

# The Impact of the Employer Training Pilots on the Take-up of Training Among Employers and Employees

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The Institute for Fiscal Studies



ADULT LEARNING  
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## Foreword

The Government is committed to raising demand for skills to help raise productivity growth, meet the challenges of globalisation and improve social inclusion. Employer Training Pilots (ETPs) have tested a new approach, focused on increasing demand from employers for training for their low skilled staff and creating a training supply-side truly driven by that demand. The Pilots were designed to overcome market failures that are most acute at low skills levels. These prevent employers and individuals investing in training and work against a large proportion of the workforce getting the skills they need to fulfil their potential. This in turn makes it less likely for firms to realise productivity improvements and, prevents the economy maximising its long-term growth potential.

This study by the Institute for Fiscal Studies (IFS) sits alongside other independent evaluations, which confirm ETP offers a model that can deliver flexible and responsive training, with high levels of satisfaction from employers and learners. The model delivers training to Level 2 via the workplace, to suit the operational needs of the employer's business. Although there are still improvements to be made, training providers have nevertheless delivered large volumes of quality, bespoke training in the workplace - by the end of November 2005 over 220,000 learners and 26,000 employers had signed up. That is why we are building on the pilots and rolling out Train to Gain - the National Employer Training Programme - from 2006-07 as a new way of stimulating demand for, and delivering, training through employers.

This IFS study indicates that the Pilots had a small positive effect on the incidence of training among eligible employers, but that this early impact is limited. An implication of the findings, however, might be that ETP has freed resources that participating employers had allocated to training their low skilled staff for other things - such as funding more higher-level learning. However, Train to Gain is designed to address a long-standing weakness in the economy, and we are only likely to identify its true impact over a number of years once more employees and employers have participated. This study is a useful contribution to the evidence base. Its findings demand that we redouble our efforts in reaching out to employers that are least likely to provide qualification bearing training to their low skilled staff without the intervention of a Skills Broker and the financial support available for training to Level 2.

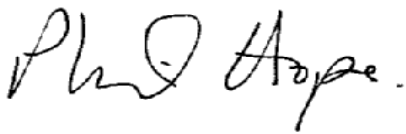
We have already taken a number of steps. In the light of the IFS report we will go further and;

- improve the capacity, skills and performance management of brokers and focus them on the employers least likely to invest in training their low-skilled employees;
- continue to test wage compensation for small employers as an incentive to engage in Train to Gain. These employers face higher training costs, employ the largest proportion of low skilled adults and are among the most difficult for government to reach;

- develop the training provider infrastructure to remove identified constraints in training supply through infrastructure development funding and by ensuring that funding mechanisms allow for provider contestability and enable new providers to enter the market;
- make sure colleges who provide Train to Gain training sustain the growth in their existing mainstream funded Level 2 programmes, making Train to Gain provision truly additional.

We will also put in place procedures for regularly monitoring participation in Train to Gain and for evaluating additionality. The best measure of additionality will be the overall increase in Level 2 achievements over time and the contribution that the new programme makes towards our PSA targets.

As Lord Leitch's interim report "*Skills in the UK: the long-term challenge*" confirms, significantly improving the skills of the nation is essential to securing its long-term prosperity. Train to Gain has an important part to play in achieving that ambition. The findings from this evaluation of the ETPs are particularly timely, as we implement the new programme nationwide, and we are grateful to IFS for this useful piece of work.



**PHIL HOPE MP**  
**Parliamentary Under Secretary**  
**Of State for Skills**



**JOHN HEALEY MP**  
**Financial Secretary**  
**HM Treasury**

## **Summary**

This report presents the final stage of the Employer Training Pilots impact study, conducted by the Institute for Fiscal Studies. The aim has been to assess the impact of the ETP on the take-up of training by eligible employers and employees from the start of the pilots up until Summer 2004. The ETP “offer” is of free or subsidised training leading to a basic skills or first Level 2 qualification for employees qualified to below Level 2, where the employees receive paid time off in which to train, and for which the employers are compensated.

This report is a part of the wider evaluation of ETP, conducted by the Institute for Employment Studies (IES), which has assessed a broader set of questions relating to the operation of ETP. The work undertaken by IES involves surveys of participating employers and employees, plus case study work in the pilot areas. Two reports of the findings have been published to date. These revealed high levels of satisfaction with ETP amongst participants (at levels comparable to those in the LSC’s national learner satisfaction survey), and a range of perceived benefits for participating employers and employees. At the time of the most recent published report, rates of successful completion of Level 2 qualifications were slightly higher than the nearest comparator, and more recent evidence indicates that completion rates have risen further since then. The reports also pointed out some potential quality issues for ETP, including patchy provision of Information, Advice and Guidance and a lack of sufficient initial assessment of learners.

### **The impact of ETP on employer provision of training**

To estimate the impact on employers, we have used data on workplaces based on interviews carried out by MORI for the ETP evaluation in 2003 and 2004. These were

conducted in four first wave pilot areas (Derbyshire, Essex, Wiltshire and Swindon, Birmingham and Solihull) and four second wave pilot areas (Leicestershire, East London, Kent, and Berkshire), and two carefully selected control areas (Bedfordshire and Sussex).

Our estimates of the effect of the ETP on the take-up of training among eligible employers are derived using a ‘difference-in-differences’ methodology, comparing the trends in training over time across pilot and control areas in order to identify the impact of ETP.

To ensure the robustness of our results we have estimated the effects of the programme based on two different definitions of whether or not a workplace is eligible for ETP:

- 1 *Qualification-based*: here we include all workplaces that report employing at least one individual who is qualified below Level 2. Our analysis considers whether or not workplaces provide ETP-type training to such employees.
- 2 *Occupation-based*: here we include all workplaces employing at least one worker in an occupational category that is associated with “low-qualification” jobs. Our analysis then considers whether or not the workplace provides ETP-type training to these types of workers. We include this measure of eligibility in recognition of the fact that employers may not always know whether their staff are qualified to below Level 2. In addition given that some individuals taking part in ETP already have Level 2 qualifications, this definition may provide a more accurate picture of the ETP programme on the ground.

Summary Table 1 below shows a summary of our estimated effects of the ETP on the take-up of training among eligible employers. These are effects for the first year of operation for both the first wave and the second wave pilot areas. In each case the table shows :

- 1 our estimate of the policy-off baseline: the percentage of eligible employers that would have provided ETP-equivalent training in the absence of the ETP;
- 2 the estimated effect in percentage points: our estimate of by how much the ETP

- has increased the percentage of eligible employers providing ETP type training;
- 3 whether or not the estimated effects are statistically significantly different from zero (indicated by the presence of a ‘\*’).
  - 4 The 90% confidence interval around the estimated effect. In circumstances where the confidence interval overlaps with zero, we cannot say that the estimated effects are statistically significantly different from zero. However, where the estimated effect is positive, the effect is more likely to be positive than zero or negative.

In estimating the impact of ETP, our analysis controls for other factors besides ETP, which determine the take-up of training by workplaces. Our control variables include workplace characteristics (such as sector and the proportion of the workforce that are full time employees) and local labour market characteristics that might affect the likelihood of an employer providing training (such as the change in the employment rate).

The Table shows that our estimates are consistent with a small positive effect of ETP on the incidence of training among eligible employers. However the confidence intervals around the estimated effects show that these effects are generally not statistically significantly different from zero.



**Summary Table 1: Employers' evaluation: estimated first year effects for the first and second wave pilot areas, all workplaces**

	First wave pilots	Second wave pilots
<b>Qualification-based estimates</b>		
Policy off baseline	8.4%	8.2%
Effect	0.38ppt	0.71ppt
90% confidence interval	[-0.63 ; +1.55]	[-1.04 ; +2.76]
<b>Occupation-based estimates</b>		
Policy off baseline	8.3%	6.8%
Effect	0.64ppt*	1.05ppt
90% confidence interval	[0.01 ; +1.38]	[-0.64 ; +3.39]

ETP Random Employers Survey. All results shown control for workplace characteristics and local area characteristics.

(\*). Significantly different from zero at the 10% level (\*\*). Significantly different from zero at the 5% level. The confidence intervals around the point estimates are not symmetric as they are taken from the percentiles of the distribution, following the application of bootstrapping methods.

We are able to find some instances where the estimated effects are statistically significantly different from zero. These are primarily found when we use the occupation-based eligibility definition, suggesting that this definition may capture the type of employers (and their employees) who are participating in ETP more accurately than the qualification-based measure.

While the instance of a positive and statistically significant effect shown in the Table is found in the results for the first wave pilot areas, this should not be taken to imply that the first wave pilots have been more effective at generating new training than the second wave pilots. This is because the confidence intervals around the effects for the first and second wave pilot areas suggest that these estimates are not different to one another in statistical terms.

We could not find any significant differences between the estimated effects for the different wage compensation packages or the different offers of time-off for training (35 hours versus 70 hours).

## **The impact of ETP on employee receipt of training**

We have assessed the impact of the ETP programme on a range of training-related outcomes for eligible employees, i.e. those qualified to below Level 2. Our analysis has been based on a similar methodology to that used for employers.

Our analysis is based on two separate sources of data:

- 1 *ETP data*: Employee questionnaires collected for the ETP evaluation by MORI in 2003 and 2004 in two second wave ETP areas (Berkshire and Leicestershire) and in two selected control areas (Bedfordshire and Sussex).
- 2 *LFS data*: Labour Force Survey data covering the whole of England, with ETP pilot area identifiers (to which we have been granted special access for the ETP evaluation). These data allow us to estimate the impact of ETP on employee training in all first and second wave ETP areas, compared to control areas drawn from the whole of England.

The combination of these two data sources means that we have been able to conduct a thorough analysis of the impact of ETP on the take-up of training among eligible employees.

Summary Table 2 below shows a summary of our estimated effects of the ETP on the take-up of training among eligible employees using the ETP and LFS data. These are effects for the first year of operation for both the first wave and the second wave pilot areas.

As with employers, our results are consistent with small positive effects of ETP on the take-up of training among eligible employees. However these estimated effects are not in general statistically significant (since the confidence intervals contain zero), and there is no evidence that the impact of ETP on the incidence of training among eligible employees is significantly larger than the impact of ETP on employers.

**Summary Table 2: Employees' evaluation: estimated first year effects for first and second wave pilot areas using ETP and LFS data, all workplaces**

	<b>First wave pilots (LFS data)</b>	<b>Second wave pilots (LFS data)</b>	<b>Second wave pilots (ETP data)</b>
<b>Training in last 3 months</b>			
Policy-off baseline	19.1%	19.3%	19.9%
Effect	1.10ppt	1.05ppt	0.57ppt
90% confidence interval	[-1.36 ; +3.55]	[-2.06 ; +4.16]	[-1.72 ; +2.87]
<b>Training leading to a qualification in last 4 weeks (LFS) / 3 months (ETP)</b>			
Policy-off baseline	3.7%	4.9%	9.2%
Effect	0.11ppt	0.31ppt	0.56ppt
90% confidence interval	[-1.16 ; +1.34]	[-1.30 ; +1.92]	[-1.06 ; +2.19]
<b>Training to a Level 2<sup>a</sup> in last 4 weeks (LFS) Training to a Level 2<sup>a</sup> in last 3 months, externally provided and employer supported (ETP)</b>			
Policy-off baseline	1.2%	1.0%	1.0%
Effect	-0.53ppt	0.88ppt*	0.11ppt
90% confidence interval	[-1.15, +0.09]	[0.06,+1.71]	[-0.49, +0.71]

ETP Random Employees Survey. Pilot areas: Berkshire and Leicestershire.

LFS data: estimates pool all pilot areas in relevant wave and use rest of England as control areas. All specifications control for the individual, firm and area characteristics listed in Appendix II. Second wave pilot areas exclude East London.

<sup>a</sup> Only around 1% of employees report that their training is “ETP-type” training, namely that it is to a Level 2 or basic skills qualification. This is likely to be a considerable under-estimate of the total number of employees genuinely undertaking “ETP-type” training however, since approximately two-thirds of individuals who report that they are training to a qualification are unable to say what level their training is to.

(\*) Significantly different from zero at the 10% level (\*\*) Significantly different from zero at the 5% level.

### **Concluding comments**

ETP has a number of policy objectives, a primary one being “to raise levels of training”. As noted in HM Treasury (2002), “The Government hopes that this approach will reach those employers and individuals who do not currently engage in training”. In so doing, the aim has been to increase the proportions of adults with basic skills and Level 2 qualifications (both of which have associated government targets). Other objectives include tackling barriers to the provision of training to qualifications for low skilled employees, and encouraging more flexible and responsive provision of training to meet employers’ needs.

Our results are consistent with small positive effects of ETP on employer and employee

training, but we do not find across-the-board, systematic evidence that ETP had significantly increased employer provision of, or employee engagement in, training by the end of August 2004. This suggests that if ETP had an effect on the take-up of training over this period of the pilots' implementation, it was a small one. All of the different forms of evidence we provide in this report lead to this conclusion.

We can use these estimated effects to understand more about the level of 'deadweight' associated with the policy, and how much 'new' or 'additional' training has been generated by ETP. By 'deadweight' we mean here the proportion of training funded through ETP that would have been provided – either publicly or privately - if ETP had not been in place. By additional 'new' or 'additional' training we mean training that would not have taken place if the policy had never been introduced.

It is worth noting that for any given level of 'deadweight', it is possible that ETP might have funded training that would otherwise have been privately funded, or alternatively it could be replacing training that would otherwise have been funded publicly. It is not possible for us to distinguish the extent to which ETP has displaced privately vs. other publicly funded training activity.

We can make a 'back of the envelope' calculation of the level of deadweight – i.e. the proportion of ETP-participant firms that we estimate would have provided ETP-type training in the absence of the ETP offer. For eligible employers, our central estimate of the effect of ETP on all workplaces in the first wave pilot areas is between 0.4 and 0.6 percentage points, depending on whether the qualification- or the occupation-based definition of training is used. Given the penetration rate of around 4% by the end of August 2003, these estimates would suggest about 10% to 15% of the training is additional training, and about 85% to 90% is deadweight. Bearing in mind that our estimates are subject to sampling error, the range in which the true effect may actually lie is broader. For example, if the true effect of the ETP programme were nearer 1.4 percentage points in the first year, then deadweight could be as low as 65%. Equally the confidence intervals around our estimates in general mean that we cannot rule out the possibility that the true effect is zero percentage points implying 100% deadweight.

We can also make a ‘back of the envelope’ calculation for the number of ‘new’, or ‘additional’ basic skills and Level 2 awards made to employees arising directly from ETP in its first two years. By ‘new’ or ‘additional’ awards, we mean awards that would not have been made in the absence of ETP. Given an eligible population of around 1 million employees in the first wave pilot areas, and a further 1 million eligible employees in the second wave pilot areas, an effect of approximately 0.5 percentage points would imply around 5,000 new learners per year in each of the first and second wave areas, or around 15,000 in total by September 2004. If the achievement rate amongst these learners was around 75%, this would suggest around 11,000 new qualifications gained. Bearing in mind that our estimates are subject to some sampling error, the true number of ‘additional’ learners could be bigger than this, but by the same token we equally cannot rule out a considerably smaller number.

#### *Rationalising the findings*

Given the scale of ETP pilots in the first and second years, the effects we have sought to detect are, by definition, relatively small. At the maximum they would equal the ETP penetration rates (i.e. the proportion of eligible employers and employees participating in ETP) in the case where all the training was additional.

Our findings suggest that there was a relatively small addition to the proportion of eligible employers and employees undertaking ETP-type training due to the programme. One likely explanation is that a substantial proportion of those undertaking training through the ETP programme would have done so in the absence of ETP.

Given that ETP was universally available, widely marketed and offered employers financial incentives to provide training, we would expect the programme to attract a considerable number from the minority of employers who would have provided this type of training without the ETP offer. For example, it is possible that employers who would have provided training in the absence of the ETP were “sold” ETP by providers with whom they had existing relationships. It may also be the case that employers were diverted from other forms of publicly subsidised training to ETP, given the additional incentives involved. We have been unable to distinguish between whether ETP has

funded training that would otherwise have been publicly or privately funded, and this will require further investigation and research by LSC and DfES.

This explanation – that ETP largely attracted employers who would have offered training in the absence of ETP - is consistent with the conclusions from the IES (2005) report, which finds that “most [participating employers] agreed that they would have provided the training in any event”. The report shows that only around 14 percent of employers taking part in ETP were “hard to reach”, and that ETP employers had a relatively positive attitude to training compared with average employers. If we assume that these 14 percent of employers would not have provided training in the absence of ETP, this translates into around a one percentage point increase in the take-up of training among eligible employers – which lies within the confidence intervals around our estimated effects.

Given that NETP is to be rolled out nationwide, this explanation – that the ETP pilots were mainly reaching those employers that were likely to train anyway – suggests that the DfES, LSC and their partners will need to consider strategies (and the roles of brokers and providers within them) for increasing additionality.

A second explanation for our finding that similar numbers of employers and employees were undertaking training as would have done so in the absence of the pilots is that some of the new training under ETP may be at the expense of training that would otherwise have occurred. This could be the case if there were supply constraints in training provision. If providers were unable to increase capacity they may have switched towards ETP training and away from other non-ETP Level 2 training. This could lead to a substantial number of employees training under ETP, but mean little impact on the overall numbers of eligible employees training to basic skills or Level 2. If there are constraints in training provision, this suggests that a focus for the national programme should be to work on building up supply capacity. It is possible that the private sector supply response may be greater for the national programme, compared to a time-limited pilot.

Finally it should be noted that none of these findings makes any judgement on the quality of the ETP training provided or the extent to which it meets employers’ needs. Nor does

it assess whether the training is of long-term benefit to participants. The wider evaluation of ETP has shown that training is provided in a flexible way and as previously noted, that in general participants express strong satisfaction with their training experiences (see IES, 2005 for more information).

Furthermore, this evaluation has focussed on first year effects (and some second year effects) of the ETP programme. Going forward, the numbers participating in ETP have increased considerably; over time it might be the case that additional training generated by the policy increases beyond its initial levels.

## **1 Introduction**

The Employer Training Pilots (ETP) were established in September 2002 in six LLSC areas in England, in order to test the effectiveness of a new policy approach to stimulating work-based training to qualifications for low-skilled employees. Since their initial introduction the pilots have been extended in both length and in coverage. Six new LLSC areas were introduced to the ETP in September 2003, and a further five plus a regional pilot in the North East in September 2004. All three ‘waves’ of ETP pilots will now run until April 2006 when the introduction of a National Employer Training Programme (building on the lessons from ETP) will begin.

The policy approach aims to encourage training to either NVQ Level 2 or equivalent, or basic skills qualifications, for employees who are not already qualified to Level 2 (i.e. with fewer than five GCSEs grade A\*-C or equivalent). The approach being tested combines four elements, namely:

- 1 Free or subsidised training
- 2 Paid time off for training (funded for either 35 or 70 hours)
- 3 Wage compensation (paid to employers for the time employees spend training)
- 4 Information, Advice and Guidance to employers and employees

A primary aim of the pilots has been to increase the level of training provided by employers and received by employees, who would not otherwise engage in qualification-based training. This report presents the final stage of our impact study, which employs statistical methods to assess how much the presence of the ETP policy has indeed increased the level of training in ETP pilot areas. Our report fits into the wider evaluation of ETP, conducted by the Institute for Employment Studies, which has assessed a broader set of questions relating to the operation of ETP.

In this report we provide estimates of the impact on eligible employers’ take-up of



training until Summer 2004 from four of the first wave pilot areas and four of the second wave pilot areas. We also provide estimates of the impact on the take-up of training amongst eligible employees up to Summer 2004, across all first and second wave pilot areas.

**Table 1 Employer and Employee Participation in ETP, by end August 2003 and end August 2004**

Area	Employers					Employees				
	Estimated eligible population	Take-up to end August 2003	Penetration rate	Take-up to end August 2004	Penetration rate	Estimated eligible population	Take-up to end August 2003	Penetration rate	Take-up to end August 2004	Penetration rate
<i>Wave 1 pilots</i>										
Derbyshire	7,316	205	2.8%	1,116	15.3%	140,900	1,683	1.2%	6,466	4.6%
Essex	14,387	792	5.5%	2,264	15.7%	233,310	4,123	1.8%	13,219	5.7%
Wiltshire & Swindon	5,289	382	7.2%	723	13.7%	86,485	2,784	3.2%	6,656	7.7%
Birmingham & Solihull	8,812	159	1.8%	593	6.7%	154,256	1,576	1.0%	5,587	3.6%
Tyne and Wear	6,601	257	3.9%	911	13.8%	127,194	2,696	2.1%	7,476	5.9%
Greater Manchester	18,687	604	3.2%	1,648	8.8%	322,601	4,084	1.3%	12,202	3.8%
<b>Total</b>	<b>61,092</b>	<b>2,399</b>	<b>3.9%</b>	<b>7,255</b>	<b>11.9%</b>	<b>1,064,746</b>	<b>16,946</b>	<b>1.6%</b>	<b>51,606</b>	<b>4.8%</b>
<i>Wave 2 pilots</i>										
Leicestershire	7,281			663	9.1%	131,486			4,724	3.6%
Kent and Medway	9,742			1058	10.9%	229,024			4,423	1.9%
East London	17,129			659	3.8%	238,275			4,850	2.0%
Berkshire	6,895			681	9.9%	96,078			3,523	3.7%
Shropshire	3,549			637	17.9%	58,041			4,734	8.2%
South Yorkshire	7,665			764	10.0%	187,802			5,706	3.0%
<b>Total</b>	<b>52,261</b>			<b>4,462</b>	<b>8.5%</b>	<b>940,706</b>			<b>27,960</b>	<b>3.0%</b>

Source: IES Employer Training Pilots Year 2 Evaluation Report (based on ETP MI Information, IDBR data, LFS data, ETP Random Employer Survey).

Table 1 provides some context, by showing the number of employers and employees participating in ETP up to the end of August 2003 and the end of August 2004 in first and second wave pilots. It also shows the “penetration rates” for employers and employees, expressing the number of participants as a proportion of the estimated total eligible population in the area. Employer penetration rates in the first wave pilot areas were around 4% by the end of August 2003 and 12% by the end of August 2004; in the second wave areas, the penetration rate was 8.5% by end of August 2004. Employee penetration rates were lower, with ETP reaching only 2% of eligible employees in first wave pilot areas by the end of August 2003, and 5% by the end of August 2004; the penetration rate for employees in second wave pilots was 3% by the end of August 2004.

Our impact study goes beyond these simple measures of take-up, by estimating how much ETP has increased the level of training provided by employers and received by employees, over and above the training that would have occurred anyway, in the absence of the policy.

## **1.1 Data Sources**

The data for this report are drawn from the large-scale survey effort conducted by MORI during summer 2003 and summer 2004, and from the Labour Force Survey provided by the Office for National Statistics.

### **Random Employer Survey**

The survey among employers consisted of a representative telephone survey of workplaces with at least 2 employees across 10 areas. The first two columns of Table 2 show in which first wave and second wave pilot areas the surveys were conducted, plus the location of the control areas. Table 10 in Appendix I gives more details of all the areas in which ETP is operating.

**Table 2: ETP survey areas**

<b>Area</b>	<b>First Random Employer Survey</b>	<b>Second Random Employer Survey</b>	<b>First Random Employees Survey</b>	<b>Second Random Employees Survey</b>
Conducted	Summer 2003	Summer 2004	Summer 2003	Summer 2004
<b><i>First wave pilots (started September 2002)</i></b>				
Birmingham & Solihull	X	X		
Derbyshire	X	X		
Essex	X	X		
Wiltshire & Swindon	X	X		
Greater Manchester				
Tyne & Wear				
<b><i>Second wave pilots (started September 2003)</i></b>				
Berkshire	X	X	X	X
East London	X	X		
Leicestershire	X	X	X	X
Kent	X	X		
Shropshire				
South Yorkshire				
<b><i>Control areas</i></b>				
Bedfordshire	X	X	X	X
Sussex	X	X	X	X

We refer to the survey as the Random Employer Survey. The aims of the survey were primarily to collect information for eligible (not just participating) employers on:

- 1 a range of workplace characteristics such as size, business activity, workforce composition (full time versus part-time, proportion of workforce defined as low-skilled), attitudes to staff development;
- 2 current and retrospective training activity for low-skilled workers.

Eligible employers are identified both on the basis of the qualifications of their employees and on the occupational mix of their employees. Further detail is given in Chapter 2. In order to identify ETP-type training the questionnaire asks eligible employers about whether their eligible employees had any off-the-job training, which was funded, arranged or supported by the employer. To clarify this, the employer is told “By off the job training, I mean training or assessments, from an external provider, for which time away from normal work duties is allowed. The training may still be in the workplace.” This question is combined with an additional question about whether that

training leads to a basic skills or a Level 2 qualification.

The sample was drawn from the commercial Yellow Pages Business Database. The Database contains information relating to size (based on the number of employees) and sector (based on Standard Industrial Classification codes) for each establishment. The overall valid response rate in the summer 2003 survey was 41 percent. Further details on the survey methods and screening can be found in MORI (2003). The summer 2004 survey re-interviewed the same employers from the 2003 survey. Around 67 percent of the employers that participated in the first survey responded to the second survey. Weights have been constructed and applied to the data to gross up the results to the eligible population, taking into account non-response by sector and firm size. Information about the sample sizes used for this evaluation is reported with the estimated effects in Chapter 2.

### **Random Employee Survey**

As shown in Table 2 the Random Employee Survey was carried out in two of the second wave ETP pilot areas and the two control areas in summer 2003 and summer 2004. The first Random Employee Survey involved face-to-face interviews, and completed interviews were obtained from around 5,500 individuals. The second Employee Survey was carried out by telephone, in order to boost sample sizes, and around 8,000 completed interviews were obtained. Unlike the employers' survey, the employees' survey did not re-interview the same individuals in the second wave, but instead carried out interviews of random samples of individuals in both cases. Full surveys were only carried out on individuals who reported that they were employees and whose level of qualification meant that they would be eligible for ETP (i.e. below Level 2 equivalent).

The employees' survey collected the following information on eligible individuals:

- 1 key demographic characteristics, such as age, gender, ethnicity, marital status, number of children, work status of partner (if any), illness or disability;
- 2 detailed education and qualification history, including age left full-time education and any qualifications held;

- 3 work-related information including occupation, industry, size of workplace, job tenure, supervisory duties, hours of work, income from employment;
- 4 detailed information on job-related training in last three months and since the previous September, including whether any training allowed time off from normal duties, was externally provided, or employer-supported; also information on whether any training would lead to, or had led to a qualification, and if so, what qualification it would lead to.

### **Labour Force Survey**

To measure the impact of the ETP on the take-up of training among eligible employees we also have been able to use information from the Labour Force Survey (LFS), to which the Office for National Statistics (ONS) has granted us special access.

The LFS is a quarterly sample survey of around 60,000 households living at private addresses in Great Britain. Its purpose is to provide information on the UK labour market that can then be used to evaluate labour market policies. The LFS is based on a systematic random sample design, which makes it representative of the whole of Great Britain. It is a five-wave rolling panel, with each household in the LFS interviewed for five successive quarters. Households are interviewed face-to-face when first included in the survey, and by telephone thereafter.

Although the publicly available Labour Force Survey does not provide geographic identifiers indicating whether households are inside or outside ETP pilot areas, for the purpose of this evaluation we have been granted access to special LFS data by ONS which allows us to identify whether the address of residence is in a first, or second wave ETP area. This has allowed us to examine the impact of ETP across a wider range of pilot areas than the Employee Survey collected by MORI. We do not include East London in our analysis of second wave pilots using the LFS, however, because we do not believe region of residence to be a good indicator of region of work in this case (ETP eligibility is based on workplace rather than home address).

We have used LFS data primarily from the Spring 2002, 2003, and 2004 quarters for this

evaluation. This is because Spring is the only quarter that has information on the size of the employee's workplace, and on whether or not their training leads to a qualification. In each Spring quarter we obtain a sample of approximately 10,000 eligible individuals (i.e. individuals in employment and with below Level 2 or equivalent qualifications) in England, of whom around 1,500 live in first wave pilot areas, and around 1,000 in second wave pilot areas (excluding East London). Note that these pilot area sample sizes are smaller than in the ETP data, meaning that in general it will be more difficult to detect statistically significant effects from the LFS data than from the MORI evaluation dataset.

### **National Information System for Vocational Qualifications (NISVQ) data on NVQ awards**

Finally, we also use information at the LSC level on the number of National Vocational Qualifications (NVQ) made by UK awarding bodies from the National Information System for Vocational Qualifications (NISVQ) held by DfES. We use these to compare trends in the overall number of awards of NVQ Level 2 qualifications in ETP LLSC areas compared to non-ETP, in order to ascertain if ETP appears to be having a detectable effect on such awards. These data have the advantage that they contain information on a very high proportion of all NVQs awarded throughout England, thus leaving little room for sampling error (see section 1.2 below). However the data have the drawback of lacking information about other factors that might also determine differences in trends in awards of qualifications between ETP and non-ETP areas. We are also unable to distinguish awards to people without a first Level 2 qualification from those to individuals with prior Level 2 or above qualifications.

## **1.2 Evaluation Strategy**

Our evaluation strategy, outlined in more detail in Appendix II, is designed to measure the impact of ETP on the take-up of training amongst workplaces and employees. For employers, we do this by estimating the percentage point increase in the proportion of eligible workplaces providing ETP-type training to their low-qualified employees, as a result of ETP. For employees, we estimate the percentage point increase in the proportion

of eligible employees receiving training, as a result of ETP. For example, if the proportion of eligible employees receiving training increased from 5% to 6% as a result of ETP, the effect would be one percentage point.

The main issue for the evaluation to contend with is that we cannot directly observe how much training would have happened in the ETP-pilot areas, had the ETP pilots never been introduced (the so-called *counterfactual* outcome). Instead we have to use information from control areas to estimate the impact of the ETP. The basic idea behind our approach is to compare trends in training amongst a random sample of eligible workplaces (and employees) in ETP pilot areas, compared to a sample of otherwise-equivalent workplaces (employees) in non-ETP control areas.

We employ a *difference-in-differences* approach that compares the change in training activity in the pilot areas from before to after the implementation of the pilots, with the equivalent change in training activity in the control areas, controlling for other influences. That is, it looks at whether training provision increased over time to a greater extent in pilot areas than in control areas due to the ETP. This provides us with an estimate of the effect of the ETP.

### **Detecting effects of the ETP: statistical significance of the estimates**

Our evaluation of the effects of ETP is based on surveys of representative samples of workplaces and employees in ETP and control areas (see Section 1.1). Because of this, all estimates that we are able to derive are subject to what is known as ‘sampling error’. This means that their accuracy is subject to some uncertainty, since if we had chosen other random samples of eligible workplaces and employees from the same overall population, we might have obtained different estimates of the effects of ETP.

Because of the presence of sampling error, we do not just present our estimates of the effects of ETP on the take-up of training, but also present indicators of the degree of accuracy of the estimates, by providing indicators of their ‘statistical significance’. The degree of statistical significance of our estimates tells us the likelihood that the true value of the effect of ETP is different from zero, given the effects we have estimated. In



general, we would tend to accept that the ETP has had a positive effect on training if we find estimates greater than zero that are statistically significant at the 95% level or higher, and would tend to be more cautious about the interpretation of positive effects that are found to be less significant (i.e. less likely to be different from zero) than this. Effects that are significant at the 90% level are often referred to as ‘marginally significant’, and provide weak evidence that ETP has had a positive effect. Below this level of significance, we would have to conclude that we have found no robust evidence for positive effects on the proportions of eligible employers providing and employees receiving, ETP type training.

In our summary tables we also provide the 90% confidence intervals around our estimated effects; the confidence intervals are defined so that there is a 90% chance that the true effect is within these intervals. In many cases, it may be that although we cannot rule out the possibility that the true effect is zero (since zero lies within these confidence intervals), we also cannot rule out the possibility that the effect is small and positive, since the confidence intervals also cover a range of positive effects. It should also be noted that wherever the estimated effect is positive, it is more likely that the effect is small and positive than actually zero.

The degree of statistical significance of any estimates, and the width of the confidence intervals around these estimates depend on a number of factors, including the size of the true effects we are seeking to estimate, as well as the sample sizes we are using to form our estimates. For this evaluation, we have had to contend with the fact that the size of the impact we are looking to detect is quite small in statistical terms. This is because the overall level of ETP penetration in each area is fairly low (see Table 1), and because we might expect that the incentives offered in ETP would inevitably attract a considerable number of employers who would have provided this type of training without the ETP-offer (often referred to as deadweight), hence we would expect the impact we are trying to detect to be considerably lower than these penetration rates.

Our approach has been to collect data from as many firms and employees as possible in each LLSC area, with original sample sizes chosen to be able to detect an effect of

around one percentage point, under a range of assumptions. It should be noted that since we follow up the same workplaces over time, the Random Employer Survey provides us with a larger sample of workplaces in first wave pilot areas than in the second wave (due to sample attrition between 2003 and 2004), so in general we will find it more difficult to detect statistically significant effects among workplaces in the second wave pilot areas than the first (see Chapter 2). It is also the case that the Labour Force Survey data we have been given by ONS contains a bigger overall sample than the Random Employer and Random Employee datasets collected from MORI, but contains fewer individuals in ETP pilot areas; this means it will in general be more difficult to detect statistically significant effects from the LFS data than from the MORI evaluation datasets.

### **1.3 Structure of the Report**

Chapter 2 describes the findings on the impact of the ETP on the take-up of training among eligible employers. Chapter 3 details our findings for employees and Chapter 4 discusses our conclusions. The Appendices provide some additional material. Appendix II gives a more detailed description of our evaluation methodology and how we have implemented it. Appendix III contains the results of a number of additional checks we have carried out to ascertain the robustness of our main results. Full details of the robustness checks are also given in Appendix II.

## **2 The impact of ETP on the take-up of training by employers**

In this Chapter we examine the effect of the ETP programme on the take-up of training by employers. We focus mainly on ‘first year’ effects in both the first and second wave pilots. In summary, our estimates are consistent with the presence of a small positive effect. However in many cases our estimated effects are not statistically significantly different from zero.

In Section 2.1 we describe our findings across workplaces of all sizes. In Section 2.2 we present results separately for small and medium-sized employers. We do not present findings for large employers due to small sample sizes. In Section 2.3 we look at whether the effect varies with the level of wage compensation offered to employers and in Section 2.4, at whether the effect varies with the offer of time-off for training (for which the wage compensation is available). Section 2.5 looks at the ‘second year’ effect for the first wave pilots. Finally, Section 2.6 looks at the effect on qualification attainment for the second wave pilots. Before turning to the results, we describe how we define eligible employers.

### **Definition of employer eligibility and ETP-equivalent training**

The Random Employer Survey enabled us to identify eligible employers on the basis of both the qualification levels and the occupational composition of their employees. In the first case an employer is eligible if they employ at least one person who is unqualified or qualified only up to Level 1. In the second case an employer is eligible if they employ at least one employee in an occupational category that is associated with “low-qualification” jobs.

Questions on whether eligible employees were receiving ETP-equivalent training were asked on the basis of both the eligibility measures, and we refer to them as ‘qualification-based’ and ‘occupation-based’ measures. ETP-equivalent training is defined as training that leads to a basic skills or Level 2 qualification (specifically an NVQ Level 2), that is off-the-job and that is funded, arranged or supported by the employer. All the results presented in this Chapter combine both basic skills training and training to Level 2.

## **Variation by sector**

We also examined the effects on the take-up of training excluding the public sector and health and social work sectors (2-digit Standard Industrial Classifications 75 and 85) from our analysis. The impact of the ETP on training could vary across sectors, in this case for example, because some employers within the health and social work sector have to comply with the National Minimum Standards for Care Homes issued by the Department of Health. The health and social work sector accounts for the highest proportion of take-up across the pilot areas at 28% of participating employers.

### **2.1 The impact of ETP on the take-up of training among eligible employers**

Below we present the evaluation results for the first and second wave pilots separately. We first present the results for all eligible employers regardless of size and then we break down the results for medium and small workplaces in the next section. In each case we show results using both the qualification and occupation-based measures.

Table 3 shows the results for first year effects across all workplace sizes. The top panel shows the results for the first wave pilots and the bottom panel shows the results for the second wave pilot areas. We present results across all sectors, and a second set of results excluding the public, health and social work sectors. In all cases we show a set of results where we only control for observable workplace characteristics and a set of results where we additionally include a set of local authority level area characteristics. The workplace characteristics we include are the industry (2-digit level SIC92 category) in which the employer is active, whether or not the employer expects to expand or contract activities, the extent of capacity utilisation, whether the workplace is part of a larger group, the extent to which the employer's workforce comprises full versus part-time employees, whether the employer is in the public or private sector, the age of the workplace and information on whether or not an employer uses government business support schemes, and whether the employer has a training or business plan. The local authority characteristics we include are the proportion of the working age population qualified up to level 1 in 2001, a deprivation index, capturing further characteristics of the local area

and workforce, and the change in the employment rate between the years 2000 and 2001, which approximates the tightness of the labour market.

In each case the table first shows the policy-off baseline. This is the percentage of eligible workplaces that we estimate would be providing ETP-equivalent training in the relevant pilot areas in the absence of the ETP programme. The row below shows our estimate of the ETP effect. This is shown as a percentage point difference from the policy-off baseline level of training. The Table shows whether the estimated effect is significantly different from zero, indicated by the presence of a '\*'. The Table also gives information on sample sizes. It is worth noting that although the sample sizes used to estimate the first year effects in the second wave pilot areas are smaller than those used to estimate the effects for the first wave pilot areas due to sample attrition, this sample attrition is not likely to bias our results (see footnote 15).

We first turn to the results for the first wave pilots, displayed in the top panel of Table 3. The policy-off baseline across all workplace sizes and across all sectors is around 8%, for both the qualification- and the occupation-based measures. Taking the eligible population of employers in these four areas from Table 1 (approximately 35,800), this implies that in the absence of the ETP programme around 3,000 would have provided training. This can be compared to the number of employers participating in ETP in these four areas by the end of August 2003, which was 1,538 (or 4.0% of eligible employers), which is within the estimated baseline number of employers who would have provided this type of training in the absence of ETP.

**Table 3: All workplace sizes**

	All sectors		Excluding Public, Health and Social Work	
	Workplace	Workplace + Local Area	Workplace	Workplace + Local Area
<b>FIRST WAVE PILOTS</b>				
<b>Qualification measure</b>				
Policy-off baseline	8.15%	8.40%	7.14%	7.27%
Effect	0.63ppt	0.38ppt	0.44ppt	0.31ppt
Sample size pilots	8,123	8,123	7,371	7,371
Sample size	19,189	19,189	17,322	17,322
<b>Occupation measure</b>				
Policy-off baseline	8.17%	8.29%	7.04%	7.08%
Effect	0.76ppt**	0.64ppt*	0.60ppt*	0.56ppt
Sample size pilots	8,407	8,407	7,601	7,601
Sample size	20,095	20,095	18,062	18,062
<b>SECOND WAVE PILOTS</b>				
<b>Qualification measure</b>				
Policy-off baseline	8.41%	8.23%	6.58%	6.40%
Effect	0.53ppt	0.71ppt	1.01ppt	1.20ppt
Sample size pilots	4,688	4,688	4,161	4,161
Sample size	7,001	7,001	6,187	6,187
<b>Occupation measure</b>				
Policy-off baseline	7.16%	6.83%	4.92%	4.60%
Effect	0.73ppt	1.05ppt	1.58ppt	1.90ppt**
Sample size pilots	4,969	4,969	4,387	4,387
Sample size	7,350	7,350	6,464	6,464

Columns labelled Workplace and Local Area include workplace characteristics and local area characteristics. The estimates for first wave pilots use both control and 2<sup>nd</sup> wave pilot areas as the comparison group. The estimates for second wave pilots use only control areas as the comparison group. Estimates from parametric difference-in-differences regressions.

(\*) Significantly different from zero at the 10% level (\*\*) Significantly different from zero at the 5% level.

The results for the first wave pilots suggest a small positive effect of ETP on the proportion of eligible employers who provide ETP-equivalent training. However the results are only statistically significantly different from zero in a few cases, where, across all firms, the measured effect is between 0.6 and 0.8 percentage points.

The occupation-based measure was included in recognition of the fact that in practice

employers may not always know whether their staff lack a first Level 2 qualification. The occupation-based definition may also capture the type of employers (and their employees) who are participating in ETP more accurately, as it could include some employees in low skill occupations who are already qualified to Level 2, but who nevertheless receive ETP training. This may explain why we find some instances of higher and statistically significant effects when using the occupation-based measure that are not mirrored in the qualification based measure.

However these statistically significant results using the occupation-based measure do not hold up to all of our robustness checks. These are explained in further detail in Appendix II. Briefly, they consist of comparing employers in the pilot areas to different subsets of the employers that form the comparison group. These results for first wave pilots are not robust to varying the areas used as the control group, as is shown in Table 10 in Appendix III.

Turning to the results for the second wave pilots, here the estimated effects are positive at around 1 percentage point when considering all sectors and between 1 and 2 percentage points when we exclude the public, health and social work sectors. However our estimates are generally not statistically significantly different from zero. Having said this, it should be noted that while the instances of statistically significant effects shown in Table 3 are mainly found in the results for the first wave pilot areas, this does not imply that the estimated effects for the first and second wave pilots themselves differ. The confidence intervals around the estimated effects in the first wave pilot areas lie within those for the equivalent effects in the second wave pilot areas, (see Summary Table 1), which means that the second wave pilot effects are not statistically significantly different from the first wave effects.

Finally it is worth mentioning some descriptive information underlying our results. We looked at whether the characteristics of the workplaces that were providing ETP-type training in each wave of the pilots changed following the introduction of ETP, using the sample of workplaces used in the analysis above. We found that in both first and second wave pilot areas the sectoral composition and the size distribution of workplaces

providing ETP-type training remains fairly stable over time, using both the occupation- and the qualification-based measures. For example, in both the first and second wave pilot areas, around 60% of the workplaces providing ETP-type training were small, both before and after the implementation of the ETP-pilots. Table 13 in Appendix III shows the sectoral breakdown of those workplaces providing ETP-type training using the occupation-based measure. Together, the healthcare and social work sector and the distribution sectors account for around half of these workplaces, both before and after the implementation of ETP. Overall there is no discernable change in the sectoral composition of workplaces providing ETP-type training within the pilot areas.

## **2.2 The impact of ETP on the take-up of training among eligible employers by workplace size**

Table 4 shows first year impacts for first and second wave pilots for small workplaces only. For the first wave pilots we find no evidence of statistically significant positive effects across any of the specifications. This is re-enforced by findings from the further robustness checks in Table 14 in Appendix III. For the second wave pilots we find some evidence of a 1 to 2 percentage point effect for small workplaces outside the public, health and social work sectors, but only when using the occupation based measure. This is not robust to using two-year differences, as shown in Table 15 in Appendix III, but is robust to using matching techniques.



**Table 4: Small workplaces, first year effects**

	All sectors		Excluding Public, Health and Social Work	
	Workplace	Workplace + Local Area	Workplace	Workplace + Local Area
<b>FIRST WAVE PILOTS</b>				
<b>Qualification measure</b>				
Policy-off baseline	6.18%	6.44%	5.42%	5.59%
Effect	0.49ppt	0.23ppt	0.21ppt	0.05ppt
Sample size pilots	6,819	6,819	6,212	6,212
Sample size	15,795	15,795	14,315	14,315
<b>Occupation measure</b>				
Policy-off baseline	6.42%	6.60%	5.58%	5.67%
Effect	0.55ppt	0.37ppt	0.31ppt	0.22ppt
Sample size pilots	7,059	7,059	6,402	6,402
Sample size	16,530	16,530	14,898	14,898
<b>SECOND WAVE PILOTS</b>				
<b>Qualification measure</b>				
Policy-off baseline	7.11%	6.87%	5.36%	5.11%
Effect	0.34ppt	0.58ppt	0.92ppt	1.17ppt
Sample size pilots	3,707	3,707	3,281	3,281
Sample size	5,616	5,616	4,967	4,967
<b>Occupation measure</b>				
Policy-off baseline	5.19%	4.87%	2.93%	2.64%
Effect	0.52ppt	0.84ppt	1.52ppt**	1.82ppt**
Sample size pilots	3,993	3,993	3,503	3,503
Sample size	5,990	5,990	5,254	5,254

Columns labelled Workplace and Local Area include workplace characteristics and local area characteristics. The estimates for first wave pilots use both control and 2<sup>nd</sup> wave pilot areas as the comparison group. The estimates for second wave pilots use only control areas as the comparison group. Estimates from parametric difference-in-differences regressions.

(\*) Significantly different from zero at the 10% level (\*\*) Significantly different from zero at the 5% level

Table 5 shows the findings for medium sized workplaces. For the first wave pilots we find evidence of 2 to 3 percentage point effects, when considering all sectors and when excluding the public, health and social work sectors. We find positive and statistically significant results across both the qualification and occupation based measures. But only the results using the occupation-based measure are re-enforced by all further robustness

checks as shown in Table 16 in Appendix III. For the second wave pilots the smaller sample sizes mean that it is harder to detect statistically significant effects, as shown in the bottom panel of Table 5 and re-enforced by Table 17 in Appendix III. However, as discussed in the Summary the second wave pilot effects are not statistically significantly different from the first wave effects.

**Table 5: Medium workplaces, first year effects**

	All sectors		Excluding Public, Health and Social Work	
	Workplace	Workplace + Local Area	Workplace	Workplace + Local Area
<b>FIRST WAVE PILOTS</b>				
<b>Qualification measure</b>				
Policy-off baseline	15.30%	15.64%	12.66%	12.88%
Effect	2.53ppt*	2.19ppt	3.31ppt**	3.01ppt**
Sample size pilots	1,099	1,099	983	983
Sample size	2,823	2,823	2,512	2,512
<b>Occupation measure</b>				
Policy-off baseline	14.75%	14.96%	11.72%	11.82%
Effect	3.12ppt**	2.90ppt**	3.76ppt**	3.66ppt**
Sample size pilots	1,142	1,142	1,021	1,021
Sample size	2,984	2,984	2,659	2,659
<b>SECOND WAVE PILOTS</b>				
<b>Qualification measure</b>				
Policy-off baseline	13.42%	13.19%	10.96%	10.84%
Effect	0.49ppt	0.72ppt	1.14ppt	1.26ppt
Sample size pilots	798	798	719	719
Sample size	1,147	1,147	1,017	1,017
<b>Occupation measure</b>				
Policy-off baseline	14.06%	13.66%	11.68%	11.32%
Effect	1.56ppt	1.95ppt	2.19ppt	2.54ppt
Sample size pilots	794	794	721	721
Sample size	1,129	1,129	1,008	1,008

Columns labelled Workplace and Local Area include workplace characteristics and local area characteristics. The estimates for first wave pilots use both control and 2<sup>nd</sup> wave pilot areas as the comparison group. The estimates for second wave pilots use only control areas as the comparison group. Estimates from parametric difference-in-differences regressions.

(\*) Significantly different from zero at the 10% level (\*\*) Significantly different from zero at the 5% level.

### **2.3 How does the impact vary with the level of wage compensation?**

In this section we look at whether the estimated first year effect varies with the level of wage compensation given to employers. We define high wage compensation areas as those that offer 150%, 120% and 75% wage compensation to small, medium and large employers respectively, medium wage compensation areas as those that offer 130%, 100% and 50% wage compensation to small, medium and large employers respectively, and low wage compensation areas as those that offer 110%, 75% and 0% wage compensation to small, medium and large employers respectively. Finally there is one zero wage compensation area where employers of all sizes receive no wage compensation.

The first wave pilot areas surveyed include two areas that offer low wage compensation and two areas that offer medium wage compensation (see Table 10 in the Appendix I for the precise areas). For the first wave pilots, to examine whether the effect of the ETP varies with the level of wage compensation, using the same difference-in-differences method as above, we first compare workplaces in the pilot areas that offer the medium wage compensation package to those in the control areas to estimate an effect of the ETP for medium wage compensation areas. We then compare workplaces in low wage compensation areas to those in the control areas to estimate an effect of the ETP for low wage compensation areas. Finally we look at whether there is a significant difference between the two measured effects.

**Table 6: Wage compensation. All workplace sizes, all sectors, first wave pilots**

	Low wage compensation		Medium wage compensation	
	Workplace	Workplace + Local Area	Workplace	Workplace + Local Area
<b>Qualification measure</b>				
Policy-off baseline	8.33%	8.55%	7.91%	7.97%
Effect	0.66ppt	0.43ppt	0.61ppt	0.55ppt
Sample size pilots	4,564	4,564	3,559	3,559
Sample size	15,630	15,630	14,625	14,625
<b>Occupation measure</b>				
Policy-off baseline	8.04%	8.15%	8.30%	8.36%
Effect	0.93ppt**	0.82ppt*	0.59ppt	0.52ppt
Sample size pilots	4,717	4,717	3,690	3,690
Sample size	16,405	16,405	15,378	15,378

Columns labelled Workplace and Local Area include workplace characteristics and local area characteristics. Control and 2<sup>nd</sup> wave pilot areas are used as the comparison group. Estimates from parametric difference-in-differences regressions.

(\*) Significantly different from zero at the 10% level (\*\*) Significantly different from zero at the 5% level (⊖) Effects by wage compensation package significantly different from each other at the 10% level, (⊕) significantly different from each other at the 5% level.

The findings for the different wage compensation packages for the first year of the first wave pilots are shown in Table 6. The first two columns of the table show the estimated effect on the take-up of training for the low wage compensation areas and the final two columns show the estimated effect on the take-up of training for the medium wage compensation areas. Although one of the measured effects (for low wage compensation areas using the occupation-based measure) is significantly different from zero, we cannot detect any significant differences between the estimated effects for the low wage compensation areas and the medium wage compensation areas.

The second wave pilot areas surveyed include one zero compensation area, two medium wage compensation areas and one high wage compensation area. As for the first wave pilots, we estimate a separate ETP effect for each wage compensation package by comparing the relevant pilot areas to the control areas. We then examine whether there are any significant differences across the estimated effects for the different wage compensation packages. Table 18 in Appendix III shows the estimated effects for the zero wage compensation area, the medium wage compensation areas and the high wage compensation area. None of the estimated effects are significantly different from zero,

and we cannot detect any significant differences between the estimated effects for the different wage compensation packages.

The results shown above are for workplaces of all sizes. We also investigated whether we could detect differences in the impact of the ETP across different wage compensation packages for small workplaces and medium sized workplaces separately. Again we could not find any significant differences between the estimated effects for the different wage compensation packages.

In conclusion, we cannot find evidence that the level of wage compensation makes a difference to the estimated effect of the ETP on employer take-up of ETP-type training.

## **2.4 How does the impact vary with the amount of time off for training?**

In this section we assess whether the estimated first year effect varies with the amount of time off for training. Here we use the same approach as used above to look for differences across wage compensation levels. That is we first compare workplaces in pilot areas that offer 35 hours time-off to the control areas to estimate an effect for the 35 hours offer. We then compare workplaces in the 70 hours time-off pilot areas to those in controls to estimate an effect of the 70 hours offer. Finally we look for significant differences in the estimated effects for the two time-off variants.

The findings are shown in Table 19 and Table 20 in Appendix III. In most cases the estimated effects are not significantly different from zero and we find no evidence that the effect of the policy varies with the amount of time-off offered. We also looked at small and medium sized workplaces separately and again found no differences in the effect of the ETP by the amount of time-off offered.

## **2.5 The second year effect in the first wave pilots**

Table 3 above detailed our findings on the impact of the ETP in the first year of the first wave pilots. We also have information on the take-up of training in the second year in which the first wave pilots were in operation. We can therefore look at the effect of the

ETP on the take-up of training among employers once it is in its second year of operation.

To look at the second year effect we compare the change in training activity in the first wave pilot areas from the period September 2001 to Summer 2002 (before the implementation of the first wave pilots) to the period September 2003 to Summer 2004 (the second year of operation) to the change in training in the control areas over the same period.

Table 21 in Appendix III shows the results of this exercise. We do not find evidence of a statistically significant effect of the ETP on the take-up of training amongst eligible employers in the first wave pilots in the second year.

We also looked at second year effects in the first wave pilots for small and medium sized employers separately. As in the results for the first year effects, in the second year we also find some evidence of statistically significant effects among eligible medium sized employers but only using the occupation-based measure. We find no statistically significant effects for small employers.

## **2.6 The impact on qualification attainment**

Finally, in this section we examine whether the ETP had any impact on the successful attainment of qualifications among eligible employers. That is, did the proportion of eligible employers reporting that one or more of their employees had obtained a qualification through ETP type training increase as a result of the pilots? We can examine this question using information collected in the Second Random Employer Survey, since we asked about qualification attainment in the period September 2003 to summer 2004 and we also asked a retrospective question about attainment in the period September 2002 to summer 2003. In the second wave pilot areas this retrospective question relates to the period before the implementation of the pilots, and allows us to implement our difference-in-differences methodology, using the control areas as a comparison group.

However, it may well be that it is too early to assess the impact of the ETP on attainment

using these data for the first year of the second wave pilot areas, given the length of time involved in achieving a qualification and in certification. Table 22 in Appendix III shows that we find no evidence of a significant impact of the ETP on the proportion of employers that had employees who obtained qualifications. Across all workplaces during the period September 2003 to summer 2004 about 4% of employers report that at least one employee obtained a qualification through ETP type training, (the figure for small employers is around 3% and for medium sized employers around 9%). But the proportions and the changes in these proportions over time are very similar in both the second wave pilot areas and the control areas.

### **3 The impact of ETP on the take-up of training by employees**

This Chapter sets out our assessment of the impact of the ETP programme on a range of training-related outcomes for eligible employees, i.e. those qualified to below Level 2. Our analysis is based on a similar methodology to that used for employers; our estimates are derived using a ‘difference-in-differences’ methodology, comparing the trends in employee training over time across pilot and control areas in order to identify the impact of ETP (see Appendix II for more details).

As outlined in Chapter 1, our analysis is based on two main separate sources of data:

- 1 Employee questionnaires conducted for the ETP evaluation by MORI in 2003 and 2004 in two second wave ETP areas (Berkshire and Leicestershire) and in two selected control areas (Bedfordshire and Sussex). We refer to this as “ETP data”.
- 2 Labour Force Survey data covering the whole of England, with ETP pilot area identifiers (to which we have been granted special access for the ETP evaluation). These data allow us to estimate the impact of ETP on employee training in all first and second wave ETP areas, compared to control areas drawn from the whole of England. We refer to this as “LFS data”.

We also briefly consider a third source of data:

- 3 NISVQ data on the award of NVQ Level 2 qualifications in pilot and control areas.

Our analysis is mainly based on the ‘first year’ effects of the ETP in both first and second wave pilots, although in Appendix III, we also consider the ‘second year’ effects for the six first wave pilots.

The structure of the Chapter is as follows. In section 3.1 we describe our findings using ETP data. We present the ETP data analysis first, since the survey questionnaire was designed by MORI especially for the ETP evaluation, and asks more detailed questions about specific forms of training than the LFS. Sample sizes are also larger in the pilot



areas in the ETP data than in the LFS data, which means that effects should be more precisely estimated. In Section 3.2 we present our analysis using LFS data. This allows us to look beyond the two second wave pilot areas covered in the ETP data, to all of the first and second wave pilot areas, with the exception of East London (see Section 1.1 for more details about the data). In Section 3.3 we briefly consider awards of NVQ Level 2 from NISVQ data.

Before turning to the results, we first provide some descriptive information from the ETP and LFS data about levels of employee training in pilot and control areas.

### **The take-up of training by employees in the ETP and LFS datasets**

Figure 1 shows the proportion of employees who have reported receiving job-related training in the last 3 months, between Spring 2001 and Spring 2004, as reported in the LFS data. The population has been divided into those employees whose highest qualification is below Level 2 (L2) - i.e. ETP eligible individuals - and ETP ineligible individuals - with L2 or L3 qualifications. Non-employees, and those with degree level or higher qualifications, have not been included in this analysis. The Figure shows individuals in England, divided by whether they are in first wave ETP pilot areas, or in control areas (consisting here of all other areas in England, apart from second wave ETP pilot areas).

Figure 1 shows the now familiar finding that higher qualified individuals are significantly more likely to have received training in the last 3 months than those with low or no qualifications. Whilst on average around 28 per cent of employees with qualifications at L2 or L3 received training in the last 3 months, this proportion was on average around 19 per cent for employees whose highest qualification was below L2.

Figure 1 also shows that training levels, and the trends in training over time, appear to be similar across first wave ETP pilot areas and control areas. There is no discernible change in the proportion of employees who report having received training after Autumn 2002, when the ETP was introduced, compared to before; nor are the trends discernibly different to the trends in the control areas over this time.

**Figure 1: Percentage of employees training in last three months, first wave pilots (LFS data)**

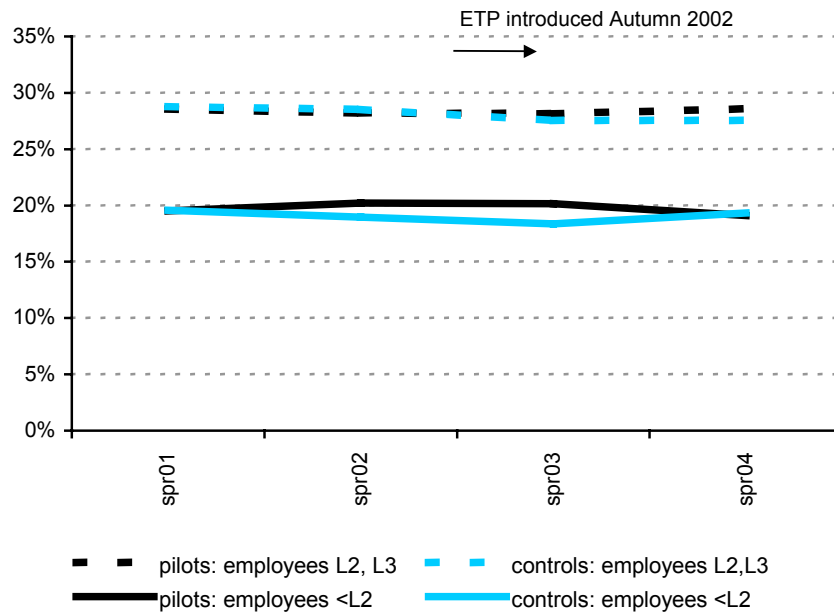
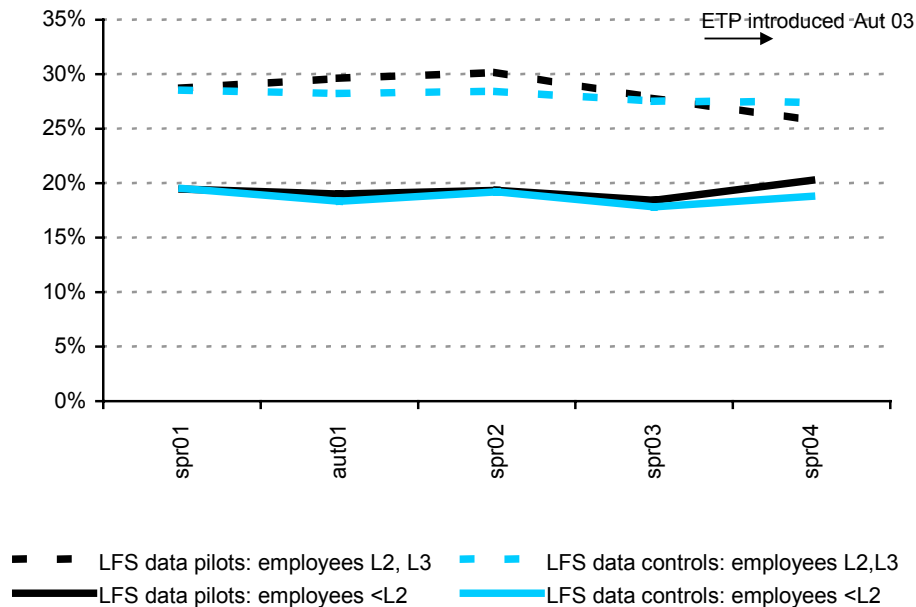


Figure 2 shows a similar analysis for second wave ETP pilot areas. Again the Figure shows the familiar pattern that high-qualified individuals are more likely to receive job-related training than low-qualified employees; it also shows little discernible difference in trends in training between pilot and control areas after the introduction of the ETP in Autumn 2003.

Although not shown in these figures, we can also examine the proportion of low-qualified individuals reporting having received training in the last 3 months in the ETP data. Reported levels of training are slightly higher in the ETP data than amongst eligible employees in the LFS data, and are slightly higher in the control than in the pilot areas. However, as with the LFS data, there is no discernible difference in the trends in training between pilot and control areas after the introduction of ETP in the second wave pilot areas in Autumn 2003.

**Figure 2: Percentage of employees training in last three months, second wave pilots (LFS data)**



So far we have discussed the incidence of just one very broad measure of training amongst eligible employees. However ETP is concerned with raising the level of more specific types of training, namely employer-supported qualification-based training to basic skills or Level 2. In addition ETP training also entails time-off from normal work-duties. It is very difficult to ascertain from surveys of individuals exactly how many people are undergoing ETP-type training, since many people are unable to report exactly what level their qualification is to. Additionally, publicly available surveys such as the LFS have not, until very recently, explicitly asked about basic skills qualifications, and do not ask individuals about whether they have time away from their normal duties. For this reason, we have chosen to analyse the effect of ETP on the incidence of training of eligible employees across a range of different training outcomes, rather than focussing solely on a narrow definition of ETP-type training.

Using our ETP data, we find that whilst around 20% of eligible employees report receiving some form of work-related training in the last 3 months, around 10% of respondents report that this training is to a qualification. Just around 1% of employees

report that their training is “ETP-type” training, namely that it is externally provided and employer supported, that they are given time-off from their normal duties, and that they are training to a Level 2 qualification (with virtually no reports at all of basic skills training). This latter figure is likely to be a considerable under-estimate of the total number of employees genuinely undertaking “ETP-type” training however, since approximately two-thirds of individuals who report that they are training to a qualification are unable to say what level their training is to.

This information from the ETP data is very consistent with what we can derive from the LFS. Here we find again that around 20% of all eligible employees report having received some form of training in the last 3 months, and around 9% have received this training in the last 4 weeks. Only around 4% of eligible employees report training in the last 4 weeks that leads to a qualification, and less than 1% report training that is to a Level 2 qualification in the last 4 weeks. Again this is likely to be a considerable under-estimate of the true number of individuals training to Level 2 because of the very high proportion who do not know the level that their qualification is to.

### **3.1 The effect of ETP on employee training: ETP data analysis**

In this section we present the results of our analysis of the effects of ETP on employee training, estimated using the ETP data. In order to identify the effect of ETP, we use a similar methodology to that for employers, comparing differences in trends in training from before to after the programme started, across pilot and control areas. We are careful to control for a range of individual and workplace characteristics which could also affect whether or not an individual undertakes training, for example, their age, gender, ethnicity, occupation, industry of employment, workplace size (the full set of control variables is set out in Appendix II). This is important, as it means that we do not confound the effect of ETP on training with the effect of these other variables.

It should be remembered that the ETP data cover a random sample of eligible employees in two second wave pilot areas (Berkshire and Leicestershire) compared to two control areas (Bedfordshire and Sussex), and we evaluate the effects in summer 2004, one year

after the programme was implemented (we call this the ‘first year’ effect).

The outcomes we consider are:

- 1 training in the last three months.
- 2 training in the last three months which has led/will lead to a qualification
- 3 training in the last three months which is externally provided and for which the employee is allowed time off normal duties, and which is supported by the employer, and which leads to a Level 2 qualification.

Table 7 below shows our estimated effects of the ETP on the take-up of training among eligible employees across all workplace sizes, and across small firms, medium firms and large firms. In each case the Table displays our estimate of:

- 4 the policy-off baseline: the percentage of eligible employees that would have undertaken training (variously defined) in the absence of the ETP;
- 5 the percentage point effect of the ETP: our estimate of by how much the ETP has changed the percentage of eligible employees undergoing training;
- 6 whether or not the estimated effects are statistically significantly different from zero (indicated by the presence of ‘\*’ next to the estimated effect).

Our results are, in general, consistent with small positive effects of ETP on employees’ take-up of training. For example, on most outcomes the estimated effects of ETP is around one half of one percentage point, although in general these are not statistically significant. Our estimate of the effect of ETP on training to a qualification amongst employees in small firms is bigger than this, and is marginally statistically significant (at the 10% level). However there is no consistent evidence that the impact of ETP on the incidence of employee training is any bigger than the impact of ETP on employers.

**Table 7: Selected second wave pilots, all sectors, year 1 effects using ETP data**

	<b>All Firms</b>	<b>Small firms</b>	<b>Medium firms</b>	<b>Large firms</b>
	<b>Pilots vs controls</b>			
<i>ETP data</i>				
<b>Training in last 3 months...</b>				
Policy-off baseline	19.90%	18.10%	22.90%	24.00%
Effect	0.57ppt	0.55ppt	-2.04ppt	0.01ppt
<b>.... leading to a qualification</b>				
Policy-off baseline	8.9%	9.3%	10.2%	8.6%
Effect	0.82ppt	1.84ppt*	-1.75ppt	-0.57ppt
<b>... externally provided, employer supported, leading to Level 2 qualification</b>				
Policy-off baseline	1.0%	1.1%	0.8%	1.1%
Effect	0.11ppt	0.47ppt	0.17ppt	-0.72ppt
Sample size pilots	3,908	1,930	1,072	824
Sample size	13,393	7,046	3,335	2,660

*Notes to table:* The ETP pilots are Berkshire and Leicestershire; the ETP controls are Bedfordshire and Sussex.

Figures reported are the differences in training across pilot and control areas in 2004, net of the differences in training across pilot and control areas in 2003. These figures are obtained from parametric difference-in-differences regressions.

All specifications control for the individual, firm and area characteristics listed in Appendix II.3.

(\*) Statistically significant at the 10% level. (\*\*) Statistically significant at the 5% level.

### **3.2 The effect of ETP on employee training: LFS data analysis**

In this section we present the results of our analysis of the effects of ETP on employee training, estimated using the LFS data. The LFS data cover employees in all twelve of the first and second wave ETP areas, though for reasons explained in Section 1.1, we exclude East London from our analysis. Furthermore, our analysis is based on Spring quarters of the LFS only, since this is the only quarter containing information on workplace size. We mainly focus on ‘first year’ effects of ETP, that is, the effects in first wave pilots by Spring 2003, and in second wave pilots in Spring 2004; however Table 23 in Appendix III presents our analysis of the ‘second year’ effects of the first wave pilots, i.e. in Spring 2004.

The outcomes we consider are the following:

- 1 Training in the last 3 months

- 2 Training in the last 4 weeks
- 3 Training in the last 4 weeks, to a qualification
- 4 Training in the last 4 weeks, to a L2 qualification
- 5 Proportion of employees in area with L2 qualifications or above.

Whilst the first four of these outcome measures can be thought of as measures of training ‘flows’, the last is a measure of the ‘stock’ of individuals who have L2 qualifications or above. One would expect the ETP to have a positive impact on this latter measure if it led to significantly more individuals gaining L2 qualifications, or going on to attain L3 qualifications or higher. However lags in the qualification award process could mean that it is too soon to definitively assess the impact of ETP on this measure.

It should also be noted that these measures of training are not as close to the exact type of training supported by ETP, as are the measures of training observed in the ETP data. Furthermore, the sample sizes in pilot areas in the LFS data are smaller than those in pilot areas in the ETP data, rendering our estimated effects less precise.

Because we are able to use employees from the whole of England as controls when we use the LFS data, we have adopted two different approaches to estimating ETP effects from these data:

- 1 *Pilots vs all England*: in order to maximise our sample sizes, we first estimate effects using as controls employees from across all of England.
- 2 *Pilots vs selected controls*: in order to refine our choice of control area, in this specification we first estimate effects on training for each ETP pilot area separately, and then combine the effects across all pilot areas to obtain the estimated effect of the ETP on training. For each pilot area we select appropriate control areas from within England, using only areas that have similar recent trends in job-related training. This is particularly important as our evaluation methodology rests on the assumption of common trends in training over time (see Appendix II). We also make sure that the control area(s) for each pilot area in

question are geographically close to each pilot area, again to minimise any unobserved area differences between pilots and controls that would confound the estimated effects. This specification comes at the cost of a reduction in sample size.

Table 8 shows our estimates of the effects of ETP on employee training in both first and second wave pilot areas, using the LFS data. As in the sections above, the table shows the policy-off baseline; the estimated effect in percentage points (our estimate of by how much the ETP has increased the percentage of eligible employees undergoing training); and whether or not the estimated effects are statistically significantly different from zero (indicated by the presence of ‘\*’ on the table).

We find little evidence of positive effects of ETP on training amongst employees in the first year of the first wave pilots. The absence of a ‘\*’ on the table for first wave pilots, means that we do not find any statistically significant effects of ETP on training in the first year of the first wave pilot areas, for any of the training outcomes we consider.

For the second wave pilot areas, the estimated effects are similar, although we do find some weak evidence that the ETP has increased the proportion of employees training to a Level 2 qualification, and also the proportion of employees who hold Level 2 qualifications or higher, raising the proportion from a ‘without ETP counterfactual’ of around 65%, to around 67%. However these latter effects are both significant only at the 10 percent level and should therefore be interpreted as ‘true’ effects with caution.



**Table 8: All workplace sizes, first and second wave pilots, year 1 effects using LFS data**

	All sectors First wave pilots		All sectors Second wave pilots	
	Pilots vs all England	Pilots vs selected controls	Pilots vs all England	Pilots vs selected controls
<b>Training in last 3 months</b>				
Policy-off baseline	19.10%	19.50%	19.30%	18.80%
Effect	1.10ppt	0.78ppt	1.05ppt	1.37ppt
<b>Training to qualification in last 4 weeks</b>				
Policy-off baseline	3.70%	4.40%	4.90%	6.00%
Effect	0.11ppt	-0.66ppt	0.31ppt	-0.87ppt
<b>Training to Level 2 qualification in last 4 weeks</b>				
Policy-off baseline	1.2%	1.7%	1.0%	0.8%
Effect	-0.53ppt	-0.91ppt	0.88ppt*	0.96ppt*
Sample size pilots	1,567	1,722	841	938
Sample size	16,537	11,129	12,633	4,364
<b>Proportion of population with L2 + qualifications</b>				
Policy-off baseline	63.50%	63.20%	65.20%	69.30%
Effect	-0.76ppt	-0.21ppt	1.82ppt*	-3.08ppt
Sample size pilots	5,150	5,737	3,479	3,730
Sample size	60,525	39,555	48,588	17,050

*Notes to table:* Second wave ETP pilots areas do not include East London.

Figures in the columns labelled “Pilots vs selected controls” are obtained by estimating separate regressions for each of the pilot areas - using suitable control areas for each - and combining the estimated effects across all pilot areas (within each wave). “Pilots vs all England” results are obtained by pooling all 1<sup>st</sup> or 2<sup>nd</sup> wave pilot areas and using the rest of England as control areas.

All figures are obtained from parametric difference-in-differences regressions.

All specifications control for the individual, firm and area characteristics listed in Appendix II.3.

(\*) Statistically significant at the 10% level. (\*\*) Statistically significant at the 5% level.

Appendix III also provides this LFS-based analysis separately for employees working in small, medium, and large firms (see Table 24, Table 25 and Table 26) We do not in general find statistically significant effects of ETP on employee training in small, medium or large firms. However it is interesting to notice that the estimated effects appear bigger for many outcomes in second wave ETP areas than first wave areas across these different workplace sizes, in line with the higher penetration rates in the second

wave areas. These differences must be interpreted with caution as they are not statistically significant.

Our analysis of the LFS data again suggests that if the ETP has had an effect employee training amongst employees qualified below Level 2, these effects have been small. This is a view also confirmed by the descriptive statistics provided in Section 3.1, in which Figure 1 and Figure 2 show little discernible graphical evidence that the introduction of ETP has affected the trends in general training amongst eligible employees. However some of our results have suggested that if ETP has had a positive effect on employee training, this has been stronger in the second wave ETP pilot areas than in the first wave ETP pilot areas; we also have found weak evidence that ETP may have raised the proportion of employees in second wave pilot areas training to a Level 2 qualification.

### **3.3 NISVQ Evidence on Level 2 awards conferred**

If it were the case that more people undertake training to a Level 2 qualification due to the ETP, one would expect to see an increase in the rate at which Level 2 qualifications are *awarded* in pilot areas compared to control areas. To take a look at this, we use administrative information on the number of National Vocational Qualifications (NVQ) awards made by UK awarding bodies, to see if there has been a disproportionate increase in the number of Level 2 awards in ETP pilot areas compared to non-ETP areas.

We obtain this data at the LLSC level, from the National Information System for Vocational Qualifications (NISVQ) held by DfES. These data have the advantage that they contain information on a very high proportion (over 90%) of all NVQs awarded throughout England, thus leaving little room for sampling error. This is an advantage over the survey data we have used so far in the analysis, though the data also has the drawback that because it is at the LLSC level, we cannot use it to control for other factors that might also determine differences in trends in award qualifications between individuals in ETP compared to non-ETP areas. We also cannot identify which awards are to individuals receiving their first Level 2 qualification (the ETP target group), as opposed to awards to individuals who are already qualified to L2 or above, or awards

specifically to employees.

Confining the analysis to England only, we compare the change in Level 2 awards granted in pilot areas between 2002 and 2004, with the corresponding change in control areas. In each case the number of awards is expressed as a proportion of the total working-aged population, to allow comparability across areas. As seen in Table 9 below, the evidence suggests that by summer 2004 there was a small additional increase (0.25 percentage points) in the proportion of the working-age population awarded Level 2 qualifications in the first wave pilots compared to the rest of England, but little evidence yet of additional awards in the second wave pilot areas. The magnitude of these changes (that may be due to ETP) is consistent with our main evaluation estimates of the effect of ETP on studying to Level 2 (for more detail, see note to Table 9).

**Table 9: Awards of Level 2 NVQs: changes across first and second wave pilots compared to the rest of England**

	<b>First wave pilots Year 2</b>	<b>Second wave pilots Year 1</b>
<b>Proportion of working age population awarded NVQ2</b>		
'Policy-off baseline'	0.85%	0.79%
'Effect'	0.25ppt	0.07ppt

Note: the 'effect' presented in this table is the difference between the change in the proportion of the working aged population awarded NVQ L2 between 2002 and 2004 in ETP pilot areas compared to the rest of England. This approach is similar to our methodology for estimating ETP effects using survey data, but does not control for any differences in demographic or labour market factors between pilots and the rest of England, and is not restricted to the eligible population.

If these 'effects' were due only to ETP, this would suggest that there were around 14,000 NVQ awards due to ETP by the end of summer 2004 (based on a working aged population of around 4.5 million in first wave pilots and around 3.4 million in the second wave pilot areas). This is similar to our 'ballpark' estimates of the number of new Level 2 awards due to ETP, which were calculated from our main evaluation estimates.

## 4 Conclusion

This report has presented the final stage of the evaluation of the impact of the Employer Training Pilots on the take-up of training. The aim has been to assess the impact of the ETP on the take-up of training by eligible employers and employees up until Summer 2004, through the statistical analysis of large-scale data sources. Our evaluation has used carefully designed and collected survey information from both before and after the introduction of ETP; the data covers both workplaces and employees, and was drawn both from ETP areas, and selected controls. For our analysis of employees we have also been able to use the national-coverage of the Labour Force Survey to our advantage. By combining ‘before and after’ and ‘pilots and controls’ comparisons using these samples, we have used highly robust and statistically sound methods for this impact study.

ETP has a number of policy objectives, a primary one being “to raise levels of training”. As noted in HM Treasury (2002), “The Government hopes that this approach will reach those employers and individuals who do not currently engage in training”. In so doing, the aim has been to increase the proportions of adults with basic skills and Level 2 qualifications (both of which have associated government targets). Other objectives include tackling barriers to the provision of training to qualifications for low skilled employees, and encouraging more flexible and responsive provision of training to meet employers’ needs.

Our results are consistent with small positive effects of ETP on employer and employee training, but we do not find across-the-board, systematic evidence that ETP had significantly increased employer provision of, or employee engagement in, training by the end of August 2004. This suggests that if ETP had an effect on the take-up of training over this period of the pilots’ implementation, it was a small one. All of the different forms of evidence we provide in this report lead to this conclusion.

We can use these estimated effects to understand more about the level of ‘deadweight’ associated with the policy, and how much ‘new’ or ‘additional’ training has been

generated by ETP. By ‘deadweight’ we mean here the proportion of training funded through ETP that would have been provided – either publicly or privately - if ETP had not been in place. By additional ‘new’ or ‘additional’ training we mean training that would not have taken place if the policy had never been introduced.

It is worth noting that for any given level of ‘deadweight’, it is possible that ETP might have funded training that would otherwise have been privately funded, or alternatively it could be replacing training that would otherwise have been funded publicly. It is not possible for us to distinguish the extent to which ETP has displaced privately vs. other publicly funded training activity.

We can make a ‘back of the envelope’ calculation of the level of deadweight – i.e. the proportion of ETP-participant firms that we estimate would have provided ETP-type training in the absence of the ETP offer. For eligible employers, our central estimate of the effect of ETP on all workplaces in the first wave pilot areas is between 0.4 and 0.6 percentage points, depending on whether the qualification- or the occupation-based definition of training is used. Given the penetration rate of around 4% by the end of August 2003, these estimates would suggest about 10% to 15% of the training is additional training, and about 85% to 90% is deadweight. Bearing in mind that our estimates are subject to sampling error, the range in which the true effect may actually lie is broader. For example, if the true effect of the ETP programme were nearer 1.4 percentage points in the first year, then deadweight could be as low as 65%. Equally the confidence intervals around our estimates in general mean that we cannot rule out the possibility that the true effect is zero percentage points implying 100% deadweight.

We can also make a ‘back of the envelope’ calculation for the number of ‘new’, or ‘additional’ basic skills and Level 2 awards made to employees arising directly from ETP in its first two years. By ‘new’ or ‘additional’ awards, we mean awards that would not have been made in the absence of ETP. Given an eligible population of around 1 million employees in the first wave pilot areas, and a further 1 million eligible employees in the second wave pilot areas, an effect of approximately 0.5 percentage points would imply around 5,000 new learners per year in each of the first and second wave areas, or around

15,000 in total by September 2004. If the achievement rate amongst these learners was around 75%, this would suggest around 11,000 new qualifications gained. Bearing in mind that our estimates are subject to some sampling error, the true number of ‘additional’ learners could be bigger than this, but by the same token we equally cannot rule out a considerably smaller number.

### *Rationalising the findings*

Given the scale of ETP pilots in the first and second years, the effects we have sought to detect are, by definition, relatively small. At the maximum they would equal the ETP penetration rates (i.e. the proportion of eligible employers and employees participating in ETP) in the case where all the training was additional.

Our findings suggest that there was a relatively small addition to the proportion of eligible employers and employees undertaking ETP-type training due to the programme. One likely explanation is that a substantial proportion of those undertaking training through the ETP programme would have done so in the absence of ETP.

Given that ETP was universally available, widely marketed and offered employers financial incentives to provide training, we would expect the programme to attract a considerable number from the minority of employers who would have provided this type of training without the ETP offer. For example, it is possible that employers who would have provided training in the absence of the ETP were “sold” ETP by providers with whom they had existing relationships. It may also be the case that employers were diverted from other forms of publicly subsidised training to ETP, given the additional incentives involved. We have been unable to distinguish between whether ETP has funded training that would otherwise have been publicly or privately funded, and this will require further investigation and research by LSC and DfES.

This explanation – that ETP largely attracted employers who would have offered training in the absence of ETP - is consistent with the conclusions from the IES (2005) report, which finds that “most [participating employers] agreed that they would have provided the training in any event”. The report shows that only around 14 percent of employers

taking part in ETP were “hard to reach”, and that ETP employers had a relatively positive attitude to training compared with average employers. If we assume that these 14 percent of employers would not have provided training in the absence of ETP, this translates into around a one percentage point increase in the take-up of training among eligible employers – which lies within the confidence intervals around our estimated effects.

Given that NETP is to be rolled out nationwide, this explanation – that the ETP pilots were mainly reaching those employers that were likely to train anyway – suggests that the DfES, LSC and their partners will need to consider strategies (and the roles of brokers and providers within them) for increasing additionality.

A second explanation for our finding that similar numbers of employers and employees were undertaking training as would have done so in the absence of the pilots is that some of the new training under ETP may be at the expense of training that would otherwise have occurred. This could be the case if there were supply constraints in training provision. If providers were unable to increase capacity they may have switched towards ETP training and away from other non-ETP Level 2 training. This could lead to a substantial number of employees training under ETP, but mean little impact on the overall numbers of eligible employees training to basic skills or Level 2. If there are constraints in training provision, this suggests that a focus for the national programme should be to work on building up supply capacity. It is possible that the private sector supply response may be greater for the national programme, compared to a time-limited pilot.

Finally it should be noted that none of these findings makes any judgement on the quality of the ETP training provided or the extent to which it meets employers’ needs. Nor does it assess whether the training is of long-term benefit to participants. The wider evaluation of ETP has shown that training is provided in a flexible way and as previously noted, that in general participants express strong satisfaction with their training experiences (see IES, 2005 for more information).

Furthermore, this evaluation has focussed on first year effects (and some second year effects) of the ETP programme. Going forward, the numbers participating in ETP have

increased considerably; over time it might be the case that additional training generated by the policy increases beyond its initial levels.



## Appendix I. ETP areas

**Table 10: ETP areas**

LSC area	Level of wage compensation (percentage of pay, by size of firm)			Time off (hrs)
	Small (under 50 employees)	Medium (50 to 249 employees)	Large (250 or more employees)	
<i>First wave (started September 2002)</i>				
Greater Manchester	150	120	75	35
Derbyshire	130	100	50	35
Essex	110	75	0	35
Tyne & Wear	150	120	75	70
Wiltshire & Swindon	130	100	50	70
Birmingham & Solihull	110	75	0	70
<i>Second wave (started September 2003)</i>				
Shropshire	150	120	75	35
Leicestershire	130	100	50	35
Kent	0	0	0	35
East London	150	120	75	70
Berkshire	130	100	50	70
South Yorkshire	110	75	0	70
<i>Third wave (started September 2004)</i>				
Northumberland	130	100	50	70
Co. Durham	130	100	50	70
Tees Valley	130	100	50	70
Lancashire	130	100	50	70
Black Country	110	75	0	70
Cambridgeshire	110	75	0	70
Devon and Cornwall	130	100	50	70
West Yorkshire	110	75	0	70

## **Appendix II. Evaluation methodology**

This Appendix describes the difference-in-differences approach used in our evaluation, and sets out the control areas used, how we obtain ‘before’ and ‘after’ information on training activity and the characteristics of local areas, workplaces and individuals that we control for in estimation.

### **The difference-in-differences approach**

The central issue in evaluating the impact of the ETP on the take-up of training is to establish how much additional training has happened because of the ETP, i.e. on top of the training that would have occurred if the policy had not been introduced. Since this counterfactual ‘policy-off’ situation can never actually be observed in ‘policy-on’ areas (as one can never observe the same firms and individuals being simultaneously subject to and not subject to the policy), we have to use alternative strategies to estimate the effect using suitable comparison groups.

The basic idea behind our approach is to assess how much training occurs amongst a random group of eligible workplaces and eligible employees in ETP pilot areas compared to a similar group of workplaces and employees in non-ETP control areas that, apart from the policy not being implemented, are equivalent in all other aspects that are relevant to determining training. More specifically, we compare how the change in training over time (before and after the introduction of the policy) differs between employers in the pilot areas and the control areas. This provides us with an estimate of the effect of the ETP. It is referred to as “difference-in-differences” estimation.

In order to implement the “difference-in-differences” estimation, we compare the change in training behaviour that takes place in pilot areas once the different schemes are introduced (i.e. the “before to after” change), to the change over the same period in control areas in which no policy is introduced. By taking the difference between these two changes (hence the name “difference-in-differences”), we are able to separate out the effect of the policy on the level of training in the pilot areas in the ‘after’ period, from the

level of training that would have occurred in the absence of programme. The approach uses the trend in training in the control areas to proxy the change in training in the pilot areas that would have occurred anyway, had the policy not been in place. Therefore, a main assumption on which the estimation strategy relies is that trends in the provision of training would have been the same in the pilot and control areas, had the policy not been in operation.

This technique allows us to control for unobserved characteristics of local areas that are fixed over time, as well as for macroeconomic effects that affect pilot and control areas in the same way. The main benefit of the “difference-in-differences” approach, therefore, is that it takes into account area specific effects, provided that these effects remain constant over time. For our evaluation of workplaces, we use information on the *same* employers before and after the policy. In this case, the approach also controls for workplace-specific unobservable characteristics that are fixed over time (for example different attitudes towards training employees). The approach does not, however, allow us to control for unobserved differences that are not constant over time. (For example we may not observe certain changes in labour market conditions specific to certain areas, firms or individuals. However we are able to include a number of variables relating to labour market conditions that may proxy for these).

More detail on how we implement this method is given in the sections below.

## **Before and after information**

We implement our difference-in-differences approach by exploiting before to after comparisons among workplaces and employees in both first and second wave pilots.

### **Employers**

We collect information on the same workplaces in both waves of the Random Employer Survey. Although we did not collect information from employers in first wave pilot areas before the policy was in operation (i.e. before September 2002), the pre-ETP level of training can be estimated using retrospective information we collected in the summer 2003 Survey on past training provision. It is well known that retrospectively collected

information can be affected by recall errors, that is employers may fail to report the exact information about past provision of training to their eligible employees. For example, employers may tend to over-report training provision in the past year depending on their characteristics (industry or size, for example). If there is recall error then our results will be biased.

We investigated the effects of reporting errors on our evaluation strategy using retrospective questions collected in the second survey wave. We compared data from *two* self-reported questions on training provision for the period September 2002 – August 2003, one contemporaneous taken from the first Employer Survey (i.e. using questions on training activity during that period collected in the same year) and one from the second Employer Survey (i.e. using retrospective questions on the same period collected one year after). We looked at the extent to which the retrospective questions accurately reflected the contemporaneous questions across the different areas. We found that the quality of retrospective answers was very similar across pilot and control areas, suggesting that errors in reporting training provision by means of retrospective questions do not depend on the ETP being in operation.

However for the second wave pilot areas we have contemporaneous before and after information and do not need to use the retrospective information on training. For this reason, and because the first year effects for the second wave pilots may differ from the first year effects for the first wave pilots we present results for the first and second wave separately.

We also investigated the possible effects of sample attrition on our evaluation findings. Although it is the case that those employers who said that they were providing ETP-type training in the first wave of the survey were more likely to remain in the sample in the second wave of the survey, the extent to which this was the case did not vary systematically across pilot and control areas and therefore will not bias our results.

## **Employees**

We use two different data sources to evaluate the impact of the ETP on the take-up of training by employees. These are set out in section 1.1. The Random Employee survey is

a separate random survey in each year, and therefore does not survey the same individuals in both waves. It covers second wave pilot areas and controls only, and the information on training is collected contemporaneously. We also use the LFS as a series of separate cross-sections, and do not exploit the panel nature of this data.

## **Selecting Control Areas**

### **Employers**

To estimate first year effects in the first wave pilots we use both control areas and second wave pilot areas as controls. To estimate first year effects for the second wave pilots, and second year effects for the first wave pilots we use only control areas as the comparison group.

### **Employees**

In the ETP data we pool the two pilot second wave areas (Berkshire and Leicestershire) and use the two selected control areas (Bedfordshire and Sussex) as the counterfactual.

The LFS data cover the whole of England and contain ETP pilot area identifiers (to which we have been granted special access for the ETP evaluation). The LFS allows us to estimate the impact of ETP on employee training in all first and second wave ETP areas, compared to control areas drawn from the whole of England.

In our specification referred to in the main text as “Pilots vs selected controls”, we first estimate effects on training for each ETP pilot area separately, and then combine the effects across all pilot areas to obtain the estimated effect of the ETP on training. For each pilot area we carefully select appropriate control areas from within England, using only areas that have similar recent trends in job-related training and that are geographically close to each pilot area. This is in order to minimise any unobserved area differences between pilots and controls that would confound the estimated effects. The controls for each of the first wave and second wave (except East London) pilot areas are listed in the Table below.

### Specification 1, LFS, Selected controls

<b>First wave pilots (started September 02)</b>	<b>Selected controls for first wave pilots, first year effects</b>
Birmingham & Solihull	Black Country, Leicestershire, Herefordshire and Worcestershire, Staffordshire
Derbyshire	Leicestershire, South Yorkshire
Essex	Cambridgeshire
Greater Manchester	Lancashire, South Yorkshire, West Yorkshire
Tyne & Wear	County Durham, Northumberland, Tees Valley
Wiltshire & Swindon	Bournemouth, Dorset and Poole, Gloucestershire, Somerset, West of England
<b>Second wave pilots (started September 03)</b>	<b>Selected controls for second wave pilots, first year effects</b>
Berkshire and Kent	Milton Keynes, Oxfordshire and Buckinghamshire, Surrey, Sussex
Leicestershire	Lincolnshire and Rutland, Northamptonshire, Nottinghamshire
Shropshire	Black Country, Herefordshire and Worcestershire, Staffordshire
South Yorkshire	Humberside, Lincolnshire and Rutland, North Yorkshire, Northamptonshire, Nottinghamshire

In our second specification, we pool all pilots and controls (separately by wave). For first wave pilots, the control areas are all of the rest of England. For second wave pilots, the control areas are all of the rest of England, excluding first wave pilot areas and London.

### Controlling for observable characteristics

#### Employers

In estimation we control for a range of workplace and local area characteristics, which we would expect to affect an employer's propensity to train. The workplace characteristics are taken directly from the Random Employer Survey. We have also considered a number of local area characteristics, primarily at the local authority level, which might potentially influence employers' propensity to train, sourced from the Office for National Statistics.

It is worth pointing out that all the workplace and area characteristics we control for in analysis refer to data *prior* to the introduction of the ETP, as some of these characteristics

may be affected by the policy itself. In this respect, our analysis aims at comparing the change in training behaviour for pilot areas to the change in training behaviour for control areas, net of differences in the workplace composition or in the area characteristics that pre-existed before the introduction of the ETP.

***Workplace Characteristics*** We consider a range of workplace characteristics starting with size and industrial sector, which we would expect to affect an employer's propensity to train. For example, public sector workplaces and larger employers might be more likely to provide training than smaller and private-sector employers. The characteristics include a narrowly defined description of the industry (2-digit level SIC92 category) in which the employer is active (for example this might be important because firms in industries undergoing rapid technological advance might be especially likely to provide training to their employees, but this is not something we can observe directly). Further characteristics that we include are whether or not the employer expects to expand or contract activities, the extent of capacity utilization, whether the workplace is part of a larger group and the extent to which the employer's workforce comprises full versus part-time employees (for example there is evidence that part-time workers are less likely to receive training), the age of the workplace and whether the employer is in the public or private sector. We also use information on whether or not an employer uses government business support schemes, and whether the employer has a training or business plan.

***Local Area Characteristics*** The local area characteristics we include are at the local authority level, and are chosen on the basis that they might be expected to affect employers' propensity to train. These are: the proportion of the working age population qualified up to level 1 in 2001, for example as an indicator of the extent to which it is possible to hire in trained employees; a deprivation index for the year 2000 capturing further characteristics of the local area and workforce; and the change in the employment rate between the years 2000 and 2001, which approximates the tightness of the labour market.

The robustness of our evaluation relies on whether these observable characteristics are the same in the pilot and control areas. The composition in both areas is very similar with

respect to workplace characteristics. Also including local area characteristics makes the task of finding similar workplaces in similar local areas slightly more difficult, but we check this explicitly in our results using matching techniques.

## **Employees**

In all of the estimations, we control for a range of individual, workplace and - for some of the LFS analysis - local area characteristics that one would expect to affect an employee's propensity to undertake training. The individual and workplace characteristics are obtained directly from the ETP/LFS data. The local area characteristics are obtained from the Office for National Statistics. The exact variables are listed below. Note that unless otherwise stated, variables that are listed are used in both the LFS and ETP analyses.

### ***Individual characteristics***

Gender;

Age, banded: 19-24, 25-34, 35-44, 45-54, 55-59, 60-64 (LFS); Actual Age (ETP)

Dummy variable for married;

Occupational category: Manager/Senior Official, Professional, Associate Professional/Technical, Administrative/Secretarial, Skilled Trade, Personal Service, Sales/Customer Service, Process Plant/Machine Operation, Elementary.

### ***Workplace characteristics***

Region of work (LFS); Local learning and skills council (ETP)

Dummy variable for responsibility for supervising work of other employees;

Job tenure, banded: less than 1 year, 1 to 5 years, over 5 years;

Industry sector: Primary Industry/Construction, Manufacturing, Distribution, Finance/Business, Public administration/Education/Health (where applicable);

Size of firm, banded as follows: small (<50), medium (50-249), large ( $\geq 250$ )

### ***Local area characteristics***

For our LFS analysis, we control for a range of local area characteristics when we use the specification that pools all of the pilot areas and that uses the rest of England as controls. These area characteristics are measured at the LLSC level, but in some instances are then combined across LLSCs in order to allow us to merge with the LFS data (the region



identifiers in the LFS data are sometimes broader than LLSC level). It is worth noting that all of the area characteristics relate to a period *prior* to the introduction of the ETP, as some of these characteristics may be in turn affected by the policy, in which case it would no longer be valid to control for them. This is because the analysis aims at comparing the change in training for pilot employees to the change in training behaviour for control employees, net of differences in the area characteristics that existed before the introduction of the ETP.

The area-level characteristics are:

Proportion of individuals receiving job-related training in last 13 weeks, private services, 2000-2001;

Proportion of individuals receiving job-related training in last 13 weeks, production, 2000-2001;

Proportion of individuals receiving job-related training in last 13 weeks, public sector, 2000-2001;

Proportion of individuals with Level 3 qualification or below receiving job-related training in last 13 weeks, 2000-2001;

Economic inactivity rate amongst all individuals aged 16-25, 2001-2002;

Economic inactivity rate amongst all individuals aged 25-49, 2001-2002;

Economic inactivity rate amongst all individuals aged 50-plus, 2001-2002;

Unemployment rate amongst working age males, 2001-2002;

Unemployment rate amongst working age females, 2001-2002

## **Implementing the approach**

### **Employers**

Each eligible workplace is assigned an indicator variable that takes the value of one if it is providing ETP equivalent training and zero if it is not. To estimate the effect of the policy we run a regression of the *change* in this indicator variable for each workplace on a set of workplace and local area characteristics and a dummy variable which is equal to one in the pilot areas and zero in the control areas. It is the coefficient on this dummy variable that tells us the effect of the policy. The regression also allows us to estimate the

policy-off baseline. That is an estimate of the percentage of eligible workplaces in pilot areas that would have provided training in the absence of the ETP programme.

Within this regression framework we also investigate whether the effect of the ETP programme varies with workplace size. To examine statistical significance of the effects we derive standard errors associated with the estimated effects using numerical bootstrapping methods based on a large number of replications.

We estimate the impact of ETP on training provision using a regression framework as, conditional on having a similar composition of workplaces in pilot and control areas, this method will increase the likelihood of detecting statistically significant effects compared to non-parametric techniques such as propensity score matching (described below). As mentioned above, including local area characteristics makes the task of finding similar workplaces in similar local areas slightly more difficult, however, one of our robustness checks is to estimate effects using matching techniques combined with difference-in-differences methods, which ensures that we are comparing like with like. In chapter 3 we also present evaluation results controlling for workplace characteristics only and controlling for both workplace and local area characteristics.

### **Employees**

The difference-in-differences approach is similar in spirit to that of the employer evaluation. However, due to some differences in the employer and employee surveys, there are some methodological differences between both approaches. The main difference is that we do not have information on the same individual in each time period. Each eligible employee is assigned an indicator (dummy) variable that is equal to one if (s)he is undertaking training and zero otherwise.

Again we are measuring the change in training in pilot areas over time (from before to after ETP), and comparing this to the change in training in control areas. Again, the assumptions required for this approach to be correct are that there are **common time effects** [A1] between pilot and control areas, and that any difference in training between pilot and control areas due to **unobserved factors** is fixed over time [A2]. These assumptions allow us to attribute the *change* in training over time to the programme

(conditional on observed characteristics).

This is shown more formally in the table below. The coefficient on  $g_1$  (see notes to table for legend) yields average training amongst eligible employees in pilot and control areas in the period before the programme (2002 for first wave pilots, 2003 for second wave pilots). The coefficient on  $g_2$  yields average training in pilot and control areas in the period after the programme (2003 for wave 1 pilots, 2004 for wave 2 pilots). Notice that the time effects are the same across pilot and control areas - hence assumption **[A1]**. In table A3,  $u$  measures the effect of unobserved factors on training in pilot and controls areas. Notice that it is fixed over time - hence assumption **[A2]**. These assumptions allow us to estimate the effect of the programme on training, denoted  $e$  below, using a difference in differences estimation, by comparing the change in training that has occurred in pilot areas to the change that has occurred in control areas.

### Difference-in-Differences

	<b>Pilot</b>	<b>Control</b>
<b>Pre-ETP, T=1</b>	$Y_{P1} = g_1 + g_P + u$	$Y_{C1} = g_1 + g_C + u$
	$Y_{P1} - Y_{C1} = g_P - g_C$	
<b>Post-ETP, T=2</b>	$Y_{P2} = e + g_2 + g_P + u$	$Y_{C2} = g_2 + g_C + u$
	$Y_{P2} - Y_{C2} = e + g_P - g_C$	
	$e = (Y_{P2} - Y_{C2}) - (Y_{P1} - Y_{C1})$	

*Notes:* Y=training, P=pilot, C=control,  $g_1$ =pre-programme period,  $g_2$ =post-programme period,  $u$ =unobserved factors,  $e$ =effect of the programme. For ease of notation, we have suppressed the conditioning on X.

In order to implement this, we estimate the effect using parametric ordinary least squares regressions in which we pool pre- and post-policy periods.

### Robustness

We carry out a series of additional robustness checks. The results are shown in Appendix III.

### Employers

For the first wave pilots we vary the areas used to construct the comparison group. While

the control areas were chosen to be similar to the pilot areas in terms of a number of characteristics (labour market characteristics and workplace demographics) it is important to check whether our findings differ with the choice of comparison group. First we use only control areas. Second we use only second wave pilot areas as controls. The reason that we estimate one specification using only control areas as the comparison group is that it is possible that training decisions in the second wave pilots were subject to anticipation effects, that is firms may have anticipated the introduction of the policy and refrained from training to some extent the year before. This can therefore influence the estimated effects for first wave pilots when second wave pilots are used as a control group.

For the second wave pilots, as a robustness check, we estimate the effect using the change in training over a two-year period using the retrospective information collected for September 2001 to August 2002. By comparing these results to the results using a single year difference, we can potentially see whether the anticipation effects described above affect our findings using the single-year difference.

Finally we check our results from the parametric specifications against results derived using non-parametric propensity score matching techniques combined with difference-in-differences. In practice this is carried out by *matching* employers in pilot areas to their closest counterparts in control areas. To do this we use propensity score matching techniques. This essentially matches employers in pilot areas to their counterparts in control areas on the basis of a weighted index of observable characteristics that are chosen on the basis that they may have an important influence on training decisions. The aim of the procedure is to ensure that the distributions of workplace and local area characteristics in the pilot and control areas are similar, i.e. we are comparing like with like. Having used the procedure to select an appropriate control group we then compare how the change in training over time (before and after the introduction of the policy) differs between employers in the pilot areas and their matched controls.

### **Employees**

We carry out a number of robustness tests, mostly concerning our definitions of

eligibility. In the specifications in the main analysis, eligibility covers individuals who have no qualification, have a qualification below Level 2, or have obtained a Level 2 qualification since the programme started (i.e. since September 2002 for first wave pilots, since September 2003 for second wave pilots).

However, one concern is that we know that individuals who already had a Level 2 qualification were often allowed to undertake ETP training. We therefore include individuals with a Level 2 qualification in an alternative definition of eligibility shown in the next appendix. We show the results for all firm sizes pooled, in Table 27 below, using this definition of eligibility, denoted “Plus Level 2”.

A second concern is that we may mis-classify some individuals as ineligible for the programme. This is because some individuals report having “other” qualifications, which could be below Level 2 qualifications. In our main results we assume that all of these individuals have qualifications at Level 2 or above. In the next appendix we show results where we follow LFS conventions and assume that 55% of “other” qualifications are Level 1. We therefore characterise these as eligible for the policy. However, rather than randomly assigning 55% of individuals who report “other” to “Level 1”, we assign the individuals who are most similar in observable characteristics to those who actually report having a Level 1 qualification. The characteristics that we consider include gender, marital status, type of employment sector, job responsibility, whether job is permanent or temporary, and job tenure. In Table 28 this is denoted “Plus Other”.

## Appendix III: Additional tables

### III.1 Employers

**Table 11: Robustness, all workplace sizes, first wave pilots**

	All sectors			Excluding Public, Health and Social Work		
	Controls only	2 <sup>nd</sup> wave only	Matching	Controls only	2 <sup>nd</sup> wave only	Matching
<b>Qualification measure</b>						
Policy-off baseline	8.69%	7.91%	7.45%	7.68%	6.93%	6.37%
Effect	0.09ppt	0.86ppt	0.40ppt	-0.09ppt	0.65ppt	0.72ppt
Sample size pilots	8,123	8,123	8,106	7,371	7,371	7,371
Sample size	11,753	15,559	19,167	10,605	14,088	17,322
<b>Occupation measure</b>						
Policy-off baseline	8.61%	7.96%	7.31%	7.53%	6.81%	6.33%
Effect	0.33ppt	0.97ppt**	0.61ppt	0.12ppt	0.84ppt**	0.79ppt*
Sample size pilots	8,407	8,407	8,393	7,601	7,601	7,585
Sample size	12,106	16,396	20,076	10,888	14,775	18,041

Columns labelled Controls only include workplace characteristics and use only control areas as the comparison group. Columns labelled 2<sup>nd</sup> wave only include workplace characteristics and use only 2<sup>nd</sup> wave pilot areas as the comparison group. Estimates from parametric difference-in-differences regressions, apart from columns labelled Matching which use propensity score matching techniques and both control and 2<sup>nd</sup> wave pilot areas as the comparison group.

(\*) Significantly different from zero at the 10% level (\*\*) Significantly different from zero at the 5% level

**Table 12: Robustness, all workplace sizes, second wave pilots**

	All sectors		Excluding Public, Health and Social Work	
	2-year difference	Matching	2-year difference	Matching
<b>Qualification measure</b>				
Policy-off baseline	9.47%	6.70%	7.82%	5.44%
Effect	-0.53ppt	1.05ppt	-0.22ppt	1.31ppt
Sample size pilots	4,688	4,651	4,161	4,123
Sample size	7,001	6,959	6,187	6,144
<b>Occupation measure</b>				
Policy-off baseline	8.10%	4.64%	6.10%	3.07%
Effect	-0.21ppt	1.53ppt	0.39ppt	2.20ppt**
Sample size pilots	4,969	4,929	4,387	4,334
Sample size	7,350	7,304	6,464	6,405

Columns labelled 2-year difference include workplace characteristics and measure the change in training over two years between the periods September 2001 to Summer 2002 and September 2003 to Summer 2004. Estimates from parametric difference-in-differences regressions, apart from columns labelled Matching which use propensity score matching techniques. Control areas are used as the comparison group.

(\*) Significantly different from zero at the 10% level (\*\*) Significantly different from zero at the 5% level

**Table 13: Workplaces that provide ETP-type training – occupation measure: sectoral composition**

	First wave pilots		Second wave pilots	
	September 2001 – August 2002	September 2002 – August 2003	September 2002 – August 2003	September 2003 – August 2004
Primary industries and Construction	6%	5%	6%	4%
Manufacturing	12%	12%	9%	12%
Distribution	24%	25%	21%	21%
Finance and Business Services	8%	7%	9%	8%
Education and Public Administration	14%	14%	14%	17%
Health and Social Work	20%	22%	29%	26%
Other services	16%	15%	12%	12%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Source: Random Employer Survey

**Table 14: Robustness, small workplaces, first wave pilots**

	All sectors			Excluding Public, Health and Social Work		
	Controls only	2 <sup>nd</sup> wave only	Matching	Controls only	2 <sup>nd</sup> wave only	Matching
<b>Qualification measure</b>						
Policy-off baseline	6.56%	6.01%	6.02%	5.74%	5.28%	5.39%
Effect	0.12ppt	0.66ppt	0.27ppt	-0.11ppt	0.35ppt	0.29ppt
Sample size pilots	6,819	6,819	6,806	6,212	6,212	6,199
Sample size	9,849	12,765	15,778	8,938	11,589	14,298
<b>Occupation measure</b>						
Policy-off baseline	6.91%	6.19%	6.25%	6.17%	5.30%	5.20%
Effect	0.06ppt	0.78ppt	0.26ppt	-0.28ppt	0.59ppt	0.68ppt
Sample size pilots	7,059	7,059	7,049	6,402	6,402	6,402
Sample size	10,135	13,454	16,516	9,157	12,143	14,898

Columns labelled Controls only include workplace characteristics and use only control areas as the comparison group. Columns labelled 2<sup>nd</sup> wave only include workplace characteristics and use only 2<sup>nd</sup> wave pilot areas as the comparison group. Estimates from parametric difference-in-differences regressions, apart from columns labelled Matching which use propensity score matching techniques and both control and 2<sup>nd</sup> wave pilot areas as the comparison group.

(\*) Significantly different from zero at the 10% level (\*\*) Significantly different from zero at the 5% level

**Table 15: Robustness, small workplaces, second wave pilots**

	All sectors		Excluding Public, Health and Social Work	
	2-year difference	Matching	2-year difference	Matching
<b>Qualification measure</b>				
Policy-off baseline	8.02%	6.12%	6.35%	4.79%
Effect	-0.58ppt	0.72ppt	-0.07ppt	1.18ppt
Sample size pilots	3,707	3,699	3,281	3,271
Sample size	5,616	5,607	4,967	4,956
<b>Occupation measure</b>				
Policy-off baseline	6.26%	3.84%	4.30%	2.26%
Effect	-0.55ppt	1.14ppt	0.16ppt	1.98ppt**
Sample size pilots	3,993	3,981	3,503	3,488
Sample size	5,990	5,977	5,254	5,238

Columns labelled 2-year difference include workplace characteristics and measure the change in training over two years between the periods September 2001 to Summer 2002 and September 2003 to Summer 2004. Estimates from parametric difference-in-differences regressions, apart from columns labelled Matching which use propensity score matching techniques. Control areas are used as the comparison group. (\*) Significantly different from zero at the 10% level (\*\*) Significantly different from zero at the 5% level

**Table 16: Robustness, medium workplaces, first wave pilots**

	All sectors			Excluding Public, Health and Social Work		
	Controls only	2 <sup>nd</sup> wave only	Matching	Controls only	2 <sup>nd</sup> wave only	Matching
<b>Qualification measure</b>						
Policy-off baseline	17.60%	14.31%	15.44%	16.06%	11.28%	12.73%
Effect	0.24ppt	3.53ppt**	2.68ppt	-0.09ppt	4.69ppt**	4.02ppt**
Sample size pilots	1,099	1,099	1,099	983	983	983
Sample size	1,613	2,309	2,823	1,423	2,072	2,512
<b>Occupation measure</b>						
Policy-off baseline	14.92%	14.73%	14.29%	11.94%	11.71%	11.34%
Effect	2.94ppt*	3.13ppt**	3.23ppt**	3.53ppt**	3.77ppt**	4.01ppt**
Sample size pilots	1,142	1,142	1,142	1,021	1,021	1,021
Sample size	1,678	2,448	2,984	1,484	2,196	2,659

Columns labelled Controls only include workplace characteristics and use only control areas as the



comparison group. Columns labelled 2<sup>nd</sup> wave only include workplace characteristics and use only 2<sup>nd</sup> wave pilot areas as the comparison group. Estimates from parametric difference-in-differences regressions, apart from columns labelled Matching which use propensity score matching techniques and both control and 2<sup>nd</sup> wave pilot areas as the comparison group.

(\*) Significantly different from zero at the 10% level (\*\*) Significantly different from zero at the 5% level

**Table 17: Robustness, medium workplaces, second wave pilots**

	All sectors		Excluding Public, Health and Social Work	
	2-year difference	Matching	2-year difference	Matching
<b>Qualification measure</b>				
Policy-off	16.05%	15.19%	15.88%	14.02%
Effect	-2.14ppt	-0.63ppt	-3.78ppt	-0.75ppt
Sample size pilots	798	746	719	686
Sample size	1,147	1,091	1,017	980
<b>Occupation measure</b>				
Policy-off	14.73%	13.16%	12.85%	11.79%
Effect	0.88ppt	2.22ppt	1.02ppt	2.03ppt
Sample size pilots	794	736	721	684
Sample size	1,129	1,067	1,008	967

Columns labelled 2-year difference include workplace characteristics and measure the change in training over two years between the periods September 2001 to Summer 2002 and September 2003 to Summer 2004. Estimates from parametric difference-in-differences regressions, apart from columns labelled Matching which use propensity score matching techniques. Control areas are used as the comparison group. (\*) Significantly different from zero at the 10% level (\*\*) Significantly different from zero at the 5% level

**Table 18: Wage compensation. All workplace sizes, all sectors, second wave pilots**

	Zero wage compensation		Medium wage compensation		High wage compensation	
	Workplace	Workplace + Local Area	Workplace	Workplace + Local Area	Workplace	Workplace + Local Area
<b>Qualification measure</b>						
Policy-off baseline	10.06%	10.15%	8.15%	8.13%	6.9%	6.76%
Effect	-0.29ppt	-0.39ppt	0.85ppt	0.87ppt	0.97ppt	1.11ppt
Sample size pilots	1,403	1,403	2,078	2,078	1,207	1,207

Sample size	3,716	3,716	4,391	4,391	3,520	3,520
<b>Occupation measure</b>						
Policy-off baseline	9.90%	10.19%	6.32%	6.04%	5.59%	4.60%
Effect	-0.03ppt	-0.32ppt	1.70ppt	1.97ppt	-0.01ppt	0.98ppt
Sample size pilots	1,378	1,378	2,283	2,283	1,308	1,308
Sample size	3,759	3,759	4,664	4,664	3,689	3,689

Columns labelled Workplace and Local Area include workplace characteristics and local area characteristics. Control areas are used as the comparison group. Estimates from parametric difference-in-differences regressions.

(\*) Significantly different from zero at the 10% level (\*\*) Significantly different from zero at the 5% level  
 (†) Effects by wage compensation package significantly different from each other at the 10% level, (††) significantly different from each other at the 5% level.

**Table 19: Time-off. All workplace sizes, all sectors, first wave pilots**

	35 hours time-off		70 hours time-off	
	Workplace	Workplace + Local Area	Workplace	Workplace + Local Area
<b>Qualification measure</b>				
Policy-off baseline	8.41%	8.69%	7.72%	7.7%
Effect	1.37ppt**	1.10ppt	-0.18ppt	-0.24ppt
Sample size pilots	4,486	4,486	3,637	3,637
Sample size	15,552	15,552	14,703	14,703
<b>Occupation measure</b>				
Policy-off baseline	8.90%	9.10%	7.2%	7.24%
Effect	0.91ppt*	0.71ppt	0.63ppt	0.61ppt
Sample size pilots	4,625	4,625	3,782	3,782
Sample size	16,313	16,313	15,470	15,470

Columns labelled Workplace and Local Area include workplace characteristics and local area characteristics. Control and 2<sup>nd</sup> wave pilot areas are used as the comparison group. Estimates from parametric difference-in-differences regressions.

(\*) Significantly different from zero at the 10% level (\*\*) Significantly different from zero at the 5% level  
 (†) Effects by time-off package significantly different from each other at the 10% level, (††) significantly different from each other at the 5% level.

**Table 20: Time-off. All workplace sizes, all sectors, second wave pilots**

	35 hours time-off		70 hours time-off	
	Workplace	Workplace + Local Area	Workplace	Workplace + Local Area
<b>Qualification measure</b>				
Policy-off baseline	9.29%	8.94%	7.10%	6.40%
Effect	0.24ppt	0.59ppt	1.09ppt	1.79ppt
Sample size pilots	2,624	2,624	2,064	2,064

Sample size	4,937	4,937	4,377	4,377
<b>Occupation measure</b>				
Policy-off baseline	8.81%	9.01%	5.25%	4.33%
Effect	1.23ppt	1.04ppt	0.18ppt	1.10ppt
Sample size pilots	2,648	2,648	2,321	2,321
Sample size	5,029	5,029	4,702	4,702

Columns labelled Workplace and Local Area include workplace characteristics and local area characteristics. Control areas are used as the comparison group. Estimates from parametric difference-in-differences regressions.

(\*) Significantly different from zero at the 10% level (\*\*) Significantly different from zero at the 5% level.  
 (†) Effects by time-off package significantly different from each other at the 10% level, (††) significantly different from each other at the 5% level.

**Table 21: All workplace sizes, second year effect for first wave pilots**

	All sectors		Excluding Public, Health and Social Work	
	Workplace	Workplace + Local Area	Workplace	Workplace + Local Area
<b>Qualification measure</b>				
Policy-off baseline	10.06%	10.57%	8.55%	9.09%
Effect	0.01ppt	-0.50ppt	0.19ppt	-0.36ppt
Sample size pilots	5,343	5,343	4,772	4,772
Sample size	7,656	7,656	6,798	6,798
<b>Occupation measure</b>				
Policy-off baseline	9.17%	10.03%	7.38%	8.34%
Effect	0.04ppt	-0.82ppt	0.30ppt	-0.66ppt
Sample size pilots	5,493	5,493	4,895	4,895
Sample size	7,874	7,874	6,972	6,972

Columns labelled Workplace and Local Area include workplace characteristics and local area characteristics. Control areas are used as the comparison group. Estimates from parametric difference-in-differences regressions.

(\*) Significantly different from zero at the 10% level (\*\*) Significantly different from zero at the 5% level.

**Table 22: All workplace sizes, first year effect on *attainment* for second wave pilots**

	All sectors		Excluding Public, Health and Social Work	
	Workplace	Workplace + Local Area	Workplace	Workplace + Local Area
<b>Qualification measure</b>				
Policy-off baseline	4.32%	4.49%	3.40%	3.36%
Effect	0.47ppt	0.30ppt	0.69ppt	0.49ppt
Sample size pilots	4,613	4,613	4,105	4,105
Sample size	6,901	6,901	6,113	6,113
<b>Occupation measure</b>				
Policy-off baseline	5.01%	4.92%	3.72%	3.66%
Effect	0.33ppt	0.42ppt	0.82ppt	0.87ppt
Sample size pilots	4,963	4,963	4,384	4,384
Sample size	7,343	7,343	6,460	6,460

Columns labelled Workplace and Local Area include workplace characteristics and local area characteristics. Control areas are used as the comparison group. Estimates from parametric difference-in-differences regressions.

(\*) Significant at the 10% level (\*\*) Significant at the 5% level

### III.2 Employees

#### Additional analysis

The impact of ETP on employees across all workplace sizes, ‘second year’ effects of first wave pilots

Table 23: First wave pilots, year 2 effects, all workplace sizes (LFS data)

	All sectors	
	Pilots vs all England	Pilots vs selected controls
<b>Training in last 3 months</b>		
Policy-off baseline	18.30%	18.90%
Effect	-0.07ppt	-0.15ppt
<b>Training in last 4 weeks</b>		
Policy-off baseline	10.00%	9.20%
Effect	-0.97ppt	0.19ppt
<b>Training to qualification in last 4 weeks</b>		
Policy-off baseline	3.30%	4.30%
Effect	0.44ppt	-0.33ppt
<b>Training to L2 qualification in last 4 weeks</b>		
Policy-off baseline	0.5%	0.4%
Effect	0.05ppt	0.84ppt
Sample size pilots	1,353	1,509
Sample size	16,050	10,581
<b>Proportion of population with L2 + qualifications</b>		
Policy-off baseline	64.60%	66.00%
Effect	0.84ppt	-0.81ppt
Sample size pilots	4,804	5,308
Sample size	58,949	38,400

Notes to table: See Notes to Table 8, except that all figures reported are the differences in training across pilot and control areas in 2004, net of the differences in training across pilot and control areas in 2002.

**The impact of ETP on employees on employees in small, medium and large workplaces (LFS data)**

**Table 24: Small workplaces, first and second wave pilots, year 1 effects (LFS data)**

	All sectors Wave 1 Pilots		All sectors Wave 2 Pilots	
	Pilots vs all England	Pilots vs selected controls	Pilots vs all England	Pilots vs selected controls
<b>Training in last 3 months</b>				
Policy-off baseline	16.70%	18.00%	17.80%	19.60%
Effect	1.63ppt	0.18ppt	2.37ppt	0.47ppt
<b>Training in last 4 weeks</b>				
Policy-off baseline	8.10%	8.40%	8.70%	9.10%
Effect	-1.45ppt	-1.90ppt	0.81ppt	0.51ppt
<b>Training to qualification in last 4 weeks</b>				
Policy-off baseline	3.80%	4.40%	5.10%	4.00%
Effect	-0.56ppt	-0.97ppt	1.14ppt	2.16ppt
<b>Training to Level 2 qualification in last 4 weeks</b>				
Policy-off baseline	1.4%	1.6%	1.1%	0.8%
Effect	-0.48ppt	-0.79ppt	1.56ppt***	1.69ppt
Sample size pilots	784	856	451	518
Sample size	8,910	5,935	6,754	2,349
<b>Proportion of population with L2 + qualifications</b>				
Policy-off baseline	59.90%	59.10%	61.90%	66.30%
Effect	-0.75ppt	0.61ppt	2.14ppt	-3.57ppt
Sample size pilots	2,319	2,595	1,625	1,774
Sample size	29,271	18,732	23,311	8,240

*Notes to table:* See notes to Table 8.

**Table 25: Medium workplaces, first and second wave pilots, year 1 effects (LFS data)**

	All sectors Wave 1 Pilots		All sectors Wave 2 Pilots	
	Pilots vs all England	Pilots vs selected controls	Pilots vs all England	Pilots vs selected controls
<b>Training in last 3 months</b>				
Policy-off baseline	20.00%	19.90%	20.10%	16.90%
Effect	-1.22ppt	-0.73ppt	0.50ppt	3.01ppt
<b>Training in last 4 weeks</b>				
Policy-off baseline	8.80%	9.00%	9.00%	8.00%
Effect	0.10ppt	-0.48ppt	2.45ppt	2.83ppt
<b>Training to qualification in last 4 weeks</b>				
Policy-off baseline	3.60%	4.40%	4.80%	3.30%
Effect	0.35ppt	-0.82ppt	-0.64ppt	0.60ppt
<b>Training to Level 2 qualification in last 4 weeks</b>				
Policy-off baseline	1.3%	1.5%	0.9%	0.20%
Effect	-0.93ppt	-1.33ppt	-0.46ppt	0.25ppt
Sample size pilots	426	469	218	231
Sample size	4,204	2,784	3,289	1,162
<b>Proportion of population with L2 + qualifications</b>				
Policy-off baseline	64.30%	63.90%	66.70%	71.40%
Effect	-0.67ppt	-0.96ppt	0.74ppt	-4.15ppt
Sample size pilots	1,482	1,614	952	995
Sample size	15,965	10,294	13,137	4,635

*Notes to table:* See notes to Table 8.

**Table 26: Large workplaces, first and second wave pilots, year 1 effects (LFS data)**

	All sectors Wave 1 Pilots		All sectors Wave 2 Pilots	
	Pilots vs all England	Pilots vs selected controls	Pilots vs all England	Pilots vs selected controls
<b>Training in last 3 months</b>				
Policy-off baseline	23.10%	22.00%	22.10%	21.20%
Effect	2.67ppt	3.93ppt	-1.72ppt	-0.56ppt
<b>Training in last 4 weeks</b>				
Policy-off baseline	10.50%	10.80%	9.90%	9.90%
Effect	2.15ppt	2.00ppt	-0.58ppt	-0.38ppt
<b>Training to qualification in last 4 weeks</b>				
Policy-off baseline	3.70%	4.60%	4.80%	4.00%
Effect	1.32ppt	0.21ppt	-0.70ppt	-0.27ppt
<b>Training to Level 2 qualification in last 4 weeks</b>				
Policy-off baseline	1.2%	1.7%	0.9%	0.8%
Effect	-0.18ppt	-0.91ppt	0.78ppt	0.74ppt
Sample size pilots	357	397	172	189
Sample size	3,423	2,410	2,590	853
<b>Proportion of population with L2 + qualifications</b>				
Policy-off baseline	69.00%	69.30%	69.50%	73.80%
Effect	-0.88ppt	-0.87ppt	2.38ppt	-2.18ppt
Sample size pilots	1,349	1,528	902	961
Sample size	15,289	10,529	12,140	4,175

*Notes to table:* See notes to Table 8.



## Robustness tables

**Table 27: Eligible “Plus Level 2”, first and second wave pilots, year 1 effects (LFS data)**

	All sectors, Wave 1 Pilots		All sectors, Wave 2 Pilots	
	Pilots vs all England	Pilots vs selected controls	Pilots vs all England	Pilots vs selected controls
<b>Training in last 3 months</b>				
Policy-off baseline	22.20%	22.00%	23.20%	23.50%
Effect	1.03ppt	1.31ppt	-0.87ppt	-1.05ppt
<b>Training in last 4 weeks</b>				
Policy-off baseline	11.20%	10.40%	11.20%	12.80%
Effect	-0.53ppt	0.27ppt	0.57ppt	-1.07ppt
<b>Training to qualification in last 4 weeks</b>				
Policy-off baseline	4.90%	4.70%	5.20%	4.40%
Effect	0.43ppt	0.59ppt	0.94ppt	1.68ppt
<b>Training to Level 2 qualification in last 4 weeks</b>				
Policy-off baseline	0.9%	0.6%	1.0%	1.0%
Effect	-0.08ppt	0.25ppt	0.58ppt	0.56ppt
Sample size pilots	2,403	2,648	1,382	1,525
Sample size	26,232	17,405	20,261	6,962

*Notes to table:* See Notes to Table 8

**Table 28: Eligible Plus “Other”, first and second wave pilots, year 1 effects (LFS data)**

	All sectors, Wave 1 Pilots		All sectors, Wave 2 Pilots	
	Pilots vs all England	Pilots vs selected controls	Pilots vs all England	Pilots vs selected controls
<b>Training in last 3 months</b>				
Policy-off baseline	17.90%	19.60%	19.50%	19.60%
Effect	0.23ppt	0.24ppt	0.57ppt	0.24ppt
<b>Training in last 4 weeks</b>				
Policy-off baseline	9.50%	11.30%	9.30%	11.30%
Effect	-0.59ppt	-1.68ppt	0.53ppt	-1.68ppt
<b>Training to qualification in last 4 weeks</b>				
Policy-off baseline	3.20%	6.00%	5.10%	6.00%
Effect	0.51ppt	-1.01ppt	0.03ppt	-1.01ppt
<b>Training to Level 2 qualification in last 4 weeks</b>				
Policy-off baseline	1.1%	0.8%	1.0%	1.0%
Effect	-0.46ppt	-0.15ppt	0.59ppt	0.73ppt
Sample size pilots	1,519	1,104	1,000	1,104
Sample size	18,071	5,026	14,498	5,026

*Notes to table:* See Notes to Table 8

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