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Working Families' Tax Credit and Disabled Person's Tax Credit: a survey of employers.

Nick Coleman<sup>1</sup> Mark Peters<sup>1</sup> Alex Bryson<sup>2</sup> Helen Bewley<sup>2</sup>

<sup>1</sup> BMRB Social Research

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<sup>&</sup>lt;sup>2</sup> Policy Studies Institute

## Working Families' Tax Credit and Disabled Person's Tax Credit: A Survey of Employers

#### **Main Report**

By Nick Coleman and Mark Peters (BMRB Social Research) and Alex Bryson and Helen Bewley (Policy Studies Institute)

**BMRB International and Policy Studies Institute** 

**Inland Revenue Research Report 4** 

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and Disabled Person's Tax Credit:			
A Survey of Employers			
Prepared for:			
Inland Revenue			
Prepared by:			
Nick Coleman and Mark Peters (BMRB Social Research) and			
Alex Bryson and Helen Bewley (Policy Studies Institute)			
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#### Disclaimer

The views expressed in this report are those of the authors and do not necessarily reflect the views of the Inland Revenue or any other government department.

#### **Explanatory Notes**

#### Report format

This report contains the descriptive findings from a survey of employers conducted by BMRB. Where appropriate these descriptive analyses have been supported by multivariate analyses, which have been undertaken by PSI. The findings from all sections (including descriptive and multivariate) have been pulled together to form the Executive Summary at the start of this report.

At various points in the report where the multivariate analyses are discussed reference is made to the 'Multivariate Technical Appendix'; this is part of a separate volume of appendices and contains details of the various models that have been used. This volume also includes a Technical Appendix and copies of the survey questionnaires.

#### Multi-coded questions

The percentages in some tables and charts may not add up to 100 percent as some questions were multi-coded, meaning that respondents could give more than one answer.

#### Rounding

In tables throughout this report percentages have been rounded to the nearest final digit. Therefore the constituent items may not add up exactly to the total. Total percentages are also quoted in the text of the report so in some cases, these may not match the sum of constituent items in the relevant charts and tables.

#### Table symbols

The symbol '\*' in tables denotes a value that is less than one percent but greater than zero.

#### **Executive Summary**

#### Introduction

The Inland Revenue commissioned BMRB Social Research and Policy Studies Institute (PSI) to conduct a survey among employers, to quantify the impact that Working Families' Tax Credit (hereafter described as WFTC) and Disabled Person's Tax Credit (hereafter described as DPTC) had on the population of employers. The survey focused particularly on the experiences of employers in paying tax credits through the payroll (generally referred to as Payment via the Employer, or PVE).

Telephone interviewing took place between June and August 2002 and a total of 6,453 interviews were achieved. Postal questionnaires were sent to 285 of these 6,453 employers, who were unable to answer the cost related questions in the survey over the telephone. The postal questionnaire was returned by 170 employers.

#### Characteristics of the PVE population

According to administrative data at October 2001, 15 percent of employers were "PVE employers" who were paying tax credit recipients through the payroll at that date, while a further five percent had paid tax credits through the payroll in the past but were not currently doing so (these cases are referred to as "ex-PVE"). The remainder of employers had never paid tax credits through the payroll.

The majority of PVE employers had just one tax credit recipient paid through the payroll, although survey data indicated that two per cent had 20 or more recipients (predominantly organisations with 500 employees or more).

PVE employers differed in a number of respects from never-PVE employers. The probability of being a PVE employer, and the number of tax credit recipients a PVE employer employs, were strongly associated with employer size, industry, organisation type, and region. Perhaps most striking was the fact that, controlling for other employer characteristics, the probability of being a PVE employer rose with employment size and turnover, as did the number of tax credit recipients employed in PVE organisations.

Eleven percent of employers showed a switch in status between the data download and the survey. Switching in and out of PVE status was also strongly associated with employment size, with switching out of PVE status driven largely by employer size and the number of tax credit recipients in employment within the firm.

#### **Information and Advice**

Just under six out of 10 employers (57 percent) said they knew something about WFTC and just over a fifth (21 percent) claimed some knowledge of DPTC. With the exception of Student Loans, awareness of other recent types of legislation affecting employers was higher. The lack of knowledge of WFTC/DPTC was particularly concentrated among small never-PVE employers. However, these results are hardly surprising since we are not comparing like with like. Unlike legislation such as the National Minimum Wage, not all employers need to know about tax credits. Most employers only find out about them when they have employees eligible for WFTC/DPTC, and this is reflected in the results showing that knowledge was high amongst PVE employers. The particularly low awareness of DPTC is probably linked to the relatively small size of the DPTC caseload, and perhaps also to the fact that employers did not necessarily know which tax credit they were paying – some employers may automatically assumed that they were paying WFTC.

Of all employers, over three quarters (78 percent) were aware of their responsibilities regarding the payment of WFTC/DPTC, and 30 percent were "very confident" that they knew their responsibilities as an employer in relation to WFTC/DPTC (56 percent among PVE employers). This is perhaps evidence of pragmatism on the part of employers: they found out about tax credits when they needed to know, that is, when faced with the need to deal with tax credit recipients. The multivariate analysis revealed that a number of employer features are associated with awareness – it is not simply down to PVE experience. These factors include size (larger organisations showing higher awareness) and the nature of the payroll system (higher awareness where payroll was handled internally within the firm).

When they had queries about WFTC/DPTC, large employers were more likely to use information within their own organisation to answer these, while smaller employers were more inclined to seek advice from the Inland Revenue.

When asked about various sources of Inland Revenue communication, the Inland Revenue information pack was the source of information most commonly used by employers (60 percent had used this). Use of other sources ranged from one out of twenty for attendance at seminars, to one out of seven for use of the helpline. In general, employers were light users of the different types of information, having used each just once or twice, although satisfaction was very high amongst those that had used them.

Not surprisingly, PVE employers were more likely to seek out Inland Revenue advice: five in six with PVE experience did so, compared with four in ten of those who have never employed PVE recipients. This was mainly due to higher use of the Inland Revenue

helpline. Still, the general level of usage of the sources among never-PVE employers was perhaps higher than might have been expected.

PVE status was also the key factor determining use of Inland Revenue advice, after accounting for other employer characteristics, but it made little difference if the employer was a current or ex-PVE employer, nor did it matter how many tax credit recipients the employer had. In general, employers used Inland Revenue sources more often where they had complex payroll arrangements – either the central payroll system covered the whole organisation, they had to administer more than one PAYE code, they deployed a high number of staff on payroll matters, or they used specialist software.

Overall, one in 10 employers said they had provided information to staff about WFTC/DPTC (21 percent among PVE employers and 17 percent for ex-PVE). Among PVE employers, it was the smallest (fewer than five employees) who were most likely to do so.

#### **Administering WFTC/DPTC**

Almost half (46 percent) of employers who had ever run PVE said it was 'very easy' to manage. In all, nine-in-ten said it was either 'very easy' or 'quite easy' to run, and a mere two percent found it 'very difficult'. The difficulty of running PVE did not differ according to the use employers made of the Inland Revenue for information and advice on WFTC/DPTC, but PVE was perceived as more difficult where employers were less satisfied with the service provided by Inland Revenue (and vice versa). Difficulties with PVE were also more likely to be reported where the employer said the costs of PVE were significant or moderate, and where the employer said PVE had a big impact on payroll.

Smaller employers found PVE more difficult to administer than larger employers. This is apparent in the effect of employment size, but also in the reduced probability of proprietorships and partnerships finding PVE 'very easy'. Some of this effect is accounted for by small employers' increased likelihood of perceiving greater PVE costs and in identifying big PVE effects on payroll.

When asked to consider the impact that WFTC/DPTC had on payroll, 11 percent said it has been big or very big, although the majority (62 percent) said it had little or no impact.

Seven percent of employers with experience of PVE said that they had encountered cash flow problems as a result of paying WFTC/DPTC. This was almost exclusively limited to organisations with fewer than 100 employees, and most prevalent among those with fewer than ten employees. The most common of these problems tended to be general cash flow

or financial problems or the timing of tax credit payments, i.e. having to pay WFTC/DPTC in wages before the money can be claimed back.

Over one in 10 (12 percent) of employers with experience of PVE said there had been an occasion when the amount paid out in WFTC/DPTC was more than was deducted from PAYE tax, NI contributions and student loan repayments. Among respondents who reported occasions where tax credit payments exceeded deductions, half (52 percent) said that they applied to the Inland Revenue for additional funding, and of these, 39 percent said they were currently receiving funding.

Very few employers reported difficulties administering WFTC/DPTC and amongst those that did, they mentioned difficulties calculating the amount of tax credits to pay, difficulties understanding rules and regulations, difficulties with software and general comments about the burden of time. Employers were unlikely to state that they perceived any actual benefits to themselves arising from paying WFTC/DPTC through the payroll. Where benefits were identified, they were likely to be seen as benefits to the employee.

Three-quarters of employers with experience of PVE were satisfied with the service they received from the Inland Revenue in giving information and advice about WFTC/DPTC. One-third of these cases were 'very satisfied'. Fewer than one in twenty employers expressed themselves dissatisfied with the Inland Revenue service.

Satisfaction with the Inland Revenue service was strongly associated with usage of Inland Revenue sources of information and advice, with greater users tending to be more satisfied, even having controlled for other employer characteristics. However, not all types of Inland Revenue information and advice were associated with satisfaction with the service once other factors are taken into account. For instance, use of the helpline and the video were not significant in estimates of high satisfaction or dissatisfaction. Seminar attendance and use of the information pack, on the other hand, were clearly associated with higher satisfaction. Regional effects are particularly important in explaining patterns of high satisfaction. Sectoral effects, on the other hand, play a greater role in explaining dissatisfaction. (Construction and Agriculture/Fisheries/Mining being most dissatisfied).

#### Payroll characteristics

A third (32 percent) of employers used an external body or person to help with processing or managing payroll, or to give advice on matters affecting payroll. Large employers, particularly those with 500 or more employees, were most likely to outsource part or all of their payroll function (40 percent). However, amongst those who did use an external body, small employers (those with less than 10 staff) were most likely to outsource their entire payroll function.

Eight out of 10 respondents who used an external body said this was an accountant, whilst nearly one in eight (13 percent) used a payroll bureau. The majority of employers had been using this external body for a long period of time, although PVE and ex-PVE employers were more likely to say this was a new working relationship. Such external organisations were most commonly used to undertake the payroll process (e.g. payslips, end of year tax returns), to complete tax forms and end of year tax returns and provide general advice.

Just over two fifths (41 percent) of employers used specialist software and over half (52 percent) used entirely manual processes (i.e. no specialist software). Of those who used a payroll software provider, nine in ten said they received regular updates from this provider and nearly all of these said that the software updates they received incorporated changes to government legislation, for example on tax. A high proportion (87 percent) felt that their payroll system was flexible when incorporating changes.

In terms of staffing, 45 percent employed no staff to work mainly on payroll matters, while 48 percent employed one member of staff. The remaining seven percent had two or more staff working mainly on payroll.

#### Payroll costs and PVE

Overall, external payroll costs increased with employment size and there was a minority (two percent) who had costs of £10,000 or more. A third of employers were unable to give a figure for their external payroll costs, and the largest employers had most difficulty doing this. Costs of specialist software varied from those who said no costs were incurred in the last year (20 percent), to those who spent in excess of £5,000 (seven percent). Just under a fifth (18 percent) were unable to give an estimate of these costs.

In terms of staff payroll costs, nearly one in eight (13 percent) had incurred no staff costs and under a third (30 percent) had spent less than £1,000. A further fifth (22 percent) had spent between £1,000 to £4,999. A much smaller proportion had spent more than £5,000 on the wages of staff working on payroll.

A number of multivariate analyses were undertaken to test the association between PVE and total payroll costs per employee. On the basis of this methodology, we conclude that PVE had no statistically significant effect on the total payroll costs per employee for the population from which our sample was drawn; nor did PVE have a statistically significant impact on the sub-components of costs – external payroll, specialist software, or staff working mainly or some of the time on payroll.

#### **Direct costs**

When asked about the direct costs of WFTC/DPTC, the highest costs related to on-going staff costs - dealing with general paperwork and with Inland Revenue enquiries. This applied particularly to larger organisations and those with a higher number of tax credit recipients. Non-staff costs (accountant, payroll bureau and software costs) tended to be lower overall, as only a minority of employers incurred these costs. However, a relatively high proportion of the total direct costs incurred by smaller organisations was accounted for by non-staff costs. For example, among PVE employers with fewer than five employees, accountant costs represented nearly half of the total direct costs. Employers also identified time spent on set-up tasks, although these costs tended to be lower overall than on-going staff costs or non-staff costs.

Multivariate analysis has shown that among employers who have ever employed tax credit recipients, the direct costs attributable to PVE through set up, running and non-staff costs were in the order of £325 per employer. Costs were substantially greater among current PVE than ex-PVE employers (£373 compared with £207). The mean cost for employers who have never operated PVE was £16. Across all employers, this produces a mean figure of £101.

Direct PVE related costs were a little higher if we exclude those with experience of running PVE who nevertheless said they have not incurred costs: doing so raises costs to around £350. These sums are not large, so it is hardly surprising that the PVE impact on overall payroll costs was not statistically significant in our earlier analysis.

Nevertheless, costs that are directly attributable to PVE can vary quite considerably across employers. PVE-related costs were around zero for the vast majority of employers who have never employed tax credit recipients. Overall direct costs were higher among larger organisations. The mean direct cost was relatively stable at between £289 and £336 for those with fewer than 100 employees, but then increased to £734 among those employing 100-499 staff, and £1,503 with 500 or more employees. Related to this, costs increased among employers with a larger number of tax credit recipients. In terms of region, the mean cost was highest in the South East, where there is a relatively high incidence of large employers.

In assessing the impact of WFTC/DPTC on employers' costs, it is important to note that Family Credit imposed some compliance costs on the employer in terms of time spent completing earnings enquiry forms. The compliance costs reported here are therefore gross costs, rather than net of any existing compliance costs associated with Family Credit.

#### Comparison with RIA estimate

The total direct cost of WFTC/DPTC, as estimated by the survey, was £100 million. This is lower than the estimate provided by the Regulatory Impact Assessment (RIA), which estimated there would be a total of £105 million on annual recurrent costs and £44 million on non-recurrent costs; approximate equivalent figures based on survey data were £77m and £33m respectively. The RIA figures are considerably higher than the survey estimates for larger organisations. However, for small organisations (less than five employees), the survey estimate is higher than the RIA estimate. This may be because the method used in the RIA analysis under-estimated the economies of scale that could be made at larger organisations. Alternatively, it may be more difficult for survey respondents in large organisations to identify all costs accurately. However, it should be noted that the RIA and the survey used different methods to estimate costs, and therefore direct comparisons should be treated with caution.

#### **General perceptions of costs**

The analysis of the perceived costs of WFTC/DPTC shows that only one in four employers reported any costs of administering WFTC/DPTC, whilst only one in 50 experienced significant costs. This broadly supports the actual costs analysis. Higher perceived costs were reported among PVE employers (five percent said costs had been significant, as well as 19 percent who said they had been moderate).

The analysis demonstrates that whilst larger organisations were more likely than smaller employers to experience some impact from administering WFTC/DPTC, smaller organisations reported greater costs. However, there is no evidence to suggest that there is any link between the perceived costs of administering WFTC/DPTC and the actual costs experienced by an organisation. Perceptions of cost were more closely linked to the perceived general impact of WFTC and other legislation, and by the degree of difficulty experienced. This suggests that, to some extent, the perceived impact on costs of administering WFTC/DPTC reported by employers are explained by the general outlook of the respondent, and the level of upheaval associated with this type of legislation, rather than the actual impact on costs.

#### Recruitment, hours and wages

Although there is no evidence that WFTC/DPTC have made recruitment substantially easier or more difficult, it appears that some PVE employers believed that WFTC/DPTC encouraged some new recruitment amongst them. Around one in eight (12 percent) PVE and one in twenty ex-PVE employers said that WFTC/DPTC had helped them to recruit

staff. Only two percent of PVE and three percent of ex-PVE employers said that WFTC/DPTC made it difficult. Furthermore, a fifth of PVE employers said WFTC/DPTC had definitely or possibly encouraged new people to join their organisation. It is important to stress that these findings are based on employers' perceptions of the link between WFTC/DPTC and recruitment, rather than an objective estimate of the impact.

Respondents mostly said that their organisation had not made any changes to staff hours as a result of WFTC/DPTC. Five percent of PVE and two percent of ex-PVE employers said that they had made changes. Where changes had been made, around the same number of employers, four in ten, said the number of hours had gone up as had gone down, and a further 16 percent said it had been a mixture of both. Employers were also unlikely to say that individual staff had changed their working hours because of WFTC/DPTC. A small proportion (eight percent) replied that some staff had 'definitely' changed the hours they work, with a further six percent saying 'possibly'.

Only a minority of employers said that WFTC/DPTC had led to changes in wage levels (four percent and two percent respectively for PVE and ex-PVE employers). This was likely to be seen as an increase (by eight in ten of those reporting a change). Finally, a quarter of employers with experience of WFTC/DPTC said that they had definitely or possibly had a positive impact on staff retention.

#### 1 Introduction

The Inland Revenue commissioned BMRB Social Research and Policy Studies Institute (PSI) to conduct a survey among employers, to quantify the impact that Working Families' Tax Credit (hereafter described as WFTC) and Disabled Person's Tax Credit (hereafter described as DPTC) had on employers. This report is based on a telephone survey of 6,453 employers.

#### 1.1 Family Credit and Disability Working Allowance Policy

This government's provision of in-work support for families with children and people with disabilities is motivated by the desire to 'make work pay'. Making work pay achieves two central objectives for government. First, it offers incentives for people to enter paid work, reducing the level of worklessness. Secondly, it alleviates in-work poverty by topping up incomes.

Governments' desire to sharpen the financial incentives to work date back to the late 1980s when Family Income Supplement (FIS) was replaced by Family Credit. Family Credit was payable to people with children working 16 hours or more (24 hours or more until April 1992) and in low-paid work, whether as an employee or self-employed person. The perceived success of in-work benefit payments resulted in a similar scheme being offered to people with disabilities through the Disability Working Allowance. Disability Working Allowance, introduced in 1992, was intended to help disabled people claiming a specified range of benefits move into or remain in employment.

#### 1.2 Policy background to WFTC/DPTC

The shift to tax credits followed the success of reforms to the Earned Income Tax Credit scheme in the United States. It was motivated by concerns about the low take-up of inwork benefits. It was thought that payment through tax credits would reduce some of the stigma attached to claiming benefits and, by more directly involving employers, assist workers to claim what was rightfully theirs, even where their knowledge of those rights was poor. In Britain, Martin Taylor<sup>1</sup> conducted a review of the tax and benefit system in 1998 and outlined plans for a tax credit system.

<sup>&</sup>lt;sup>1</sup> Martin Taylor, The Modernisation of Britain's Tax and Benefit System (No. 2) "Work incentives: A Report by Martin Taylor", 1998.

The government's welfare-to-work strategy entails a great deal more than wage supplementation. There is recognition that, while reducing the unemployment trap, where being on benefits pays more than being in work, wage supplementation can catch workers in a poverty trap in which they face very high marginal withdrawal rates for each additional pound of income earned. Policy initiatives have sought to tackle this problem by raising earnings at the lower end of the pay distribution with a national minimum wage, which has recently been up-rated on several occasions, and through policies aimed at increasing the earning potential of those out of work (for example on New Deals).

Welfare-to-work has also involved increasing employers' chances of recruiting and retaining people leaving benefits. Policies have included encouraging them to recruit New Deal participants, and offering them subsidy payments for taking on and training people with poor labour market prospects. Payment of tax credits should be seen in this wider policy context.

Family Credit and Disability Working Allowance were replaced by WFTC and DPTC in October 1999 (with increases in rates and childcare support which greatly enlarged the pool of those eligible) and were payable via the wage packet after April 2000. This was intended to strengthen work incentives by making the link between work and in-work support explicit, as part of the Government's overall strategy of 'making work pay', the assumption being that receiving the credit with wages will provide positive psychological reinforcement (Grover and Stewart, 2000). It is also hoped that making this type of assistance available via the tax system, rather than as part of social security, will increase take-up because it will be free of the stigma often associated with claiming means-tested benefits (Taylor, 1998). Although there is little empirical evidence in support of this effect, and some US studies suggest that those in receipt of tax credits still see themselves as benefit claimants (Grover and Stewart, 2000).

Both DPTC and WFTC are aimed at groups who face disadvantage in the labour market. These tax credits may therefore be helpful if they encourage employers to consider applications from recipients more favourably, or they may exacerbate labour market disadvantage if employers are reluctant to recruit people claiming in-work support. The significance of employers' attitudes is increased by the change to payment via employer (PVE), both because the new system involves employers in administering in-work support, and also because employers will now have more information about who is claiming and how much they are receiving.

#### 1.3 PVE and employers' responsibilities

From April 2000 onwards, employers were responsible for paying tax credits to eligible employers through the payroll, a process known as Payment Via the Employer (PVE).

Under Family Credit and Disability Working Allowance employers did not have PVE responsibilities, although they were sometimes asked to provide evidence of an employees' earnings if the employee could not supply this directly themselves.

Employers made WFTC/DPTC payments, in accordance with Inland Revenue instructions, at their normal pay intervals. WFTC/DPTC awards lasted for a 26 week period: Inland Revenue made the first payments direct to the recipient each time an award was set or renewed, after which they were paid via the employer where appropriate. Employers' offset the amount of WFTC/DPTC paid out against their monthly PAYE, National Insurance contributions (NICs) and student loan repayments. Employers could apply to the Inland Revenue for additional funding in advance if the amount paid out in WFTC/DPTC exceeded the amount of income tax, NICs and student loan repayments which employers paid to the Inland Revenue. Employers applied for additional funding six months at a time and the Inland Revenue paid additional funding directly to employers through automated credit transfer.

Employers' main responsibilities under WFTC and DPTC were to:

- calculate the tax credits for the pay period from a daily rate and add the tax credit amount to net pay;
- enter this amount on the employee's payslip and record the total tax credits paid in a tax year;
- enter the total tax credits in the year for the employee on the P14 and P60;
- enter the total tax credits for all employees in the year on the P35, together with the total amount of Inland Revenue funding in that year;
- pay tax credits during holiday, sick and maternity leave; and
- produce Certificates of Payments if the employee leaves before the end of their award period.

Employers who contracted out their payroll work needed to ensure that the payroll system they used could cope with these tasks.

#### 1.4 Previous literature

The literature in this area is not extensive, and there has not been a lot of research that has looked at the views of employers. There are three studies that have some relevance to this

research, either in their methodology or the issues that they have addressed. Each of these is briefly addressed in turn below.

#### 1.4.1 Family Credit

A survey of employers (Callender *et al.*, 1994)<sup>2</sup> aimed to examine the employers' perspective of Family Credit. The research looked to fill in the 'knowledge gaps' about the nature and characteristics of employers employing Family Credit recipients. In addition the research sought to explore employers' awareness, knowledge, involvement and attitudes to Family Credit.

Employers with Family Credit recipients were found to be located in some industries more than others (e.g. hotel and catering and other manufacturing). Industries with the highest proportion of recipients also employed the highest proportions of women, and had lower earnings. Company size was an important factor as both the number of claimants and awareness increased with company size. However, small employers were found to employ a disproportionately high share of Family Credit recipients, relative to their total share of employment.

Overall, employers had a lack of knowledge and detailed understanding of Family Credit. Family Credit was not considered to be on employers' agendas nor a priority, and had no effect in encouraging the recruitment of people likely to be eligible, but that some employers targeted such groups occasionally to increase their pool of labour. While the time spent completing forms for Family Credit was resented by some, and some employers had negative views of the benefit, there was no evidence of a reluctance to hire workers because they were likely to claim Family Credit. In addition, Family Credit was not seen to be used as a wage setting tool.

The research found that employers were not proactive in promoting Family Credit, as they did not see this as part of their role. Furthermore, it was concluded that take-up could be increased if employers could undertake more active promotion.

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 $<sup>^{\</sup>rm 2}\,$  Callender et al, Employers and Family Credit, DSS Research report No. 32, 1994

#### 1.4.2 Earnings Top-Up

Similarly to the above research, a study by Lissenburgh *et al.*, 2001<sup>3</sup> into Earnings Top-up (ETU), also found a marginal influence of in-work support in increasing levels of recruitment. The research aimed to examine the impact of ETU on employers' wage setting and recruitment behaviour. There was mixed evidence regarding employment effects among the panel sample of employers; the research found no evidence that the ETU had eased recruitment difficulties amongst the employers surveyed, and the research also found limited evidence of an ETU effect on wages. The findings suggest that it had some effects in constraining wage growth in the areas where it was piloted, although no such effects were identified for Family Credit in Callender *et al.* (1994).

The Lissenburgh *et. al* report concluded that 'just as there is little strong evidence of a positive ETU effect on employment, there is no significant evidence of a negative impact either'. Some employers might have been expected to target their recruitment on those eligible for the benefit at the expense of existing and prospective non-eligible employees (termed a 'substitution effect') or to hold down or even reduce wage offers (termed a 'wage effect'). However, the recruitment of those ineligible for ETU was not found to be affected, and this was considered to be a positive impact. This was because the incentives to low-paid workers and improvements in the real incomes of low-paid workers could be achieved without the above mentioned negative labour market consequences.

#### 1.4.3 Compliance Costs

Also of relevance to this study is a report by The Centre for Fiscal Studies, University of Bath, (1998), which looked at the tax compliance costs for employers of Pay As you Earn (PAYE) and National Insurance (for the period 1995-6)<sup>4</sup>. Sandford (1995)<sup>5</sup> defines compliance costs as 'the costs incurred by taxpayers in meeting the requirements laid upon them by the tax law and the revenue authorities'. The research found that smaller employers pay the largest proportion of compliance costs, what the authors refer to as the 'regressivity of compliance costs'. More specifically, the bottom 30 percent paid 75 percent

<sup>&</sup>lt;sup>3</sup> Lissenburgh et al, Earnings Top-Up Evaluation: Employers' Reactions, DSS Research Report 132, 2001

<sup>&</sup>lt;sup>4</sup> University of Bath, The Tax Compliance Costs for Employers of PAYE and National Insurance in 1995-96, IR Economics Papers: No 3, 1998

<sup>&</sup>lt;sup>5</sup> Sandford, Tax Compliance Costs: Measurement and Policy, 1995

of the compliance costs associated with PAYE and NICs. Compliance costs were found to be very high in the one to nine size band across all industry sectors, but particularly high in financial and professional services.

The research also found that payroll technology also had a direct impact on costs and the most cost-effective method depended on employer size. Manual methods were considered cheapest for small employers, PCs for medium sized employers and mainframes or payroll bureaux for the largest employers.

In order to measure compliance costs, the research team used a 'bottom-up' approach. Rather than asking employers for a global figure, they were asked to build up their costs from actual time taken to complete the main operations. These costs included any staff costs, in terms of hours spent by staff and their respective earnings. Associated costs included computer software, accountant or payroll bureau fees, other administration charges, equipment and office space relating directly to PAYE and National Insurance. The approach was adopted for the measurement of compliance costs in this study.

#### 1.4.4 Regulatory Impact Assessment

The Inland Revenue produced a Regulatory Impact Assessment for WFTC/DPTC in February 1999, which was later revised in December 1999. The aim of this work was to estimate the change in costs to employers following the introduction of tax credits. This assessment produced estimates of compliance costs, divided into non-recurrent set-up costs and costs which occur year on year (ongoing costs). The approach adopted for the assessment of costs employed the broad principles that were used in the Bath study (discussed above). The Inland Revenue also consulted a number of individual employers, payroll representatives, software houses, and payroll experts.

In terms of overall compliance costs, total recurrent costs were estimated to be about £100 million, and total non-recurrent costs about £40 million. The assessment also considered two types of employer, small<sup>6</sup> and large<sup>7</sup>. In contrast to the Bath study, costs were considered to be not so regressive as PAYE/NICs. Small employers faced recurrent costs of around £25 million, whereas the largest employers face £8 million costs but covered around 2.5 times as many employees as small employers. However, when allowance is made for non-recurrent costs, the distribution of costs was found to more progressive.

<sup>7</sup> Defined as having 5,000+ employees and a significant number of part-timers

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<sup>&</sup>lt;sup>6</sup> Defined as having 1to 4 employees

Large employers were estimated to incur recurrent costs of £25,000-£30,000 per year and a £10,000 non-recurrent cost. It was estimated that a small employer would face an average cost increase of £37 per year in recurrent compliance costs and an average £2 one-off cost. The Bath report estimated that total compliance costs for PAYE/NICs were on average £800 per year<sup>8</sup> for a small employer. The £37 per year increase therefore constitutes less than five percent of the total annual compliance cost for such employers.

#### 1.5 Research aims and objectives

The government is committed to minimising the regulatory burdens on employers, and in particular small employers. Related to this, an important aim was to assess the impact of WFTC and DPTC on employers. Inland Revenue carried out a regulatory impact assessment prior to implementation<sup>9</sup>; this evaluation provides analysis on the actual impact on employers since implementation.

The evaluation as a whole includes qualitative work with employers and with WFTC/DPTC recipients, as well as the survey of employers reported here. The quantitative research among employers aimed to quantify the impact of WFTC and DPTC on employers, in terms of organisational and administrative practices. A key objective was the collection of reliable cost information that allowed for the analysis of the compliance cost incurred by employers. More specifically, the research objectives were to:

- Compare the profile of employers operating PVE with the wider employer population;
- Assess the operational effectiveness of WFTC/DPTC in terms of delivery via employer payroll;
- Report the impact on recruitment and earnings of WFTC and DPTC recipients;
- Provide detailed cost analysis, which will permit an estimate of the cost impact of WFTC and DPTC on employers.

 $<sup>^{8}</sup>$  Estimated to be £800 per year at 1999 prices

<sup>&</sup>lt;sup>9</sup> Described in previous section on relevant literature

#### 1.6 Survey Methods

#### 1.6.1 Development Stage

The project included a substantial development stage, where both the survey methodology and questionnaire were considered in full. At the very start of the project a preliminary exploratory stage was conducted by BDO Stoy Hayward, Chartered Accountants, who have expert knowledge in the area of taxation, and the ability to gain co-operation from clients in a number of locations around the UK. Consultants within BDO's Central London office contacted a small number of organisations who form part of their client list, ranging from some very small to some very large businesses.

A total of 20 employers were interviewed in August 2001, including a selection of PVE and never-PVE employers, both large and small. BDO consultants used a topic guide which covered a number of areas relating to the process and costs of PVE. The aim of the study was to examine perceptions of WFTC/DPTC and explore the ease with which employers were able to quantify the impact and associated costs of PVE. In addition, the study was used to identify the 'appropriate' person within organisations that the survey should target.

BDO found that businesses have incurred additional costs as a result of the introduction of WFTC/DPTC although most businesses found it very difficult to itemise these additional costs. The main areas giving rise to additional costs were found to be 'dealing with Inland Revenue queries in relation to staff salary information' and 'dealing with staff who query whether they qualify for these credits'. The perceived difficulty in identifying relevant costs was considered the major challenge of the research and stimulated much further discussion between the research team and the Inland Revenue.

The survey research team at BMRB embarked on a lengthy development period and after much constructive discussion between the Inland Revenue and BMRB it was decided that a combined telephone and postal methodology would be used to collect the survey data. The main point of contact for the telephone survey was considered to be Head of Payroll in large organisations and the Head of Business in smaller organisations. However, some discussion was also given to speaking to the Human Resources Director, who might be best placed to answer questions relating to recruitment.

A pilot stage was then conducted in February 2002 to test the feasibility of speaking to two people in an organisation (Head of Payroll/Head of Business and Human Resources Director) and to test the survey questionnaire. A total of 100 telephone interviews were conducted with a range of employers. It was discovered that trying to identify two people in an organisation did not add to the quality of the data and could have a detrimental effect on overall response rates. It was also decided that recruitment and wages would not be

such a high priority in terms of the survey aims and more attention should be given to collecting information on the costs of PVE, administering WFTC/DPTC and operational effectiveness issues.

The final agreed methodology included a dual stage approach that involved a telephone interview at the outset and a postal survey sent to employers who preferred to give detailed information on the costs of operating PVE in this format. The BDO study correctly identified that collecting cost data was a major challenge for the research and the methodology needed to be as flexible as possible to meet the needs of different employers. Where possible, interviewers attempted to collect the information over the telephone to minimise any sample attrition that might occur if a postal questionnaire was also sent, although a postal survey was sent if employers could not provide the information during the telephone interview stage.

#### 1.6.2 Sampling

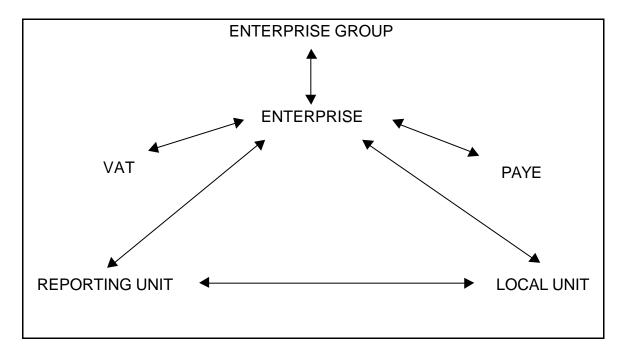
The sample frame for the survey was taken from Inland Revenue sources and the Inter Departmental Business Register (IDBR). Inland Revenue administrative data is historical data from 31<sup>st</sup> October 2001 going back to when PVE was first introduced in April 2000. To create the Inland Revenue database for the project, Inland Revenue matched data covering all those recipients who had ever received a WFTC/DPTC award via the payroll to an employer database; this provided employer details and PVE status. The data were then merged with the IDBR data<sup>10</sup> by the Office for National Statistics (ONS) to provide a comprehensive sample frame of employers.

The IDBR contains records of all UK businesses registered for VAT or PAYE purposes and covers over 99 per cent of UK economic activity. It is continuously updated from administrative sources. The smallest unit held on the register is an individual site (Local Unit), typically a workplace. The Reporting Unit is a larger unit, which holds the mailing address to which inquiry forms are sent.

One or more Local Units with their associated legal units (VAT or PAYE) form an Enterprise, the smallest combination of these legal units. A PAYE unit is the payroll unit, administering payroll functions for part or all of the organisation. A group of enterprises under common ownership form an Enterprise Group.

 $<sup>^{\</sup>rm 10}\,$  The date of the IDBR data download was April 2002

The IDBR Reporting Unit was the chosen sampling unit for the survey, as this is the most commonly used unit for surveys of this kind. In the majority of cases, the Reporting Unit is the same as the PAYE unit, although there are exceptions in a minority of cases. This is either where a PAYE unit has responsibility for more than one Reporting Unit, or where it has responsibility for only part of the Reporting Unit. Further analysis of the sample is included in Chapter Two. The diagram below details the structure of the IDBR.



The pilot response data were used to make a number of assumptions about sample attrition for the mainstage survey. Details of the sample stratification can be found in the Technical Appendix. The mainstage sample was also supplemented with a 'reserve sample'; a relatively small initial sample was issued to maintain high response rates, and the reserve sample was later used to boost response in specific stratification cells. Monitoring quotas were also set so that the research team could keep track of the number of interviews by PVE status and employer size, as fieldwork progressed.

The survey data were weighted, to account for the stratification used in the sampling process, as well as survey non-response. The data were weighted to reflect the initial probability of selection, in selecting the sampling frame from the reporting unit universe; they were weighted to reflect the selection of issued sample from the IDBR sample frame and they were also weighted to account for survey non-response. These individual weights were then combined, in order to align the issued sample/interviewed sample to the reporting unit population. More details on the survey weighting can be found in the separate Technical Appendix document.

#### 1.6.3 Fieldwork

Telephone interviewing took place between June and August 2002 and a total of 6,453 interviews were achieved. This represents a response rate of 67 percent, which exceeded initial expectations and which gives us a robust sample from which to analyse various subgroups of interest (see Technical Appendix).

Postal questionnaires were sent to 285 of these 6,453 employers, who were unable to answer the cost related questions in the survey over the telephone. Two reminders were sent to respondents who had not responded by each reminder despatch date<sup>11</sup>. The postal questionnaire was returned by 170 employers (60 percent). This data was later merged with the cost data collected over the telephone to produce one final dataset.

Copies of the telephone and postal questionnaires can be found in the Appendix.

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 $<sup>^{11}</sup>$  Reminder one was a letter only reminder, reminder two was a full-pack reminder and included a letter and questionnaire

#### 2 Characteristics of the PVE Population

This chapter identifies the characteristics of employers who pay WFTC/DPTC via the payroll ('the PVE population'), and compares them with other employers: both those who used to pay WFTC/DPTC through the payroll but no longer do so ('ex-PVE'), and those who have never done so ('never-PVE'). The purpose of the analysis is to gain further knowledge of the factors that are associated with being a PVE employer.

The analysis uses multivariate techniques to identify employer characteristics associated with being a PVE employer and switching PVE status between the moment the data were downloaded from the Inland Revenue administrative system and the survey interview.

The remainder of this chapter is set out as follows. Section 2.1 introduces the data and describes the methods used to analyse the data. Section 2.2 describes the outcomes analysed. Sections 2.3 - 2.5 present results. Section 2.6 brings in descriptive analysis from the survey data, and Section 2.7 provides a summary.

#### 2.1 Data used to analyse the outcomes

This chapter uses the administrative data taken from the sampling frame used to issue the sample for interview. These data are drawn from the Interdepartmental Business Register (IDBR) and the Inland Revenue's tax credit records. ONS matched the Inland Revenue data described above, which was collected at the level of the Pay-as-you-earn (PAYE) code, to each reporting unit. The IDBR data were downloaded in April 2002. This means that data were current until that point, although some of the information would have been collected originally some time before that point.

The independent variables used in the analysis are taken from the IDBR fields in the administrative data. They are:

- region
- organisation type, distinguishing between companies, sole proprietors, partnerships, public corporations, central government, local authorities and non-profit making bodies
- employment size
- annual turnover
- number of establishments within the reporting unit

- number of PAYE codes within the reporting unit
- industry.

In addition, when analysing the probability of switching out of PVE status between data download and interview, we use the Inland Revenue data on the number of tax credit recipients in the reporting unit at the time of data download.

The weighted percentage of reporting units in each category for all in the issued sample is given in Table 2.1a to Table 2.1e. Although industry was coded at 5-digit level, we have aggregated the data so that there are a reasonable number of cases in each cell. In some cases, despite only a small percentage of cases falling into a cell, we have not combined cells because differences across categories make combination difficult (for example, in the case of public corporations and central government). In the case of the number of PAYE codes per reporting unit, the coding is of considerable substantive interest in its own right.

Table 2.1a: Descriptive information on the issued sample, Proportion of reporting units by region

	Administrative data measure
	%
North East	3
North West	15
North	1
Yorks/Humbs	8
East Midlands	11
West Midlands	10
East Anglia	4
Eastern	5
London	14
South East	11
South West	10
Wales	4
Scotland	5
(Base)	(14,969)
Base: All cases issued for interviewin	g

Table 2.1b: Descriptive information on the issued sample, Proportion of reporting units by organisation type

	Administrative data measure	
	%	
Company	61	
Proprietor	8	
Partnership	22	
Public corporation	*	
Central government	*	
Local authority	*	
Non-profit	8	
(Base)	(14,969)	
Base: All cases issued for interviewing		

Table 2.1c: Descriptive information on the issued sample, Proportion of reporting units by number of employees

	Administrative data measure
	%
Less than 5	54
5-9	17
10-19	13
20-49	12
50-99	2
100+	2
(Base)	(14,969)
Base: All cases issued for interviewing	ng

Table 2.1d: Descriptive information on the issued sample, Proportion of reporting units by number of PAYE units

	Administrative data measure	
	%	
PAYE = 0	*	
1	97	
2	2	
3+	*	
(Base)	(14,969)	
Base: All cases issued for interviewing	ing	

Table 2.1e: Descriptive information on the issued sample, Proportion of reporting units by industry

	Administrative data measure
	%
Agriculture/fishing	1
Mining	*
Manufacturing	18
Construction	11
Wholesale/retail	33
Hotel/restaurants	5
Transport/Communicatio	4
Finance	1
Business activities	15
Public administration	*
Education	*
Health	1
Other services	10
(Base)	(14,969)
Base: All cases issued for interviewing	

Most codes are self-explanatory. However, we draw attention to the variable PAYE0, denoting a reporting unit with no live PAYE code. This category only accounts for 219 of the issued sample. According to ONS, it usually means the reporting unit is not currently paying employees. These cases have been retained in the analysis.

Most of the analysis that follows is based on multivariate modelling which isolates the independent association between an outcome variable and independent variables. Each model predicts how the probability of an outcome – eg being a PVE employer – changes with employer characteristics. The tables that follow report changes in the probability of the outcome arising from change in each independent, continuous variable, and for switches in the value of discrete variables. These probabilities are calculated for employers as if they had the mean characteristics for the employers in the sample. Some tables illustrate the impact of shifting the value of independent variables for a 'typical' case with specific characteristics.

All models are run on weighted data which accounts for the probability of selection into the sample and, for analyses of interviewees, the probability of survey response.

#### 2.2 Mapping the PVE population: the outcomes analysed

We have two measures of PVE status. The first comes from the Inland Revenue's administrative data. These data are derived from a 100 percent scan of Inland Revenue records which identify all employers who have ever been PVE employers between the date of data download (31<sup>st</sup> October 2001) and when PVE was first introduced in April 2000. PVE status from this source is presented in Table 2.2 for the whole sample that was issued for interviewing.

Table 2.2: PVE status by October 2001, administrative data

	Weighted %	Unweighted %
PVE	15	$\overline{39}$
ex-PVE	5	23
never-PVE	80	39
(Base)		(14,969)
Base: All cases issued	for interviewing	

Fifteen percent of the weighted issued sample were paying WFTC/DPTC via the payroll when the data were downloaded; a further five percent had been PVE in the past. However, four-fifths of employers had never paid WFTC/DPTC via the payroll. (The unweighted figures show how we oversampled the PVE and ex-PVE categories to obtain large numbers permitting sub-group analyses.)

To create the database for this project, the Inland Revenue, together with ONS, matched data covering all those recipients who had ever received a WFTC/DPTC award via the payroll to an employer database to get employer details and PVE status. The tax credit recipients database is updated every month, whereas the employer database is updated less frequently. Nevertheless, these data provide very accurate information on PVE status up to and including the 31<sup>st</sup> October 2001 when the data were downloaded for sampling. There are no missing data either. For this reason, and because only a sub-set of employers respond to the survey interview, we have chosen to analyse the administrative measure of PVE status in this chapter, as opposed to the interview survey equivalent, which relies on accurate knowledge and recall from the respondent regarding the reporting unit's PVE status. This second measure of PVE status, taken at interview some 8-10 months after the Inland Revenue data were downloaded for sampling, is presented alongside the administrative measure in Table 2.3.

The survey asked interviewees 'Can I just check, do you have any employees that are currently receiving WFTC or DPTC through the payroll?' If the respondent said 'no' they

were asked: 'Have you ever had any employees receiving Working Families' Tax Credit or Disabled Person's Tax Credit through the payroll?'

Table 2.3: Comparison of administrative and survey measures of PVE

ative d
%
17
5
79
(6,453
6,453) PVE st

Note: The base figures differ because 66 survey respondents did not know their employer's PVE status at interview

Experience of PVE was higher in the survey measure, either because some employers started using PVE since the download of the administrative data, or because survey respondents are incorrect in their responses. If we assume that the interview measure is reasonably accurate, the two measures give us an indication of the degree of switching in and out of PVE status between October 2001 and the time the survey interview took place, namely June-August 2002. We make this assumption later in an analysis of switching.

Both the administrative data and survey data also contain information on the number of PVE tax credit recipients employed by each employer. It is worth pointing out in passing that this does not include all tax credit recipients; some 40% of WFTC/DPTC recipients received their tax credits through a route other than the pay packet, primarily direct into a bank account, although as it is impossible to link such recipients to their employers only recipients paid through PVE are looked at here. Using the administrative data measure, 65 percent of PVE employers at the time of data download had only one tax credit recipient being paid through the pay packet; 29 percent had between two and five; and six percent had six or more tax credit recipients who were paid in this way<sup>12</sup>. The fact that two-thirds of PVE employers only employed a single tax credit recipient implies a high likelihood of switching between PVE and non-PVE status, since most employers only need to lose a single employee, or acquire a single employee, to switch status. These data on the number of PVE tax credit recipients are the basis for the final analysis in this chapter which estimates the probability of having high and low numbers of PVE claimants, to see whether this is simply driven by the size of the organisation, or something else.

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 $<sup>^{12}</sup>$  More detailed figures were obtained in the survey data, and these are included in section 2.6

#### 2.3 The probability of PVE in the issued sample

Whether an employer is a PVE employer is determined by the pay and hours an employer offers and the type of people attracted to the jobs offered by that employer. This is because eligibility for WFTC/DPTC is based on needs assessment. For instance, an employee with children may qualify for WFTC if s/he is working at least 16 hours per week and earning below a certain pay threshold (this threshold varies depending on the particular circumstances of the family, eg. number of children).

Descriptive analyses of the PVE administrative measure for the issued sample presented in Tables 2.4a to Table 2.4e, reveal the following:

- Region: differences were pronounced, with PVE incidence lowest in the North, London and Scotland (eight percent) and highest in the North East, Wales and Yorkshire and Humberside (25 percent)
- Organisation: sole proprietorships had the lowest PVE incidence (nine percent); the public sector had the highest incidence of PVE, particularly in public corporations (77 percent)
- Size: PVE incidence rose with employment size, turnover, and the number of local units (workplaces) within the organisation
- PAYE codes: PVE incidence increased with the number of PAYE codes attached to
  employees in the reporting unit, except that where there was no live PAYE code, PVE
  incidence was similar to PVE incidence among employers with three or more PAYE
  codes
- Industry: PVE incidence was lowest in Construction (eight percent) and highest in Education (44 percent) and Public administration (32 percent).

Table 2.4a: The incidence of PVE, by Region

	Administrative data measure
	%
North East	25
North West	8
North	16
Yorks/Humbs	25
East Midlands	16
West Midlands	15
East Anglia	14
Eastern	10
London	8
South East	16
South West	16
Wales	25
Scotland	8
(Base)	(14,969)
Base: All cases issued for interviewing	

Table 2.4b: The incidence of PVE, by Organisation type

	Administrative data measure
	%
Company	16
Proprietor	9
Partnership	16
Public corporation	77
Central government	34
Local authority	31
Non-profit	17
(Base)	(14,969)
Base: All cases issued for interviewing	

Table 2.4c: The incidence of PVE, by number of employees

	Administrative data measure
	%
Less than 5	5
5-9	12
10-19	21
20-49	41
50-99	63
100+	76
(Base)	(14,969)
Base: All cases issued for interviewing	

Table 2.4d: The incidence of PVE, by Number of PAYE units

	Administrative data measure	
	%	
PAYE = 0	47	
1	15	
2	40	
3+	47	
(Base)	(14,969)	
Base: All cases issued for in	nterviewing	

Table 2.4e: The incidence of PVE, by Industry

	Administrative data measure
	%
Agriculture/fishing	16
Mining	27
Manufacturing	21
Construction	8
Wholesale/retail	13
Hotel/restaurants	20
Transport/Communication	13
Finance	10
Business activities	15
Public administration	32
Education	44
Health	26
Other services	17
(Base)	(14,969)
Base: All cases issued for interviewing	

Table 2.5 enters these data into a multivariate model to isolate independent associations between PVE and the employer characteristics discussed above. The probability of being a PVE employer estimated by the model was 11 percent<sup>13</sup>. The figures in Table 2.5 represent the change in the probability of being a PVE employer induced by a switch in characteristic away from the reference category, measured for an employer with mean characteristics on other sample characteristics. Consider the effects of region, for example. For an employer with mean characteristics, being located in Yorkshire and Humberside rather than in the reference region of the North West increased the probability of being a PVE employer by 14 percent.

 $<sup>^{13}</sup>$  Tables 2.2 and 2.3 are based on the interview sample whereas subsequent tables including Table 2.5 are based on the issued sample.

Table 2.5: Percentage change in probability of PVE

	%
Region (ref. North West)	70
North East	9
Yorks/Humbs	14
East Anglia	-3
South East	4
Wales	10
Organisational type (ref. company)	
Proprietor	4
Partnership	4
Central Government	-8
Employment size (ref. 20-49)	
Less than 5	-26
5-9	-12
10-19	-8
50-99	12
100+	21
<b>Industry</b> (ref. wholesale/retail)	
Agriculture/Fishing	8
Construction	-5
Hotel/Restaurants	7
Finance	-6
Business activities	-2
Public administration	16
Other services	6
(Base)	(14,969)
Base: All cases issued for interviewing	

The table reveals the following findings from the model<sup>14</sup>:

<sup>14</sup> Running the model on the interview sample only produces similar results so they are not discussed here. Some results were not significant in the smaller interview sample due to higher standard errors. In the case of London, turnover, and Agriculture/Fisheries, smaller coefficients in the interview sample resulted in effects being statistically non-significant. For the full models see Appendix 1 in the Multivariate Technical Appendix.

- Region: as in the descriptive analysis, the probability of PVE was highest in Yorkshire
  and Humberside, the North East and Wales. However, having controlled for the
  composition of employers their size, industry and so on employers had the lowest
  probability of PVE if situated in East Anglia
- Organisation: contrary to the descriptive findings, sole proprietorships (together with partnerships) had a higher probability of being PVE than other organisations, while PVE probabilities were lowest in central government. It is likely that the descriptive analyses are driven by the relative size of these organisations. Once we control for size, the independent effect of organisation type reveals itself.
- Size: as in the descriptive analysis, PVE incidence increased with employment size. The marginal effects reveal these effects to be large: for instance, among employers with mean sample characteristics, a shift from 20-49 employees to fewer than five employees reduces the probability of being PVE by 26 percent. Size effects also transmit themselves through turnover and the number of establishments in the organisation.
- Industry: as in the descriptive analysis, PVE incidence was low in Construction and high in Public administration.

We can take the same information from the model and illustrate results in a different way by comparing the predicted probability of PVE for different types of employer. Results for six artificial cases are shown in Table 2.6. The first case is an employer with the modal characteristics for the issued sample, but with mean turnover for an employer with fewer than five employees. Such an organisation has a very low probability of being PVE. Switching its location from the North West to Yorkshire and Humberside (case two) raises the PVE probability from three percent to 10 percent, while in case three increasing its size to 20-49 employees from under five (adjusting turnover accordingly) raises its PVE probability twelve times, from three percent to 36 percent. The impact of ownership is illustrated by case four, which takes case three and simply switches the type of organisation from a company to sole proprietorship, resulting in a nine percentage point increase in PVE probability. Case five illustrates the type of private sector employer with a very high probability of PVE. Case six takes a typical small organisation in the public sector: its PVE probability is boosted by being in Public administration.

Table 2.6: The predicted probability of PVE across different types of employer

<b>Employer characteristics</b>	Predicted probability of PVE
1. North West, company, <5 employees, <5 establishments, mean turnover for <5 employees, 1 PAYE code, in wholesale/retail	3%
2. As 1, but Yorkshire and Humberside	10%
3. As 1, but 20-49 employees and mean turnover for 20-49 employees	36%
4. As 3, but sole proprietor	45%
5. Yorkshire and Humberside, company, 100+ employees, mean turnover for organisation with 1000+ employees, > 5 establishments, 3+ PAYE codes, Manufacturing	88%
6. East Anglia, local authority, < 5 employees, mean turnover for <5 employees, <5 establishments, 1 PAYE code, Public administration	35%
(Base) Base: All cases issued for interviewing	(14,969)

Note: predicted probabilities are derived from m(1) in Appendix 1 of the Multivariate Technical Appendix

Similar analyses were run for the interview sample only, comparing results using the administrative and survey measures of PVE. Results were broadly similar to those discussed above, with some exceptions. Most notably, using the survey measure of PVE, the positive effects of sole proprietorship and partnership identified above become statistically non-significant.

# 2.4 Switching PVE status

Employers may switch in or out of PVE status, often because of choices made by employees changing jobs. If an employee in receipt of WFTC/DPTC leaves an employer, this can often result in the employer becoming ex-PVE since, in many cases, employers only employ a single PVE tax credit recipient. Conversely, a non-PVE employer may become a PVE employer because an employee qualifies for a tax credit.

Assuming both the Inland Revenue administrative data and survey data are free from measurement error we can construct a variable identifying switching between PVE and never-PVE status. The results are presented in Table 2.7, which gives cell proportions. Three-quarters (76 percent) of survey respondents were not PVE at data download or interview; 13 percent were PVE at both points in time; four percent were current PVE at

the time of the data download but had exited PVE by interview; and seven percent had gone the other way, from not-PVE to PVE. If we accept that the data are free from measurement error, 11 percent of the interview sample had switched PVE status between data download and interview some 8-10 months later.

Table 2.7: Changes in PVE status between date of data download and survey interview

	PVE status at d		
<b>PVE</b> status at interview	Not PVE	PVE	Total
Not PVE	76%	4%	80%
PVE	7%	13%	20%
Total	83%	17%	100%
(Base 6,453)	83%	17%	
: All survey respondents			

Note: Figures are cell percentages

A more detailed breakdown of the same information is shown in Table 2.8. This shows that most of the employers who had started PVE between data download and survey had never used PVE before (six percent, compared with one percent who were ex-PVE in the data download); also that most of those identified as ex-PVE at interview had indeed had some experience of PVE at the time of data download (six percent, compared with two percent who were coded as never-PVE).

This analysis also indicates that there is a small level of error in respondents' answers: in two percent of cases, respondents said that they had never been PVE, even though they had been recorded in the administrative data as either PVE or ex-PVE.

Table 2.8: More detailed information on switching PVE status

	PVE			
<b>PVE</b> status at interview	PVE	Ex-PVE	never-PVE	Total
PVE	13%	1%	6%	20%
ex-PVE	3%	2%	3%	8%
never-PVE	1%	1%	70%	72%
Total	17%	5%	78%	100%

Note: Figures are cell percentages

To understand the determinants of switching PVE status we estimated the probability of switching into PVE status by the time of the interview for all employers who were not PVE at the time of data download. The analysis is run on the 3,503 interviewees with valid

data for PVE status at interview. Of these, eight percent declared themselves to be PVE employers at interview, six percent said they were ex-PVE, and 85 percent said they had never been PVE. Findings from the model, which predicted six percent switching into PVE by interview, are as follows:

- Region: employers in the North East, Yorkshire and Humberside and the South East had the highest probabilities of becoming PVE since the data download, relative to the reference category of the North West.
- Organisation: if an employer had mean characteristics for the sample, being a local authority as opposed to a company lowered the probability of switching into PVE by six percent.
- Size: the probability of switching into PVE rose with number of employees, but other size measures (turnover, number of establishments) were not significant.
- Industry: although sizeable, the industry effects for Mining, Public administration and Education should be treated with caution because their incidence in the sample was so low.
- Previous PVE status: being ex-PVE increased switching into PVE by nine percent for an employer with mean sample characteristics, indicating movement in and out of PVE status (what we might term 'churning').

We also estimated the determinants of switching out of PVE between data download and the survey for the 2,884 employers who were PVE according to our administrative data, but said they were no longer PVE at the time of the interview. The results show that:

- There were no significant effects for region, organisation type, turnover, number of establishments.
- Employment size: the probability of switching out of PVE fell as employment size rose.
- PAYE codes: in the small number of organisations with three or more PAYE codes, the probability of switching out increased.
- Number of tax credit recipients at data download: the probability of switching out fell markedly where employers had more than one tax credit recipient at the time of data download, indicating that much of the switching was the result of employee turnover.

• Industry: the hotels and restaurants sector had the biggest probability of switching out of PVE.

Table 2.9 illustrates the results using different employer types. Employers with modal characteristics for the interviewees who had been PVE in the data download had a 28 percent probability of switching out of PVE by interview (case one). This fell as employment rose (cases two and three). Comparing cases three and four shows that the probability of switching out of PVE was very small indeed for larger organisations where they had a number of recipients. We can conclude that switching out is driven largely by employer size and the number of tax credit recipients in employment.

Table 2.9: The predicted probability of switching out of PVE

<b>Employer characteristics</b>	Predicted probability of switching out of PVE
1. North West, company, <5 employees, <5 establishments, mean turnover for <5 employees, 1 PAYE code, in wholesale/retail, 1 tax credit recipient in past	28%
2. As 1, but 20-49 employees and mean turnover for 20-49 employees	24%
3. As 1, but $100+$ employees, mean turnover for organisation with $100+$ employees, $>5$ establishments	9%
4. As 3, but 6+ tax credit recipients in past	1%
(Base)	(3,503)
Base: All survey respondents not PVE at time of data downlo	ad, with valid interview
data on PVE status	

### 2.5 Employers with more than one PVE tax credit recipient

Among employers with at least one tax credit recipient at the time of the data download from the Inland Revenue, 35 percent had more than one tax credit recipient (again, we should bear in mind that this analysis covers only those tax credit recipients being paid through the payroll). To establish whether the number of tax credit recipients employed is simply a function of employer size, we estimated the probability of a PVE employer employing more than one tax credit recipient. The analysis was run on the 5,756 employers issued for sampling who, according to Inland Revenue records, had tax credit recipients in October 2001. Findings from the model are shown in Table 2.10. Although the size of the employer was a very significant factor in determining whether a PVE employer employs more than one tax credit recipient, region, industry and ownership were also important:

- Region: employers in Scotland had the highest probability of employing more than one tax credit recipient, whereas employers in London, the South East and Eastern regions had the lowest probabilities of doing so relative to the reference category of the North West
- Organisation: if an employer had the mean characteristics for PVE employers, an organisation owned by the proprietor as opposed to other organisations increased the probability of employing more than one tax credit recipient by 10 percent
- Size: as anticipated, the probability of employing more than one tax credit recipient rose markedly with size, with the number of employees, the number of establishments and turnover all having independent effects
- Industry: industry effects were pronounced, with Education and hotels and catering having the highest probability of employing more than one tax credit recipient, and Agriculture and fisheries and Construction being least likely to do so.

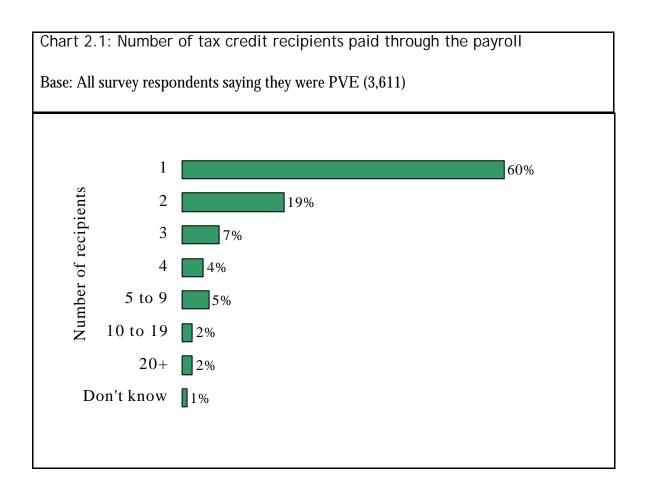
Table 2.10: Percentage change in probability of 2+ tax credit recipients

	<u> </u>
	%
<b>Region</b> (ref. North West)	
Eastern	-22
London	-29
East Anglia	-9
South West	-9
South East	-23
Scotland	14
Organisational type (ref. Company)	
Proprietor	10
<b>Employment size</b>	
Less than 5 (ref. 20-49)	-27
5-9 (ref. 20-49)	-20
10-19 (ref. 20-49)	-18
50-99 (ref. 20-49)	16
100+ (ref. 20-49)	33
Industry	
Agriculture/Fishing (ref. Wholesale/retail)	-16
Construction (ref. wholesale/retail)	-9
Hotel/Restaurants (ref. Wholesale/retail)	14
Education (ref. wholesale/retail)	22
Other services (ref. wholesale/retail)	7
(Base)	(5,756)
Base: All in initial sample frame recorded as having ta	x credit recipients

# 2.6 Survey data on number of recipients

The survey data provides more detailed information on the number of tax credit recipients paid through the payroll. This is shown in chart 2.1 below.

This indicates that in some cases, employers have a large number of tax credit recipients paid through the payroll. In fact, 10 percent of those with 100-249 employees said they had 10 or more recipients, and this rises to 38 percent for those with 250-499. One in five (21 percent) organisations with 500 or more employees said they had 50 or more recipients.



### 2.6.1 When employers started and stopped paying WFTC/DPTC

The survey data also provided information on additional issues: when employers started and stopped paying WFTC/DPTC through the payroll; the extent to which the number of recipients had changed in the last year; and their expectations for numbers of recipients in the future.

Given that the majority of PVE employers had just one tax credit recipient, it is not surprising that there was variation in terms of when they started paying them through the payroll. One in eight said that they only started in 2002 (the year of fieldwork), and the majority of these (73 percent) had just one recipient at the time of interview. Nine percent claimed to have started paying them in 1999 (the year before WFTC/DPTC were first paid via employers). A further one in six were unsure of the year.

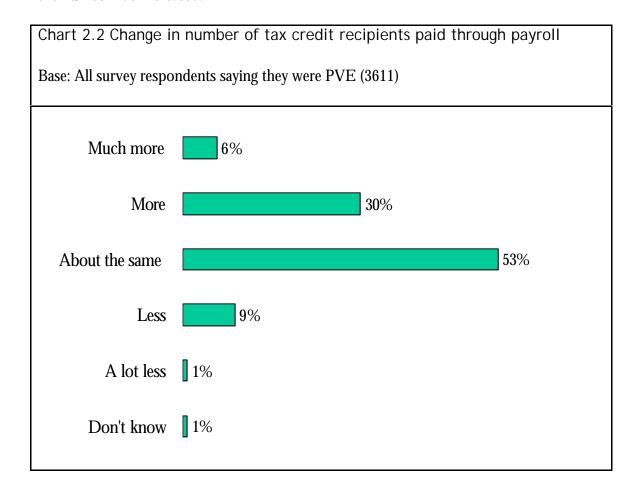
Those who no longer had any tax credit recipients paid through the payroll were asked when they last paid WFTC/DPTC. Again, there was some variation, with a third (34 percent) saying it was the year of fieldwork (2002); 44 percent said it was 2001, and nine percent said it was before 2001.

In organisations which previously had paid WFTC/DPTC through the payroll but were no longer doing so, respondents were asked why this was the case. In the majority of cases (59 percent), the employees concerned had left, while 44 percent said that the employees were still at the organisation, but were no longer eligible for WFTC/DPTC. A small proportion of respondents (six percent) said that both of these things had happened.

The smallest size band (those with fewer than five employees) were particularly likely to say that the employees concerned had left (71 percent).

# 2.6.2 Changes in number of tax credit recipients

Current PVE organisations were asked whether the number of recipients was greater or smaller than at the same time the previous year. Around half (53 percent) said it was about the same, while the remainder were more likely to say that the number had gone up than gone down (36 percent compared with 10 percent). Larger organisations and those with a high number of tax credit recipients (the two groups overlap) were particularly likely to say the number had increased.



Note that the above question was restricted to current PVE employers, and many of these only started paying WFTC/DPTC in the last year (ie the number has increased from zero). In addition, these figures exclude the ex-PVE sample, many of whom stopped paying WFTC/DPTC in the last year (which obviously means that their number will have gone down). Therefore, it is useful to take an overview of this issue, covering the total interviewed sample, and bringing in answers from different questions, as appropriate.

Table 2.11 Change in number of tax credit recipients paid through payroll in the last year: total sample

	Total
	%
<b>More</b> (current PVE who say number has increased)	7
Same/about the same	83
- current PVE who say number has stayed about the same	10
- all who have never been PVE	71
- $\operatorname{ex-PVE}$ , but who stopped paying more than 1 year before	1
Less	7
- current PVE who say number has gone down	2
- ex-PVE who stopped paying in last year	5
Don't know/not sure of timing	3
(Base)	(6,453)
Base: All survey respondents	

Current PVE employers were also asked whether they expected the number of tax credit recipients to rise or fall over the next few months. Respondents were more likely to predict the number to go up rather than down (18 percent compared with five percent), while the majority did not expect any change. Again, it was the larger organisations and those with a high number of recipients who expected a rise in numbers.

Table 2.12: Whether expect the number of tax credit recipients to rise or fall in next few months

	Total
	%
Rise a lot	1
Rise a little	17
Stay the same	71
Fall a little	3
Fall a lot	2
Don't know	5
(Base)	(3,611)
Base: All survey respondents saying they were PVE	

# 2.7 Summary

According to administrative data at October 2001, 15 percent of employers were paying tax credit recipients through the payroll (PVE), while a further five percent were ex-PVE.

The majority of PVE employers had just one tax credit recipient paid through the payroll, although survey data indicated that two per cent had 20 or more recipients (predominantly organisations with 500 employees or more).

PVE employers differed in a number of respects from never-PVE employers. The probability of being a PVE employer, and the number of tax credit recipients a PVE employer employs, were strongly associated with employer size, industry, organisation type, and region. Perhaps most striking was the fact that, controlling for other employer characteristics, the probability of being a PVE employer rose with employment size and turnover, as did the number of tax credit recipients employed in PVE organisations.

Eleven percent of employers showed a switch in status between the data download and the survey. Switching in and out of PVE status was also strongly associated with employment size, with switching out of PVE status driven largely by employer size and the number of tax credit recipients in employment within the firm.

#### 3 Information and advice

In this chapter we examine in detail employers' experiences of operating PVE, including attitudes to advice and information, awareness and knowledge of the system.

The remainder of this chapter is set out as follows. Sections 3.1 to 3.3 examine knowledge and awareness of WFTC/DPTC, while section 3.4 looks at the ways in which employers deal with tax credit queries. Section 3.5 focuses on the information and advice that employers receive about WFTC/DPTC, including the multivariate analysis that has been carried out on use of Inland Revenue sources of information. Section 3.6 looks at the sources of information and advice in more detail. Finally, section 3.7 looks at general communication with staff.

This chapter includes multivariate analyses. There are three elements addressed by these analyses:

- levels of awareness/knowledge of WFTC/DPTC;
- perceived usefulness of Inland Revenue information and advice on WFTC/DPTC;
- satisfaction with the pay-rolling of WFTC/DPTC.

The purpose of this analysis is to further identify the extent of employer awareness of matters relating to WFTC/DPTC and point to those factors associated with different levels of employer awareness. Multivariate techniques are used to identify employer characteristics associated with high and low awareness of WFTC/DPTC among the employers interviewed. The multivariate analysis presents results after isolating the independent effects of employer characteristics on the extent of awareness of WFTC/DPTC using a composite index based on four separate questions. The analysis also identifies employer characteristics associated with high and low awareness of WFTC/DPTC.

While Chapter Two used analysis based on the issued sample (14,969 cases), this and subsequent chapters focus on survey respondents (6,453 cases).

## 3.1 Knowledge of WFTC/DPTC

Less than six out of 10 employers (57 percent) said they knew something about WFTC and just over a fifth (21 percent) claimed some knowledge of DPTC. With the exception of Student Loans, awareness of other recent types of employer-related legislation was higher.

It is of course important to recognise that employers do not necessarily know which tax credit an employee is receiving. Furthermore, knowledge of WFTC/DPTC is most important among PVE employers specifically, and the data show that most PVE (94 percent) and ex PVE (90 percent) employers had some knowledge of WFTC. This was far higher than the knowledge amongst never-PVE employers (43 percent).

Interestingly, PVE employers also had more knowledge of all other types of government and tax legislation. This is partly, but not exclusively, because PVE employers tend to be larger, and larger organisations in general also showed greater knowledge of the various legislative measures than smaller organisations.

Table 3.1: Knowledge of government and tax legislation, by PVE status

	Total	PVE	ex-PVE	never-PVE
	%	%	%	%
National Minimum Wage	92	96	97	91
Statutory Sick Pay	85	94	93	82
Recent Pension changes	71	81	79	67
Working Time Regulations	64	69	70	62
Statutory Maternity Pay	59	77	72	52
WFTC	57	94	90	43
Repayment of Student Loans	31	42	39	26
DPTC	21	22	24	20
(Base)	(6,453)	(3,611)	(1,019)	(1,757)
Base: All respondents				

Although knowledge of WFTC was lower amongst never-PVE employers, this lack of knowledge was concentrated among small never-PVE employers. Just over a third (35 percent) of those with less than five staff, and less than half (49 percent) with five to 49 employees, claimed to have some knowledge.

# 3.2 Employers' Responsibilities

Interviewers then provided some more information to respondents about WFTC and DPTC: "Now I'd like to ask you a bit more about Working Families' Tax Credit and Disabled Person's Tax Credit. These replaced Family Credit and Disability Working Allowance between October 1999 and April 2000." Respondents were then asked if they knew that employers were now responsible for paying these tax credits direct to eligible employees through their pay packet.

Over three quarters (78 percent) said they were aware of this, and as one might expect, there were high levels of awareness amongst PVE (98 percent) and ex-PVE (94 percent) employers. Those PVE and ex-PVE respondents who said they did not know this tended to be small employers (less than 50 employees).

The awareness levels at this question were higher than the previous question asking whether respondents knew "something about" WFTC and DPTC. This may indicate that while employers were aware of the tax credits process, they were less familiar with the individual credits: WFTC and DPTC. It may also indicate that while many people did not feel confident about their overall knowledge, they felt more knowledgeable about their organisation's specific responsibilities.

Table 3.2: Awareness of PVE process, by PVE status

	Total	PVE	ex-PVE	never-PVE
	%	%	%	%
Aware	78	98	94	72
Unaware	21	2	6	28
(Base)	(6,453)	(3,611)	(1,019)	(1,757)
Base: All respondents				

Awareness levels were found to be high across most sub-groups of interest, with the notable exception being never-PVE employers with fewer than five staff, where a third were not aware of the process of paying WFTC/DPTC through the payroll.

Three in five employers (60 percent) were very or quite confident that they fully understood their responsibilities to pay WFTC/DPTC. As above, the same variations between PVE and never-PVE employers existed, with higher confidence amongst PVE and ex-PVE employers (92 and 89 percent respectively) than never-PVE (48 percent). Once again, small never-PVE employers (those with fewer than five staff) displayed lowest levels of awareness (42 percent). If we focus on the proportion who said they were very confident, 30 percent of all employers said this, ranging from 56 percent of PVE, to 50 percent of ex-PVE, and 20 percent of never-PVE. As noted above, it would appear that employers were more knowledgeable about their own responsibilities than about WFTC and DPTC in general, and that they expressed greater understanding of "tax credits" than WFTC and DPTC by name.

## 3.3 Awareness and knowledge: multivariate analysis

We produced a summary measure of tax credit awareness by summing together the scores from the four data items described above. The awareness scale runs from zero to four, with an employer scoring a point for each of the following:

- knowing something about WFTC
- knowing something about DPTC
- knowing that employers are responsible for paying tax credits through the pay packet
- expressing themselves 'very confident' that they fully understood their responsibilities to pay tax credits.

The distribution of scores by PVE status at interview is given in Table 3.3. Over one-third (36 percent) of all employers had a high awareness of WFTC/DPTC on this composite measure, scoring three or four points. The percentage rose to 61 percent among current PVE employers but was only 23 percent among the never-PVE employers. Conversely, 39 percent of employers had low awareness of WFTC/DPTC, scoring zero or one on the index. Among the never-PVE employers, half (52 percent) had low awareness, compared with only six percent among PVE employers.

Table 3.3: Scores on overall measure of tax credit awareness

	Total	PVE	Ex-PVE	never-PVE
	%	%	%	%
0	16	1	1	22
1	23	4	10	30
2	28	34	32	26
3	24	45	42	17
4	8	16	15	6
Mean	1.9	2.7	2.6	1.54
(Base)	(6,453)	(3,611)	(1,019)	(1,757)
Base: All respondents				

Using the index described we ran multivariate analyses to identify independent associations between employer characteristics and awareness of WFTC/DPTC and PVE. First, since the zero – four scale is ordinal, we estimated an ordered probit regression which allows us to estimate the impact of various factors on the probability of employers being in each of the five categories. Full results are presented in Model (1) in Appendix 2 of the

Multivariate Technical Appendix, where positive coefficients identify factors associated with higher awareness. The key findings are as follows:

- PVE status: having controlled for other factors, tax credit awareness was much higher among employers with experience of PVE than among those who had never experienced PVE, but there was little difference between current and ex-PVE employers. This pattern is consistent across different versions of the model, measuring both high and low awareness, as well as scores on the summary awareness scale. Model (2) in Appendix 2 replaces PVE status with the number of PVE tax credit recipients employed by the organisation, either at the time of interview or previously. It shows there was little difference in tax credit awareness between those employing one recipient and those employing two or more.
- Organisational status: employers in owner-managed organisations had lower awareness of WFTC/DPTC than respondents in other organisations.
- Employment size: awareness was greater in the larger organisations employing more employees, perhaps because human resources and other functions tend to be more sophisticated in larger organisations.
- Industrial sector: Business sector employers had a higher awareness of WFTC/DPTC than the reference category, the Wholesale and Retail sector, which was similar to the average for all employers.
- Workforce composition effects: the nature of the workforce was also associated with awareness. For instance, employers with a high proportion of non-white staff had higher awareness of WFTC/DPTC.
- Payroll arrangements: awareness of WFTC/DPTC was lower among those using an external body for payroll matters, perhaps because they were removed from the minutiae of payroll matters compared to those organisations that undertake payroll internally. Where there was a central payroll unit covering the whole organisation, rather than the reporting unit only, payroll managers had higher awareness of WFTC/DPTC. Where specialist software was used for payroll, awareness of WFTC/DPTC was higher than it was where a manual system was in place.

Table 3.4 illustrates results in a different way by comparing the predicted probability being a 'low awareness' employer for different types of employer. The first case is an employer with the modal characteristics for the interviewed sample. Such an organisation had no experience of PVE, so the probability of low awareness of WFTC/DPTC was quite high at 47 percent. If the same organisation currently employed tax credit recipients, its

probability of low awareness would fall dramatically to four percent (case two). The impact of ownership is illustrated by case three, which takes case one and simply switches the type of organisation from a company to sole proprietorship, resulting in a 16 percentage point increase in the probability of low tax credit awareness. Case four takes case one, but switches the industrial sector from Wholesale/Retail to Construction, bringing about a nine percentage point increase in the probability of low awareness. Using an external body for payroll raises the probability of low awareness by 13 percentage points (case five) relative to case one. Case 6 illustrates the impact of using specialist software: this reduces the probability of low tax credit awareness to 37 percent for an employer that otherwise has modal characteristics.

Table 3.4: The predicted probability of low tax credit awareness across different types of employer

<b>Employer characteristics</b>	Predicted probability of low tax credit awareness
1. never PVE, North West, company, <5 employees, <5 establishments, 1 PAYE code, in wholesale/retail, no workers working <16 hours, <80% employees working 30+ hours, <10% employees non-white, 0 employees with Health problems, $30\%$ + of full-time employees earning <£15,000, <50% part-timers earning <£15,000, payroll organised internally, manual payroll, 1 person working mainly on payroll, no-one working partly on payroll, 1 central payroll unit dealing with whole organisation	47%
2. As 1, but PVE	4%
3. As 1, but proprietor	63%
4. As 1, but Construction	56%
5. As 1, but external payroll	60%
6. As 1, but specialist software only	37%
(Base) Base: All respondents	(6,453)

#### 3.4 Dealing with tax credit queries

Nearly half of employers (48 percent) said they had not had any tax credit related queries; this was most common amongst never-PVE employers (61 percent). When employers did have queries about WFTC/DPTC, they were likely to address these in three main ways:

- 1. Nearly a third (32 percent) sought information or advice from the Inland Revenue;
- 2. Around a quarter (24 percent) answered the query using information available within their own organisation; and
- 3. One in six (16 percent) sought information or advice from someone else (e.g. accountants, payroll advisers).

Tables 3.5 shows the use of different sources analysed by number of employees. This analysis is limited to current PVE employers, as they have the most recent experience of these types of query. Amongst smaller employers (less than 50) the Inland Revenue was the most commonly used source for queries; larger employers were more likely than smaller employers to use information within their own organisation.

Table 3.5: How dealt with queries about WFTC/DPTC, by PVE and number of employees

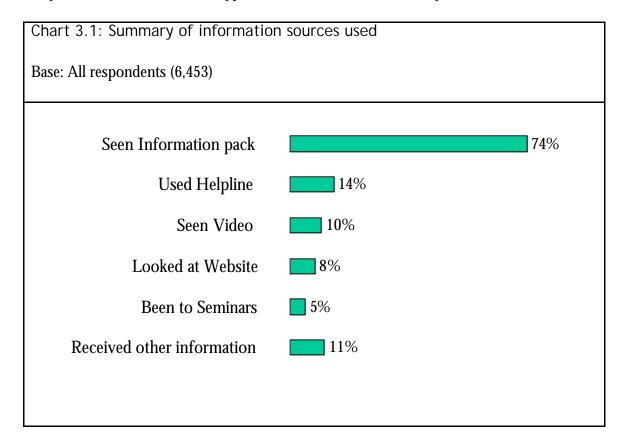
		PVE	PVE	PVE	PVE	PVE	PVE
	Total	<b>&lt;5</b>	<b>5-49</b>	<b>50-99</b>	100-249	<b>250-499</b>	<b>500</b> +
	%	%	%	%	%	%	%
Used information available within your own organisation	24	33	43	55	48	65	64
Got information from Inland Revenue	32	57	50	56	51	51	70
Got information from someone else	16	23	24	16	14	11	11
Other	3	1	1	2	2	*	2
Don't know	2	*	1	*	*	*	*
Not had any queries	48	24	24	17	29	18	7
(Base)	(5888)	(262)	(1078)	(511)	(589)	(344)	(745)
Base: All who knew employers	are resp	onsible :	for payin	g tax cre	dits		

#### 3.5 Use of information and advice

## 3.5.1 Descriptive analysis

Respondents were asked a series of questions about the types of information and advice they had received about WFTC/DPTC. The Inland Revenue has a number of communication channels and ways in which it disseminates tax credit information to employers, including an information pack, a tax credits helpline, specialist seminars, a website and a tax credits video.

As can be seen in chart 3.1, the majority of respondents (74 percent) said they had seen the information pack that was sent to employers. However, when probed, half of these said that although they had seen it, they had either not read it or did not know how often it had been used at their organisation. Use of other sources ranged from one out of twenty attending seminars to one out of seven using the employer tax credit helpline. Respondents may have used more than one type of information, as indicated by the chart below.



### 3.5.2 Use of information and advice: multivariate analysis

We produced a summary measure of employer usage of Inland Revenue sources of information and advice for tax credits by summing together the scores from the six data

items described above. The usage scale runs from zero to six, with an employer scoring a point for use of each Inland Revenue information source.

The distribution of scores by PVE status at interview is given in Table 3.6. Just over half (53 percent) of all employers used at least one Inland Revenue channel for information or advice on tax credits. Around half (49 percent) of all users used a single source, but a quarter (25 percent) used three or more sources. One sixth (17 percent) of employers with experience of employing tax credit recipients never used the Inland Revenue as a source of information. However, of those who did use the Inland Revenue at all for this purpose, over half used two or more channels (70 percent in the case of current PVE employers and 61 percent in the case of ex-PVE employers). Fourteen percent of employers with PVE experience used four or more of the six Inland Revenue channels. The majority (59 percent) of employers who never employed tax credit recipients used none of the Inland Revenue information sources, but this still leaves a sizeable minority who used at least one source. In 15 percent of cases, never-PVE employers actually used two or more Inland Revenue sources.

The difference between never-PVE employers and those with experience of PVE was due largely to the differing levels of use of the Inland Revenue helpline. PVE and ex-PVE employers were considerably more likely to have used this than never-PVE employers.

Table 3.6: Number of Inland Revenue tax credit information and advice sources used

	Total	PVE	ex-PVE	never-PVE
	%	%	%	5
0	47	17	17	59
1	26	25	32	26
2	14	24	21	10
3	9	21	20	4
4	4	10	10	1
5	*	3	1	*
6	*	*	0	*
Mean	0.99	1.93	1.78	0.64
(Base)	(6,453)	(3,611)	(1,019)	(1,757)
Base: All respondents				

Using the index described we ran multivariate analyses to identify independent associations between employer characteristics and the use of Inland Revenue sources of information on WFTC/DPTC and PVE. First, since the zero to six scale is ordinal, we estimated an ordered probit regression which allows us to estimate the impact of various factors on the

probability of employers using between zero and six sources. Full results are presented in Model (1) in Appendix 2b of the Multivariate Appendix, where positive coefficients identify factors associated with higher usage. The key findings are as follows:

- PVE status: having controlled for other factors, use of Inland Revenue information sources was much higher among employers with experience of PVE than among those who have never experienced PVE, but there was little difference between current and ex-PVE employers. (Replacing PVE status with the number of PVE tax credit recipients employed by the organisation, we found little difference in usage between those employing one recipient and those employing two or more).
- Organisational status: employers in partnerships used Inland Revenue more for tax credit information and advice than payroll managers in other organisations.
- Size and complexity: employment size was not associated with use of Inland Revenue information/advice, but the number of Inland Revenue channels used was higher in more complex organisations, namely those with five or more establishments and those with two or more PAYE codes.
- Workforce composition effects: the nature of the workforce is also associated with Inland Revenue usage. Usage rose with the percentage of non-white ethnic minorities employed. It fell with a high percentage of lower paid part-time employees.
- Payroll arrangements: those contracting out the whole of their payroll function to an external body used fewer Revenue information sources than those with at least some of their payroll administered internally. This suggests that external payroll contractors took on this responsibility. The number of Inland Revenue sources used was higher where a central payroll unit dealt with the payroll for the whole organisation, rather than the reporting unit alone, another indication that employers with complex payroll matters to deal with were more likely to seek information and advice from the Revenue. Organisations resort to more Inland Revenue channels where they use specialist software in their payroll administration rather than running a purely manual system. More Inland Revenue sources were used where there was more staff working mainly on payroll.

If analysis is confined to those with experience of employing tax credit recipients, results are fairly similar. We also analysed high use (scoring three or more on the scale) and low use (scoring zero or one on the scale) respectively. The mean probability of high Inland Revenue usage was eight percent. The analysis revealed the following features, which were additional to the patterns described for the first model:

- Region: compared to an employer in the North West with mean sample characteristics, similar employers in the North, London and Eastern regions had a five to six percent lower probability of high usage.
- Organisational complexity: An employer with five or more establishments was four
  percent more likely to use a high number of Inland Revenue channels than an
  otherwise identical employer with sample mean characteristics but with fewer than five
  establishments.
- Low pay: the probability of high use for an employer with mean characteristics was three to four percent lower where at least 50 percent of part-timers earn below £15,000 per annum, compared with a like employer where a lower percentage of part-timers earn these wages.

If we consider low use of Inland Revenue information sources, that is, employers using none or one channel, influences are in many ways the mirror images of those relating to high use. However, there were some important differences:

- Region: whereas employers in London were less likely to be high users of Inland Revenue information than employers in the North West, London was not statistically significant in the low use model.
- Workforce composition: having a high percentage of non-white ethnic minority employees reduced the probability of low use, whereas it had no effect on high use. Having no full-timers earning below £15,000 per annum reduced the probability of low use, but was not significantly associated with high use.
- Payroll characteristics: use of an external body for payroll administration reduced probabilities of high use but had no significant effect on low use.

#### 3.5.3 Frequency and usefulness of information sources: overview

Frequency of use was broadly consistent for the information pack, helpline and website (see table 3.7). The information pack attracted more frequent users, although a high level of non-response (those stating "don't know" accounting for 16 percent) was found here. In general, employers were light users of the different types of information, using each just once or twice. Smaller proportions said they had used them a few times, whilst a small minority claimed to be more frequent users.

Table 3.7: Frequency of use, for information pack, helpline and website

	<b>Information Pack</b>	Helpline	Website
	%	%	%
Used frequently	7	3	5
Used a few times	14	19	16
Used just once or twice	63	76	77
Don't know	16	2	2
(Base)	(4,007)	(1,979)	(1,089)
Base: All respondents who had	used information source		

Table 3.8 shows that satisfaction was very high amongst those that had used Inland Revenue sources of information. Over nine out of 10 found the helpline and seminars useful, whilst similarly high proportions found the website (86 percent) and information pack (85 percent) useful. Over seven out of 10 also found the tax credits video and other sources<sup>15</sup> useful.

Reporting differences in overall usefulness is potentially misleading as it disguises more subtle variations, such as the distinction between those who found the information 'very' or 'quite' useful. Further analysis of this reveals that highest satisfaction can be found with the helpline and seminars, where 60 percent and 68 percent of users found these 'very' useful. In contrast, less than three in 10 found each of the remaining sources 'very' rather than 'quite' useful.

 $^{15}$  The other sources of information used are discussed later in this section

Table 3.8: How useful found information sources

	Information	Helpline	Seminars	Website	Video	Other
	pack					
	%	%	%	%	%	%
Useful	85	93	94	86	72	<b>73</b>
Very useful	23	60	68	26	23	28
Quite useful	61	33	26	59	49	45
Not useful	12	6	5	11	25	18
Not that	8	4	4	7	19	9
Not at all	4	2	*	4	7	9
Don't know	3	1	1	14	3	9
(Base)	(3,735)	(1,942)	(918)	(1,089)	(703)	(1,173
Base: All who used	information sour	rce				٠

There were sub-group variations, and it would appear that satisfaction is linked to employer size in most cases, with larger employers more likely to express higher levels of satisfaction than their smaller counterparts. PVE employers were also more satisfied than never-PVE employers, although the exception to the rule was satisfaction with the helpline, where small never-PVE employers found this most useful.

Employers who contacted the Inland Revenue via the helpline or website were asked what types of queries they had. The most common queries included information about whether staff were eligible for WFTC/DPTC, and other more general enquiries.

# 3.6 Detailed analysis of individual information sources

It is clear from section 3.5 that there are some common variations linked to each of the different types of information. However, there are some differences across each information type that are worth exploring individually. Each information source is now considered separately.

#### 3.6.1 Information Pack

Nearly three quarters (74 percent) had seen the information pack that was sent to employers and there were no significant differences by PVE status or employer size, although payroll structure did have an impact, as can be seen in Table 3.9. Employers who outsourced their entire payroll were least likely to have seen the pack (57 percent).

Table 3.9: Whether seen Information Pack, by role of external body

	Total	External body used for entire payroll	External body used for part of payroll	No external body used
	%	%	%	%
Yes	74	57	74	78
No	23	40	25	20
Don't know	2	3	2	2
(Base) Base: All survey respondents	(6,453)	(775)	(1,201)	(4,464)

PVE and ex-PVE employers used the pack more frequently than never-PVE employers, where more than half (51 percent) had not read anything from the pack. In addition, nearly half (49 percent) of employers who outsourced their entire payroll had not read the literature.

Over half (52 percent) of employers with fewer than five staff had not read the pack. Larger employers with 100 or more staff tended to be more frequent users.

Table 3.10: How often used the Information Pack, by number of employees

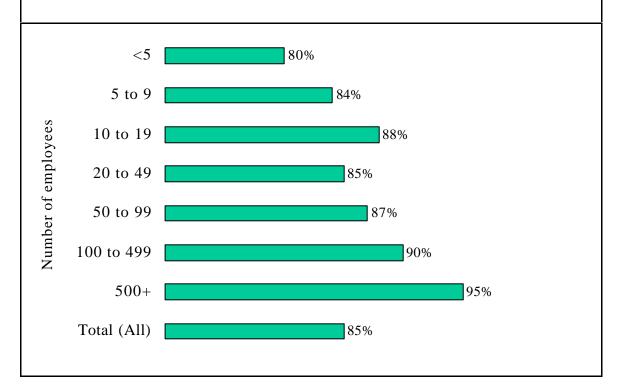
	Total	<5	5-9	10-	20-	50-99	100-499	<b>500</b> +
	%	%	%	%	%	%	%	%
Frequently	4	4	5	5	3	5	11	7
A few times	9	4	8	10	14	19	22	42
Just once or twice	38	29	37	44	51	54	53	44
Didn't read it	40	52	42	31	25	16	11	5
Don't Know	10	12	9	10	7	7	4	2
(Base	(4,933)	(789)	(600)	(524)	(745)	(644)	(925)	(646)

Base: All respondents who have seen the Information Pack

A quarter (24 percent) had used the information pack to answer specific queries and this rose to over three in 10 (31 percent) amongst PVE employers. The majority of employers (85 percent) found the pack useful, and larger employers found this resource more useful than their smaller counterparts, as can be seen in Chart 3.2.

Chart 3.2: Proportion who found Information pack useful, by number of employees

Base: All who have seen Information Pack (3,685)

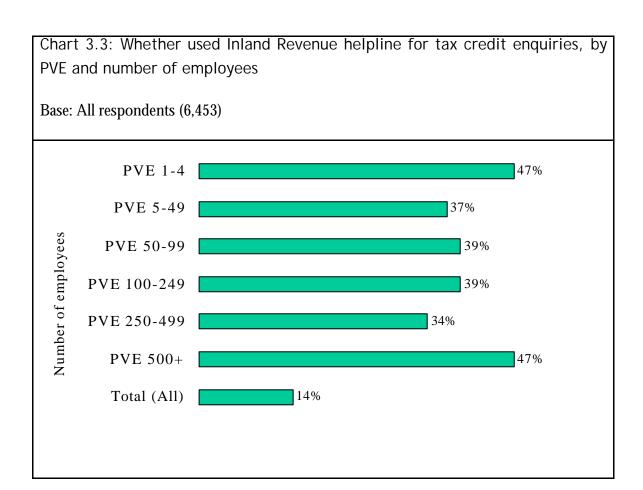


In Chapter Eight we explore employers' perceptions of costs of administering or preparing for WFTC/DPTC, and here it seems that satisfaction with the information pack was linked to respondents' perceptions of costs. Of those who perceived that costs have been significant, only 69 percent found the pack useful.

### 3.6.2 Helpline

Overall, one in seven employers (14 percent) had used the tax credits helpline for enquiries. Nearly two fifths (39 percent) of PVE employers had used the helpline, compared with 32 percent of ex-PVE and four percent of never-PVE. This is the information source that shows the greatest variation between employers who have had experience of PVE and those that have not.

As shown in Chart 3.3, use was most common amongst the smallest (fewer than five) and largest (500 or more) PVE employers, where just less than half (47 percent) had used it.



Employers who outsourced their entire payroll function were less likely to have used the helpline than those who conducted the entire process internally (six versus 16 percent).

Most respondents had used the helpline just once or twice (76 percent) or a few times (19 percent). A minority (three percent) had used it frequently.

Use of the helpline was also linked to respondents' perceptions of costs of administering PVE. If they perceived that costs have been significant, they were more likely to be frequent users (10 percent).

Respondents called the helpline with various types of queries. The six main types of queries are detailed below, and are based on the 856 respondents who contacted the helpline.

- General enquiries or queries about WFTC/DPTC (12 percent)
- Eligibility for WFTC/DPTC (10 percent)
- Information about how the system works (nine percent)
- Start dates/end dates (seven percent)

- General payment queries/calculations of WFTC/DPTC (seven percent)
- What to do when someone leaves (seven percent).

A range of other queries were mentioned by fewer employers and included topics such as additional funding, dates of payment, amounts to pay and set-up queries to name a few of these.

The most common query raised among PVE employers was general enquiries about WFTC/DPTC (13 percent); ex-PVE employers were most likely to have called about start and end-dates (13 percent) and never-PVE employers were most likely to have queried eligibility criteria (18 percent). Very large PVE employers (500 or more employees) were most likely to contact the helpline about queries they had received directly from employees (21 percent). In addition, employers with 10 or more tax credit recipients called most often with queries about the process of dealing with 'leavers' (18 percent).

Over nine out of 10 (93 percent) found the helpline useful. Table 3.11 shows that satisfaction was highest among small employers (fewer than five employees), who were particularly likely to find the helpline 'very' useful. Furthermore, nine in 10 small never-PVE employers (fewer than five employees) found the helpline 'very' useful.

Table 3.11: How useful found tax credits helpline, by number of employees

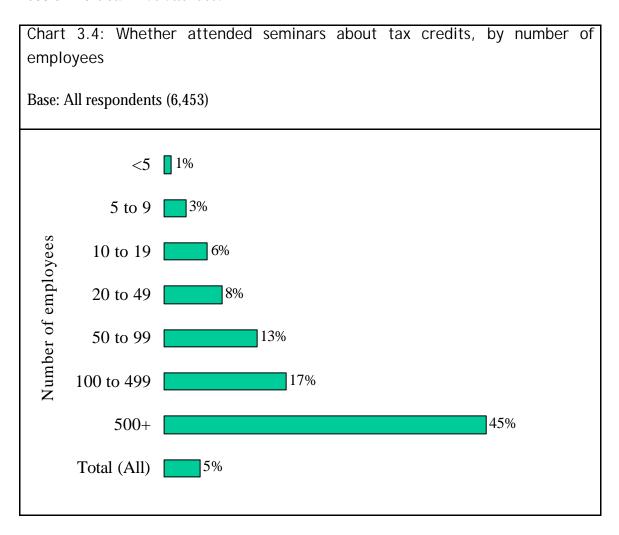
	Total	<5	5-9	10-19	20-49	50-99	100-499	<b>500</b> +	
	%	%	%	%	%	%	%	%	
Very useful	60	75	49	66	60	60	54	42	
Quite useful	33	20	39	31	36	31	44	50	
Not that useful	4	2	4	1	5	7	2	4	
Not useful at all	2	2	5	3	-	1	-	-	
Don't Know	1	1	3	-	-	1	-	4	
(Base)	(1,942	(225)	(232)	(178)	(254)	(229)	(416)	(378)	
Base: All respondents who know how often they use the helpline									

Just as use of the helpline was linked to respondents' perceptions of costs, so was satisfaction. If employers perceived that costs had been significant, they were less likely to find the helpline useful (80 percent).

#### 3.6.3 Seminars

Prior to the introduction of PVE, the Inland Revenue Business Support Teams ran tax credit workshops and seminars for several months in the run-up to April 2000. These workshops also continued after this date.

One in 20 employers had been to a seminar on tax credits – nine percent of PVE employers, seven percent ex-PVE and three percent never-PVE. Chart 3.4 shows that attendance increases with employer size, and as many as 45 percent of organisations with 500 or more staff had attended.



Once again, high levels of satisfaction were found and the majority (94 percent) found the seminars useful (68 percent found these very useful, 26 percent quite useful). Sub-group variations were limited, although satisfaction was lower among never-PVE (91 percent) than PVE employers (97 percent).

#### 3.6.4 Website

The Inland Revenue website contains links to a number of factsheets and guides, which aim to assist employers and individuals. Eight percent of respondents had used the website for information or advice about tax credits – 16 percent among PVE employers, 12 percent ex-PVE and six percent never-PVE. Once again, use of information increased with employer size, and a fifth of employers with 100-499 staff and a third with 500 or more had used the website.

Large employers (500 or more staff) were not only more likely to have used the website, but were also more likely to have used it frequently.

Table 3.12: How often used the website, by number of employees

	Total	<5	5-9	10-19	20-49	50-99	100-499	<b>500</b> +
	%	%	%	%	%	%	%	%
Just once or twice	77	79	85	69	71	64	61	52
A few times	16	15	10	19	17	26	27	31
Frequently	5	5	2	11	9	8	11	16
Don't Know	2	2	3	1	3	2	1	1
(Base)	(1,089	(65)	(68)	(80)	(143)	(164)	(286)	(262)
Base: All respondents v	vho have us	ed the	website	;				

Nearly three in 10 (29 percent) had used the website to answer specific queries and when probed on the types of queries they had used the website for, as with the helpline, response was varied. The four main types of queries are detailed below, and are based on the 156 respondents who had used the website to answer specific queries:

- Eligibility criteria (24 percent)
- General query/information (13 percent)
- Payment dates/structure (12 percent)
- End of year queries (10 percent)

86 percent of respondents found the website useful. This fell slightly to eight in 10 amongst employers with fewer than five staff.

#### 3.6.5 Video

Prior to April 2000, Inland Revenue produced a nine-minute video plus an accompanying leaflet specifically for employers outlining key responsibilities under tax credits. Employers with fewer than 10 staff were automatically sent a copy, and other employers could request a copy.

One in 10 employers said they had seen the video. This figure was 13 percent among both PVE and ex-PVE employers, and eight percent among never-PVE employers. Given that employers with fewer then 10 staff had been sent a copy, one might expect a larger proportion of these to have seen it. This is not borne out in the data and smaller employers were no more likely to have seen this. However, if the analysis is restricted to PVE employers only, then smaller employers were more likely to have seen the video. As can be seen in Table 3.13 a quarter of PVE employers with less than five staff had watched it.

Table 3.13: Whether seen tax credit video, by PVE and number of employees

		PVE	PVE	PVE	PVE	PVE	PVE
	Total	<b>&lt;5</b>	<b>5-49</b>	<b>50-99</b>	100-249	<b>250-499</b>	<b>500</b> +
	%	%	%	%	%	%	%
Yes	10	25	12	10	9	8	9
No	90	75	88	89	91	92	91
Don't know	*	*	*	1	*	*	1
(Base) Base: All respondents	(6,453)	(271)	(1,112	(513)	(595)	(346)	(756)

Over one in 10 employers who conducted all or part of their payroll internally had seen the video compared to four percent who had outsourced the entire payroll.

Over seven out of 10 (72 percent) of employers found the video useful; 23 percent found it very useful and 49 percent quite useful. Satisfaction levels were highest amongst PVE (76 percent) and ex-PVE employers (81 percent), while satisfaction amongst never-PVE employers was lower (68 percent).

Satisfaction was lowest amongst small employers (less than five employees), where 61 percent found the video useful. Amongst small never-PVE employers, satisfaction fell to 53 percent.

#### 3.6.6 Other information

In addition to the sources of information already described, a further 11 percent had received information about tax credits from other sources (including Inland Revenue or other external sources). A fifth of ex-PVE and one in six (17 percent) PVE employers had received such information, compared to eight percent of never-PVE employers. Large employers were also more likely to have sought additional information than their smaller counterparts. More specifically, just under a third (32 percent) with 500 or more employees had received such information.

Use of additional information was linked to respondents' perceptions of costs. Amongst employers who perceived that costs of PVE had been significant, a relatively high proportion (31 percent) had used additional information.

When asked what information they had received, four main sources were mentioned, and the analyses below are based on the 701 respondents who had received additional information.

- Inland Revenue information (35 percent)
- Accountant/payroll bureau information (20 percent)
- Trade Association/Professional body information (10 percent)
- Trade press/journals (nine percent).

Table 3.14 shows that large employers were most likely to receive information from a payroll bureau or accountant, whilst smaller employers were more likely to have received it from the Inland Revenue.

Table 3.14: Source of additional information<sup>16</sup>, by number of employees

	Total	<5	5-9	10-	20-	50-99	100-	500+
	%	%	%	%	%	%	%	%
Information from	20	17	15	13	24	24	29	53
Accountant/ Payroll								
bureau								
Information from Inland	35	42	53	31	25	21	21	12
Revenue								
(Base)	(1,173)	(89)	(73)	(98)	(187)	(160)	(284)	(261)
Base: All respondents who	received ac	lditiona	l inforn	nation a	hout tax	credits		

When asked for a description of this additional information, respondents' answers fell into three broad groups. The following analysis is based on the 701 respondents who received additional information.

- 1. Just under a third (31 percent) received general information about tax credits
- 2. Over a quarter (26 percent) said they received information in the form of a newsletter, bulletin, leaflet, magazine, handbook or CD-ROM
- 3. 16 percent received information about the payment of tax credits.

Nearly three quarters (73 percent) found this information useful. PVE and ex-PVE employers were once again more satisfied with the information received (81 percent and 77 percent respectively) compared with never-PVE employers (67 percent).

#### 3.7 Communication with staff

As well as examining the types of information that employers have received from the Inland Revenue and other sources, it is also important to explore whether and how employers disseminate information to their staff about tax credits.

One in 10 employers said they had provided information to staff about tax credits, although there are some interesting sub-group variations, notably by PVE status and employer size. Over a fifth (21 percent) of PVE employers, and 17 percent of ex-PVE

<sup>&</sup>lt;sup>16</sup> The table does not show all responses to this question, just the two most commonly mentioned. A smaller proportion of respondents mentioned other sources of information.

employers, said they provided information to staff, compared to six percent of never-PVE employers. Overall, large employers were more likely to distribute information to staff, although Table 3.15 shows that among PVE employers, it was the smallest (less than five staff) who are most likely to. This is because the difference by PVE status was most extreme among the smallest organisations (fewer than five employees). Among this group, 34 percent of PVE and 23 percent of ex-PVE employers have provided information, compared with four percent of never-PVE employers.

Table 3.15: Whether provided information about tax credits, by PVE and number of employees

	Total	PVE <5	PVE 5-49	PVE 50-99	PVE 100-249	PVE 250-499	PVE 500+
	%	%	%	%	%	%	%
Yes	10	34	20	23	16	16	20
No	89	66	78	75	82	82	78
Don't know	1	-	2	2	2	2	2
(Base) Base: All respondents	(6,453)	(271)	(1,112	(513)	(595)	(346)	(756)

It is also interesting to note that there is no significant difference in terms of the number of tax credit recipients. For instance, just less than a quarter (23 percent) of employers with one PVE tax credit recipient had done so, the same proportion as for those with 10 or more recipients.

When asked how they had communicated any information to staff, a range of communication channels were identified, although the main two were that employers told staff on an individual basis (63 percent) or they provided written communication (27 percent). PVE employers more often spoke to staff individually, whilst never-PVE employers preferred to provide other types of written communication. As noted earlier, large employers were more likely to distribute information, and they were most likely to do so via written communication channels. In contrast, small employers most often told staff on an individual basis.

## 3.8 Summary

Just under six out of 10 employers (57 percent) said they knew something about WFTC and just over a fifth (21 percent) claimed some knowledge of DPTC. With the exception of Student Loans, awareness of other recent types of legislation affecting employers was higher. The lack of knowledge of WFTC/DPTC was particularly concentrated among small never-PVE employers. However, these results are hardly surprising since we are not

comparing like with like. Unlike legislation such as the National Minimum Wage, not all employers need to know about tax credits. Most employers only find out about them when they have employees eligible for tax credits, and this is reflected in the results showing that knowledge was high amongst PVE employers. The particularly low awareness of DPTC is probably linked to the relatively small size of the DPTC caseload, and perhaps also to the fact that employers did not necessarily know which tax credit they were paying – some employers may automatically have assumed that they were paying WFTC.

Of all employers, over three quarters (78 percent) were aware of their responsibilities regarding the payment of tax credits, rising to 98 percent amongst PVE employers; and 30 percent of all employers were "very confident" that they knew their responsibilities as an employer in relation to tax credits (56 percent among PVE employers). This is perhaps evidence of pragmatism on the part of employers: they found out about tax credits when they needed to know, that is, when faced with the need to deal with tax credit recipients. The multivariate analysis revealed that a number of employer features are associated with awareness – it is not simply down to PVE experience. These factors include size (larger organisations showing higher awareness) and the nature of the payroll system (higher awareness where payroll was handled internally within the firm).

When they had queries about tax credits, large employers were more likely to use information within their own organisation to answer these, while smaller employers were more inclined to seek advice from the Inland Revenue.

When asked about various sources of Inland Revenue communication, the Inland Revenue information pack was the source of information most commonly used by employers (60 percent had used this). Use of other sources ranged from one out of twenty for attendance at seminars, to one out of seven for use of the helpline. In general, employers were light users of the different types of information, having used each just once or twice, although satisfaction was very high amongst those that had used them.

Not surprisingly, PVE employers were more likely to seek out Inland Revenue advice: five in six with PVE experience did so, compared with four in ten of those who have never employed PVE recipients. This was mainly due to higher use of the Inland Revenue helpline. Still, the general level of usage of the sources among never-PVE employers was perhaps higher than might have been expected.

PVE status was also the key factor determining use of Inland Revenue advice, after accounting for other employer characteristics, but it made little difference if the employer was a current or ex-PVE employer, nor did it matter how many tax credit recipients the employer had. In general, employers used Inland Revenue sources more often where they

had complex payroll arrangements – either the central payroll system covered the whole organisation, they had to administer more than one PAYE code, they deployed a high number of staff on payroll matters, or they used specialist software.

Overall, one in 10 employers said they had provided information to staff about tax credits (21 percent among PVE employers and 17 percent for ex-PVE). Among PVE employers, it was the smallest (fewer than five employees) who were most likely to do so.

# 4 Administering WFTC/DPTC

In this chapter we examine issues around the administration of WFTC/DPTC. This includes an assessment of how easy WFTC/DPTC have been to administer, as well as the overall impact they have had on payroll. This section also covers the timing of tax credit payments, cash flow issues, and whether employers have applied for additional funding from the Inland Revenue. In addition, it examines any perceived benefits of payment via the employer, as well as any difficulties this has caused.

Section 4.1 looks at the ease of operating PVE, and section 4.2 identifies the difficulties and benefits involved. Section 4.3 examines the impact of PVE on payroll. Sections 4.4 and 4.5 focus on payment procedures and cash flow problems. Finally, section 4.6 explores overall satisfaction with the Inland Revenue.

Because of the nature of the questions, this chapter is limited to survey respondents with experience of PVE.

### 4.1 Ease of operating PVE

All employers with experience of paying WFTC/DPTC through the payroll were asked how easy they have found this. Most respondents said that it had been at least quite easy (91 percent), and nearly half (46 percent) said it had been very easy (as shown in Table 4.1). However, a proportion reported that they had found it quite or very difficult (five percent and two percent respectively). Section 4.2 provides details on the type of difficulties employers have faced. Figures are similar whether the employer was currently PVE or ex-PVE, although a higher percentage of ex-PVE employers could not recall how easy it was.

There is a link between answers to this question and the flexibility of the payroll system, with those who said they had a very flexible payroll system more likely to have found it very easy to pay WFTC/DPTC. However, there were no significant differences in terms of whether payroll was handled externally, the only variation being the higher number of "don't know" answers when payroll was all handled externally.

Table 4.1: How easy have found their organisation's experience of paying WFTC and DPTC through payroll

	Total
	%
Very easy	46
Quite easy	45
Quite difficult	5
Very difficult	2
Don't know	2
(Base)	(4,564)
Base: All PVE and ex-PVE respondents	

The ease with which employers felt WFTC/DPTC were paid through the payroll increased with satisfaction with the Inland Revenue's tax credit service (as shown in Table 4.2). In particular, 67 percent of those who said they were 'very satisfied' with the service thought payment through the payroll was 'very easy', compared with 39 percent of those who said they were only 'quite satisfied' with the Inland Revenue service. Similarly, the likelihood of experiencing difficulty paying WFTC/DPTC through the payroll rose with dissatisfaction with the Inland Revenue service. It may be that a satisfactory Inland Revenue service increased the ease with which WFTC/DPTC were paid through the payroll. An alternative explanation is that there are limits to the assistance the Inland Revenue can offer, so that those with the greatest difficulty paying credits through the payroll were most likely to express frustration with the level of service on offer.

Table 4.2: Ease with which WFTC/DPTC are paid through the payroll, by satisfaction with Inland Revenue tax credit service

	Satisfaction with tax credit service offered by Inland								
	Revenue								
	Very Quite Neither Quite								
	satisfied	satisfied		dissatisfied	dissatisfied				
	%	%	%	%	%				
Very easy	67	39	38	37	28				
Quite/very difficult	3	6	8	33	37				
(Base)	(1,135)	(2,287)	(974)	(90)	(62)				
Base: All PVE and ex-PVE respo	ondents								

Ease of paying credits through the payroll was also associated with the perceived costs of paying WFTC/DPTC: where costs were perceived as minimal or zero, over half PVE employers believed PVE was 'very easy', compared to one-sixth of those bearing 'significant' costs (Table 4.3).

Table 4.3: Ease with which WFTC/DPTC are paid through the payroll, by perceived costs of WFTC/DPTC

	Perceived costs of preparing							
	for/administering WFTC/DPTC							
	Significant Moderate Minimal None							
	%	%	%	%				
Very easy	17	25	48	59				
Very/quite difficult	46	15	2	4				
(Base)	(246)	(886)	(2,315)	(1,118)				
Base: All PVE and ex-PVE respondents								

Table 4.4 shows that ease of PVE was also associated with the impact that employers think WFTC/DPTC has on payroll. Where the impact was adjudged to be 'very big' the difficulty of PVE was at its greatest.

Table 4.4: Ease with which WFTC/DPTC are paid through the payroll, by perceived impact of PVE on payroll

	Perceived impact of paying WFTC/DPTC on payroll							
	Very big	Big	Not very big	Little				
	%	%	%	%				
Very easy	34	22	33	49				
Very/quite difficult	38	29	8	3				
(Base) Base: All PVE and ex-PVE responde	(131) nts	(523)	(1,207)	(1,964)				

The ease with which employers felt they could pay WFTC/DPTC was not correlated with either the number of Inland Revenue sources of information and advice used<sup>17</sup>, nor with the use of any particular channel of Inland Revenue information or advice.

<sup>&</sup>lt;sup>17</sup> Correlation coefficient=0.037

# 4.1.1 Multivariate analysis: Employer characteristics and ease of paying WFTC/DPTC through the payroll

Multivariate analyses were used to identify independent associations between employer characteristics and the ease of paying WFTC/DPTC through the payroll. First, since the scale is ordinal, we estimated an ordered probit regression (see Model (1) in Appendix 3 of the Multivariate Technical Appendix). We recoded the variable so that the highest score denotes 'very easy' and the lowest score 'very difficult', so that positive coefficients represent greater ease of payment. The key findings are as follows:

- Region: although there were no significant differences in ease of PVE relative to the reference region (the North West), employers in Scotland found PVE significantly easier than employers in Yorkshire and Humberside, London and Wales.
- Organisational type: proprietorships and partnerships found PVE harder to deal with than other organisations.
- Size: larger employers found PVE easier to administer, as indicated by the significant difference between the smallest employers with fewer than five employees and the largest with 100 or more employees.
- Industry: employers in Agriculture/fisheries/Mining found PVE more difficult than employers in the wholesale/retail reference category, whereas employers in transport and communication found PVE easier than the reference category.

Table 4.5 displays the significant results from a model identifying influences on finding payment of WFTC/DPTC 'very easy'. Under the model, the mean probability of finding PVE very easy was 46 percent. The figures in the chart represent the change in the probability of finding PVE 'very easy' to deal with, induced by a switch in characteristic away from the reference category, measured for an employer with mean characteristics on other sample characteristics. It reveals the following findings, which are additional to those outlined for the first model:

- Region: regional effects are quite pronounced. The probability of finding PVE very easy was significantly greater in East Anglia, as well as in Scotland (the latter also identified in the first model).
- Payroll arrangements: these played only a minor role, the only significant effect being the reduced probability of finding PVE 'very easy' where the employer contracts out part of the responsibility for payroll.

Perceptions of the costs and impact of PVE on payroll: these both had independent
effects, having controlled for other observable factors. Believing that WFTC/DPTC
have a substantial or moderate impact on payroll costs reduced the probability of
finding PVE very easy to administer by 25 percent for the employer with mean
characteristics. The belief that PVE has a 'very big' or 'big' impact on payroll lowered
the probability by 12 percent.

In other models that are not shown, neither PVE status (current or ex-PVE) nor the number of tax credit recipients proved significant.

Table 4.5: Percentage change in probability of PVE being very easy

	%
Region (ref. North West)	
East Anglia	11
Scotland	16
Organizational true (ref. company)	
Organisational type (ref. company)	
Proprietor	-15
Partnership	-9
Perceptions of cost and impact of PVE	
Perceives cost to be substantial/moderate (ref. Minimal/zero)	-26
Perceives PVE has a very big/big impact on payroll (ref. not very big/little)	-12
Payroll arrangements (ref. internal only)	
External and internal payroll management	-7
Industry (ref. Wholesale/retail)	
Agriculture/Fishing	-22
(Base)	(4,564)
Base: All PVE and ex-PVE respondents	

Influences on finding PVE quite or very difficult tended to mirror those relating to finding PVE easy. However, there were some important differences:

Region: regional effects were quite different. Employers in London had the greatest
difficulty running PVE, perhaps due to high labour turnover. East Anglia was close
behind, even though East Anglia was also positively associated with greater ease of
administering PVE, a finding suggesting East Anglia was associated with middling
degrees of difficulty.

- Organisation type: this was no longer significant.
- Payroll characteristics: these were more important in identifying employers with
  difficulty than they were in identifying employers finding PVE easy. With two or more
  PAYE codes in the organisation, the difficulty operating PVE actually fell, relative to
  employers with a single code. Having a manual system was associated with greater
  difficulty, as was the absence of someone working mainly on payroll matters.
- Sector: compared with Wholesale/Retail, the manufacturing, Construction and services sectors experience lower degrees of difficulty in administering PVE.

#### 4.2 Difficulties administering WFTC/DPTC and perceived benefits

Respondents were asked about the difficulties and benefits of paying WFTC/DPTC via the payroll. Section 4.1 covered respondents' views on how easy it has been for their organisation to pay WFTC/DPTC; it showed that seven percent said that they found it very or quite difficult. A similar proportion (six percent) mentioned having specific problems, when asked whether they had experienced any difficulties administering WFTC/DPTC through the payroll.

The types of problem most frequently reported (each by one percent of the total sample of employers with PVE experience) were:

- Difficulty calculating the amount of WFTC/DPTC to pay
- Understanding rules/regulations/procedures
- Too time-consuming
- Software/systems problems.

Although only a small proportion of employers mentioned specific problems in administering PVE, employers were also unlikely to mention any actual benefits arising from paying WFTC/DPTC through the payroll: nine in ten did not identify any benefits. Where benefits were identified, they were likely to be seen as benefits to the employee: either in receiving tax credits quickly and directly into their bank account (although in reality this is not a distinguishing feature of the PVE system), or by increasing the wage that employees receive. Other respondents felt that it benefited the employee, but could not specify exactly why. In other cases, respondents felt that it was generally beneficial to the employer. A further response was that the system encourages people to go back to work. These issues are addressed directly in the chapter on Recruitment issues.

Employers who used Inland Revenue information sources were more likely to mention benefits associated with WFTC/DPTC. Just five percent of employers who had not used any Inland Revenue sources identified any benefits, compared with eight percent who had used one Inland Revenue source and 12 percent who had used two or more.

#### 4.3 Impact of PVE on Payroll

When asked to consider the impact that WFTC/DPTC has had on payroll, 11 percent said it had been big or very big, although the majority said it has had little or no impact (62 percent). Those employing fewer than 10 people were most likely to report an impact. On this question, however, it should be noted that the largest band (500+ employees) was also more likely than average to say there has been an impact (16 percent big or very big, and just 10 percent said there has been no impact). So this group of large employers tended to acknowledge there has been an impact, but generally did not see the process as difficult (as reported in section 4.1).

Among smaller employers, the number of tax credit recipients had an effect on responses. For those with fewer than 20 employees, 14 percent rated the impact as big if they had just one tax credit recipient, while this rises to 30 percent if they had two or more recipients.

Where payroll was handled externally, respondents were more likely to say there has been no impact (as one might expect).

In addition, organisations with a high proportion of part-time workers (that is, with more than 20 percent or more of staff working less than 30 hours per week) were more likely than average both to say that WFTC/DPTC have been difficult and that they have had an impact on payroll. Related to this, the hotel industry was the one sector showing the same pattern; these findings are related, because organisations in the hotel industry typically have a high proportion of part-time workers. These differences still applied after allowing for total number of employees.

Answers to both of the above questions (on ease and impact) were also highly correlated with the perceived cost of operating WFTC/DPTC.

Table 4.6: How big an impact paying WFTC and DPTC has had on payroll, by number of employees

	Total	<5	5-9	10-19	20-49	50-99	100-499	<b>500</b> +	
	%	%	%	%	%	%	%	%	
Very big	2	4	5	2	2	1	1	4	
Big	9	17	14	8	7	5	5	12	
Not very big	25	26	24	24	26	25	24	22	
Little	42	35	34	41	42	52	56	53	
No impact	20	17	24	23	22	17	14	10	
Don't know	1	1	0	2	1	0	0	0	
(Base)	(4,564)	(483)	(486)	(454)	(725)	(634)	(1,036)	(746)	
Base: All PVE and ex-PVE respondents									

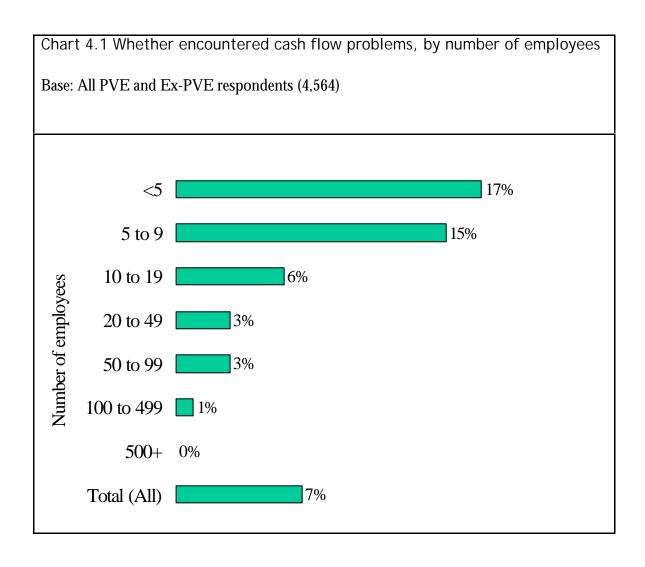
## 4.4 Payment procedures

Among employers with experience of paying WFTC/DPTC through the payroll, almost all (98 percent) said that they paid them at the same time as wages. In practice, this means that they were usually paid either weekly or monthly, weekly payments being more widespread among smaller employers.

Only 62 respondents said that they paid WFTC/DPTC at a different time to wages, and less than half of these said that they had to revise their payment system to pay WFTC/DPTC. This is the equivalent of less than one percent of the total population of employers who have paid WFTC/DPTC.

#### 4.5 Cash flow problems

Seven percent of employers with experience of PVE said that they had encountered cash flow problems as a result of paying WFTC/DPTC. This was almost exclusively limited to organisations with fewer than 100 employees, and most prevalent among those with fewer than ten employees.



Because cash-flow problems were concentrated among smaller employers, these organisations tended to have a small number of tax credit recipients. However, the findings show that among smaller employers, those with two or more recipients were more likely to have encountered cash flow problems than those with just one. Specifically, for organisations with fewer than 20 employees, cash-flow problems affected 11 percent of those with just one recipient, compared with 20 percent with more than one.

The same pattern applies to this issue as was noted in section 4.3, on impact and ease of operating PVE. That is, organisations with a high proportion of part-time workers (more than 20 percent or more of staff working less than 30 hours per week) were more likely than average to have experienced cash flow problems (12 percent), as were those in the hotel industry.

There was also a strong link between cash-flow problems and the perception of costs incurred by operating PVE. Among employers with cash-flow problems, 29 percent said

that they had incurred significant costs from operating PVE. This compares with the overall figure of five percent of PVE and ex-PVE employers who said they had incurred significant costs.

When probed on the types of cash-flow problems encountered, respondents' answers fell into four broad groups. The following analysis is based on the 296 respondents reporting cash flow problems.

- General cash flow or financial problems (56 percent)
- The timing of tax credit payments, ie having to pay WFTC/DPTC in wages before the money can be claimed back (20 percent)
- Paying more in WFTC/DPTC than equivalent amount in PAYE tax, NI etc (eight percent)
- Delays or problems in applying for funding (eight percent).

Some of these issues were then addressed directly. Firstly, respondents were asked whether there had been an occasion when the amount paid out in WFTC/DPTC was more than was deducted from PAYE tax, NI contributions and student loan repayments. In total, 12 percent of employers with experience of PVE said that this had happened to them (as shown in Table 4.7).

Again, it was smaller organisations that were most likely to encounter this situation, in particular those with fewer than 10 employees.

Table 4.7: Whether had occasion where tax credit payments exceeded deductions, by number of employees

	Total	<5	5-9	10-	20-	50-99	100-499	500+
				19	<b>49</b>			
	%	%	%	%	%	%	%	%
Yes	12	28	25	8	6	5	3	2
No	85	69	72	97	91	92	95	96
Don't know	3	3	3	5	3	3	2	2
(Base)	(4,564)	(483)	(486)	(454)	(725)	(634)	(1,036)	(746)
Base: All PVE and	ex-PVE respon	dents						

Sub-group variations were similar to those noted above for cash-flow problems. Organisations with a high proportion of part-time workers were most likely to report this

situation occurring (23 percent of those with more than 20 percent of the workforce working less than 30 hours per week). Again, among smaller organisations (those employing fewer than 20 staff), the number of tax credit recipients had an impact – 27 percent of those with two or more recipients, compared with 20 percent of those with just one. In addition, the link noted above between perceived PVE costs and cash-flow problems also applies to this issue (17 percent of those whose payments exceeded deductions said they had significant costs in operating PVE).

Among respondents who reported occasions where tax credit payments exceeded deductions, half (52 percent) said that they applied to Inland Revenue for additional funding, and of these, 39 percent said they were currently receiving funding. Where tax credit payments exceeded deductions, smaller organisations were particularly likely to apply for funding: this applies to 60 percent of those with fewer than 10 employees, compared with 52 percent overall.

This means that overall, across all employers with experience of PVE, six percent said that they have applied for additional funding, and two percent were receiving funding at the time of the survey. The overall distribution of employers who had applied for additional funding, by size, is shown below.

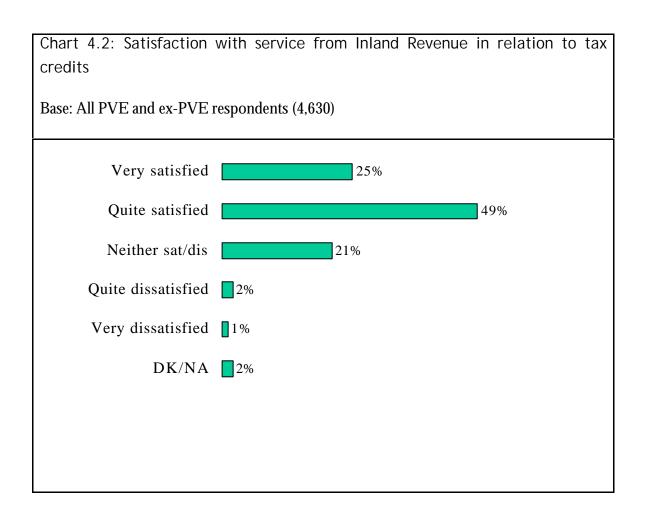
Table 4.8: Whether applied for additional funding, by number of employees

	Total	<5	5-9	10-	20-	50-99	100-499	<b>500</b> +
	%	%	%	%	%	%	%	%
Yes	6	17	15	4	2	2	0	0
No	94	83	85	96	98	98	100	100
(Base	(4,564)	(483)	(486)	(454)	(725)	(634)	(1,036)	(746)
Basa: All DVE a	nd ov DVF rospon	donte						

Base: All PVE and ex-PVE respondents

#### 4.6 Satisfaction with service from the Inland Revenue

Employers with experience of PVE (current or ex-PVE) were asked: "Overall, how satisfied are you with the service that the Inland Revenue provides in relation to tax credits (eg the information, advice and support it offers employers)?". A quarter of respondents said they were very satisfied (25 percent), and a further half were quite satisfied (49 percent). Just three percent said that they were dissatisfied with the service they receive from Inland Revenue.



Figures are nearly identical irrespective of whether the employer was currently PVE or ex-PVE.

Satisfaction with Inland Revenue is linked to respondents' perceptions of costs. If they perceived that costs were significant, they were more likely to say they were dissatisfied with the service from Inland Revenue (20 percent). Similarly, those who said that implementing tax credits was easy were more likely to be satisfied with Inland Revenue than those who found it difficult; 17 percent of the latter group said they were dissatisfied with Inland Revenue.

Users of the Inland Revenue's sources of information and advice were more satisfied with the overall Inland Revenue service than those who had not used them, and satisfaction increased with increased usage. This might mean that those who were more in need of the service, who therefore used it more, were most appreciative of it. Alternatively, perhaps only those satisfied with their initial contacts with the service went on to use it further. Details are shown in Table 4.9, which indicates satisfaction with the overall Inland Revenue service, broken down by the use of individual services.

Table 4.9: Percentage either 'very' or 'quite' satisfied with the Inland Revenue, by services used

	Very/quite satisfied overall
If anymached Inland Devenue with tay andit avery	%
<b>If approached Inland Revenue with tax credit query</b> Yes	66
No	81
110	01
If used information pack	
Yes	63
No	79
If used helpline	
Yes	69
No	82
If attended seminar	
Yes	73
No	83
If used Web	
Yes	72
No	83
If watched the video	
Yes	72
No	84
Number of Inland Revenue Sources Used	
None	52
1	69
2	81
3	82
4	88
5	87
6	68
(Base)	(4,630)
Base: All PVE and ex-PVE respondents	· · ·

Note: Figures are cell percentages

# 4.6.1 Employer characteristics and satisfaction with the Inland Revenue service on WFTC/DPTC

Multivariate analyses were used to identify independent associations between employer characteristics and satisfaction with the Inland Revenue service on WFTC/DPTC. First, since the scale is ordinal, we estimated an ordered probit regression. We recoded the variable so that the highest score denotes 'very satisfied' and the lowest score 'very dissatisfied', so that positive coefficients represent higher satisfaction. The key findings were as follows:

- Region: satisfaction was higher in the East Midlands, Wales and Scotland than it was in the reference region, the North West.
- Size: size did not play a big role, but organisations with 10-19 employees were more satisfied with the service than organisations with 20-49 employees.
- Workforce composition effects: satisfaction fell as the percentage of non-white ethnic minorities in the workforce increased. Relative to employers with over 30% of their full-timers earning below £15,000, employers with under 10 percent of full-timers earning below this figure were less satisfied with the Inland Revenue service. Relative to employers with 10 or more percent of employees with a health problem those with no such employees were more satisfied with the Inland Revenue service.
- Payroll arrangements: generally speaking payroll features were not significantly associated with satisfaction with the Inland Revenue service. However, compared to those employers with a single person working mainly on payroll, those with two such people were more satisfied with the Inland Revenue's service.

In other models that are not shown, neither PVE status nor the number of tax credit recipients proved significant.

Figures in Table 4.10 represent the change in the probability of being 'very satisfied' induced by a switch in characteristic away from the reference category, measured for an employer with mean characteristics on other sample characteristics. Under the model, the mean probability of high satisfaction with the Inland Revenue service was 24 percent. Table 4.10 reveals the following additional features:

 Use of the Inland Revenue for tax credit information and advice: the probability of high satisfaction was six percent higher for an employer with mean characteristics where that employer has used the information pack, compared with an otherwise identical employer who has not. Seminar attendance was associated with a nine percent increase in the probability of high satisfaction. However, use of the web service was associated with a six percent fall in the probability of being very satisfied.

- Region: regional effects are quite pronounced. This may be because services differed across regions, although this may be considered surprising given that a single Tax Credit Office served the whole country. It is also possible that respondents' answers alluded more to overall satisfaction with the Inland Revenue (not just tax credits), where services may differ by local tax office. It may also be that regional differences are correlated with other factors outside of the model. The probability of high satisfaction was greatest in the North and Scotland: a switch to either of these regions sees an increase in the probability of high satisfaction of over 25 percent compared to an employer in the North West with mean sample characteristics. High satisfaction was also greater in London, Wales and the East Midlands than it was in the North West.
- Size: number of employees is not significant, but having five or more establishments reduced the probability of being very satisfied by six percent.

Table 4.10: Percentage change in probability of high satisfaction with Inland Revenue

	%
Use of the Inland Revenue	
Uses information pack	6
Attended seminar	9
Uses Website	-6
Region (ref. North West)	
North	28
East Midlands	8
London	9
Wales	9
Scotland	26
<b>Number of establishments</b> (ref. less than 5)	
More than 5	-6
Ethnicity (ref. less than 10)	
10+ Non-White	-6
(Base)	(4,630)
Base: All PVE and ex-PVE respondents	

If we consider dissatisfaction with the service offered by the Inland Revenue, influences tend to mirror those relating to high satisfaction, but with some differences:

- Use of Inland Revenue: the usage variables have a stronger effect on dissatisfaction than they do on satisfaction. Being a non-user of the six identified channels for Inland Revenue information and advice is significantly associated with greater dissatisfaction, while approaching Inland Revenue for advice is significantly associated with reduced dissatisfaction. Both are not statistically significant in the high satisfaction analysis. Interestingly, being a web user is negatively associated with dissatisfaction and satisfaction with the Inland Revenue service, indicating that users of this service had middling views of it.
- Region: regional effects are less pronounced in the dissatisfaction model, with only two
  significant effects (Wales and East Midlands) on the margins of statistical significance
  in the dissatisfaction analysis.
- Sector: sectoral effects are stronger for dissatisfaction with the Inland Revenue service.
   Compared with the reference sector of Wholesale/Retail, Construction and Agriculture/Fisheries/Mining are both associated with greater dissatisfaction with the Inland Revenue service.
- Workforce composition: having a high percentage of part-timers (50 percent or more)
  was associated with reduced dissatisfaction with the Inland Revenue service, but was
  not associated with high satisfaction.

## 4.7 Summary

Almost half (46 percent) of employers who had ever run PVE said it was 'very easy' to manage. In all, nine-in-ten said it was either 'very easy' or 'quite easy' to run, and a mere two percent found it 'very difficult'. The difficulty of running PVE did not differ according to the use employers made of the Inland Revenue for information and advice on WFTC/DPTC, but PVE was perceived as more difficult where employers were less satisfied with the service provided by Inland Revenue (and vice versa). Difficulties with PVE were also more likely to be reported where the employer said the costs of PVE were significant or moderate, and where the employer said PVE had a big impact on payroll.

Smaller employers found PVE more difficult to administer than larger employers. This is apparent in the effect of employment size, but also in the reduced probability of proprietorships and partnerships finding PVE 'very easy'. Some of this effect is accounted for by small employers' increased likelihood of perceiving greater PVE costs and in identifying big PVE effects on payroll.

When asked to consider the impact that WFTC/DPTC had on payroll, 11 percent said it has been big or very big, although the majority (62 percent) said it had little or no impact.

Seven percent of employers with experience of PVE said that they had encountered cash flow problems as a result of paying WFTC/DPTC. This was almost exclusively limited to organisations with fewer than 100 employees, and most prevalent among those with fewer than ten employees. The most common of these problems tended to be general cash flow or financial problems or the timing of tax credit payments, i.e. having to pay WFTC/DPTC in wages before the money can be claimed back.

Over one in 10 (12 percent) of employers with experience of PVE said there had been an occasion when the amount paid out in WFTC/DPTC was more than was deducted from PAYE tax, NI contributions and student loan repayments. Among respondents who reported occasions where tax credit payments exceeded deductions, half (52 percent) said that they applied to the Inland Revenue for additional funding, and of these, 39 percent said they were currently receiving funding.

Very few employers reported difficulties administering WFTC/DPTC and amongst those that did, they mentioned difficulties calculating the amount of WFTC/DPTC to pay, difficulties understanding rules and regulations, difficulties with software and general comments about the burden of time. Employers were unlikely to state that they perceived any actual benefits to themselves arising from paying WFTC/DPTC through the payroll. Where benefits were identified, they were likely to be seen as benefits to the employee.

Three-quarters of employers with experience of PVE were satisfied with the service they received from the Inland Revenue in giving information and advice about WFTC/DPTC. One-third of these cases were 'very satisfied'. Fewer than one in twenty employers expressed themselves dissatisfied with the Inland Revenue service.

Satisfaction with the Inland Revenue service was strongly associated with usage of Inland Revenue sources of information and advice, with greater users tending to be more satisfied, even having controlled for other employer characteristics. However, not all types of Inland Revenue information and advice were associated with satisfaction with the service once other factors are taken into account. For instance, use of the helpline and the video were not significant in estimates of high satisfaction or dissatisfaction. Seminar attendance and use of the information pack, on the other hand, were clearly associated with higher satisfaction. Regional effects are particularly important in explaining patterns of high satisfaction. Sectoral effects, on the other hand, play a greater role in explaining dissatisfaction (employers in Construction and Agriculture/Fisheries/Mining being most dissatisfied).

# 5 Payroll characteristics

This section starts by looking at the operation of payroll activities amongst employers. For those employers who deal with payroll in-house, we have analysed the structure of the payroll unit(s), and the time and responsibilities of payroll staff. Where employers outsource their payroll function, this section also examines the nature of external payroll provision and the use of specialist software.

This section is useful in its own right, as a description of how payroll varies between employers. It also sets an important context for subsequent chapters of this report. For instance, the number of payroll staff and the hours they work is important information in being able to estimate the likely impact and costs of PVE. This has been explored further in chapter six although in this section we examine the numbers employed to work on payroll.

The remainder of this chapter is set out as follows. Section 5.1 looks at internal versus external payroll and section 5.2 examines the role of the external body. Section 5.3 looks at the payroll structure of employers and sections 5.4 to 5.5 focus on payroll software. Section 5.6 examines payroll personnel and the numbers employed to work on payroll.

#### 5.1 External versus internal payroll

Employers were asked whether an external body or person is used at all to help with processing or managing payroll, or to give advice on matters affecting payroll. Almost a third (32 percent) said they used such a person or organisation.

Large employers, particularly those with 500 or more employees, were most likely to outsource part or all of their payroll function (40 percent). Table 5.1 also shows that outsourcing of payroll is relatively high amongst the smallest employers, and shows a decline amongst medium-sized employers.

Table 5.1: Whether external body is used for any part of payroll, by number of employees

	Total	<5	5-9	10-	20-	50-99	100-499	<b>500</b> +
	%	%	%	%	%	%	%	%
Yes	32	35	38	25	28	27	26	40
No	68	65	62	75	72	73	74	60
(Base)	(6,453	(1,018)	(818)	(706)	(962)	(857)	(1,230)	(779)
Base: All respondents								

The data also show variations by industry type. Employers in the Education and Health sectors were most likely to use an external body (47 percent and 46 percent respectively), whilst those in the Agriculture sector were least likely. This is not surprising given the link with employment size, as the education and health sectors have a high proportion of organisations with 500 or more employees. However, this is not entirely the case, as even amongst the smallest employers in the Health sector (less than five employees), 55 percent outsourced their payroll.

There are also variations linked to region, with London in particular being the region most likely to have employers outsourcing payroll (45 percent). PVE status did not have a major impact on whether or not an employer outsourced their payroll. A third of never-PVE employers used an external body, compared with 29 percent who operated PVE and 30 percent who were ex-PVE employers.

## 5.2 Role of external payroll body

Employers who outsourced their payroll can be divided into two main groups: those who used an external body to process the entire payroll and those who still conducted part of the process internally. Over half (54 percent) still retained some of the payroll function, and once again, there are variations by employer size.

Small employers (those with fewer than 10 staff) were most likely to outsource their entire payroll function to an external body. Over half (53 percent) of organisations with fewer than five employees did this, compared with 19 percent of the organisations with 500 or more employees. This is not totally surprising, as one might expect larger employers to have some staff internally who work on payroll (e.g. a payroll department).

Table 5.2: Role of external body in payroll process, by number of employees

	Total	<5	5-9	10-19	20-49	50-99	100-499	<b>500</b> +
	%	%	%	%	%	%	%	%
Responsible for entire payroll	45	53	47	39	30	29	31	19
Part of payroll process conducted internally	54	47	51	61	69	71	69	81
Don't know	1	-	2	*	1	-	-	-
(Base)	(1,985)	(337)	(297)	(184)	(256)	(231)	(405)	(246)
Base: All who use external body to help with payroll								

Eight out of 10 respondents who used an external body said this was an accountant, whilst nearly one in eight (13 percent) used a payroll bureau. Two percent said they sought help from other parts of their organisation and five percent were unsure. The data show variations by employment size; more specifically, over nine out of 10 (91 percent) organisations with 500 or more employees used a payroll bureau.

Table 5.3: Type of external organisation used, by number of employees

	Total	<5	5-9	10-	20-	50-99	100-499	<b>500</b> +
	%	%	%	%	%	%	%	%
Accountant	80	89	83	91	59	42	30	10
Payroll bureau	13	7	7	5	32	46	60	91
Tax consultant	*	*	1	-	-	-	-	-
Help from other parts	2	1	2	1	3	2	5	-
of organisation								
Don't know	5	3	6	3	7	10	5	-
(D )	(1.005)	(007)	(007)	(104)	(9.5.6)	(0.0.1)	(405)	(0.40)
(Base)	(1,985)	(337)	(297)	(184)	(256)	(231)	(405)	(246)
Base: All who use external body to help with payroll								

The majority of employers had been using this external body for a long period of time; 86 percent said the external source had helped them with payroll for over two years. PVE and ex-PVE employers were more likely to say this was a new working relationship, with 18 and 20 percent respectively claiming that they had used the external body for less than two years, in comparison with one in 10 never-PVE employers.

Respondents who used an accountant were more likely than those who used a payroll bureau to have done so for more than two years (89 versus 77 percent).

Respondents were also asked what the external body was responsible for. The activities of the external body were found to fall into three main categories:

- 1. Over seven out of 10 (71 percent) said it undertook the overall payroll process (e.g. payslips, end of year tax returns);
- 2. Two thirds (67 percent) used the external source to complete tax forms and end of year tax returns; and
- 3. Over six out of 10 (63 percent) said it provided general advice.

Large employers were more likely to use an external body to undertake the payroll process, whilst smaller organisations were more likely to seek general advice and help completing tax forms and end of year returns.

Nearly one out of eight employers (13 percent) said they used the external body to provide software updates, although this rose to nearly half (48 percent) of organisations with 500 or more employees.

Table 5.4: What use external organisation for, by number of employees

	Total	<5	5-9	10-	20-	50-99	100-499	<b>500</b> +
	%	%	%	%	%	%	%	%
Undertakes payroll	71	74	67	74	64	69	78	95
process								
General advice	63	57	73	68	62	65	58	43
Completes tax	67	74	69	66	49	44	47	43
forms/end of year tax								
returns								
Provides	13	6	15	15	20	24	35	48
software/software								
updates								
Invoices/payments	2	5	1	1	-	-	-	-
Audits	2	2	3	*	1	-	-	-
General accounting	2	1	3	4	4	-	-	-
Other	1	1	*	-	1	-	3	5
Don't know	5	3	6	3	7	10	5	-
(Base)	(1,985)	(337)	(297)	(184)	(256)	(231)	(405)	(246)
Base: All who use extern	nal body to	help wi	th payr	oll				

As already highlighted, larger employers were more likely to use a payroll bureau than an accountant to assist with payroll. Given these findings, it is not surprising therefore that employers who used a payroll bureau were more likely to seek help with the payroll process *per se* (86 percent). Those who used an accountant were more likely to seek general advice and help completing specific tax forms (68 percent) and end of year returns (74 percent).

#### 5.3 Payroll structure

For employers who conducted some or their entire payroll internally, nearly all (97 percent) had one central payroll unit that only dealt with payroll for their reporting unit<sup>18</sup>. A small minority (three percent) therefore claimed that payroll for their reporting unit was dealt with by more than one payroll unit. Multiple payroll units were more likely to be present within larger organisations. This survey measure supports findings from the administrative data analysed (see Table 2.1d).

Employers who said there was just one payroll unit were asked whether this also dealt with payroll for other parts of the organisation. The majority, nine in 10 employers, said that there was one central payroll unit that dealt with their payroll only. Payroll structure for the largest employers was more complex, and over half (51 percent) of organisations with 500 or more employees said that the central payroll unit also dealt with other parts of the organisation as well as them.

Nearly nine in 10 (88 percent) of employers said they could answer questions about payroll for all employees in the reporting unit and just over one in 10 (12 percent) said that they could only answer thinking about the whole payroll unit or their specific payroll unit.

These 12 percent (75 respondents) therefore needed to be treated differently and were asked questions about the size and industry make-up of the payroll unit they could answer for. More specifically, over eight out of 10 (82 percent) said the payroll unit they were referring to made the same goods or provided the same services as the reporting unit (i.e. was part of the same industry sector).

#### 5.4 Payroll software

Some organisations use specialist software to help with their payroll; this may involve organisations buying in specialist payroll software packages. Just over two fifths (41 percent) of employers used specialist software and over half (52 percent) used entirely "manual" processes (i.e. no specialist software). Large employers were more likely than their smaller counterparts to use specialist software as can be seen in Table 3.8. As few as one in seven organisations with less than five employers, and less than a third (31 percent) of those with 5-9 employees did so. In contrast, over eight in 10 organisations with 20 or more employees used specialist software, rising to as many as nine in 10 of those with 500 or more employees.

<sup>&</sup>lt;sup>18</sup> Reporting Unit is a sampling terms adopted by IDBR and refers to the sampling unit. For further details see discussion of 'sampling' in this report introduction.

Table 5.5: What software is used for payroll purposes, by number of employees

	Total	<5	5-9	10-	20-	50-	100-	<b>500</b> +
	%	%	%	%	%	%	%	%
All Manual	52	78	59	34	13	10	6	4
Specialist software	41	15	31	60	80	83	88	91
Mixture of both	2	1	3	2	4	5	4	4
Don't know	5	6	7	4	3	2	1	2
(Base)	(6,453)	(1,018)	(818)	(706)	(962)	(857)	(1,230)	(779)
Base: All respondents								

Over two thirds (67 percent) of employers who used specialist software (and where at least part of payroll was handled internally) said they used the software themselves, whilst one out of seven (14 percent) said this was used by an external body or person. In just under a fifth (19 percent) of cases, the situation was more complex, with both the employer and external body using the software.

Over a quarter (28 percent) who used this software themselves or did so in conjunction with the external body, said it was provided as part of the overall service received by the external company. Larger employers were more likely to receive software from the external body they used.

#### 5.5 Software updates and changes

Of those who used a payroll software provider, nine in ten said they received regular updates from this provider. Organisations with less than five employees were less likely to do so, and just over three quarters (76 percent) said they get such updates.

Table 5.6: Whether receive software updates from software provider, by number of employees

	Total	<5	5-9	10-	20-	50-99	100-499	<b>500</b> +
	%	%	%	%	%	%	%	%
Yes	90	76	88	93	93	96	95	92
No	7	12	9	5	6	2	3	4
Don't Know	3	12	3	2	1	1	2	4
(Base)	(4,356)	(215)	(280)	(448)	(796)	(756)	(1,069)	(724)
Base: All employers who use payroll software provider								

From time to time, the Government introduces changes that affect payroll and how pay is calculated. Nearly all (97 percent) of employers said that the software updates they received incorporated changes to government legislation, for example on tax. It is interesting to note the relationship between expenditure on software and whether updates are incorporated. Table 3.11 shows that nearly all employers who had incurred expenditure in the last year said that their software updates incorporated changes. In contrast, those who had not incurred any expenditure over the last year were less likely to get any changes incorporated (92 percent).

Table 5.7: Whether software updates incorporate changes to government legislation, by expenditure on payroll software

	Total	0	£1-	£150	£30	£50	£1000-	£50
			149	-299	0-	0-	4999	<b>00</b> +
	%	%	%	%	%	%	%	%
Yes	97	92	100	99	99	97	99	100
No	2	6	*	*	1	2	-	-
Don't Know	1	2	-	*	-	1	1	-
(Base)	(4,030)	(169)	(244)	(418)	(751)	(713)	(1,012)	(667)

Base: All employers who get software updates from external organisation

A similarly high proportion (87 percent) felt that their payroll system was flexible when incorporating changes. This was consistent across different size employers. However, employers who used an external payroll body found their payroll systems less flexible than those who did not. A large proportion of this group were unable to comment on the flexibility of their system (13 percent were unsure whether or not their software updates incorporated changes to government legislation), although this uncertainty is not unsurprising given that the external body may be responsible for dealing with any payroll software matters. Overall, there would appear to be few variations between different types of employers on the issue of flexibility.

#### 5.6 Payroll personnel

Respondents were asked a series of questions about staff employed to work on payroll, including details of the number of staff, hours worked and levels of pay.

In terms of staffing, employers tended to fall into one of two categories:

- 1. 45 percent employed no staff to work mainly<sup>19</sup> on payroll matters;
- 2. 48 percent employed one member of staff to work mainly on payroll.

Six percent employed two staff to work mainly on payroll, whilst a small minority employed more staff than this. Employer size was the main factor influencing numbers, and Table 5.8 highlights this. More specifically, very few (four percent) large employers employed nobody to work mainly on payroll, in comparison to over half (55 percent) of organisations with less than five employees. Medium sized employers (those with 10-49 employees) were most likely to employ one member of staff and the likelihood of employing two staff to work on payroll increases with employer size. Very few organisations with less than 500 employees employed three or more staff.

Table 5.8: Number of staff working mainly on payroll, by number of employees

	Total	<5	5-9	10-	20-	50-99	100-499	500
	%	%	%	%	%	%	%	%
0	45	55	44	36	34	41	19	4
1	48	42	51	57	54	41	48	17
2	6	2	4	7	11	17	24	30
3	1	*	*	*	1	1	7	15
4	*	*	-	-	-	-	1	11
5-9	*	-	1	-	-	-	1	17
10+	*	_	-	*	_	-	-	6
Don't Know	*	-	*	-	-	-	-	-
(Base)	(6,453)	(1,018)	(818)	(706)	(962)	(857)	(1,230)	(779)
Base: All respondents								

As one might expect, employers who outsourced their entire payroll were less likely to employ staff to work on payroll matters. Nearly three quarters (73 percent) did not employ anybody, although nearly a quarter (23 percent) employed one person. There was no difference between those who used an external body for part of their payroll and those who did not outsource any of their payroll function.

Employers were also asked how many additional people spent 'some' of their time working on payroll, and just over a third (35 percent) employed one other person, six percent

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<sup>&</sup>lt;sup>19</sup> 'Mainly' working on payroll was defined in the questionnaire as 'people who spend most of their time working on payroll'.

employed two, and a further one percent employed three people. Whether or not an external body was used for payroll did not have an impact, and there were few variations by employer size, except amongst the largest employers. Six percent of organisations with 500 or more employees had between four and nine additional staff who spent some time on payroll, whilst four percent had an additional 10 or more staff.

For each member of staff employed to work on payroll, respondents were asked how many hours that person spent on payroll matters per week. This applied both to staff mainly working on payroll and those spending only part of their time on it. If staff spent less than an hour, they were asked how many minutes were worked. For each employer, it is then possible to calculate the total hours spent by all staff on payroll matters. The total number of hours varied considerably, although almost half of employers (46 percent) said that staff spent less than three hours per week, in addition to the 10 percent of organisations where no staff time was spent on payroll.

It is no surprise that large employers were more likely to spend more hours on payroll than their smaller counterparts, and amongst organisations with 500 or more staff, 37 percent spent between 50-99 hours per week and over two fifths (43 percent) spent 100 or more hours. Over two fifths (43 percent) of employers who outsourced the entire payroll function spent less than half an hour on payroll per week. No difference was found between those who outsourced part of their payroll and those who did not outsource any.

Analysis on this issue by PVE status is covered in the multivariate analysis on staff payroll costs (section 6.2.2).

### 5.7 Summary

A third (32 percent) of employers used an external body or person to help with processing or managing payroll, or to give advice on matters affecting payroll. Large employers, particularly those with 500 or more employees, were most likely to outsource part or all of their payroll function (40 percent). However, amongst those who did use an external body, small employers (those with less than 10 staff) were most likely to outsource their entire payroll function.

Eight out of 10 respondents who used an external body said this was an accountant, whilst nearly one in eight (13 percent) used a payroll bureau. The majority of employers had been using this external body for a long period of time, although PVE and ex-PVE employers were more likely to say this was a new working relationship. Such external organisations were most commonly used to undertake the payroll process (e.g. payslips, end of year tax returns), to complete tax forms and end of year tax returns and provide general advice.

Just over two fifths (41 percent) of employers used specialist software and over half (52 percent) used entirely manual processes (i.e. no specialist software). Of those who used a payroll software provider, nine in ten said they received regular updates from this provider and nearly all of these said that the software updates they received incorporated changes to government legislation, for example on tax. A high proportion (87 percent) felt that their payroll system was flexible when incorporating changes.

In terms of staffing, 45 percent employed no staff to work mainly on payroll matters, while 48 percent employed one member of staff. The remaining seven percent had two or more staff working mainly on payroll.

## 6 Payroll costs and PVE

In this section we examine the various costs that employers face. These costs can be broken down into four broad categories:

- a. staff costs relating to employees working mainly on payroll matters
- b. staff costs for employees spending some of their time on payroll matters
- c. the costs of software required to run the payroll, which is assumed to be zero when the system is run manually, or the software are not dedicated. Note that this may under-represent some marginal costs, where employers use non-specialist software for payroll (eg an Excel spreadsheet).
- d. in instances where all or part of the payroll function is contracted out, the costs of that contract.

The start of this section examines general payroll costs, including the costs of using an external payroll body and any software costs (section 6.1). This section looks at the direct costs of payroll, including analyses of the number and wages of staff who are employed to work on payroll. Using all of this data detailed above, it is then possible to derive a figure for total payroll costs. We then explore the impact that PVE has on payroll costs (section 6.2).

#### 6.1 General Payroll costs

#### 6.1.1 Costs of external payroll body

All those using an external body or person were asked how much they spent (excluding VAT) on this last year.

A third of employers were unable to give a figure for their external payroll costs, and the largest employers had most difficulty doing this. Table 6.1 shows that external payroll costs increased with size. It can also be noted that there is a minority (two percent) who have costs of £10,000 or more, rising amongst those with more than 500 employees.

Table 6.1: How much spent on external organisation last year, by number of employees

	Total	<5	5-9	10-19	20-49	50-99	100-499	<b>500</b> +
	%	%	%	%	%	%	%	%
$\mathfrak{L}0$	5	6	7	3	4	2	3	5
£1-249	9	13	9	4	4	-	3	18
£250-499	7	4	12	12	8	6	-	-
£500-999	11	11	10	12	15	9	11	-
£1000-1999	17	19	11	21	19	22	17	-
£2000-4999	13	11	16	11	12	21	17	5
£ $5000-9999$	3	1	3	7	2	5	17	5
£10,000+	2	1	2	2	3	6	8	27
Don't know	33	36	30	29	33	30	25	41
(Base)	(1,985)	(337)	(297)	(184)	(256)	(231)	(405)	(246)

Base: All respondents who use external body to help with payroll

(Note: the mean score for external organisation costs is £409, the median score £0 - based on all respondents, i.e. those not using external payroll and don't knows are treated as zeros).

There was generally little difference to be found by PVE status, although there were variations at the top-end of the cost scale. PVE employers were most likely to incur external costs of more than £5,000. Four percent of PVE and ex-PVE employers had costs of over £10,000, compared with one percent of never-PVE. However, this reflects the fact that the larger employers are mostly PVE.

Table 6.2: How much spent on external organisation last year, by PVE status

	Total	PVE	ex-PVE	never-PVI
	%	%	%	%
£0	5	5	4	6
£1-249	9	9	7	10
£250-499	7	7	9	7
£500-999	11	12	14	11
£1000-1999	17	15	18	18
£2000-4999	13	15	13	12
£5000-9999	3	5	3	2
£10,000+	2	4	4	1
DK	33	28	28	34
(Base)	(1,985)	(1,036)	(309)	(603)

Base: All respondents who use external body to help with payroll

Those who outsourced their payroll to a payroll bureau had higher costs than those who used an accountant (although these employers were also the largest, as already noted).

### 6.1.2 Payroll software costs

All employers who received specialist software, that was not part of the overall service provided by the external body referred to earlier, were asked how much they spent on this last year. Costs varied from those who said no costs were incurred in the last year (20 percent), to those who spent in excess of £5,000 (seven percent). Just under a fifth (18 percent) were unable to give an estimate of these costs.

Table 6.3 shows marked differences by employer size. A quarter of organisations with 500 or more employees had incurred costs of £5,000 or more. In addition, larger organisations found it most difficult to give any estimate of costs, as can be seen by the proportion of employers in the 'Don't Know' category in the table below. There were also a group of respondents who had not seen any expenditure on software over the past year (20 percent). Furthermore, this proportion was relatively stable across employer size, and around a fifth in each category had no costs.

Table 6.3: Amount spent on payroll software in the last year, by number of employees

	Total	<5	5-9	10-19	20-49	50-99	100-499	<b>500</b> +
	%	%	%	%	%	%	%	%
0	20	20	20	20	22	17	23	19
£1-£149	14	26	22	16	9	5	2	8
£150-£299	20	12	26	24	21	15	4	0
£300-£499	12	8	8	15	14	17	5	0
£ $500$ -£ $999$	8	5	6	7	10	12	9	2
£1000-£4999	6	5	4	3	8	14	18	6
£5000+	*	0	1	*	1	3	9	25
Don't Know	18	25	15	16	15	18	32	40
Not stated	*	0	0	*	0	0	0	0
(Base)	(4,326)	(215)	(280)	(447)	(794)	(754)	(1,055)	(714)

Base: All respondents where software is not provided as part of the service received by the external company

The data show variations by industry sector, although these appear to be linked to employer size. The sectors with highest expenditure were Public administration (nine percent had spent more than £5,000), Finance (eight percent had spent more than £5,000) and Education (eight percent had spent more than £5,000). These were the sectors containing the highest proportion of organisations with 500 or more employees, and any variations appear to be driven by employer size.

#### 6.1.3 Payroll staff costs

For each member of staff who worked on payroll, respondents were asked to give their approximate annual wage. In instances where there were more than two people working on payroll, they were asked for the average annual wage of someone working on payroll<sup>20</sup>. This information was combined with data on hours worked amongst payroll staff (described in the previous chapter) to give an overall estimate of payroll staff costs. Nearly one in eight (13 percent) had incurred no staff costs and under a third (30 percent) had spent less than £1,000. A further fifth (22 percent) had spent between £1,000 to £4,999. A much smaller proportion had spent more than £5,000 on the wages of staff working on payroll. It should

<sup>&</sup>lt;sup>20</sup> Respondents were asked to give an 'average' annual figure for payroll staff. They were asked to 'think about the people who spend most of their time working on payroll'.

be noted that just under a fifth (19 percent) did not provide sufficient information to enable total staff costs to be calculated<sup>21</sup>.

As expected, respondents who employed more staff to work on payroll had higher staff costs. The data show some interesting variations by payroll structure. Nearly half (47 percent) of employers who outsourced the entire payroll function had not incurred any staff costs on payroll, although over half had incurred some costs. Nearly a quarter (23 percent) had incurred costs of less than £1,000 and one in seven (14 percent) spent between £1,000 to £4,999. A minority had however incurred more significant costs, despite outsourcing their payroll function. As previously noted, there was little difference between employers who outsourced part of the payroll function and those who outsourced none.

Table 6.4: Staff payroll costs, by role of external body

	Total	External body used for entire	External body used for part of	No external body used
		payroll	payroll	v
	%	%	%	%
$\mathfrak{L}0$	16	47	8	11
£1-£999	38	23	41	40
£1000-£4999	27	14	32	29
£5000-£9999	8	4	7	9
£10,000-£14,999	4	5	6	3
£15,000-£24,999	4	5	3	4
£25,000+	4	2	4	4
(Base)	(4,937)	(615)	(892)	(3,430)

Base: All respondents who gave complete data on staff hours and pay (excluding missing data - See explanation of missing data in footnote 20)

Note: the mean cost was £1,984, median cost £258

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<sup>&</sup>lt;sup>21</sup> Respondents may not have known the wages of some staff working on payroll or alternatively may have refused to give this information. They may have also failed to give the total hours worked by staff, which would have prevented a total calculation being made.

## 6.2 The Impact of PVE on Employer Payroll Costs: Multivariate Analysis

This section assesses the impact that paying WFTC/DPTC through the payroll had on employer costs, by estimating the impact of being a PVE employer on the actual costs of payroll administration.

Multivariate analysis was used to identify the independent effect of PVE status at the time of the survey interview on annual payroll costs per employee. This entails the inclusion of a PVE status variable alongside other employer characteristics that might be expected to influence payroll costs. Although we refer to the 'impact' of PVE, the analysis simply isolates the association between PVE and payroll costs, controlling for other factors. It does not necessarily imply causation. All analyses presented are weighted to account for non-response and differential probabilities of sample selection, thus permitting us to extrapolate from our results to the population of employers from which the sample was drawn.

Total costs are simply the sum of a-d (as outlined in the introduction to this chapter). The analysis is confined to those instances in which the survey respondents said they could provide information for the whole payroll, namely 6,179 of the 6,453 respondents.

The survey collected data on all four of these items from payroll managers for each reporting unit in the survey. The number of employees employed in the sampled workplaces ranged from one to 22,000, so to assist in comparing payroll costs across employers, all costs have been converted into costs per employee.<sup>22</sup>

One of the problems encountered is that, in 2,437 cases, the payroll manager was unable to give full information relating to one of the four cost items. To overcome this problem, we used multivariate regression techniques to estimate those missing costs. This involved estimating models for each of the four cost items to produce a predicted cost for each employer where they missed cost data on one or more items. The predicted costs were then used to impute cost values for employers with missing data. To test the sensitivity of the results to the imputation procedure, analyses are also run on the sub-set of cases with complete cost information.

<sup>&</sup>lt;sup>22</sup> The denominator is the number of employees at the time of the survey interview, except in the 50 cases where this information was missing. In these 50 cases the number of employees recorded on the IDBR was used instead.

In the following sections, we present analyses of the PVE impact on each of the four cost items in a-d, measured in terms of costs per employee, and then the PVE impact on total payroll costs per employee.

# 6.2.1 Costs of staff working mainly on payroll

As noted in section 5.6, 45 percent of employers had no-one working mainly on payroll, 48 percent had a single person working on payroll, and the remaining seven percent had more than one person working mainly on payroll. Among those who did employ someone to deal mainly with payroll matters, PVE employers were a little more likely to employ more than one employee: 22 percent did so, compared with 13 percent of ex-PVE employers and nine percent of never-PVE employers. However, as Table 6.5 shows, the cost per employee incurred by employing those working mainly on payroll was highest among the never-PVE employers, perhaps because the larger employers who tended to have experience of PVE have economies of scale. This is the case in row one, which is confined to cases giving valid information, and in row two which includes imputed values for those with missing data. Taking row two, those with experience of PVE spend an average of £133 per employee each year on staff costs, arising from the employment of those working mainly on payroll matters. The equivalent figure for never-PVE employers is £201.

Table 6.5: Mean costs of employing those working mainly on payroll, expressed as annual costs (£) per employee on payroll

	PVE	ex-PVE	Never-PVE
Excluding imputation (Base: 3,076)	147	155	227
Including imputation (Base: 4,021)	133	133	201

This cost differential by PVE status may be accounted for in part by differences in characteristics between PVE, ex-PVE and never-PVE employers. To investigate this, we estimated the log of costs per employee of employing those working mainly on payroll, including cases with imputed values. Only those cases with costs above zero and below £5,000 per employee were included in the model (base: 4,021). This cut off of £5,000 was chosen because it is such an improbably high figure as to seem implausible. This is supported by checks on the 12 cases excluded: all but two had fewer than seven employees and their staff costs for those working mainly on payroll ranged between £5,100 per annum and £180,000.

The model, which is appended as Model (1) in Appendix 4 of the Multivariate Technical Appendix, contains the following variables in addition to PVE status: region, industry, legal status of the organisation (company, partnership etc.), turnover, number of establishments, number of PAYE codes, whether payroll is wholly or partly contracted to an outside

organisation, the number of employees employed mainly on payroll, and the number of employees working partly on payroll. The model fits the data reasonably well ( $R^2$ =0.20).

Controlling for these characteristics, costs per employee of employing staff to work mainly on payroll remained significantly lower among employers with PVE experience. Compared with never-PVE employers, costs per employee were 15 percent lower among PVE employers (p>.050). Among ex-PVE employers, costs were 25 percent lower (p>.015). Thus, the cost differential was not as high as in the raw data presented in the second row of Table 6.5, but a significant differential did remain having controlled for other employer characteristics.

# 6.2.2 Costs of staff working some of the time on payroll

Forty-two percent of employers employed at least one person working partly on payroll matters. Although this figure does not differ by PVE status, current and ex-PVE were more likely to employ two or more people in this role: 14 percent did so, compared with five percent of never-PVE.

Table 6.6 shows the cost per employee incurred by employing those working partly on payroll was highest among the ex-PVE employers and lowest among PVE employers. This is the case in row one, which is confined to cases giving valid information, and in row two which includes imputed values for those with missing data. Taking row two, PVE employers spent an average of £86 per employee each year on staff costs arising from the employment of those working partly on payroll matters. The equivalent figure for ex-PVE employers is £110, while never-PVE employees paid £104 per employee on payroll.

Table 6.6: Mean costs of employing those working partly on payroll, expressed as annual costs (£) per employee on payroll

	PVE	ex-PVE	never-PVE
Excluding imputation (base: 2,161)	96	130	115
Including imputation (base: 2,800)	86	110	104

To investigate the independent impact of PVE status, we estimated the log of costs per employee of employing those working partly on payroll, including cases with imputed values. As before, only those cases with costs above zero and below the improbably high figure of £5,000 per employee, were included in the model (N=2,799). The model, appended as Model (2) in Appendix 4 of the Multivariate Technical Appendix, contains the same variables in addition to PVE status as Model (1). The model fits the data reasonably well ( $R^2=0.23$ ).

Controlling for these characteristics, costs per employee of employing staff to work partly on payroll did not differ significantly by PVE status. Compared to never-PVE employers, the cost per employee of staff working partly on payroll was higher by a statistically insignificant 1.6 percent (p>0.87) for PVE employers and an insignificant 3.5 percent (p>0.78) for ex-PVE employers.

## 6.2.3 Costs of specialist software used for payroll purposes

The survey asked employers whether they incurred costs in payroll administration through the use of specialist software. Where such costs formed part of the basic contract with an external body taken on to perform some or all of the payroll function, they are not counted here, but are included in the costs of contracting out payroll. Thirty five percent of employers used such specialist software, but it was much more in evidence among PVE employers: 59 percent of PVE employers used specialist software for payroll purposes, compared with 53 percent of ex-PVE employers and 26 percent of employers who had never experienced PVE. However, where employers used specialist software, the costs per employee on payroll were higher among the never-PVE group, whether those costs include imputations or not (Table 6.7).

Table 6.7: Mean cost of specialist software for payroll, expressed as annual costs (£) per employee on payroll

	PVE	ex-PVE	never-PVE
Excluding imputation (base: 1,984)	28	40	56
Including imputation (base: 2,854)	25	37	51

We estimated the log of costs per employee of using specialist software for payroll, including cases with imputed values. Only those cases with costs above zero and below the improbably high figure of £1,000 per employee, were included in the model (base: 2,854). The £1,000 per employee upper limit excluded six cases only. The model, appended as Model (3) in Appendix 4 of the Multivariate Technical Appendix, identifies the independent impact of PVE status controlling for: region, industry, legal status of the organisation (company, partnership etc.), turnover, number of establishments, number of PAYE codes, whether payroll is wholly or partly contracted to an outside organisation, and whether the employer relies wholly on specialist software, or used it in conjunction with manual practices or non-dedicated software. The model fits the data well ( $R^2$ =0.32). Controlling for these characteristics, costs per employee of specialist software were 28 percent lower among PVE employers than they were among never-PVE employers (p>0.01). Those of ex-PVE employers were not significantly different from those of never-PVE employers (a one percent reduction, p>0.93).

## 6.2.4 Costs of contracting out all or part of the payroll function

Around a third (32 percent) of employers contracted out some or all of their payroll function to an external body. This was the case for 29 percent of PVE employers, 30 percent of ex-PVE employers and 33 percent of never-PVE employers. Among those contracting with an external body for payroll services, costs per employee on the payroll were much higher for never-PVE employers relative to those with experience of PVE.

Table 6.8: Mean cost of contracting some or all of the payroll function to an external body, expressed as annual costs (£) per employee on payroll

	PVE	ex-PVE	Never-PVE
Excluding imputation (base: 1,226)	202	192	348
Including imputation (base: 1,812)	164	159	290

To investigate the independent impact of PVE status, we estimated the log of costs per employee of using an external body for payroll, including cases with imputed values. Only those cases with costs above zero and below the improbably high figure of £5,000 per employee, were included in the model (N=1,812). The model, appended as Model (4) in Appendix 4 of the Multivariate Technical Appendix, contains the following variables in addition to PVE status: region, industry, legal status of the organisation (company, partnership etc.), turnover, number of establishments, number of PAYE codes, and whether payroll is wholly or partly contracted to an outside organisation. The model fits the data well ( $R^2$ =0.34). Controlling for these characteristics, costs per employee of contracting out some or all of the payroll function were 72 percent lower among PVE employers than they were among never-PVE employers (p>0.00). Those of ex-PVE employers were 65 percent lower than those of never-PVE employers (p>0.00).

### 6.2.5 Summary of PVE effects on component payroll costs

Table 6.9 summarises the information presented above. It shows the differences in the cost of payroll per employee for the four cost headings (staff working mainly on payroll, staff working partly on payroll, software costs and costs of contracting out some or all of the payroll function). The figures compare costs per head by PVE status, controlling for other employer characteristics. It seems that payroll costs per employee were higher for never-PVE employers on three of the four items, the exception being staff working partly on payroll. The difference in the costs of contracting out the payroll function was particularly marked. One possible explanation for these findings is that never-PVE

employers, which tend to be smaller than those experiencing PVE, face greater non-staff costs per head when they employ people to work on the payroll, purchase software or contract with an external body to perform payroll functions.

These findings may appear surprising since, if anything, one might expect administering PVE to increase the costs of payroll administration. However, it is important to emphasise that these differences relate only to those employers who incur costs under these headings. The never-PVE employers were actually less likely to have anyone working mainly on payroll than those who have experienced PVE, they employed fewer staff working partly on payroll, and they are less likely to use specialist software. The likelihood of contracting out all or part of the payroll differed little with PVE status. To estimate the association between PVE and total payroll costs, it is necessary to sum together these costs, and include all those employers who incur zero costs under one or more of the four cost headings. We turn to this issue next.

Table 6.9: Percentage increase in payroll costs per employee for never-PVE employers

	Staff mainly	Staff partly	Software	External
	on payroll	on payroll		body
	%	%	%	%
Relative to PVE	15	-2	28	72
Relative to ex-PVE	25	-3	1	65

Notes: (1) based on employers incurring costs under these headings (2) figures control for employer characteristics

## 6.2.6 The Impact of PVE on Total Payroll Costs

The overall impact of PVE on total payroll costs is obtained by summing together the four cost components described above to create a single overall cost figure. Where one or more cost items are missing these are imputed using the techniques described above. The association between these overall costs and PVE status is isolated using the same multivariate techniques as those described above. The purpose is to establish the association between PVE status and overall payroll costs having controlled for differences in characteristics across PVE and never-PVE employers. The analysis covers the 6,157 respondents who were able to provide information for the whole payroll and reported total payroll costs per employee below the improbably high figure of £5,000 per annum. Thus, 274 cases were lost because the respondent could not respond for the whole payroll and 22 cases were excluded because their reported costs seemed very high indeed.

Mean total annual payroll costs per head were higher among never-PVE employers (£226) than they were among ex-PVE (£180) and current PVE (£167) employers. However, as

Table 6.10 shows, having controlled for differences in the characteristics of employers, there was no significant association between PVE status and total payroll costs. The one and a half percent higher payroll costs of PVE employers relative to never-PVE employers is not statistically significant: the 95 percent confidence interval for the estimate is large, spanning –36 percent through to +40 percent. Similarly, the 8.3 percent figure for ex-PVE was not statistically significant, and lies in the middle of a –27 percent to +49 percent 95 percent confidence interval. Thus, the differential in the raw data which shows never-PVE employers having higher total payroll costs per employee than employers with experience of PVE was accounted for by differences between PVE and never-PVE employers which are controlled for in the multivariate analysis.

Table 6.10: Difference in total payroll costs by PVE status, expressed as a percentage difference in annual costs (£) per employee on payroll

	% difference in total	Lower bound of the	Upper bound of
	payroll costs relative to	95% confidence	the 95%
	never-PVE employers	interval	confidence interval
PVE	1.5%	-36%	+40%
ex-PVE	8.3%	-27%	+49%

The following analyses were undertaken to test the robustness of this result:

- use of the survey-based measure of PVE status
- confining the analysis to cases without imputed costs
- distinguishing 'ever-PVE' from never-PVE employers
- identifying those who had become PVE employers since the sample was downloaded in October 2001.
- running separate analyses for smaller employers (fewer than 100 employees) and larger employers (100 or more employees).

In all cases, the association between PVE and total payroll costs per employee was not statistically significant.

The analysis identified a number of employer characteristics that are associated with total payroll costs per employee, with the model accounting for one-quarter of the variance in total costs in the sample. The factors most strongly associated with higher total payroll costs included use of external contractors to undertake payroll functions, the use of

dedicated software, the number of employees working mainly on payroll issues, and the staff hours devoted to payroll matters. Some of these factors may themselves be the result of PVE. For instance, employers may use more people on payroll or devote more staff hours to payroll as a result of being PVE. We therefore ran further sensitivity analyses, this time removing payroll-related variables from our models to see if this brought out a PVE effect that was being hidden. Once again PVE effects were statistically non-significant.

We conclude, therefore, that PVE had no statistically significant effect on the total payroll costs per employee for the population from which our sample was drawn.

# 6.3 Summary

Overall, external payroll costs increased with employment size and there was a minority (two percent) who had costs of £10,000 or more. A third of employers were unable to give a figure for their external payroll costs, and the largest employers had most difficulty doing this. Costs of specialist software varied from those who said no costs were incurred in the last year (20 percent), to those who spent in excess of £5,000 (seven percent). Just under a fifth (18 percent) were unable to give an estimate of these costs.

In terms of staff payroll costs, nearly one in eight (13 percent) had incurred no staff costs and under a third (30 percent) had spent less than £1,000. A further fifth (22 percent) had spent between £1,000 to £4,999. A much smaller proportion had spent more than £5,000 on the wages of staff working on payroll.

A number of multivariate analyses were undertaken to test the association between PVE and total payroll costs per employee. On the basis of this methodology, we conclude that PVE had no statistically significant effect on the total payroll costs per employee for the population from which our sample was drawn; nor did PVE have a statistically significant impact on the sub-components of costs – external payroll, specialist software, or staff working mainly or some of the time on payroll.

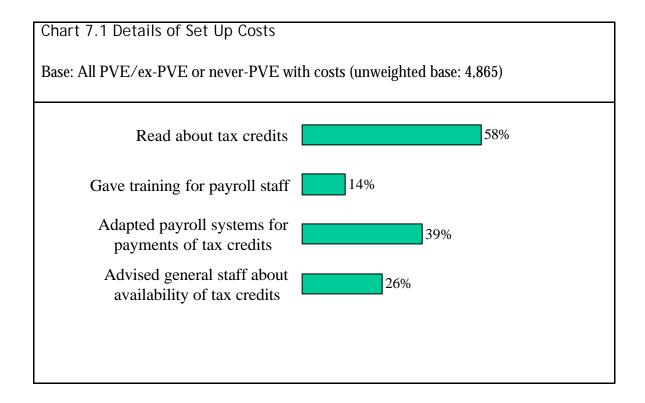
### 7 The Direct Costs of PVE

The previous section has looked at general payroll costs and the impact of PVE on these. In this section, we have reported on the direct costs associated with operating PVE. This is carried out in respect of set-up costs and ongoing costs.

In sections 7.1 and 7.2 we describe the various types of costs that have been incurred, and in section 7.3 we examine the costs incurred for each of these items. Sections 7.4 and 7.5 look at the direct total costs of PVE. Section 7.6 provides information on the Regulatory Impact Assessment analysis.

### 7.1.1 Set-up costs

All PVE and ex-PVE employers, as well as never-PVE employers who had incurred costs due to WFTC/DPTC, were asked whether they had spent time on a number of items, when they first had to pay, or prepare to pay, WFTC/DPTC. They were asked whether they had read about WFTC/DPTC, gave or received training / guidance for payroll staff about tax credits, if they had adapted payroll systems for payment of tax credits, or had advised general staff about their availability. Almost six in ten had read about tax credits, four in ten had adapted payroll systems, a quarter had advised staff about their availability and one in seven had given or received training or guidance for payroll staff.



Employers from larger organisations were more likely to have read about WFTC/DPTC than their smaller counterparts: among organisations of 500 or more employees, eight in ten employers had done so. Looking at whether they had given or received training for payroll staff, once again the figures increase with employer size: among organisations with 500 or more employees this rose to over a half. The same pattern applied for those who had adapted payroll systems and had advised staff about the availability of WFTC/DPTC. The figures by PVE status are similar (although it is important to recognise that analysis of never-PVE employers was limited to those who said that they had incurred some costs<sup>23</sup>). The exception was adapting payroll systems for payments of WFTC/DPTC: never-PVE were less likely to report these costs than PVE or ex-PVE employers (23 percent compared with 43 percent and 39 percent).

### 7.1.1.1 Reading about WFTC/DPTC

All employers who had spent time on each of these activities were asked how many hours they had spent on it. Among employers who had read about WFTC/DPTC, a quarter had spent less than an hour doing so. Four in ten had spent one or two hours, although the average was over five hours. There was no significant difference by PVE status. As one would expect, differences by employer size were also apparent. The larger the organisation, the more likely they were to have spent an hour or more reading about WFTC/DPTC and the greater the mean number of hours. Employers from the Construction and Hotels sectors were also more likely to have only spent a small amount of time reading about WFTC/DPTC, with three in ten answering less than one hour. One in seven employers who had read about WFTC/DPTC were unable to give a figure for the number of hours spent.

### 7.1.1.2 Training for payroll staff about WFTC/DPTC

Looking at the next activity related to the set-up of WFTC/DPTC, similar variations can be seen by employer size. Training was the activity that the least number of employers had spent time on and due to the smaller base size, no variation can be noted by industry sector or region or PVE status. Overall, the mean was eight hours, and a quarter spent seven or more hours.

### 7.1.1.3 Adapting payroll systems

As we have already seen, four in ten employers spent time on adapting payroll systems for the payment of WFTC/DPTC. The mean number of hours was 12, with 29 percent

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<sup>&</sup>lt;sup>23</sup> i.e. some never-PVE employers will have incurred costs preparing for PVE although many will have incurred no costs at all.

spending less than one hour and 17 percent seven hours or more. As has been the case for all set-up activities so far, the larger the employer the more time they had spent.

## 7.1.1.4 Advising staff about availability of WFTC/DPTC

The mean number of hours spent advising general staff about the availability of WFTC/DPTC was 10, although a third (35 percent) spent less than an hour. Looking at employer size, the number of hours only increased markedly among the largest size band (500 or more employees). The number of hours was also higher in organisations with a high proportion of part-time workers (less than 16 hours per week).

#### 7.1.2 Non-staff costs

All PVE and ex-PVE employers, as well as never-PVE employers who had incurred costs due to WFTC/DPTC, were also asked about non-staff costs. They were asked if they had incurred payroll bureau costs, accountant costs or software costs<sup>24</sup> as a direct result of WFTC/DPTC.

Similar proportions had incurred expenditure on each of these costs as can be seen in Table 7.1. There were no differences by PVE status on these questions (again, the never-PVE sample is limited to those with costs of some kind).

Table 7.1: Non-staff costs incurred as a direct result of WFTC/DPTC

	%
Payroll bureau costs	10
Accountant costs	14
Software costs	13
(Base)	(4,865)
Base: All PVE / ex-PVE or never-PVE with costs	

Smaller organisations were most likely to experience additional accountant costs. Nearly a fifth (18 percent) of employers with less than 10 staff had witnessed such an increase, and this rose to 23 percent amongst PVE employers with less than five staff. In contrast, it was larger employers who were more likely to have incurred costs on new or updating software. More specifically, three in ten employers with 500 or more staff had incurred these costs

<sup>&</sup>lt;sup>24</sup> Software costs were defined as costs on 'New or adapting payroll software or software licences'.

and this rose to 35 percent amongst PVE employers with 250-499 staff and 31 percent with 500 or more. There were no major differences in expenditure on payroll bureau costs.

Those who had incurred these types of expenditure were asked to quantify this further. Figures relate to the total amount spent on these items over any time period. Two fifths were unable to quantify payroll bureau costs or accountant costs and just under a third (32 percent) were unable to say how much had been spent on new software. Table 7.2 therefore shows percentages based on those employers able to give an estimate of the likely costs incurred.

New or updated software was the most expensive of these cost increases as can be seen below. Nearly half (47 percent) said they had spent £500 or more on this, as a direct result of WFTC/DPTC.

Table 7.2: Amount spent on external organisations, as a direct result of WFTC/DPTC

	Payroll bureau costs	<b>Accountant costs</b>	Software costs
	%	%	%
£1-£99	22	24	9
£100-£499	57	39	44
£500-£999	15	6	11
£1000+	5	31	36
(Unweighted Base)	(343)	(415)	(475)
Base: All respondents wh	no gave complete data on ad	ditional non-staff cos	ts (excluding

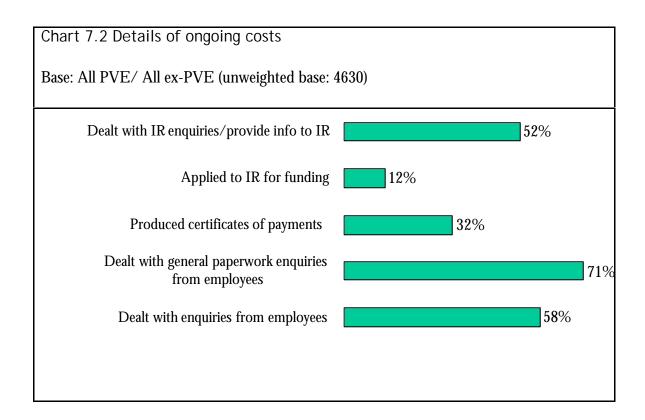
As noted above, very small organisations were most likely to incur accountant costs. Among the PVE sample, the mean cost on this item for those with less than five employees is £66, the highest of any of the size bands, and nearly half of the total cost of PVE for this group. Software costs were highest for PVE employers with 100-499 staff (the mean is £315 and this accounts for over a third of the total costs for this group).

# 7.1.3 Ongoing costs

missing data)

In addition to set-up and non-staff costs, PVE and ex-PVE employers were asked about ongoing<sup>25</sup> staff costs they may have incurred as a result of paying WFTC/DPTC. These are summarised in chart 7.2.

<sup>&</sup>lt;sup>25</sup> In this section ongoing cost figures are expressed as annual amounts



### 7.1.3.1 Dealing with Inland Revenue enquiries

Respondents were firstly asked whether staff had dealt with Inland Revenue enquiries or provided information to the Inland Revenue about employee applications. More than half had done so (52 percent). This rose to 57 percent amongst PVE employers and fell to two fifths (41 percent) amongst ex-PVE. Further variation can be noted by employer size, in particular organisations with 500 or more employees: 85 percent had dealt with such enquiries, compared with 43 percent among those with less then five employees. Among those who had spent time on this in the previous year, the mean number of hours was 34.

The mean number of hours among PVE employers with 500 or more staff was 90, considerably higher than for other size bands. Employers are required to provide information to the Inland Revenue about each new application and may from time to time have to respond to queries from the Inland Revenue. One might expect large PVE employers to undertake these activities more often given the larger number of staff that the above points will apply to.

#### 7.1.3.2 Additional funding claims

Employers off-set the amounts of WFTC/DPTC they pay against their PAYE and NIC liabilities and against any student loan repayments deducted from their employees' pay. If

the WFTC/DPTC amounts due were expected to exceed these amounts, employers are able to apply to the Inland Revenue for funding. An application form is provided for this purpose.

PVE and ex-PVE employers were asked whether they had applied to the Inland Revenue for funds to cover WFTC/DPTC payments, to which one in ten said they had. There was no significant difference between PVE and ex-PVE employers but smaller organisations were more likely to have made an application. A quarter of organisations with less than five employees had applied, while the figure drops steadily to four percent of those with 500 or more employees. Among organisations whose workforce contained 50 percent or more part-time workers, this rises to a third.

Among those who have made an application, the mean number of hours in the last year was seven, with a quarter spending less than one hour.

#### 7.1.3.3 Production of certificate for leavers

If a tax credit recipient changes job or leaves employment altogether the employer will stop tax credit payments and issue a Certificate of Payments showing WFTC/DPTC paid by the employer up to the date the employee leaves, and the period they cover.

Overall, a third of PVE and ex-PVE employers had produced a certificate of payment for leavers (38 percent amongst ex-PVE and 29 percent amongst PVE). Larger organisations were more likely to have produced such a certificate. Furthermore, among organisations where more than five percent of the workforce were from ethnic minorities, this increased to 40 percent of employers.

Among those who have spent time on this, the mean number of hours in the last year was seven, with 42 percent spending less than one hour. The mean figure only rises markedly among organisations with 500 or more employees

### 7.1.3.4 Dealing with general paperwork of tax credit recipients

More than seven in ten PVE and ex-PVE employers had dealt with general paperwork and record keeping of tax credit recipients. Breaking this down by PVE status, the figure was slightly higher among PVE employers than ex-PVE, at 74 and 65 percent respectively. Among organisations of 500 or more employees, 87 percent had dealt with paperwork of tax credit recipients.

The mean number of hours in the last year was 14 among those that had spent any time on this item. Ten percent spent 21 hours or more. There is a large variation in the time spent in terms of size and number of tax credit recipients. For those with 500 or more

employees, the mean number of hours was 52, and this number was similar (54) for those with 20 or more recipients.

### 7.1.3.5 Dealing with enquiries from employees about WFTC/DPTC

PVE and ex-PVE employers were asked whether they had dealt with enquiries from employees about WFTC/DPTC. Nearly six in 10 (58 percent) of these employers had dealt with such enquiries. Difference can again be noted by PVE status with 62 percent of PVE employers having done so, compared with 47 percent of ex-PVE. As well as variances by PVE status, larger organisations were more likely to have dealt with enquiries from employees. It is also worth highlighting the variations by number of employees from ethnic minorities. Among organisations whose workforce is made up of more than five percent of ethnic minorities, the figure went up to 63 percent. Similarly, among those who have more than two percent of employees with a health problem or disability, 65 percent had dealt with enquiries from employees about WFTC/DPTC.

Among those that have spent time on this in the last year, the mean number of hours was six, with 30 percent spending less than one hour. Again, there was a difference by size and number of recipients (the mean is 32 for employers with 20 or more tax credit recipients).

#### 7.1.4 Other costs

In addition to the specified set up and ongoing costs, employers were asked if there had been any other costs, or time, spent as a direct result of paying WFTC/DPTC through the payroll. Six percent of employers said they had incurred further costs. Differences were apparent by employer size, with this figure rising to ten percent among the largest organisations of 500 employees or more.

All employers who had specified additional costs, or time, spent on tax credit matters were asked for further details of these. A wide variety of answers were given but the most common were:

- reading literature/ finding out about WFTC/DPTC (23 percent);
- form filling / extra admin (13 percent); and
- changes in accounting procedures (12 percent).

Other responses included cash flow problems, bank charges as well as general comments about time.

# 7.2 Summary of component PVE costs

It is possible to attach a value to each of the cost items discussed so far by using data collected on the number of hours spent on each activity and the average wages that payroll staff received. The time spent on preparing to pay WFTC/DPTC (set-up costs) has therefore been converted to an actual cost figure as has the time spent on ongoing costs. Respondents gave actual cost amounts for non-staff costs (e.g. accountant costs) and these are also detailed below.

The table below highlights the mean costs for each of the component PVE costs and it is therefore possible to see what proportion of total costs (detailed in section 7.4) are accounted for by each cost item.

Table 7.3: Mean cost of each PVE component (£), by PVE status

	Total	PVE	ex-PVE	never-PVE
Set-up costs				
Reading about tax credits	6.82	25.59	23.56	1.76
Gave training for payroll staff	2.83	10.75	7.78	0.37
Adapted payroll systems for payments of tax	4.13	16.52	8.96	0.70
credits				
Advised general staff about availability of tax	2.26	9.07	3.59	0.47
credits				
Non-staff costs				
Payroll bureau costs	4.61	14.67	5.15	2.16
Accountant costs	8.07	37.10	9.57	0.86
Software costs	10.85	38.29	14.27	3.98
Ongoing staff costs				
Dealt with Inland Revenue enquiries	10.55	52.77	21.23	-
Applied to Inland Revenue for funding	0.84	3.65	2.65	-
Produced certificates for leavers	2.65	11.39	8.22	-
Dealt with general paperwork of tax credit	16.74	72.51	59.30	-
recipients				
Dealt with enquiries from employees	5.63	24.93	17.10	-
Other cost (amount given)	1.14	2.02	1.57	0.86
Other cost (converted from hours spent)	0.88	2.68	2.68	0.24

Notes: The mean costs are calculated by using data on payroll hours and wages to convert figures to actual costs. Cases have been excluded where the respondent cannot answer for the reporting unit, where total PVE hours are greater than 1000, where average hourly wages are more than 500 per hour and where non-staff costs total more than 5000. Furthermore, where any derived cost totals more than 5000 then these cases have also been excluded.

The largest costs come from ongoing PVE related activities, such as dealing with general paperwork of tax credit recipients (£16.74) and dealing with Inland Revenue enquiries (£10.55). Non-staff costs accounted for the next largest costs, with mean values of £10.85 being spent on new or adaptations to software and £8.07 being spent on accountant costs.

As one might expect, PVE employers faced the highest costs, followed by ex-PVE. It is however interesting to note the proportion of never-PVE employers who have incurred costs in preparing to pay WFTC/DPTC in the future. These costs were fairly minimal, although a larger amount was spent on non-staff costs, notably payroll bureau costs and software costs.

# 7.3 Costs Incurred as a Direct Result of PVE: Multivariate Analysis

As noted in section 7.3, employers faced with the prospect of paying WFTC/DPTC via payroll face three types of cost:

- a. staff costs for the hours spent preparing for PVE
- b. staff costs for the hours spent running PVE
- c. the non-staff costs associated with altering systems and software to accommodate PVE.

The survey collected data on all three of these items from payroll managers for each reporting unit in the survey. Using descriptive and multivariate analysis described earlier, we estimate the costs incurred directly as a result of PVE and identify those factors associated with higher and lower PVE-related costs. As one might expect, those who subsequently went on to pay WFTC/DPTC through the payroll incurred higher costs than those who did not, but even those who have never done so often incurred some costs as they prepared themselves for the possibility of PVE.

In the analysis that follows, we add up the staff hours spent on setting up for and running PVE and multiply those hours by the average hourly wage for staff engaged in these activities to give us a total staff cost for dealing with PVE. These costs are not annual because they include one-off set up costs. Then, we separately identify the non-staff costs of PVE associated with changing systems and practices. These costs are summed to give an overall cost of PVE. This approach is quite different to the one adopted in chapter six, where we sought to isolate the PVE-related component of total annual payroll costs. It is more direct in that it explicitly identifies the direct costs of PVE. The two approaches are complementary.

As before, the analysis is confined to those instances in which the survey respondent said they could provide information for the whole payroll, namely 6,179 of the 6,453 respondents.

In 2,527 cases the payroll manager was unable to give full information relating to one of the cost items. To overcome this problem, we used similar multivariate regression techniques to those used earlier to estimate those missing costs. This involved estimating models for hours spent on payroll, hourly costs of staff, and the non-staff costs of PVE to produce predicted costs for each employer where data was missing on these items. The predicted costs were then used to impute cost values for employers with missing data. To test the sensitivity of the results to the imputation procedure, analyses are also run on the sub-set of cases with complete cost information.

In the following sections, we present analyses of staff hours spent on PVE, the hourly cost of payroll staff, the non-staff costs of PVE measured in pounds, and then the total direct costs of PVE.

### 7.3.1 Staff hours spent on PVE

The survey asked employers to identify the hours staff had spent on PVE-related matters under ten headings. Four of the headings relate to set-up costs incurred when preparing to pay WFTC/DPTC (see section 7.1.1). The remaining six items relate to time spent running PVE (see section 7.1.2).

Each time the respondent answered 'yes' to having any of the costs mentioned in the above sections, they were asked for the time taken on the activity. The first row in Table 7.4 shows that, among those providing valid information on all items, the average (mean) hours spent on these activities was 28 hours in the case of current PVE employers, 20 hours in the case of ex-PVE employers and around half an hour in the case of never-PVE employers. The figures are a little lower when we include those cases with imputed hours information, the current PVE average dropping to 25 hours and the ex-PVE average dropping to 16 hours. The third row shows that the PVE and ex-PVE figures are hardly affected by excluding employers who said they spent no time on these matters. However, the never-PVE figure rose to five hours.

Table 7.4: Mean hours spent on matters relating directly to PVE

	PVE	ex-PVE	never-PVE
Excluding imputation (base: 4,658)	27.9	19.5	0.4
Including imputation (base: 6,161)	24.9	15.7	0.4
Including imputation where hours $> 0$ (base: 4,434)	25.5	16.7	5.0

Taking current and ex-PVE together, the mean number of hours spent on PVE is 25.6, or 22.2 including cases with imputed data. This compares with 0.4 hours among never-PVE employers, so the differential is in the region of 22-25 hours. If one confines the comparison to those with some hours spent on PVE the differential is 19 hours.<sup>26</sup>

<sup>&</sup>lt;sup>26</sup> 23.0 hours for those with experience of paying PVE and 4.9 hours among those who have never actually paid PVE.

The determinants of hours spent directly on PVE related matters were investigated by estimating the log of hours spent on PVE for all employers, including cases with imputed values. Those cases with hours above the improbably high figure of 1,000 were excluded from the model (base: 6,157). The model, which is appended as Model (1) in Appendix 5 of the Multivariate Technical Appendix, contains the variables listed in note 2 below Table 7.4. The model fits the data very well (R²=0.85). Not surprisingly, all the PVE related activities identified above contributed to the hours spent on PVE, with the biggest effect in the set up phase being reading about WFTC/DPTC, and the biggest on-going cost being dealing with general paperwork. The number of tax credit recipients was also significant, but the big distinction is between those with no recipients and those with one.

# 7.3.2 Hourly cost of staff working mainly on payroll

To convert the hours spent directly on PVE to cost figures, one must attach a price to each hour worked. The survey asked payroll managers to provide us with the gross wage for staff working mainly on payroll, or an average for these staff where there were more than two. This information was missing in 1,206 cases, so hourly staff cost data for these cases was estimated with the model described in the notes to Table 7.5 in Appendix 5. (Although this model only explains 16 percent of the variance in hourly staff costs, the model makes intuitive sense. For instance, costs were significantly higher in London and the South East, where staff operated specialist software, where there was a low proportion of low paid workers, and where the establishment was larger).

Employers with PVE experience paid an average of £11 per hour to their staff working mainly on payroll, whereas the figure was closer to £9 among never-PVE employers. The figures were similar whether we based them on cases without imputed values (row 1 of Table 7.5) or with imputed values (row 2). The figure rose by about £1 if the analysis was confined to those who say they have costs above zero. In the regression analysis PVE status was not statistically significant in itself, so the differential was due to differences in the characteristics of PVE and never-PVE employers, such as establishment size, which is known to have an impact on wages paid.

Table 7.5: Mean hourly cost of staff working mainly on payroll, gross £s per hour

	PVE	ex-PVE	never-PVE
Excluding imputation (base: 4,966)	11.5	11.3	9.4
Including imputation (base: 6,172)	11.2	10.7	9.2
Including imputation where $costs > 0$ (base: 5,071)	12.2	11.7	10.8

### 7.3.3 Non-staff costs of PVE

In addition to the cost of staff time, employers may face non-staff costs as a direct result of PVE. The survey identifies four types of non-staff cost:

- payroll bureau costs
- accountant costs
- new/adapting payroll software or licences
- other non-staff costs.

In 1,089 cases payroll managers were unable to provide all the cost information requested, so values were imputed using the regression analysis described above in section 7.3. In 4,559 cases the value provided was zero, so it matters a great deal if one compares non-staff costs among those with positive costs, or widens the analysis to include all those providing information, regardless of whether costs were actually incurred.

The first row in Table 7.6 shows that, confining analysis to those providing full information on non-staff PVE costs, current PVE employers said they had spent £77 on non-staff PVE-related costs, compared with £29 in the case of ex-PVE employers and £7.50 for never-PVE employers. The figures were substantially higher when including those cases with imputed values, rising to £122, £56 and £12 respectively. However, these figures include those cases with zero non-staff costs. Zero non-staff cost employers accounted for 66 percent of current PVE employers, 73 percent of ex-PVE employers and 97 percent of never-PVE employers. If the zero non-staff cost cases are removed (row 3 in Table 6.13) non-staff costs attributable directly to PVE were £354 in the case of current PVE employers, £205 for ex-PVE employers and £397 for the very small proportion of never-PVE employers incurring non-staff costs.

Table 7.6: Mean non-staff costs arising directly from PVE, £s

	PVE	ex-PVE	never-PVE
Excluding imputation (base: 5,077)	77.1	28.8	7.5
Including imputation (base: 6,166)	121.7	55.8	12.2
Including imputation where costs $> 0$ (base: 1,607)	354.0	205.4	397.3

The determinants of non-staff costs of PVE were investigated by estimating the log of non-staff costs spent on PVE, including cases with imputed values. The 13 cases with non-staff costs above £5,000 were excluded from the analysis (N=6,166). The model,

which is Model (2) in Appendix 5 of the Multivariate Technical Appendix, contains the variables listed in note 2 below Table 7.6. The model fits the data very well ( $R^2$ =0.69). As expected, each type of non-staff cost identified above increased overall non-staff costs, with changes to software and software licences proving most onerous. Non-staff costs also rose with the number of tax credit recipients employed.

# 7.3.4 Total costs attributable directly to PVE

The total costs directly attributable to PVE are simply the sum of the hours worked on PVE matters multiplied by the hourly cost of that labour, plus the non-staff costs incurred. Mean total costs by PVE status at the time of the survey interview are presented in Table 7.7 below.

It is important to note at this point that an assumption has been made about the different types of cost being additive. Whereas staff costs relating to the running of PVE are ongoing – and relate to the previous year – it is debatable as to whether the remaining costs are actually one-off or ongoing.

Staff time relating to the setting up of PVE may seem like a one-off cost, but as new firms continue to start paying tax credits through the payroll and as others cease to pay them, clearly set-up costs will continue to be incurred across the population of firms on a regular basis. Similarly firms which cease to pay tax credits but then restart at a later date may incur costs as staff re-familiarise themselves with the process. There is a similar question around non-staff costs. In some instances, conversion of payroll systems may be a one-off cost. However, it seems more likely that costs relating to software licences, regular use of accountants/payroll bureaux and so on are probably paid on an ongoing basis.

This means that figures presented on overall payroll costs in this section must be treated with some caution, and should not be interpreted as either purely ongoing annual costs, or as purely one-off costs but as a combination of both. This point is revisited in section 7.5 when looking at compliance costs.

With these caveats in mind, the first row presents total PVE costs for all cases providing valid data. PVE costs average £333 for current PVE employers, £238 for ex-PVE employers and £6 for never-PVE employers. However, these averages are affected by the very high percentage of employers with zero PVE-related costs. 6.7 percent of current PVE employers reported zero PVE-related costs, as did nine percent of ex-PVE employers and 92 percent of never-PVE employers. Row 2 removes these cases from the analysis and presents average PVE costs by PVE status only where employers reported costs above zero. This increased average costs by about £20 in the case of employers with PVE experience, but not surprisingly it dramatically increased costs for the never-PVE

employers because the figure is calculated for the eight percent of never-PVE employers identifying actual costs. The third row presents average PVE-related costs for all employers, adding in the imputed values produced with the multivariate analyses for staff costs and fixed costs described above. The imputation process increased PVE costs for current PVE employers by 12 percent to £373, but it lowered the average PVE costs facing ex-PVE employers by 13 percent to £207. PVE costs faced by never-PVE employers trebled to £16. The fourth row is the equivalent of row 2, presenting mean costs for those with costs above zero, but this time including the cases with imputed cost values. PVE costs incurred by current PVE employers were £400 on this basis, nearly double the costs faced by ex-PVE and never-PVE employers.

Throughout this section, costs were substantially greater among current PVE than ex-PVE employers. This may be because ex-PVE employers discount part of the costs as time lapses since they employed tax credit recipients. Alternatively, ex-PVE employers may face genuinely lower costs, partly reflecting the fact that switchers have fewer tax credit recipients (see Chapter Two).

Table 7.7: Mean total costs arising directly from PVE, £s

	PVE	ex-PVE	never-PVE
All employers, excluding imputation (base: 3,637)	332.9	237.5	5.8
Employers with PVE costs > 0, excluding	353.2	260.8	133.5
imputation (base: 1,947)			
All employers, including imputation (base: 6,144)	372.7	207.2	15.7
Employers with PVE costs>0, including imputation	399.8	226.3	203.7
(base: 4,305)			

Table 7.8 presents the same information in a slightly different way. Rather than distinguishing between current, ex- and never-PVE employers the table simply distinguishes between employers who have ever experienced PVE, and those who have not. In the final column, it also presents the mean direct costs of PVE across all employers. The mean cost of PVE averaged across all employers was very small - £51 for those providing valid data and £101 if imputed values are included (rows 1 and 3 respectively). Of course, there is a substantial difference between costs incurred by the never-PVE employers, who only incurred preparation costs, and the 'ever-PVE' group, all of whom had experience of running PVE. Those with experience of running PVE incurred costs of a little over £300, on average (£306 without imputed values and £324 with imputed values). Of course, turning to rows 2 and 4, it is clear that mean costs were

somewhat higher when confined to those saying they had incurred at least some PVE costs. Among this population, costs averaged about £300 per employer – a little less than this if we exclude those with imputed data (row 2) and a little more than this if we include them (row 4). If we focus on those with experience of running PVE (not just preparing for PVE) who said they incurred costs, their costs were highest of all at well over £300 (£328 excluding imputation and £350 with imputation).

Table 7.8: Mean total costs arising directly from PVE, £s

	ever	never-	Mean PVE costs
	<b>PVE</b>	<b>PVE</b>	for whole sample
All employers, excluding imputation (base: 3,637)	306.4	5.8	51.1
Employers with PVE costs $> 0$ , excluding	328.2	133.5	287.7
imputation (base: 1,947)			
All employers, including imputation (base: 6,141)	324.7	15.7	100.68
Employers with PVE costs>0, including	350.1	203.7	321.0
imputation (base: 4,302)			

Determinants of the total costs arising directly from PVE were investigated by estimating the log of total PVE related costs for all employees, including cases with imputed values. The 35 cases with total costs above £10,000 were excluded (N=6,144). The model, which is appended as Model (3) in Appendix 5 of the Multivariate Technical Appendix, contains all the variables listed in note 2 below Table 7.8. The model fits the data very well ( $R^2$ =0.81). Not surprisingly, whether employers have actually employed tax credit recipients raises costs considerably, and there is some evidence of an increase in costs if the employer employed more than one recipient. The other factor which largely determines costs is whether employers had undertaken any of the fourteen PVE-related activities identified, namely the four activities related to set-up costs, the six activities related to running costs, and the four headings for non-staff costs. As groupings, set up and non-staff costs were more significant than running costs, but costs associated with dealing with paperwork were significant.

There was little difference in the pattern of results when we checked their sensitivity to the following alternative models:

- including the 35 cases with total PVE costs above £10,000
- excluding those cases with imputed values for any costs (Model (4) in Appendix 5)
- excluding those cases with no experience of employing tax credit recipients (this last model is presented as Model (5) in Appendix 5).

### 7.4 Variation in total cost among different employers

## 7.4.1 Descriptive analysis

This section examines variation between different employers, in terms of the estimated total direct cost of PVE. This analysis is based on the mean figures for all employers, including imputation (as reported in table 7.8).

Table 7.9 shows that costs increased with number of employees, and this is the main employer characteristic which is correlated with variation in cost. This relates mainly to the PVE sample; the variation for the ex-PVE and never-PVE samples were less consistent.

As might be expected, it is the on-going costs that were particularly large for bigger employers. As noted in section 7.1.3, there were two items where costs were considerably higher than average for the largest band (500 or more employees): dealing with Inland Revenue enquiries and dealing with general paperwork.

Table 7.9: Mean total costs arising directly from PVE, £s, by number of employees

	PVE	ex-PVE	never-PVE
Total	373	207	16
Number of employees			
< 5	189	128	11
5-9	202	173	17
10-19	268	267	12
20-49	360	210	42
50-99	336	271	13
<100-499	734	163	16
500+	1,503	-	_

Note: figure excluded where fewer than 100 respondents in any sub-group

We can also examine the variation according to the number of tax credit recipients (at the time of the interview). By definition, this is limited to PVE employers. As with the total number of employees, there is a link between costs and the number of tax credit recipients. These two issues are linked, as large employers tend to have more recipients. However, both issues (total number of employees and number of recipients) have an impact on costs in their own right.

Table 7.10: Mean total costs arising directly from PVE, £s, by number of tax credit recipients

	PVE
Total	373
Number of tax credit recipients	
1	234
2	414
3	370
4	638
5-9	1,010
10-19	1,181
20+	1,307
Base: All employers, including imputation	

Table 7.11 analyses the mean costs by region. The most striking figure is the high mean cost among PVE employers in the South East. This region contains a relatively high proportion of large employers; as noted above, these tend to have higher PVE costs.

Table 7.11: Mean total costs arising directly from PVE, £s, by region

	PVE	ex-PVE	never-PVE
Total	373	207	16
Region			
North East	313	-	6
North West (inc North)	303	187	18
Yorkshire & Humber	415	-	-
East Midlands	339	-	29
West Midlands	360	-	15
Eastern	281	-	4
London	338	185	6
South East	641	107	23
South West	299	182	26
Wales	419	-	28
Scotland	292	-	-

Note: figure excluded where fewer than 100 respondents in any sub-group

## 7.4.2 Multivariate analysis

We can take the same information from our models and illustrate results in a different way by comparing the predicted direct costs of PVE for different types of employer. Results for five artificial cases are discussed.

The first case is an employer with modal characteristics for the sample. As such, the employer had never employed a tax credit recipient and had incurred a very small cost in undertaking rudimentary preparation for WFTC/DPTC. In comparison, an identical employer employing a single tax credit recipient at the time of interview, undertaking paperwork associated with WFTC/DPTC and dealing with enquiries from the Inland Revenue, faced a cost of £59.89. Case three is a similar but larger employer (20-49 employees) which has faced more substantial costs in setting up and running PVE. This employer dealt with enquiries about WFTC/DPTC from employees, gave training and guidance on WFTC/DPTC to staff, and adapted the manual payroll system in place to deal with WFTC/DPTC. This results in a total PVE-related payroll cost of £520.04.

Case four is identical to case three, except the employer employed two or more tax credit recipients, a factor which, in itself, raises costs marginally to £531.00. Case five is similar to case four, but was heavily involved in tax credit activities and was used to dealing with tax credit recipients. It used specialist software to deal with payroll, but also used a bureau to deal with part of the payroll function. It incurred non-staff costs of PVE in the fee it pays the bureau. In addition, it had to apply to the Inland Revenue for tax credit funding and produced Certificates of Payment for tax credit leavers. As a result, it faced costs of almost £5,500. Finally, case six is similar to case five, but it was larger with over 100 employees. It incurred non-staff costs associated with altering software licences and in using an accountant for part of its payroll function. However, because it was able to rely on the accountant for simple administrative support, the employer did not have to deal with paperwork, did not issue certificates of payment, and did not seek Inland Revenue funding. Its costs were still high at £1,866 but lower than those in case five, in part because it had been able to offload some of the administrative responsibilities of WFTC/DPTC to an external body. An interesting implication is that the firms' accountancy costs do not appear to have risen by the full internal costs associated with PVE, which may mean that firms have either under-reported the additional costs of paying external bodies to administer PVE, or there are genuine savings associated with contracting out payroll in this way.

This analysis is shown in Table 7.12, which derives total direct PVE costs from Model (3) in Appendix 5 of the Multivariate Technical Appendix.

Table 7.12: Mean total costs arising directly from PVE for typical cases, £s

Employer Characteristics	Predicted payroll costs incurred as a direct result of
	PVE
1. never employed PVE tax credit recipients, North West, company, $<\!5$ employees, annual turnover of £200-499k, under 5 establishments, 1 PAYE unit, none of workforce work $<\!16$ hours, 0-79% workforce work 30+ hours per week, $<\!10\%$ workforce are from non-white ethnic background, none of employees with health problem, 10-49% part-timers earn less than £15,000 per annum, none of full-timers earn $<\!$ £15,000 per annum, wholesale/retail sector, internal payroll, one person working mainly on payroll, no one working partly on payroll, no specialist software, spent time reading about WFTC/DPTC, advised staff about availability of WFTC/DPTC	12p
2. As 1, but currently 1 tax credit recipient, dealt with general paperwork, dealt with enquiries from Inland Revenue	£59.89
3. As 2, but 20-49 employees, plus dealt with general tax credit enquiries from employees, given/received training or guidance on WFTC/DPTC, adapted payroll systems for payment of WFTC/DPTC	£520.04
4. As 3, but 2+ tax credit recipients	£531.00
5. As 4, but uses specialist software for payroll, applied to Inland Revenue for tax credit funding, produced certificates of payment for tax credit leavers, and PVE costs arising from bureau used to deal with part of payroll function	£5,460.99
6. As 5, but 100+ employees, but uses accountant for part of payroll function, not had to deal with paperwork, not issued certificates of payment, not sought Inland Revenue funding, PVE fixed costs to cover accountant, PVE fixed costs in altering software licences	£1,866.75

# 7.5 Comparison of direct cost estimates with RIA analysis

This section includes information from the Regulatory Impact Assessment (RIA), produced by the Inland Revenue<sup>27</sup>. The methods used to estimate the cost of WFTC/DPTC differ between the RIA and this survey, as discussed below. However, the two sets of estimates are presented here for reference purposes.

 $^{\it 27}$  Tax Credits Act 1999 and Accompanying Regulations, Regulatory Impact Assessment, revised 1999

# 7.5.1 Number of employers covered by estimates

Table 7.13 shows a breakdown of the number of employers covered by the two estimates. The RIA analysis is based on the Inland Revenue's PAYE/NIC database, with figures relating to the end of 1998. As such, the figures and subsequent analyses are based on PAYE units. The sample for our survey was drawn from the IDBR, with figures relating to April 2002. The figures and subsequent analyses are based on RUs.

Table 7.13: Comparison of numbers of employers by size

Employer Size	RIA: Number of cases end 1998 <sup>28</sup>	IDBR: Number of cases April 2002
Small (1 to 4)	670,000	630,362
Small (5 to 99)	330,000	343,384
Medium (100 to 499)	16,000	15,452
Large (500+)	4,100	4,620
Government <sup>29</sup>	3,000	N/a
Total	1,023,100	993,818

#### 7.5.2 Estimated cost of WFTC/DPTC

Table 7.14 compares the estimated cost to employers of WFTC/DPTC produced by the two sets of analyses.

<sup>&</sup>lt;sup>28</sup> Table entries are counted on Inland Revenue COP basis, ie some employers may have more than one entry, as they run two or more separate payrolls.

<sup>&</sup>lt;sup>29</sup> This is an additional category in the RIA data, covering government organisations of all sizes. In the survey data, this category is subsumed in the various size categories

Table 7.14: WFTC cost to employers by size in £ (to nearest million)

Employer Size	$RIA^{30}$		Survey/IDBR <sup>31</sup>
	Recurrent	Non-	Total
Small (1 to 4)	25	1	34
Small (5 to 99)	27	13	44
Medium (100 to 499)	12	10	8
Large (500+)	34	14	4
Government	7	6	N/a
Total	105	44	100

The main differences in the way the costs have been estimated are as follows.

- a) The RIA figures are derived from estimates made before WFTC/DPTC were introduced, on:
- the number of employees who would receive tax credit awards through the payroll, and
- the number of employers projected to have at least one employee with a WFTC award.

The assessment of costs followed the broad principles adopted for the Bath University report entitled "The Tax Compliance Costs for Employers of PAYE and National Insurance 1995-96". Further details of the RIA assumptions are included in paragraphs 40-46 of the RIA report.

Survey data is derived from individual responses, in which the respondent estimated the direct cost of WFTC/DPTC to the organisation; specifically:

- estimate of staff time on four specific types of activity when WFTC/DPTC were introduced (reading about tax credits; giving or receiving training or guidance for payroll staff about tax credits; adapting payroll systems for payment of tax credits; advising general staff about the availability of tax credits)
- estimate of cost spent by the organisation, as a direct result of WFTC/DPTC, on payroll bureau costs; accountant costs; and new/adapting payroll software/software licences

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 $<sup>^{30}</sup>$  (i) Recurrent costs are in 1998/99 prices and include interest costs of cash-flow effects.

<sup>(</sup>ii) WFTC costs are in respect of employees only. The self-employed are excluded. Some 1,200,000employees were assumed in the RIA to hold awards, of which 840,000 were expected to receive their payments through the payroll.

 $<sup>^{31}</sup>$  Survey data is based on the combined direct cost as estimated by respondents. This is confined to employers with total PVE-related costs of less than or equal to £10,000, thus excluding 35 cases. These figures include imputation

• estimate of staff time spent in the previous year on five specific types of activity (dealing with Inland Revenue enquiries/providing information to the Inland Revenue about employee applications; applying to the Inland Revenue for funds to cover tax credits; producing Certificates of Payments for leavers; dealing with general paperwork (e.g. P14, P60, P35) and record keeping of tax credits recipients; dealing with enquiries from employees about tax credits.

The respondent's assessment of direct costs was only one approach used in the survey to examine costs. The survey also obtained respondents' overall perceptions of the level of costs incurred. It also examined payroll costs in general, and compared them between PVE and non-PVE employers. Although the assessment of direct costs is only one approach used in the survey, it is the one presented here as it provides the closest single comparison with the RIA figures.

- b) RIA calculations used estimated costs to businesses which existed in 1998-99. Survey data contain respondents' estimates of costs in the year preceding the interview (2001-2) with respect to on-going costs, as well as costs incurred at any time before the interview with respect to other costs.
- c) Survey data is based on questions about "tax credits", whereas the RIA analysis is limited to the estimated cost of WFTC.
- d) The RIA analysis has separate estimates for recurrent and non-recurrent costs. The survey data provides a single figure. In the survey, different component costs were examined, although it is not straightforward to divide these components into recurrent and non-recurrent., as the discussion in section 7.3.4 testifies. However, as a rough guide, we can treat all costs related to staff time on set-up tasks as non-recurrent; other tasks (non-staff costs and staff time on on-going tasks) as recurrent. This assumes that all non-staff costs (eg accountant costs or new payroll software) are recurrent, whereas in fact a proportion of these costs will be non-recurrent. However, such a division would apportion the overall costs as estimated by the survey (and shown in Table 7.14) as follows: £77 million on recurrent costs, £23 million on non-recurrent costs.

Table 7.15 draws on the data from tables 7.13 and 7.14, and shows the estimated mean cost per employer in different size bands. The overall estimate produced by the RIA is higher than the survey, and the RIA estimate is considerably higher for larger organisations. However, for small organisations (less than five employees), the survey estimate is higher than the RIA estimate. This may be because the method used in the RIA analysis under-estimated the economies of scale that could be made at larger organisations. Alternatively, it may be more difficult for survey respondents in large organisations to identify all costs accurately. However, it should be

repeated that the RIA and the survey used differed methods to estimate costs, and therefore it is difficult to make direct comparisons.

Table 7.15: WFTC cost to employers by size: mean £

Employer Size	RIA	RIA	
	Recurrent	Non-	Total
Small (1 to 4)	37.31	1.49	53.85
Small (5 to 99)	81.82	39.39	126.79
Medium (100 to 499)	750	625	559.09
Large (500+)	8,292.69	3,414.63	953.44
Government	2,333.33	2,000	N/a
Total	102.63	43.01	100.547

# 7.6 Summary

When asked about the direct costs of WFTC/DPTC, the highest costs related to on-going staff costs - dealing with general paperwork and with Inland Revenue enquiries. This applied particularly to larger organisations and those with a higher number of tax credit recipients. Non-staff costs (accountant, payroll bureau and software costs) tended to be lower overall, as only a minority of employers incurred these costs. However, a relatively high proportion of the total direct costs incurred by smaller organisations was accounted for by non-staff costs. For example, among PVE employers with fewer than five employees, accountant costs represented nearly half of the total direct costs. Employers also identified time spent on set-up tasks, although these costs tended to be lower overall than on-going staff costs or non-staff costs.

Multivariate analysis has shown that among employers who have ever employed tax credit recipients, the direct costs attributable to PVE through set up, running and non-staff costs were in the order of £325 per employer. Costs were substantially greater among current PVE than ex-PVE employers (£373 compared with £207). The mean cost for employers who have never operated PVE was £16. Across all employers, this produces a mean figure of £101.

Direct PVE related costs were a little higher if we exclude those with experience of running PVE who nevertheless said they have not incurred costs: doing so raises costs to around £350. These sums are not large, so it is hardly surprising that the PVE impact on overall payroll costs was not statistically significant in our earlier analysis.

Nevertheless, costs that are directly attributable to PVE can vary quite considerably across employers. PVE-related costs were around zero for the vast majority of employers who have never employed tax credit recipients. Overall direct costs were higher among larger

organisations. The mean direct cost was relatively stable at between £289 and £336 for those with fewer than 100 employees, but then increased to £734 among those employing 100-499 staff, and £1,503 with 500 or more employees. Related to this, costs increased among employers with a larger number of tax credit recipients. In terms of region, the mean cost was highest in the South East, where there is a relatively high incidence of large employers.

In assessing the impact of WFTC/DPTC on employers' costs, it is important to note that Family Credit imposed some compliance costs on the employer in terms of time spent completing forms. The compliance costs reported here are therefore gross costs, rather than net of any existing compliance costs associated with Family Credit.

### **Comparison with RIA estimate**

The total direct cost of WFTC/DPTC, as estimated by the survey, was £100 million. This is lower than the estimate provided by the Regulatory Impact Assessment (RIA), which estimated there would be a total of £105 million on recurrent costs and £44 million on non-recurrent costs – based on a number of assumptions, a rough split of the survey figure suggests recurrent costs of around £77 million and around £23 million in non-recurrent costs.

The RIA figures are considerably lower than the survey estimates for larger organisations. However, for small organisations (less than five employees), the survey estimate is higher than the RIA estimate. This may be because the method used in the RIA analysis underestimated the economies of scale that could be made at larger organisations. Alternatively, it may be more difficult for survey respondents in large organisations to identify all costs accurately. However, it should be noted that the RIA and the survey used different methods to estimate costs, and therefore it is difficult to make direct comparisons.

# 8 General perception of costs

So far we have looked at the impact of PVE on employer payroll costs and then costs incurred as direct result of PVE. A third way to establish whether PVE increases payroll costs significantly is to ask employers about their perceptions of the impact of PVE. The survey did this in two ways. First, employers were asked whether the costs they had incurred as a result of administering and preparing for WFTC and DPTC were significant, moderate, minimal or zero (section 8.1). Secondly, they were asked to pinpoint on a five-point ordinal scale running from low impact to high impact, the impact of WFTC on organisational costs.(section 8.2).

Multivariate analytical techniques similar to those used in earlier sections were used to isolate the independent association between PVE status and perceived costs, holding other employer characteristics constant. Weighted data is used throughout and only results significant at the 90 percent level or better are reported. Analyses use survey-based PVE status and employment size rather than the administrative data so that the perception of costs can be related to PVE status and employment size at the time of interview. Testing the robustness of results to the use of the administrative measure of PVE status, we found results were very similar in terms of the variables which were statistically significant.

# 8.1 Perceived Costs of Administering and Preparing for WFTC and DPTC

Respondents were asked to give their overall assessment of whether their organisation had incurred significant, moderate or minimal costs from administering and preparing for WFTC and DPTC. Their responses are shown in Table 8.1.

Table 8.1: Perceived cost of administering and preparing for WFTC/DPTC

	%
Haven't had any costs	73
Minimal costs	19
Moderate costs	6
Significant costs	2
Don't know	*
(Base)	(6,453)
Base: All respondents	

Nearly three quarters (73 percent) of employers reported that they had not experienced any costs as a result of administering or preparing for WFTC/DPTC, whilst a further 19 percent believed that costs had been minimal. Only two percent felt that they had incurred

significant costs as a result of administering WFTC/DPTC, and six percent had experienced moderate costs. These findings are very much in keeping with the analysis of actual PVE costs presented earlier.

If we consider the reported cost of administering and preparing for WFTC/DPTC by PVE status (see Table 8.2), it is apparent that employers who never administered WFTC/DPTC were far less likely to report minimal, moderate or significant costs than those with current or past experience. However, employers who never administered WFTC/DPTC may differ from employers who did have experience of PVE in terms of other characteristics such as size and so this is investigated in the following multivariate analysis.

Table 8.2: Perceived cost of administering and preparing for WFTC/DPTC by PVE status

	PVE	ex-PVE	never-PVE
Haven't had any costs	30	42	84
Minimal costs	45	42	12
Moderate costs	19	12	3
Significant costs	5	4	1
Don't know	1	1	*
(Base)	(3,611)	(1,019)	(1,757)
Base: All survey respondents			

### 8.1.1 Factors influencing the assessment of overall costs

We begin by assessing the influence of employer characteristics on whether employers perceived any costs at all arising from administering or preparing for PVE. Significant influences are identified in Table 8.3 (the full regression is appended in Appendix 6 of the Multivariate Technical Appendix). It shows that respondents in organisations where the employer paid WFTC/DPTC through the payroll were 58 percent more likely to report that their organisation had experienced costs from administering or preparing for WFTC/DPTC than those in organisations which had never paid WFTC/DPTC. Likewise organisations that had paid WFTC/DPTC in the past were 56 percent more likely to report that they had experienced some costs of administering WFTC/DPTC than those which had never paid WFTC/DPTC.

Table 8.3: Percentage change in probability of any costs of administering WFTC/DPTC

	%
<b>PVE</b> (ref. never PVE)	, 0
PVE	58
ex-PVE	56
Ease of administering WFTC/DPTC (ref. easy to administer)	
Not easy	25
Payroll arrangements (ref. internal only)	
External accountant	6
External tax consultant	-18
Help from elsewhere in the organisation	-9
Employer size (ref. 1-4 employees)	_
10-19	8
20-49	10
50-99	10
100-499	17
500+	24
Region (ref. North West)	
London	-12
Scotland	-13
Industry (ref. wholesale/retail)	0.0
Finance	38
Health	-10
Other services	10

Organisations were 25 percent more likely to have experienced costs from administering WFTC/DPTC where they had not found WFTC/DPTC easy to administer, compared to those which had found this easy.

Where an external accountant provided payroll services, the organisation was six percent more likely to have experienced some costs from administering WFTC/DPTC, but organisations which used an external tax consultant were 18 percent less likely to report that they had incurred costs from administering WFTC/DPTC (both compared with organisations which only dealt with payroll matters internally). Where help with payroll

was received from elsewhere in the organisation, the respondent was nine percent less likely to believe that the employer had experienced any costs from administering WFTC/DPTC.

The difference between the perceived costs of administering WFTC/DPTC associated with each of these sources of external help with payroll could be explained by the variation in functions of these external sources. A tax consultant might be approached specifically with the task of reducing payroll costs and would be expected to provide advice on administering WFTC/DPTC, whilst a reporting unit which could turn to a wider organisation for help may benefit from support not available to independent establishments. Rather than an external accountant failing to provide the information on WFTC/DPTC needed to avoid administration costs, it could simply be a feature of employers using external accountants that they are more likely to be required to pay WFTC/DPTC.

Larger organisations were more likely to have incurred costs from administering WFTC/DPTC than smaller organisations, which is unsurprising given the high correlation (0.60) between employment size and the number of tax credit recipients. The respondent was more likely to say that the organisation had experienced some costs of administering WFTC/DPTC where the organisation had 10 or more establishments, and where the employer was in the Finance or Other services sector. Organisations were less likely to report that they had experienced costs from administering WFTC/DPTC where they had between five and nine establishments, were based in London or Scotland, or were in the Health sector.

Whilst it is useful to look at the factors which determine whether an employer is more or less likely to incur any costs from administering WFTC/DPTC, it may be of greater interest to establish what distinguishes employers reporting moderate or significant costs from those which experience minimal costs, or no costs at all. Where the employer paid WFTC/DPTC through the payroll, they were 19 percent more likely to report that their organisation had experienced moderate or significant costs from administering or preparing for WFTC/DPTC than employers who had never paid WFTC/DPTC (see Chart 8.4, below – full model appended in Appendix 6 of the Multivariate Technical Appendix).

Table 8.4: Percentage change in probability of moderate or significant costs of administering WFTC/DPTC

	%
<b>PVE</b> (ref. never PVE)	
PVE	19
ex-PVE	16
Ease of administering WFTC/DPTC (ref. easy to administer)	
Not easy	27
Payroll arrangements (ref. internal only)	
External accountant	2
Specialist software	3
Mix of specialist software and manual	5
Employer size (ref. 1-4 employees)	
20-49	-2
50-99	-2
100-499	-3
Region (ref. North West)	
North East	3
North	18
London	-2
Scotland	-2

Employers who had paid WFTC or DPTC in the past were 16 percent more likely to believe that their organisation had incurred moderate or significant costs from administering WFTC/DPTC than organisations that had never paid WFTC/DPTC. Respondents were 27 percent more likely to believe that their organisation had experienced moderate or significant costs from administering WFTC/DPTC where they said that WFTC/DPTC were not easy to administer. The likelihood that the employer reported moderate or significant costs was raised by two percent where the employer used an external accountant to help with payroll matters, rather than dealing with payroll internally.

The use of specialist payroll software was also associated with a greater likelihood of moderate or significant costs from administering WFTC/DPTC (three percent) compared with employers who did not use any specialist payroll software. However, where the employer used a mix of specialist software and manual procedures for administering payroll, the employer was five percent more likely to report moderate or significant costs.

This suggests that, under these circumstances, the employer encounters the difficulties of adapting both their specialist software and their manual payroll administration to enable payment of tax credits.

Larger organisations were less likely to report moderate or significant costs from administering WFTC/DPTC than smaller organisations, in contrast to the finding that larger organisations are more likely to report some costs from administering WFTC/DPTC. Respondents were more likely to report moderate or significant costs where the employer was based in the North East or North.

Moderate or significant costs from administering WFTC/DPTC were more commonly reported where some of the workforce had health problems which limited the type of work they could do, perhaps reflecting the greater likelihood that some employees were entitled to DPTC in these workplaces. Respondents in London and Scotland were less likely to report moderate or significant costs of administering WFTC/DPTC, as were local authority employers.

# 8.1.2 The relationship between perceived and actual costs of administering WFTC/DPTC

There is no evidence to suggest that actual total costs experienced by respondents who felt that the cost of administering WFTC/DPTC was moderate or significant were any greater than for those reporting that costs were minimal, or that no costs had been incurred. Therefore there appears to be no link between respondents' subjective assessment of costs and the more objective measure of costs, once features likely to influence the cost of administering WFTC/DPTC are taken into account. There is also no link between the subjective assessment of costs and any of the individual elements of actual costs, namely payroll software, costs of payroll staff, and the perceived cost of administering and preparing for WFTC/DPTC. Where a significant relationship was observed between the external costs of payroll and perceived costs, this relationship was positive, but extremely small.

This finding suggests several possibilities. Firstly, the average costs associated with PVE formed such a small percentage of all payroll costs that there was no correlation between actual payroll costs and perceived PVE costs, even when these were thought to be moderate or significant. Secondly, organisations do not actually measure the cost of WFTC/DPTC, so that respondents have little evidence on which to base their judgement. Thirdly, the extent to which organisations were willing to take on additional administrative responsibilities varied greatly from organisation to organisation, so that what was assessed

as a significant cost by one organisation was regarded as a minimal cost by another. Finally, it is possible that the information supplied on total costs may carry inaccuracies.

In this context, it is also worth noting that there is a strong correlation between perceived cost and other questions on respondents' experience and perceptions of PVE (e.g. how easy it has been to administer WFTC/DPTC, whether there have been cash flow problems). This suggests that the assessment of perceived cost may be a proxy for the overall level of difficulty/aggravation felt by the respondent towards WFTC/DPTC, rather than a reliable assessment of overall financial cost.

# 8.2 Perceived impact of administering WFTC/DPTC and other statutory requirements on payroll costs

Besides asking respondents for their assessment of the costs incurred by their organisation in administering and preparing for WFTC/DPTC, those surveyed were asked to rate on an ordinal scale running from one (low) to five (high) the impact of eight statutory requirements on their payroll costs. As employers are not told which tax credit they are paying, and the proportion of employees receiving DPTC is very low, we concentrate on the perceived impact of WFTC here. The perceived impact of WFTC is shown below in Table 8.5.

Table 8.5: Perceived impact of WFTC on payroll costs

	Total	PVE	ex-PVE	never-PVE
1 (Low)	35	32	40	36
2	8	22	18	4
3	7	18	11	4
4	3	10	5	2
5 (High)	3	11	6	1
Don't know	44	8	21	53

Four in ten respondents were not aware of the impact of WFTC, whilst around one-third believed that WFTC had a low impact on their organisation. Only three percent felt that WFTC had a high impact (five on the scale). However, if we look at responses by PVE status, we see that where the organisation had no experience of administering WFTC/DPTC, the respondent was far less likely to be aware of the impact of WFTC on the organisation, and only one-in-ten rated the impact of WFTC between two and five, compared to half the respondents in workplaces administering WFTC/DPTC at the time of the survey.

Table 8.6 illustrates the perceived impact of the other statutory requirements across all survey respondents:

Table 8.6: Perceived impact of other legislation on payroll costs

Perceived impact					
1	2	3	4	5	Don't
(low)				(high)	know
35	8	7	3	3	44
18	1	1	*	*	80
62	10	11	4	5	9
44	8	7	2	1	37
26	2	1	*	*	70
48	14	12	6	5	16
39	7	6	3	2	42
37	14	11	4	4	30
	35 18 62 44 26 48 39	1 2 (low) 35 8 18 1 62 10 44 8 26 2 48 14 39 7	1 2 3 (low) 35 8 7 18 1 1 62 10 11 44 8 7 26 2 1 48 14 12 39 7 6	1 2 3 4 (low) 35 8 7 3 18 1 1 * 62 10 11 4 44 8 7 2 26 2 1 *  48 14 12 6 39 7 6 3	1 2 3 4 5 (low) (high) 35 8 7 3 3 18 1 1 * * 62 10 11 4 5 44 8 7 2 1 26 2 1 * *  48 14 12 6 5 39 7 6 3 2

(Base: 6,453)

Base: All respondents

Most of the other legislation was considered to have had a fairly small impact on payroll costs. One-in-ten respondents reported that Statutory Sick Pay had a high impact on their organisation (rated as four or five), compared with nine percent for the National Minimum Wage and eight percent for pensions legislation. However, a quarter of respondents rated the impact of pensions legislation as two or three on the scale, compared to only 15 percent for WFTC. Less than one percent of respondents rated the impact of DPTC or student loans as four or five, with DPTC least likely to be rated as having a high impact. Three percent of respondents thought that the Working Time Regulations had a high impact on their organisation, and five percent rated the impact of statutory maternity pay as four or five.

For the purposes of the following analysis we assume that where the respondent was not aware of the impact of WFTC, this indicates that the organisation was not greatly affected by it, as it seems probable that if WFTC had a substantial impact, the respondent would have known about this.

## 8.2.1 Factors influencing the perceived impact on costs of administering WFTC

Given the small proportion of respondents who rate the impact of WFTC as anything other than low (one on the scale), the factors associated with an impact greater than one are explored (Table 8.7). Organisations which paid WFTC/DPTC through the payroll at the time of the survey were 30 percent more likely to rate the impact of administering

WFTC higher than one, and organisations which had paid WFTC/DPTC via the payroll in the past were 21 percent more likely to report a greater impact from WFTC. The respondent was 13 percent more likely to rate the impact of WFTC highly where they believed that WFTC/DPTC had not been easy to administer.

The impact of administering WFTC was greater in organisations that had used a higher number of sources of information on WFTC/DPTC. It is also apparent that employers who rated the impact of other government and tax legislation highly were more inclined to believe that WFTC had a greater impact on their organisation, as respondents were 16 percent more likely to rate the impact of WFTC as greater than one where the average impact of the other measures (DPTC, National Minimum Wage, Working Time Regulations, student loan repayments via the employer, Statutory Sick Pay, Statutory Maternity Pay, and changes to pensions provisions) were also thought to be greater. It may be that there is a sub-set of employers who find it particularly difficult to accommodate statutory change. Alternatively, this finding may tell us more about the individual respondent than about the nature of costs borne by employers, with a subset of employers being more inclined to complain than others.

Table 8.7: Percentage change in probability of WFTC being rated greater than 1

	0/
<b>PVE</b> (ref. never PVE)	%
PVE	30
ex-PVE	30 21
ex-F V E	2.1
Ease of administering WFTC/DPTC (ref. easy to administer)	
Not easy	13
Employer size (ref. 1-4 employees)	
10-19	-5
20-49	-8
50-99	-9
100-499	-8
500+	-9
Region (ref. North West)	
North	-8
Yorks and Humber	6
West Midlands	-5
<b>Industry</b> (ref. wholesale/retail)	
Agriculture and fishing	-8
Public administration	27
Health	-8

Respondents were more likely to believe that the costs of administering WFTC were greater where a larger proportion of employees were on low wages, and where the employer was in the Public administration sector, or in the Yorkshire and Humberside region. A lower rating of the impact of WFTC was given where five percent or more of the workforce had health problems. WFTC was considered to have had a smaller impact amongst larger employers, and those in the Agriculture and fisheries and Health sectors. Local authority employers also reported a lower impact from WFTC, as did those in the North and the West Midlands.

## **8.2.2** The relationship between the perceived impact of WFTC and actual costs

As with the assessment of the overall costs of administering WFTC/DPTC, when actual reported costs were included in the model, no link between the perceived impact of WFTC and actual costs was observed. Therefore there is no evidence that respondents assessed the impact of WFTC to have been higher where actual costs were higher. There was also no link between the perceived impact of WFTC and the individual elements of actual costs, with only software costs displaying a very small negative relationship with the assessed impact of WFTC. Finally, there was no evidence of a significant relationship between the costs incurred as a direct result of PVE and the perceived impact of WFTC.

## 8.3 Summary

The analysis of the perceived costs of WFTC/DPTC shows that only one in four employers reported any costs of administering WFTC/DPTC, whilst only one in 50 experienced significant costs. This broadly supports the actual costs analysis. Higher perceived costs were reported among PVE employers (five percent said costs had been significant, as well as 19 percent who said they had been moderate).

The analysis demonstrates that whilst larger organisations were more likely than smaller employers to experience some impact from administering WFTC/DPTC, smaller organisations reported greater costs. However, there is no evidence to suggest that there is any link between the perceived costs of administering WFTC/DPTC and the actual costs experienced by an organisation. Perceptions of cost were more closely linked to the perceived general impact of WFTC and other legislation, and by the degree of difficulty experienced. This suggests that, to some extent, the perceived impact on costs of administering WFTC/DPTC reported by employers are explained by the general outlook of the respondent, and the level of upheaval associated with this type of legislation, rather than the actual impact on costs.

## 9 Recruitment, hours and wages

In chapter one we summarised the findings of a study by Callender et al., 1994, which found that in general Family Credit had no effect in encouraging the recruitment of people likely to be eligible, but that some employers targeted such groups occasionally to increase their pool of labour. Some employers found the completing of forms for Family Credit time consuming and some had negative views of the benefit, although there was no evidence of a reluctance to hire workers because they were likely to claim Family Credit. These theories shall be examined where relevant whilst analysing the findings from this survey.

This chapter looks at the effects of WFTC/DPTC on the recruitment process of employers, as well as its impact on staff hours, wages and employee retention. Sections 9.1 and 9.2 look at the impact of WFTC/DPTC on the recruitment process and staff hours, while Section 9.3 looks at wages and staff retention. In Section 9.4 we also look at other impacts associated with WFTC/DPTC.

Before asking this set of questions, interviewers read a short introductory paragraph to the respondent, which explained that we were trying to find out how WFTC/DPTC had affected the employment practices of some organisations. Interviewers explained that we wanted employers to respond thinking about the impact on the entire organisation, and not just the employees they worked with on a day-to-day basis.

It is important to stress that the findings in this chapter are based on employers' perceptions of the link between WFTC/DPTC and recruitment and not any 'actual' effects. In many cases employers did not recognise any direct link between WFTC/DPTC and recruitment practices and this is reflected in the tables and text that follow.

#### 9.1 Recruitment

WFTC/DPTC may have improved employers' ability to recruit by increasing the potential pool of labour willing to work for a given wage. This may occur where more generous wage supplements substantially boost the income from working, or compensate employees for childcare costs. It might also occur if take-up is higher due to a reduced stigma attached to a credit payable through the pay packet, as opposed to benefit receipt via the Department for Work and Pensions. If employers respond by providing on-site childcare, this may also increase the pool of labour from which they can draw since employer provision may remove a significant barrier to labour market participation. Both DPTC and WFTC are aimed at groups who face disadvantage in the labour market. These benefits

may therefore be helpful if they encourage employers to consider applications from claimants more favourably.

Overall, three percent of employers said that WFTC/DPTC had helped them to recruit staff. However, this includes the never-PVE sample. Among PVE employers, 12 percent said it had helped, and the figure among ex-PVE employers was five percent. A small proportion (one percent) were unable to answer as recruitment decisions were made elsewhere within the organisation. These details are shown in table 9.1.

Table 9.1: Whether WFTC/DPTC have helped employers to recruit staff

	Total	PVE	ex-PVE	Never-PVE
	%	%	%	%
Yes	3	12	5	*
No	94	85	93	97
Don't know	1	2	1	1
Can't answer	1	2	1	1
(Base)	(6,453)	(3,611)	(1,019)	(1,757)
Base: All respondents				

Looking at the PVE sample in more detail, there are no significant differences in terms of number of employees. However, the number of tax credit recipients at the organisation does have an impact at the higher end of the range. Those with 10 or more recipients were more likely to say that WFTC/DPTC had helped recruitment (20 percent where 10-19 recipients, and 24 percent where 20 or more).

Related to this, organisations with a high proportion of part-time staff (who tend to have more tax credit recipients) were more likely to note a positive impact on recruitment. This was particularly the case for larger employers: among organisations with 100 or more staff, respondents were more likely to note a positive impact on recruitment if they had 20 percent or more part-time staff (working less than 30 hours per week): 21 percent of these employers said WFTC/DPTC had helped recruitment. Following on from this, the hotel and restaurant sector (where there is a high incidence of part-time workers) also showed a high recognition of a positive impact on recruitment (29 percent said WFTC/DPTC had helped).

Following this question, all respondents were asked if WFTC/DPTC had made it difficult to recruit staff. Just one percent said that this was the case. The figures were relatively stable across PVE status for those who said yes (PVE: two percent, ex-PVE: three percent, never-PVE: one percent). Among the PVE sample, the largest size group (500 or more employees) were more likely to say it had created difficulties (five percent). The same

applied to those with a large number of tax credit recipients (11 percent said this where there were more than 10 recipients). However, this last group were also the most likely to report a positive impact on recruitment; it is clear that these employers (understandably) have stronger views on the subject, and the number stating a positive impact certainly outweighs those who reported difficulties.

Among those who perceived they had incurred significant costs from implementing PVE, a fifth said WFTC/DPTC made it more difficult to recruit staff. This was far higher than the overall figure for employers, and suggests that answers to these questions on recruitment can be affected by overall perceptions of PVE and its impact on resources.

Taking the two questions together, it is clear that the majority of employers overall did not register any impact of WFTC/DPTC on recruitment (positive or negative). However, among the PVE sample, a substantial minority (12 percent) felt there was a positive impact, and this outweighs those noting a negative effect.

Respondents were asked whether WFTC/DPTC had encouraged new people to work at the organisation. As may be expected, variations by PVE status were, once again, evident. 21 percent of PVE employers said WFTC/DPTC had definitely or possibly encouraged new people to join. This compares with 12 percent of ex-PVE, two percent of never-PVE and seven percent of all employers. For further details see table 9.2.

Table 9.2: Whether WFTC/DPTC encouraged new people to join

	Total	PVE	ex-PVE	never-PVE	
	%	%	%	%	
Yes	7	21	12	2	
- definitely	3	9	4	1	
- possibly	4	12	8	1	
No	90	75	86	95	
Don't know	4	4	2	3	
(Unweighted Base)	(6,453)	(3,611)	(1,019)	(1,757)	
Base: All respondents					

Among the PVE sample, there is little variation in terms of the number who said there had definitely been an impact. However, the number who say it had "possibly" done so increases among larger employers (21 percent with 250-499 employees, and 24 percent with 500 or more). Again, those with a large number of tax credit recipients were more likely to say there had been an impact (53 percent with 20 or more recipients said definitely or possibly).

However, among the ex-PVE sample, it was the smallest size band (less than five employees) who were most likely to say WFTC/DPTC had encouraged new people to join (14 percent).

Furthermore, a difference by region can be noted. The North East was the area within which the highest proportion of employers had said WFTC/DPTC did encourage new joiners (11 percent).

Looking at these figures by type of employees, there were no significant differences by the number of full time or part time employees. However, among those whose workforce is made up of more than five percent or more of ethnic minorities, 14 percent stated WFTC/DPTC had definitely or possibly encouraged new people to join. Those with two percent or more of employees with health problems were also more likely to have said the same, again with 14 percent having answered in this way.

Following this, respondents were asked whether WFTC/DPTC had discouraged new staff from joining their organisation. Four percent of employers said WFTC/DPTC had discouraged people from working there (one percent definitely and three percent possibly). Among both PVE and ex-PVE employers, the figures were two percent definitely and four percent possibly. No major differences can be seen among the various sub-groups.

### 9.2 Hours

Employers were asked whether they had made any changes to staff hours as a result of WFTC/DPTC. Once again an option was included for employers who could not answer, because wages and salary decisions were made elsewhere within the organisation.

The question was asked of all respondents, and only one percent replied that the organisation had changed staff hours as a result of WFTC/DPTC. As one would expect, a difference by PVE status can be noted. Five percent of PVE, two percent of ex-PVE and no never-PVE employers said there had been changes to staff hours due to WFTC/DPTC. Further details can be seen in table 9.3.

Table 9.3: Whether WFTC/DPTC led to changes in staff hours

	Total	PVE	Ex-PVE	never-PVE
	%	%	%	%
Yes	1	5	2	*
No	98	94	98	100
Don't know	1	1	0	*
Can't answer	*	*	0	*
(Base)	(6,453)	(3,611)	(1,019)	(1,757)
Base: All respondents				

Some variation can also be seen by industry sector, with Hotels/restaurants and Health being areas where a higher proportion had noted an impact on hours. Within the PVE sample, those with 250-499 employees were most likely to say there had been an impact (13 percent). The largest employers (500 or more) were no more likely than average to recognise an impact. Corresponding to this, those with 10-19 tax credit recipients showed the highest figure (18 percent), but among those with 20 or more recipients, the number is lower.

Employers who said the organisation had made changes to staff hours as a result of WFTC/DPTC were asked whether the number of hours had increased, decreased, or that the change was a mixture of both (some increased/some decreased). Around the same number of employers, four in ten, said the number of hours had gone up as had gone down (39 percent and 43 percent respectively), while 16 percent replied a mixture of both. Analysing this data by sub-groups is difficult, as only one percent of employers answered this question, having previously stated that staff hours were affected.

So far we have looked at whether the organisation had made any changes to staff hours. Following this, PVE and ex-PVE employers were asked whether they thought staff themselves had changed the hours they worked because of WFTC/DPTC. Never-PVE employers were excluded from this question. Eight percent replied that they thought some staff had definitely changed the hours they worked, with a further six percent saying 'Yes, possibly'. More than eight in ten employers however, said that no staff had changed working hours because of WFTC/DPTC and two percent answered 'don't know'.

Among PVE employers, nine percent said there had definitely been a change, while seven percent said possibly. The equivalent figures for the ex-PVE sample were three percent and six percent.

Looking at this data by the proportion of employees at the organisation who worked full and part-time, some variation can be seen. Among those employers whose staff is made up of 50 percent or more part-time workers (less than 16 hours per week), the percentage who said some staff had definitely or possibly changed their working hours increased from 14 to 27 percent. Table 9.4 shows the data for this question by the proportion of part-time employees at the organisation.

Table 9.4: Whether staff changed working hours due to WFTC/DPTC

	Total	0% P/T	1-19% P/T	20-49% P/T	50%+ P/T
	%	%	%	%	%
Yes – definitely	8	6	7	10	14
Yes - possibly	6	5	5	9	13
No	84	88	86	81	71
Don't know	2	2	2	1	2
(Base)	(4,630)	(1,885)	(1,505)	(608)	(409)
Base: All PVE and	ex-PVE resp	ondents			

The larger PVE employers were also more likely than average to note a change: 28 percent of those with 250 or more employees said staff had definitely or possibly changed their hours. Related to this, 25 percent of those with 10 or more tax credit recipients said that staff had definitely or possibly made such a change.

Examining the data by gender shows that organisations with a mainly female workforce (50 percent or more female employees) were more likely to have reported that staff had changed their hours due to WFTC/DPTC. 22 percent of this group said this was definitely or possibly the case compared with eight percent of organisations with less than 50 percent female workers. Industry sector is another area where disparity can be observed. More specifically, hotel employers stand out with a greater number agreeing that staff had changed their hours due to WFTC/DPTC: over a third (37 percent). This ties in with the above findings on part-time workers.

Employers who said staff had changed their hours due to WFTC/DPTC were asked whether the number had increased or decreased. Half said staff had decreased their hours, a fifth had increased, a fifth a mixture of both and the remaining one in ten answered 'don't know'. The smaller the organisation, the more likely they were to have increased their hours (see table 9.5 for further details).

Table 9.5: Whether those whose staff had changed hours due to WFTC/DPTC had increased or decreased their hours

	Total	<5	5-9	10-19	20-49	50-99	100-499	<b>500</b> +
	%	%	%	%	%	%	%	%
Increased	22	32	37	19	22	14	12	14
Decreased	49	48	40	56	44	57	60	43
Mixture	19	16	21	10	22	20	20	29
Don't know	10	4	3	15	13	9	8	14
(Base)	(905)	(52)	(75)	(71)	(105)	(103)	(229)	(256)
Base: All where staff had changed the hours they work								

## 9.3 Wages and Staff Retention

As well as the impact on the recruitment of staff at their organisation, the survey also sought to investigate the effects on wages and hours worked.

Employers were asked whether WFTC/DPTC had led to changes in wage levels. Overall, only a minority said that this was the case (one percent) and no significant variations can be noted by sub-group. PVE were more likely than ex-PVE to have been in this group (four percent and two percent respectively). Eight in ten employers who said WFTC/DPTC had had an effect on wages said this was an increase, three percent said wages had decreased and one in ten replied a mixture of both.

PVE and ex-PVE employers were asked if they thought WFTC/DPTC had led to staff staying at their organisation longer than they may have done otherwise. Although seven in 10 answered no, almost a quarter said this was either definitely or possibly the case. This was higher among PVE than ex-PVE employers (26 percent and 16 percent respectively).

Table 9.6: Whether WFTC/DPTC had led to staff staying at organisation longer than they may have done otherwise.

	Total		ex-PVE	
	%	%	%	
Yes – definitely	15	16	13	
Yes – possibly	8	10	3	
No	70	66	79	
Don't know	7	8	5	
(Base)	(6,453)	(3,611)	(1,019)	
Base: All respondents				

There was no consistent pattern by employer size. In terms of the number of tax credit recipients, those with a greater number of recipients were more likely to say there had "possibly" been an impact, although the number saying this has definitely been the case was no higher than average.

Differences by industry sector are apparent here with Hotels and Transport being the areas where employers were most likely to agree with this (41 and 31 percent respectively answering 'Yes - definitely' or 'Yes - possibly'). The least likely area was Construction with only 16 percent answering in this way.

Differences by region were also apparent. Employers in Scotland were the most likely to say staff have stayed longer, 19 percent of whom said 'Yes - definitely' and a further 16 percent 'possibly'. Employers in the Eastern region were the least likely, with only one in ten saying this was definitely or possibly the case.

## 9.4 Other impacts

Finally, employers were offered the opportunity to discuss whether WFTC/DPTC had any other impacts on their organisation. The majority (89 percent) had no additional comments. Those who did were most likely to be ex-PVE, followed by PVE and lastly and not surprisingly, never-PVE employers. Of the 11 percent who commented, the most commonly given answer (by five percent of all employers) was that WFTC/DPTC had had no impact on the organisation. Two percent of employers (four percent of ex-PVE) said it had had a negative impact on administration or had led to an increase in the employers' workload. Some other employers mentioned a more general negative impact on their organisation, with some specifically mentioning the negative impact on cash flow (one percent total for both these answers). Similarly, some respondents replied that a positive impact had been had, although this figure was lower (less than one percent) and very few mentioned any specific positive impacts.

Other answers given by employers included 'employers should not have to pay WFTC/DPTC', '(tax credits) affects hours employees want to work/ discourages overtime' (less than one percent overall but four percent of organisations with 500 or more employees) and 'employees should be better informed'.

## 9.5 Summary

Although there is no evidence that WFTC/DPTC have made recruitment substantially easier or more difficult, it appears that some PVE employers believed that tax credits encouraged some new recruitment among PVE employers. Around one in eight (12 percent) PVE employers and one in twenty ex-PVE said that WFTC/DPTC had helped them to recruit staff. Only two percent of PVE and three percent of ex-PVE employers

said that WFTC/DPTC made it difficult. Furthermore, a fifth of PVE employers said WFTC/DPTC had definitely or possibly encouraged new people to join their organisation. It is important to stress that these findings are based on employers' perceptions of the link between WFTC/DPTC and recruitment, rather than an objective estimate of the impact.

Respondents mostly said that their organisation had not made any changes to staff hours as a result of WFTC/DPTC. Five percent of PVE and two percent of ex-PVE employers said that they had made changes. Where changes had been made, around the same number of employers, four in ten, said the number of hours had gone up as had gone down, and a further 16 percent said it had been a mixture of both. Employers were also unlikely to say that individual staff had changed their working hours because of WFTC/DPTC. A small proportion (eight percent) replied that some staff had 'definitely' changed the hours they work, with a further six percent saying 'possibly'.

Only a minority of employers said that WFTC/DPTC had led to changes in wage levels (four percent and two percent respectively for PVE and ex-PVE employers). This was likely to be seen as an increase (by eight in ten). Finally, a quarter of employers with experience of WFTC/DPTC said that they had definitely or possibly had a positive impact on staff retention.