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UK Commission's Employer Skills Survey 2011: UK Results

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UK Commission's Employer Skills Survey 2011: UK Results

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Foreword

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Businesses in the UK today face both opportunities and threats. Regardless of their size, they are impacted by globalisation, the global economic climate, on-going technological developments, funding challenges, the domestic and European squeeze on consumption and ever changing consumer demands.

In any fast changing environment the ability of people to adapt, innovate, enter new markets and be ever more productive is essential. We cannot return the UK economy to positive growth and global competitiveness without the unique actions of highly trained and skilled people. Realising the full potential of the UK workforce is one key to enabling businesses to innovate and improve, to exploit new technological developments and emerging markets, and to ensure UK businesses can achieve real business improvements to compete on the global, European and domestic stages.

Today too many businesses lack the skilled people they need; this poses serious risks to the health and survival of their business and to bottom line performance. This is not a new phenomenon and such deficiencies have persisted over time in some sectors. But now, at a time when many new economies have "emerged" and are building their skills base at least as fast as the UK, we have to take decisive action.

It is important that investment in skills is done wisely and effectively, with clear frameworks within a business for where and how to develop essential new skills, together with a rigorous approach to measuring return on investment so that confidence in the right courses of action can be fostered even in tough times. We have tried to cast this report in the light of developing new opportunities for businesses and organisations, but it is also true that businesses which fail to invest in training and skills are more likely to go out of business than those which don't.

The UK Commission's wide-ranging activities are designed to stimulate action against this skills challenge, give practical support and guidance and encourage employers to take ownership of the UK's skills agenda – collectively and individually. Knowing our UK starting point is essential to understand what we need to focus on and this survey is part of the Commission's comprehensive labour market intelligence portfolio.

The UK Commission's Employer Skills Survey is the most comprehensive analysis to date of the skills businesses need; the pressures they face in effectively managing their businesses and accessing or developing those skills; their responses to such difficulties; whether and how much they train and why they don't. The survey provides a wealth of data on these issues and, for the first time, we can investigate them on a consistent basis right across the UK labour market. The survey also provides the opportunity to examine special topics. This year, with growing youth unemployment, we will further analyse employers' experience of recruiting young people from education.

This survey is possible because the four governments of the UK made adjustments and changes to the surveys they used before in order to achieve a joined-up understanding of the UK labour market. We are immensely pleased to conduct this research with UK employers and grateful to the more than 87,000 businesses, across all sectors, who participated in the research, building our understanding of the extent and nature of skill deficiencies, training practice and training barriers that businesses face.

As a social partnership, led by Commissioners from large and small employers, trade unions and the voluntary sector, the UK Commission for Employment and Skills is in a position to help businesses, individuals and governments develop solutions to the problems posed by the outcomes of this research as well as working towards our own objectives, namely:

- More employers investing in the skills of their people;
- More career opportunities for young people;
- More collective action by employers through stronger sectors and local networks
- More employers stepping up and taking ownership of skills.

I hope you find this report useful. It will be followed by reports for each of the nations of the UK, a web-tool to analyse the data in greater depth, and thematic reports exploring key issues within the survey.

We are keen to make the data and analysis as accessible as possible and assist with its interpretation. We are also keen to get feedback on how we could make our research even more relevant. If you have any feedback or queries, or would like to know more about the Commission's other research assets, please e-mail info@ukces.org.uk, quoting the report title.

Acknowledgements

Many individuals and organisations have been involved in the design and execution of the UK Commission's Employer Skills Survey 2011. Particular thanks are given to the 87,500 businesses who responded to the questionnaire. As the lead contractor, we have been supported by the research agencies who conducted much of the fieldwork: BMG Research and Ipsos MORI.

The project was sponsored by the four UK governments who came together to ensure the delivery of this first UK employer skills survey was possible. A steering group was established to guide the direction of the project. Members attending this group were: Mark Langdon, Department for Business, Innovation and Skills (BIS); Dominic Rice, BIS; Kathy Murphy, BIS; Euan Dick, Scottish Government; Sarah Munro, Scottish Government; Joanne Corke, Welsh Government; Graeme Belshaw; Department for Employment and Learning Northern Ireland (DELNI); Linda Bradley, DELNI; Tim Devine, DELNI; Mauricio Armellini, Department for Work and Pensions (DWP); Jacqui Hansbro, DWP; Alasdair Yeo, DWP; Anthony Clarke, Department for Education (DFE); Muriel Bankhead, Alliance of Sector Skills Councils; Sally Walters, Alliance of Sector Skills Councils; Helen Lindsay, Alliance of Sector Skills Councils and Mark Spilsbury of the UK Commission for Employment and Skills.

Particular thanks are also due to staff at the UK Commission who supported the preparation of this report, including Carol Stanfield, Caroline Berry, Ken Manson and Rachel Pinto and in particular to the project manager throughout the course of the survey, Dr Susannah Constable at the UK Commission.

Jan Shury
Joint Managing Director, IFF Research Ltd.

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Glossary

This glossary gives a short guide to the key terms used in this report:

Establishment (also referred to as workplace, business, employer, site)	A single location of an organisation with people working at it.
Vacancy density	The number of vacancies as a proportion of all employment.
Hard-to-fill vacancies	Vacancies which are proving difficult to fill, as defined by the establishment (from question: "Are any of these vacancies proving hard to fill?").
Hard-to-fill vacancy density	The number of hard-to-fill vacancies as a proportion of all vacancies.
Skill-shortage vacancies (SSVs)	Vacancies which are proving difficult to fill due to the establishment not being able to find applicants with the appropriate skills, qualifications or experience.
Skill-shortage vacancy density	The number of skill-shortage vacancies as a proportion of all vacancies
Skills gaps	A "skills gap" is where an employee is not fully proficient, i.e. is not able to do their job to the required level. See Appendix B.

Skills gap density	The number of staff reported as being not fully proficient as a proportion of all employment.
Under-use of skills	An employee is "under-used" if the employer reports they have both more skills and more qualifications than are required to perform the job role they are currently in.
Product Market Strategy (PMS)	An establishment's PMS score is worked out from the combined answers of four questions: • How customised their output is; • How price dependent their offering is; • How innovative the establishment is; • Whether outputs are premium or basic quality. A high PMS score would indicate outputs are customised, not price-dependent, premium quality and the establishment often leads the way in product development.
Level 4 qualifications	Qualifications at or above Level 4 on the National Qualifications Framework. Includes HNDs, HNCs, foundation degrees and degrees, postgraduate degrees, and some vocational and professional qualifications.
Level 3 qualifications	Qualifications at Level 3 on the National Qualifications Framework, such as A / AS Levels, Scottish Highers, NVQ Level 3, SVQ Level 3, Advanced level Welsh Baccalaureate, OND / ONC / BTEC nationals or equivalent level qualifications.
Sector	For definitions of the different sector groupings used in this report please refer to Appendix D
Occupations	For definitions of the occupational groups used in this report please refer to Appendix E

UK Commission's Employer Skills Survey: UK Results

Executive Summary

The UK Commission's Employer Skills Survey 2011 is the key UK data source on employer demand for and investment in skills. It is the first UK-wide employer skills survey, and is one of the largest employer skills surveys undertaken in the world, involving over 87,500 interviews with employers across all sectors and covering all sizes of employer. The survey covers topics such as skill related recruitment difficulties, skills gaps, training investment and the work-readiness of education leavers. Headline findings on these and other topics are provided below.

Work-readiness of those leaving education

Across the UK, around a quarter of establishments (24 per cent) had recruited at least one person straight from education in the two to three years prior to the survey. Most employers found these education leavers to be well prepared for work, with this proportion increasing with the recruit's age and / or education level (up to 82 per cent for university leavers). Where recruits were considered poorly prepared for work this was most often put down to a lack of experience (of the world of work or, more generally, life experience or maturity), or to personality (poor attitude, or a lack of motivation).

Recruitment and skill shortages

At the time of interview (March-July 2011), 12 per cent of establishments had a vacancy and a total of 636,000 vacancies were reported. In terms of vacancies, there is comparatively high demand for Associate Professional roles (this occupational group, which includes estate agents, financial analysts and advisors, junior police and fire officers, paramedics and technicians, accounted for 16 per cent of all vacancies, much higher than their share of employment).

The labour market is largely able to meet the requirements of most establishments. Four per cent had a vacancy they considered to be 'hard-to-fill'. A total of 144,000 hard-to-fill vacancies were reported, equivalent to 23 per cent of all vacancies.

Three per cent of establishments reported having vacancies at the time of the survey that they had difficulties filling specifically due to a lack of skills, qualifications or experience in applicants for the role (i.e. a "skill-shortage vacancy"). A total of 103,000 skill-shortage vacancies were reported and 16 per cent of all vacancies were due to skill shortages. It is amongst Skilled Trades occupations where employers experience the greatest difficulties in meeting their demand for skills from the available labour market (in this occupation, which includes jobs such as butchers, carpenters, chefs, electricians, farmers, mechanics and plumbers, a third of all vacancies were hard-to-fill as a result of a lack of skills).

While skill-shortage vacancies may not be common, where they do exist their impact can be significant. The vast majority (85 per cent) of establishments with skill-shortage vacancies reported that they were leading to an increased workload for their staff, risking knock-on effects on morale and retention. More direct impacts on performance were also commonly cited (47 per cent of those with any skill-shortage vacancies say they struggle to meet customer service objectives, 45 per cent have had to delay developing new products or services and 44 per cent have lost business to competitors), risking the competitiveness of the business.

Internal Skills Mismatch

This section considers the proficiency of existing staff, employee retention and the extent to which the full skills of the current workforce are being used in their current job roles.

Although the majority of establishments have the skills they require, almost 1.5 million employees (five per cent of all employees) were deemed not fully proficient (have a skills gap) and 13 per cent of employers reported having at least one employee with a skills gap.

Skills gaps were most commonly experienced among Sales and Customer services staff (a group which includes call centre agents, customer care occupations, retail cashiers and sales assistants) and Elementary Occupations (this group includes bar staff, cleaners, labourers, packers, security guards, shelf fillers and traffic wardens), both in absolute terms and as a proportion of all staff within each occupation.

Where skills gaps exist, their impact can be significant, although less so than the impact seen from having skill-shortage vacancies. The most common impact, as found with skill-shortage vacancies, is on the workload of other existing staff (reported by 48 per cent of those with skills gaps). This was followed by increased operating costs (28 per cent), difficulties in meeting quality standards (25 per cent) and difficulties introducing new working practices (23 per cent). Around two in five employers with skills gaps reported that these do not have tangible impacts on the establishment's performance. This may be related to skills gaps being caused in some instances by new staff having been taken on, in which circumstance the skill gaps will often be both anticipated and temporary.

Across England, Wales and Northern Ireland, five per cent of all employers reported that there are specific jobs in which they have difficulties retaining staff. Where employers experience retention difficulties, these are most likely to relate to Skilled Trades occupations and Elementary staff. In part this reflects the prevalence of these occupations in the employer population. The most common cause of retention difficulties was a lack of interest in the type of work in question (reported by 51 per cent of employers with retention difficulties), along with other issues relating specifically to the job such as low wages (33 per cent), long/unsocial hours (33 per cent), lack of opportunities for career progression (30 per cent) and unattractive conditions of employment (25 per cent).

Across the UK, almost half of all establishments (49 per cent) reported having at least one employee with both qualifications and skills that are more advanced than required for their current job role. In volume terms, this amounts to just under 4.5 million workers, or 16 per cent of the total UK workforce. This experimental question has been explored for the first time in this survey and enables us to get an employer perspective on a measure that has traditionally been asked of individuals.

Employer Investment in Training and Workforce Development

Most workplaces (59 per cent) had provided off-or on-the-job training for some of their staff in the previous 12 months. Employers had funded or arranged training in this period for approximately 15 million staff (equivalent to 54 per cent of the total UK workforce at the time of the survey) and provided 117m days of training (equivalent to 4.3 days per employee per annum and 7.8 days per person trained).

Employer expenditure on training in the previous 12 months was £49bn, equivalent to £1,775 per employee and £3,275 per person trained. However, half this total expenditure is accounted for by the cost of paying staff while they are being trained, while just eight per cent is accounted for by fees to external providers. Smaller establishments spend more per trainee and a greater proportion of that spend is on "non tradeable" costs, such as management time in organising training, than in larger establishments.

Fewer than half of workplaces (45 per cent) had either a training plan (38 per cent) or a budget for training expenditure (29 per cent). Many workplaces undertake training on an *ad hoc* basis, indeed almost half of those providing training did not have a formal training plan in place.

Of the employers that train, 43 per cent (equivalent to 25 per cent of all employers) had funded or arranged training which was intended to lead to a nationally recognised qualification (whether it did lead to the that qualification being obtained or not).

The most common reason for not training is that employers consider their staff to be fully proficient and / or that their staff did not need training (mentioned spontaneously by 64 per cent of non-trainers). Few point to failures in training supply as a reason for not training, though a lack of suitable provision is one of a number of factors preventing employers that train from providing more training. The main barrier cited amongst employers that train was the financial cost.

Conclusions

The UK Commission's first ever UK-wide employer skills survey shows that overall levels of variation between the UK nations are less prevalent than those between sectors and occupations. One notable difference by nation, however, is that employers in Scotland are more likely to train their staff than counterparts in the other nations.

In terms of skills deficiencies, both skill-shortage vacancies and skills gaps are concentrated in pockets of the economy, and where they are felt, they have a significant impact on the ability of businesses to function and stay competitive.

Overall, the majority of employers (59 per cent) do train their staff, but a large minority, 41 per cent, do not, which raises questions about the level of demand for skills and ambition being exhibited by employers across the UK at an aggregate level. This also links to the first experimental look at employer approaches to the use of skills in the workplace, which shows that 4.5 million businesses have staff that are being under-used in their current roles. It is difficult to draw firm conclusions from this statistic alone, but it raises questions about whether the best use is being made of talent in the UK.

In terms of employer expenditure on training, the survey reports significant amounts of employer investment (£49bn). However, around half of this is accounted for by trainee labour costs, and around £7m by training management. Effective management of training should ensure the quality and value of the training provided, yet the survey also raises questions about the fit of the public system to the private market, since a minority of establishments were training their staff towards a nationally recognised qualification. This report explores these issues, yet the richness of the data available will enable even deeper analysis to additionally be conducted over time.

1 Introduction

1.1 The first UK-wide employer skills survey

The UK Commission's Employer Skills Survey 2011 is the key UK data source on employer demand for and investment in skills. It is the first UK-wide employer skills survey and is also one of the largest employer skills surveys undertaken in the world with over 87,500 achieved interviews among large and small businesses in every sector. This ambitious and complex project has brought together the four surveys on skills deficiencies and training that were previously carried out separately in each constituent nation of the UK and represents a significant technical achievement. The previous Employer Skills Surveys conducted in the individual nations varied slightly in the population they covered[1]. This means that the results included in the main chapters of this evidence report are not directly comparable with previous skills surveys undertaken in the constituent nations. What we do get here for the first time however is comparable skills and employment data for employers across the entire UK. Where possible, throughout the narrative, an indication of how the 2011 figures relate to previous statistics will be provided, in particular to give some sense of what the impact of the current economic downturn has been on employer behaviour. However, for time series analysis on a comparable basis, readers should refer to Appendix A, which provides a set of core data tables that have been re-aggregated using the populations and weighting strategies previously used in each constituent nation of the UK. Further time series analysis for each nation will be released shortly in national reports.

This evidence report delves into the rich data provided by the survey to set out the extent of employer demand for skills; experiences of skill deficiencies and approaches to workforce development, and how this varies among different groups of employers. Viewing this information, alongside evidence of the product strategies used by business units, enables us to look at the extent of employer ambition, and to start to explore what impact this might have on training patterns and the emergence of skill deficiencies. This evidence report and the national reports for the four constituent nations will allow:

- Analysis across the entire UK on a comparable basis
- Comparison of sectors and occupations within the UK

[1] The most recent of each of these are: National Employer Skills Survey 2009 (England); Northern Ireland Skills Monitoring Survey 2008; Scottish Employer Skills Survey 2010 and Future Skills Wales 2005 (see bibliography for references).

- Re-creation of the data on a basis that allows time series analysis in the constituent nations.

1.2 Methodological overview

The UK Commission's Employer Skills Survey 2011 was a telephone-based survey. It was conducted in three parts: a core population survey of UK workplaces, and two (smaller) follow-up surveys of workplaces which had provided training for some of their employees in the 12 months preceding the survey, one looking at employers' investment in training ("Investment in Training Survey"), the other at whether employers that had trained their staff would have liked to have provided more workforce development ("Skills Equilibrium Survey").

Below we briefly summarise the key features of the methodology adopted across both surveys. Further details can be found in the separate technical report which accompanies this report.

1.2.1 Survey sampling

The survey was designed to be representative of all establishments in the UK where at least one person is employed (this excludes sole traders who own their own business). It encompasses establishments across the full geographical spread of the UK, in all sectors of the economy (across the commercial, public and charitable spheres).

The core survey adopted a stratified random sample approach. Targets were set, on an interlocking basis, for the numbers of interviews to be achieved with establishments:

- based in each of the four countries of the UK (and within each region of England); initial minimum targets were set, with stakeholders in each country given the option of commissioning boosts to the number of interviews with employers in their jurisdiction.
- operating in each of 14 SIC-defined sectors (within each country); half of all interviews within each geographical area were allocated evenly between the sectors and the other half in proportion to the number of establishments in that sector
- within each of seven sizebands defined by the number of employees on the payroll (within each sector within each country); interviews were allocated using a modified *probability proportionate to size* approach (i.e. in line with the size of the workforce in each sizeband within the sector) in such a way as to maximise coverage of the workforce).

The profile of the population was established through the Office for National Statistics (ONS) based on data from Inter-Departmental Business Register (IDBR) March 2010 statistics.

Sample (contact details for employers) was sourced from Experian's commercial database of establishments, supplemented by some records supplied through the IDBR (in order to ensure full representation of establishments in certain non-commercial sectors in particular).

The Investment in Training follow-up survey also adopted a stratified random sample approach. For this survey, initial targets were set for the numbers of interviews to be achieved according to the nature of the training the establishment provided (i.e. whether on-the-job training only, off-the-job training only, or a combination of the two); for each group of trainers, quotas were then set against an inter-locked country by size matrix.

The Skills Equilibrium follow-up survey was a web survey sent to all employers who had responded to the core survey and said that a) they provided training for staff and b) that they were happy to be contacted for a follow up survey.

All of the employers interviewed for the follow-up surveys had previously been interviewed as part of the core survey (and had given their permission to be contacted for further research).

1.2.2 Survey questionnaire

The core survey questionnaire was designed in several stages. An initial questionnaire was piloted by IFF Research in May 2010 as part of the design work for the UK Commission's Employer Perspectives Survey (Shury *et al.*, 2011), to ensure that the scope of the two surveys was complementary.

Subsequent to this initial development phase, the UK Commission managed a task and finish group of representatives from the four UK governments and IFF Research, where the initial questionnaire was reviewed and revised question by question, bearing in mind the desire for time series analysis for all constituent nations.

There were considerable pressures on the questionnaire both in terms of balancing the need for consistency across the UK with the need for continuity with legacy questionnaires; and also in terms of the drive to cover a wide range of issues without over-burdening employers and creating a lengthy questionnaire. In order to address issues of length, a modularised questionnaire design was developed where certain sections were split and only asked of half of the respondents. The report makes clear where questions were split in this way; further details are provided in the Technical Report.

A second pilot survey was then conducted in February 2011, involving 100 interviews and 10 follow-up cognitive interviews.

Surveys of employer training expenditure have previously only been conducted in England (following up the English National Employer Skills Surveys [NESS] in 2005, 2007 and 2009) and in Northern Ireland (in 2008). Employer skills surveys in Scotland and Wales have not included a follow-up exploration of training expenditure. The questionnaires used for the previous English and Northern Irish surveys were identical, and this questionnaire was used again for the 2011 UK-wide Investment in Training Survey.

The Skills Equilibrium questionnaire was based on questions asked in previous surveys in England, adapted to work as an online survey.

1.2.3 Survey fieldwork

Fieldwork for the core survey was undertaken between March and July 2011, and involved over 87,500 interviews, averaging around 24 minutes in length.

Fieldwork for the follow-up Investment in Training Survey was undertaken in May to July 2011, and involved more than 11,000 interviews with employers who had taken part in the first survey. The Skills Equilibrium Survey follow-up was undertaken in November 2011 and involved over 4,500 online interviews.

The Investment in Training Survey poses some challenging questions which seek to breakdown the costs that establishments incur in providing training to their employees in a number of different ways (in terms of direct external and internal costs, and indirect costs of labour, etc). Employers were initially re-contacted to check that they were still happy to participate in the follow-up; they were then sent a datasheet (by e-mail) outlining the questions that would be asked and giving them the opportunity to collate the information the survey was looking for; a few days later, they were re-contacted by telephone and taken through the full questionnaire.

An overall response rate of 39 per cent was achieved for the core survey; response rates in Northern Ireland and in Wales were stronger for the main survey than those in England and Scotland.

For the Investment in Training follow-up, respondents were already engaged with the survey so a much higher response rate of 75 per cent was achieved; response rates were slightly lower in Wales. The Skills Equilibrium follow-up was an online survey (which typically see lower levels of response), and as such the 13 per cent achieved response rate compares favourably to other studies carried out with similar audiences.

Table 1.1 Survey response rates

	UK	England	Northern Ireland	Scotland	Wales
Core survey					
Interviews	87,572	75,053	4,004	2,503	6,012
Response rate	39%	39%	57%	39%	55%
Investment in Training follow up					
Interviews	11,117	7,929	1,002	685	1,501
Response rate	75%	76%	73%	75%	69%
Skills Equilibrium follow up (online survey)					
Interviews	4,610	3,840	223	196	351
Response rate	13%	13%	13%	15%	12%

1.2.4 Data weighting

Findings from the core survey have been weighted and grossed up to reflect the total population of UK establishments with one or more people working there, excluding sole traders. The weighting was designed and undertaken on an interlocking size and sector basis separately for each country, and within the nine regions in England. Separate weights have been generated which allow findings to be presented (a) based on the number of workplaces reporting a particular experience, and (b) based on the number of employees and/or job roles affected by different challenges[2].

[2] This reflects the weighting strategy adopted in the legacy skills surveys in England and Northern Ireland. In Scotland and Wales, however, single "best-fit" unit/employee weights had previously been calculated and applied. More detail can be found in the technical report.

Findings from the Investment in Training survey have been weighted and grossed up to reflect the population of training employers as defined by the weighted Wave 1 findings. The weighting was undertaken on an interlocking size by sector basis, with separate weighting grids for employers who trained off-the-job only, those who trained on-the-job only and those who offered both types of training; an additional rim weight was set to ensure that findings reflect the distribution of trainers[3] of different sizes across the countries of the UK, and across the regions of England.

1.2.5 Reporting conventions

The survey was carried out at an establishment level; the terms "establishment", "employer", "workplace" and "business unit" are used for this interchangeably throughout this report to avoid excessive repetition and to aid reading.

In tables, "zero" is denoted as a dash "-" and an asterisk "*" if the figure is larger than zero but smaller than 0.5. A double asterisk "**" means the base size was too low to report (see below).

The scale and scope of data collected by the UK Commission's Employer Skills Survey 2011 means that it is a valuable research resource supporting detailed and complex statistical analysis of the inter-relationships between employer characteristics, and their practices and experiences. The findings presented in this report reflect a descriptive exploration of the data, however it should be noted that in all cases where differences by nation are commented on they are statistically significant at the 95 per cent level. Further statistical information can be found in Appendix F.

Throughout the report unweighted base figures are shown on tables and charts to give an indication of the statistical reliability of the figures. These figures are always based on the number of *establishments* answering a question, as this is the information required to determine statistical reliability. Therefore, where percentages are based on "all vacancies", the base figure quoted is the number of establishments with vacancies.

As a general convention throughout the report, figures with a base size of fewer than 25 establishments are not reported (with a double asterisk, "**", displayed instead), and figures with a base size of 25 to 49 are italicised with a note of caution.

[3] The term trainers is used here and throughout the report to indicate employers who have funded or arranged training for (some of) their employees

2 The nature of UK establishments: describing the survey population

The UK Commission's Employer Skills Survey 2011 is designed to explore and measure the skills challenges that employers in the UK face and the training activity that they engage in. In order to give some context to the findings that are presented throughout this report, and to facilitate understanding of the differences in employers' experiences and practices, this section describes some of the key characteristics of the UK employer population. These include their size and sector distribution; whether they are part of a larger organisation or not; whether their workforce has grown or declined in size over the last 12 months and how their characteristics vary by nation. In addition, it introduces two other traits, which will feature as cross-cutting variables at points throughout the report: the product market strategies being followed by establishments and how establishments are distributed according to the current qualification levels of their workforce.

It is important to note that the statistics presented in this section of the report are variously based on official counts of establishments provided by the Office of National Statistics (ONS) and on weighted survey findings; the footnotes on each table or chart detail the source.

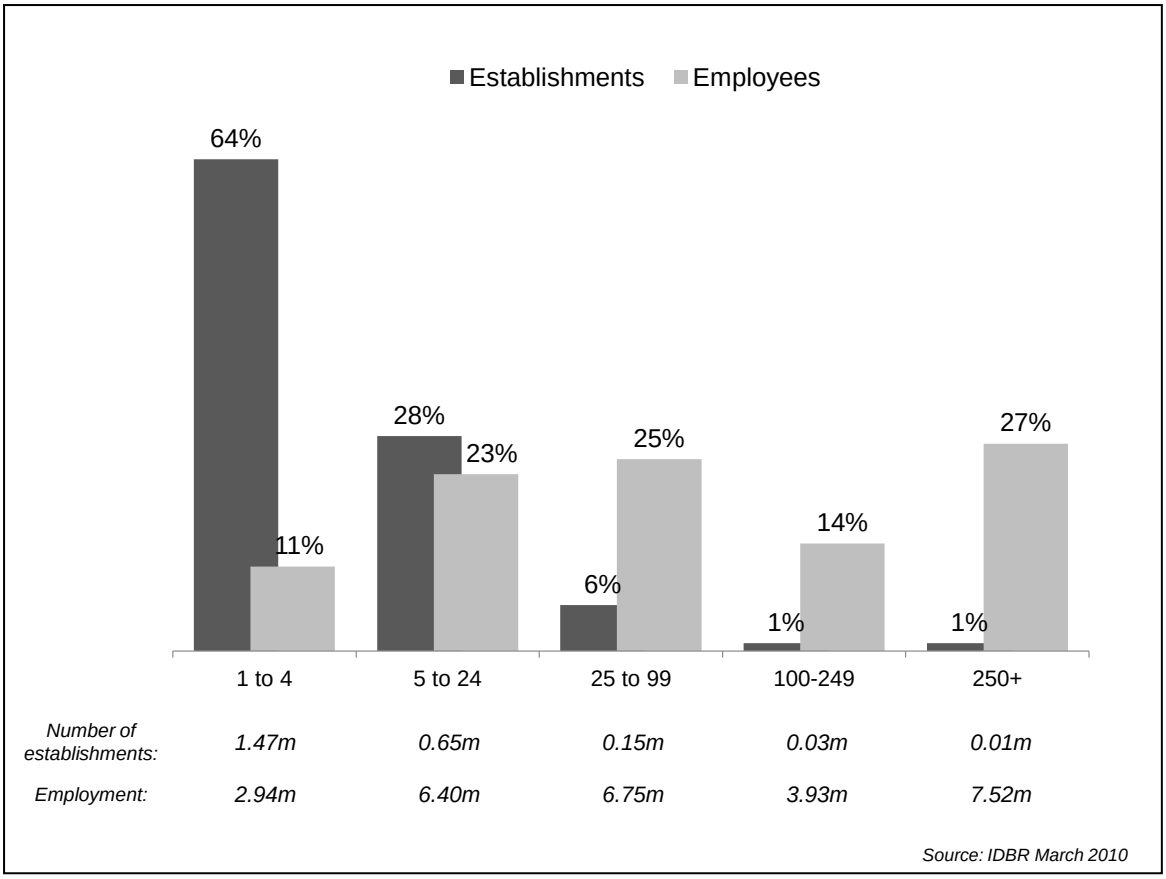
ONS figures show there were around 2.3 million "in-scope" establishments in the UK in March 2010, with around 27.5 million people were working in them[4].

2.1 The size, sector and structural profiles of UK establishments

The majority of establishments (64 per cent) were small, employing fewer than five people. Sites employing 100 or more staff represent only two per cent of all establishments but account for two-fifths (42 per cent) of overall employment.

[4] All establishments were in-scope for the survey with the exception of those where only a single working proprietor (owner/part owner of the organisation) is based with no employees. See Appendix C for further details.

Figure 2.1 Size distribution of establishments and employees



There are many different ways of understanding and describing the range of activities in which employers engage. In this report, business sector is primarily described in terms of 14 sectors, defined by SIC[5] codes; these sectors are shown in Figure 2.2.

The sectors vary considerably in terms of the numbers of establishments represented within each of them, and also in terms of the extent to which their activity has a commercial focus, and/or is funded by government[6].

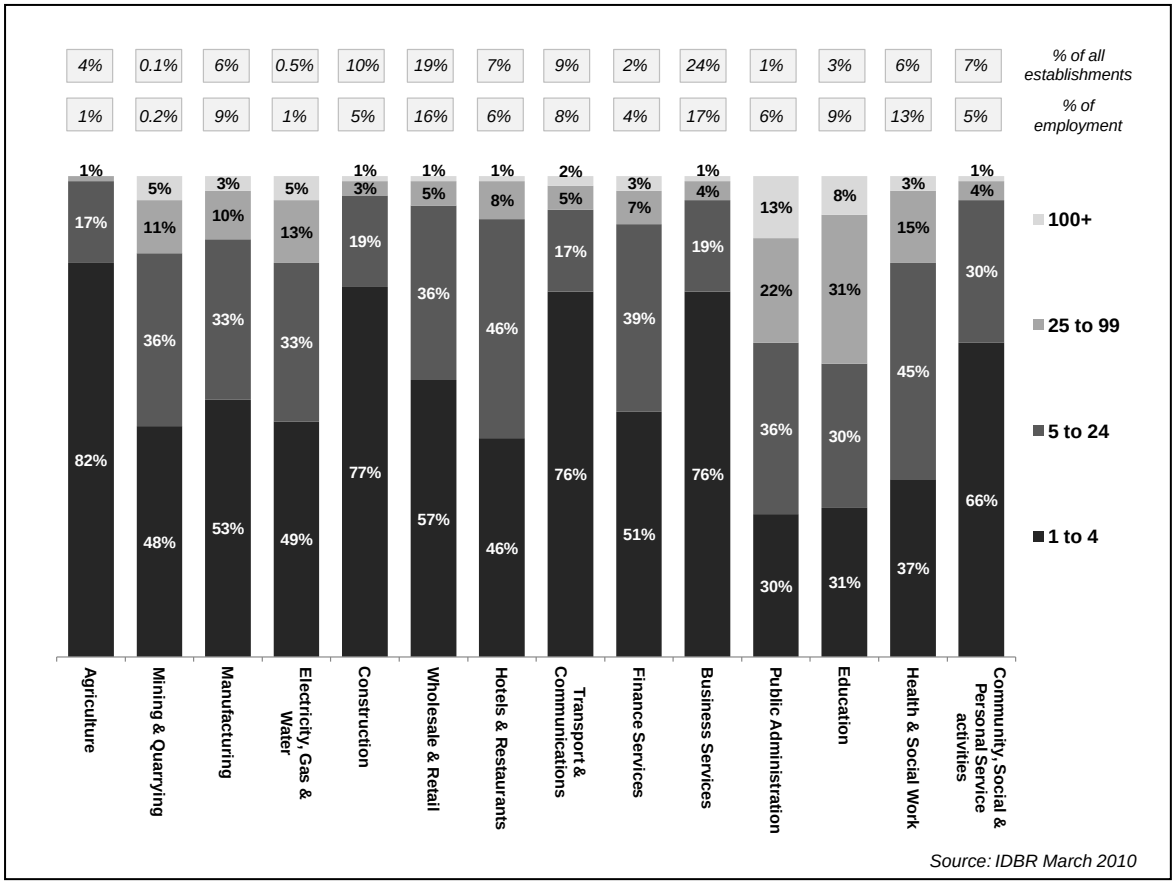
The greatest numbers of establishments operate in Business Services (this sector includes, among other things, real estate activities, consultancy, advertising and employment agencies) and Retail and Wholesale, which between them account for more than two-in-five of all establishments (43 per cent). By contrast, the Mining and Quarrying, the Electricity, Gas and Water Supply, the Public Administration and the Financial Services sectors account for very small proportions of UK establishments.

[5] Full details of the SIC codes associated with each sector are presented in Appendix D to this report.
[6] Counts of the numbers of establishments represented in each sector derive from official ONS statistics from IDBR, March 2010. Analysis of the extent to which establishments have a commercial focus or are funded by government derive from survey findings from the UK Commission's Employer Skills Survey 2011.

The number of establishments and their size profile differs greatly by sector. The two sectors with the largest numbers of establishments (Business Services and Wholesale and Retail) are both dominated by smaller establishments, and account for a smaller proportion of employment than might be expected given their share of establishments.

The Public Administration sector has a higher proportion of large establishments, and employs a disproportionately high percentage of all UK workers. This is also true of the Education and Health and Social Work sectors, both of which are (also) dominated by establishments which rely on public funding. To a lesser extent Manufacturing and Financial Services also have a high proportion of large establishments and a large proportion of the workforce represented within their establishments in relation to the proportion of establishments that they represent overall.

Figure 2.2 Size distribution of establishments in each sector



Most sectors are dominated by commercially-focused organisations whose aim is to generate profit. However, all sectors also include a proportion of establishments whose motivation is more social and/or which operate under funding from local or central government. In a small number of sectors, the majority of establishments operate outside of a commercial imperative: Public Administration, Education and Health and Social Work.

Throughout the report we highlight the importance of size of establishment in determining both the experience that employers have of skills and employment challenges, and the ways in which they react to these experiences. It should be remembered, however, that establishments can be part of wider organisations, and this can bring a different dimension to their experience and practice.

A third of all establishments (35 per cent) are part of a larger organisation, with this figure rising to three-quarters (77 per cent) among establishments with more than 250 employees (Table 2.1).

There are particular policy interests in small and medium-sized businesses. The Department for Business, Innovation and Skills in England, for example, defines these as ***organisations*** with fewer than 250 employees, referred to as small and medium-sized enterprises (SMEs). The UK Commission's Employer Skills Survey 2011 is an establishment based survey, and this is the basis on which it presents its findings. However, it does measure the total size of the workforce across multi-site organisations, and is therefore able to identify which of them are SMEs and which are not. Almost all establishments with fewer than 25 employees are (part of) SMEs, as are most establishments with 25 to 99 employees (55 per cent). A lower proportion of establishments with 100-249 employees (43 per cent) are, or are part of, organisations employing fewer than 250 people (see Table 2.1).

Table 2.1 Organisational structures

		Establishment size				
	Total	**1 to 4**	**5 to 24**	**25 to 99**	**100-249**	**250+**
Unweighted base	*87,572*	*18,955*	*47,770*	*15,951*	*3,270*	*1,626*
Column %	*%*	*%*	*%*	*%*	*%*	*%*
Single site	65	73	55	38	31	23
Multisite	35	27	45	62	69	77
SMEs	78	85	71	55	43	-

Base: All establishments

Note: SMEs are defined here as single-site establishments employing fewer than 250 staff, or sites forming part of larger organisations employing fewer than 250 staff in total.

The survey confirms that decisions about recruitment and training are most commonly taken at site level. The majority of establishments are single site organisations (two-thirds or 65 per cent) and therefore have full responsibility and autonomy when it comes to decisions about recruitment and training; a further four per cent are the Head Offices of multi-site organisations, and as such we can assume that they too have full autonomy in these areas. This leaves three in 10 employers which are sites within larger organisations, and the majority of these (60 per cent of them, equating to 18 per cent of all employers) have either total autonomy or significant input into training and recruitment decisions.

In the remaining one in eight establishments (12 per cent) these decisions are taken entirely elsewhere, or site input is minimal. This proportion remains consistent across all sizes of establishment.

2.1.1 How the population of UK establishments varies across the countries of the UK

The key innovation of the UK Commission's Employer Skills Survey 2011 is that it allows us to understand how the experience of employers varies across the countries of the UK in terms of the skills challenges they face and the training activity that they engage in; this report focuses on these variations. In order to understand what underlies them, it is important to consider the differences in the employer populations across and within each country.

The four countries of the UK are clearly very different in terms of their scale. As Table 2.2 illustrates, by far the greatest proportion of establishments is located in England (1.96 million establishments or 85 per cent of the UK total), and these establishments account for most of UK employment (84 per cent). Consequently, when we present findings at the UK level, the situation in England can sometimes mask variations across the UK as a whole.

Scotland is the location of around half of the remaining establishments and of the remaining workforce (around 180,000 establishments, employing 2.38 million people), with the other half distributed across Wales (100,000 establishments employing 1.18 million people) and Northern Ireland (70,000 establishments employing 780,000 people).

Table 2.2 Distribution of establishments and employment across the UK

	Number of establishments	% of UK establishments	Number of employment	% of UK employment
England	1.96m	85%	23.20m	84%
Northern Ireland	0.07m	3%	0.78m	3%
Scotland	0.18m	8%	2.38m	9%
Wales	0.10m	4%	1.18m	4%
TOTAL	2.30m	100%	27.55m	100%

Source: IDBR (March 2010)

The size profile of employers within each country is relatively similar, with small establishments dominating everywhere. However, in England a noticeably higher proportion of employers fall into the smallest category, having fewer than five employees (65 per cent in England compared to 57 per cent in Northern Ireland, 59 per cent in Scotland and 62 per cent in Wales).[7]

All sectors are represented in all of the nations of the UK (see Appendix D for the sector definitions used in the survey), and in each sector the vast majority of establishments are based in England. However certain sectors stand out as having a different distribution across the UK in particular:

- the Agriculture and Mining and Quarrying sectors are disproportionately located outside of England (around 30 per cent of employers in these sectors are located outside of England, compared to 15 per cent of all establishments);
- a higher than average proportion of the UK's Public Administration establishments are located in Wales (six per cent), and in Scotland (15 per cent);

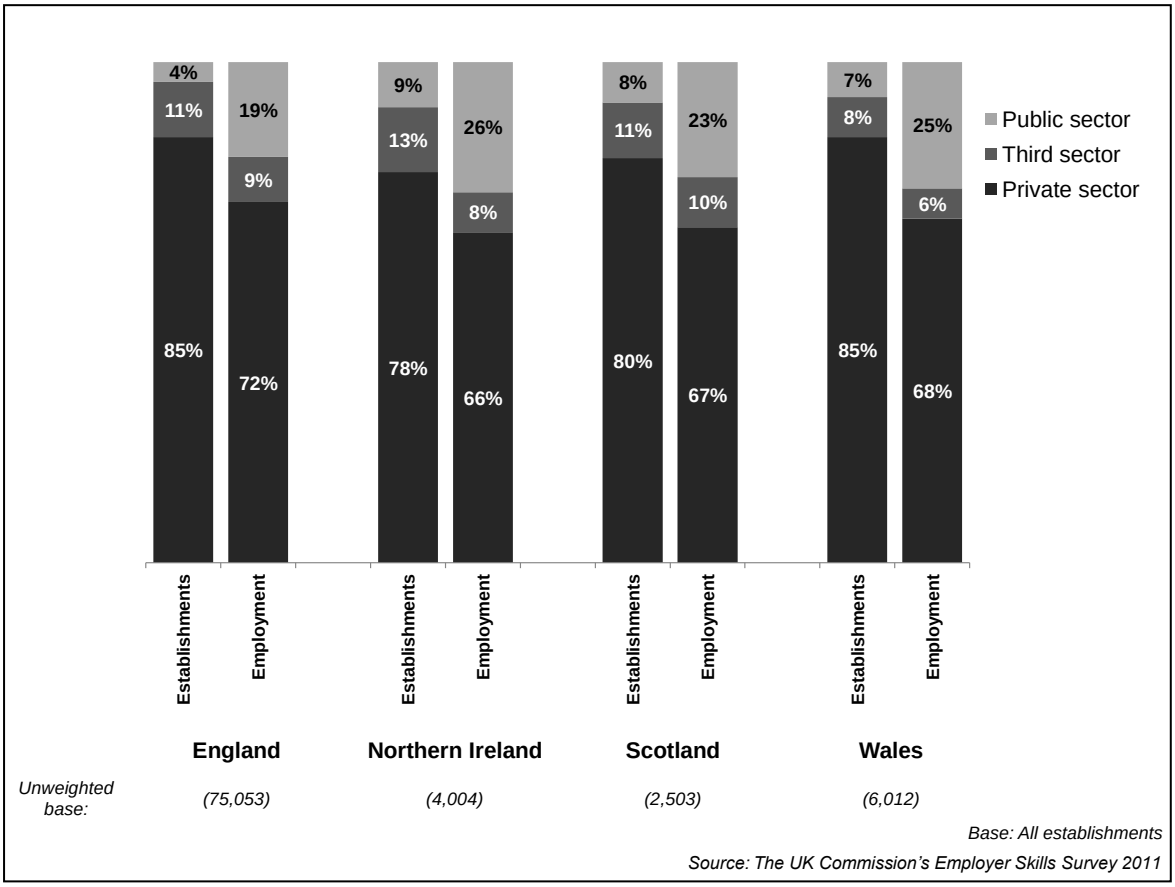
[7] The population for the UK Commission's Employer Skills Survey 2011 is all establishments with at least one employee, which is wider than the populations used in the previous surveys carried out in the constituent nations.

- the Electricity, Gas and Water sector is over-represented in Wales (seven per cent);
- the Business Services and Transport and Communication sectors are very heavily geared towards England (both 89 per cent).

More broadly, establishments in England and Wales are more likely to describe themselves as operating in a commercial sphere, and establishments in England are significantly less likely than those located elsewhere in the UK to be funded by government (whether through local or central funds, see Figure 2.3). Furthermore the proportion of establishments in Wales that classify themselves as being in the Third sector is lower than in the other three nations.

Reflecting that establishments in the public sector tend to be larger than those in the private sector, the proportion of the workforce that they employ is greater than the proportion of establishments they account for. This holds true across all countries of the UK, although a smaller proportion of the English workforce are public sector employees than in the other countries of the UK (19 per cent of workers in England are employed by the public sector compared to around a quarter in the other three nations: 23 per cent in Scotland, 25 per cent in Wales and 26 per cent in Northern Ireland).

Figure 2.3 Profile of countries' establishments and employment by type



2.1.2 Changes in the population of employers and employees over time

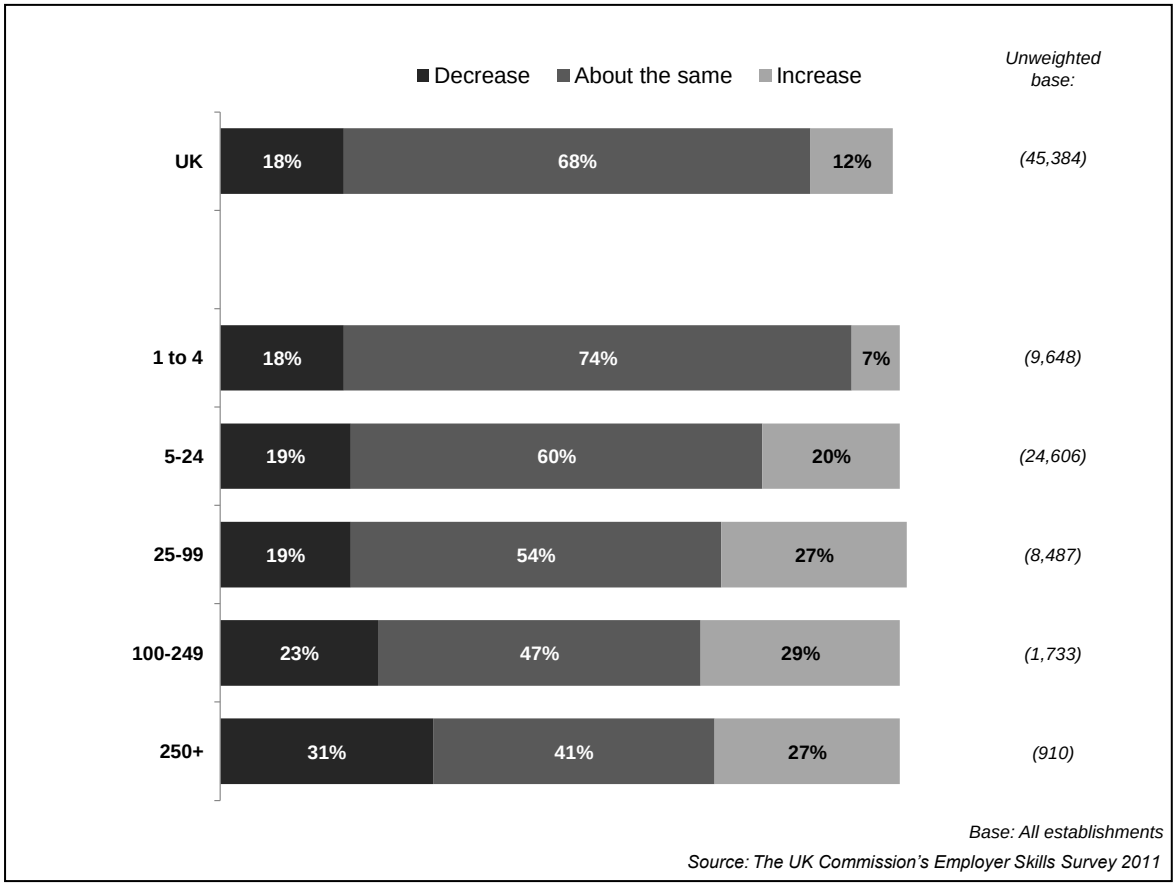
As previously noted, the fieldwork for UK Commission's Employer Skills Survey 2011 took place between March and July 2011, with employers describing their experience and activity either at the time of the survey or over the preceding 12 months depending on the question. This period (Spring 2010 to Summer 2011) was one which saw challenging economic conditions, with limited growth in GDP and little movement in overall employment levels.[8] This will be important to remember when considering the findings presented elsewhere in this report: in particular, when we are looking at recruitment and the labour market.

Below this macro-economic context, the survey asked individual establishments how their workforce levels had changed over the preceding 12 months. The vast majority (68 per cent) said the number of staff they employed had remained about the same. Of the remainder, more described themselves as having contracted the size of their workforce over the 12 months preceding the survey (18 per cent) than as having grown (12 per cent).

The pattern varies considerably by size. As one might expect, the larger the establishment, the more likely it was to have seen some change in employment levels. But the balance of those reporting growth against those reporting contraction is more complex (Figure 2.4). Among the smallest establishments, considerably more contracted than grew; while among those with more than 250 employees, almost as many grew as contracted. In between, establishments with 25 or more but fewer than 250 workers were more likely to have grown than to have reduced their headcount. (The survey did not ask questions about the scale of the growth or contraction.)

[8] GDP growth in the period: 2010 Q3: 0.7%; 2010 Q4: -0.5%; 2011 Q1: 0.4%; 2011 Q2: 0.0%. Unemployment for the same period: May 2010: 2.48m; May 2011: 2.45m (Source ONS).

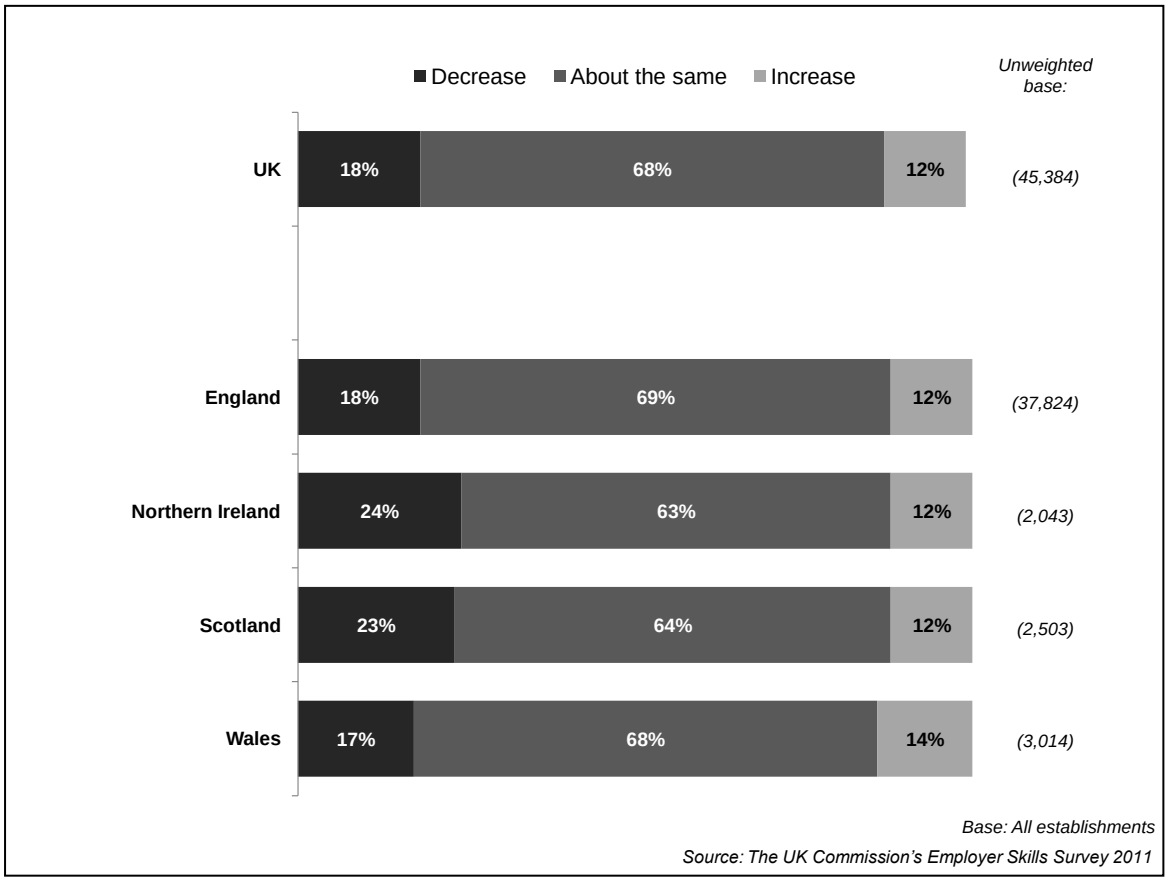
Figure 2.4 Change in size of establishment by sizeband



As one might expect in the context of the comprehensive spending review, in which substantial public sector cuts were announced to try to reduce the budget deficit, Public Administration was the sector in which employers were most likely to report a decrease in the size of their workforce (34 per cent); the Construction sector followed some way behind (24 per cent). Perhaps more surprisingly, the Financial Services sector and the Health and Social Work sector were among only three sectors where more employers report growth than a reduced headcount (20 per cent and 17 per cent respectively), the other being the Electricity, Gas and Water Supply sector (where 21 per cent of employers reported growth).

Establishments in Northern Ireland and in Scotland were most likely to report a decrease in the number of staff: 24 and 23 per cent respectively reported a decrease, while 12 per cent in both countries reported an increase, the same as the UK average (see Figure 2.5). However in both nations for the majority of employers no change was reported in the number of staff at their establishment (63 and 64 per cent respectively).

Figure 2.5 Change in size of establishment by country



2.2 Skill levels and business strategies

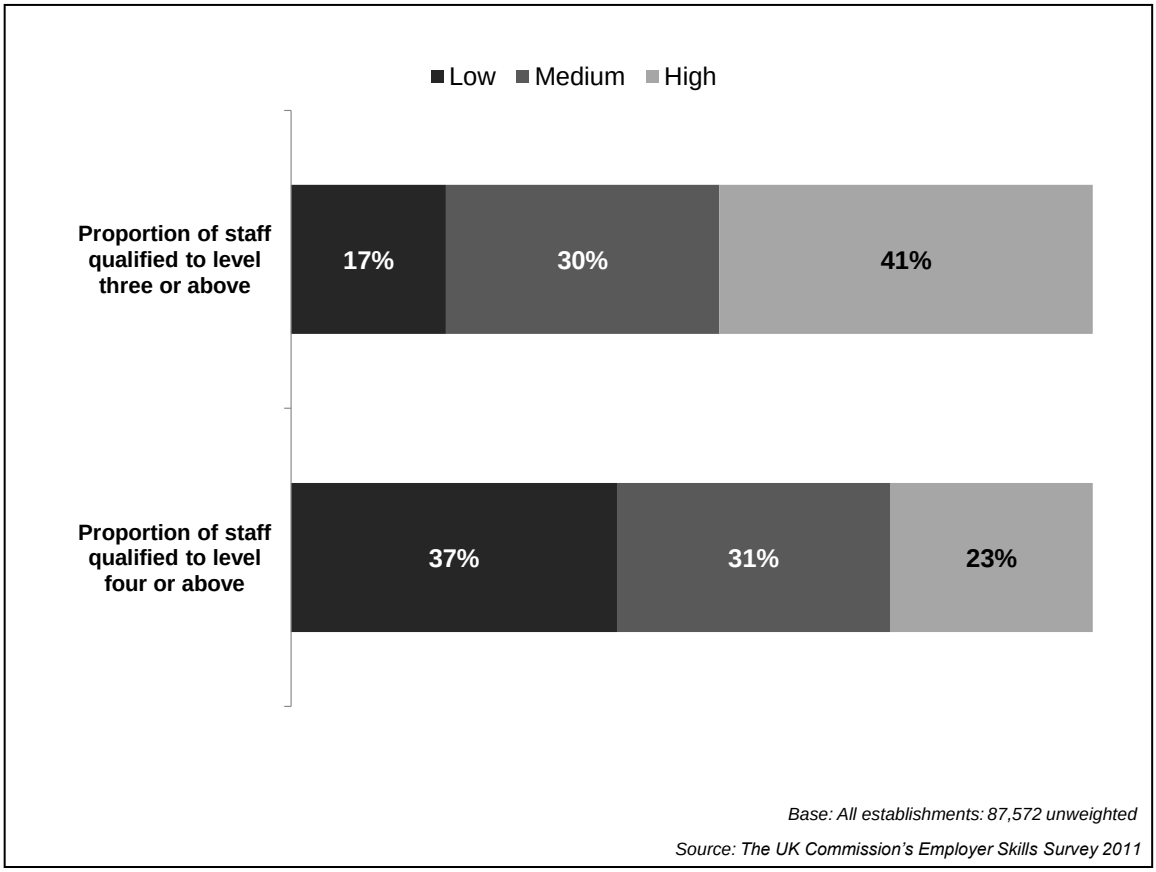
Throughout the report the data will also be analysed, where interesting patterns exist, by the skill level of establishments' workforces and the product market strategy they employ. These two measures have been found to be inter-related in previous employer skills surveys in England (Mason, 2011), and after describing each in turn this section looks at whether descriptive statistics from the 2011 survey indicate that the relationship might still hold true.

2.2.1 Skill levels of the current workforce

Workforce qualification levels can be used as a means of identifying employers with high level skills requirements. Potentially, employers with highly-qualified workforces will have quite different experiences in terms of finding suitably skilled staff, and quite different responses in terms of developing their skills, and we explore this later in the report.

Where analyses are presented through this report based on employers' workforce qualification levels, these are based on the distribution of Level 4 qualifications and group employers into three bands: those where fewer than 20 per cent of the workforce hold a Level 4 qualification ("Low"); those where between 20 and 80 per cent hold a Level 4 qualification ("Medium") and those where more than 80 per cent of the population hold a Level 4 qualification ("High"). Figure 2.6 shows how establishments split by these three groups, and also shows how the proportion of staff with Level 3 qualifications or above are distributed. For example, it shows that in 37 per cent of establishments, fewer than 20 per cent of the workforce hold Level 4, or above, qualifications, falling to 17 per cent of establishments where fewer than 20 per cent of the workforce hold Level 3 qualifications or above.

Figure 2.6 Proportion of staff qualified to Level 3 and Level 4



2.2.2 Business strategies

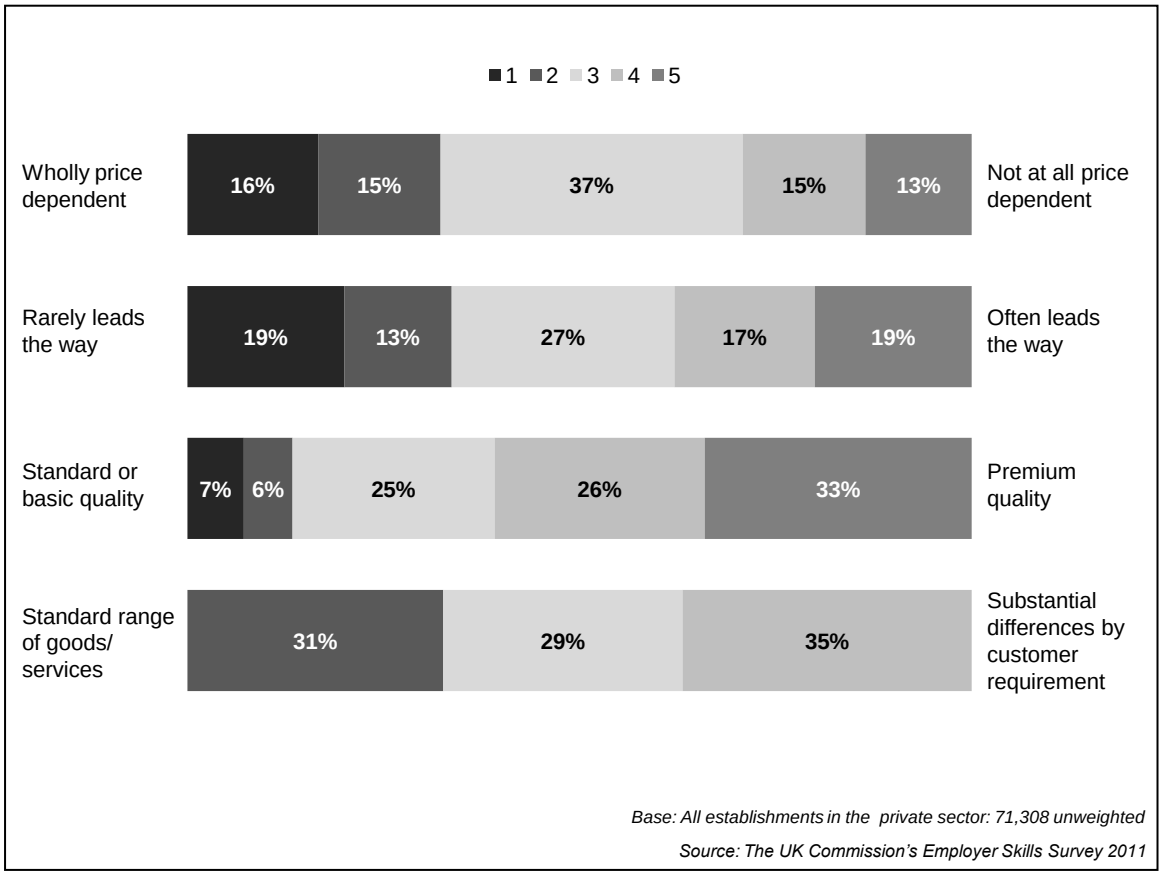
In order to enable further exploration of business strategy, the UK Commission's Employer Skills Survey 2011 included a series of questions designed to locate establishments' product market strategies (PMS). Private sector employers were asked to rate their establishments, compared to others in their industry, in terms of:

- the extent to which success of products/services was dependent on price;

- the extent to which they perceive their establishment to lead the way in their sector in terms of developing new products, services or techniques;
- whether they compete in a market for standard/basic or premium quality products or services;
- and whether they offered a standard range of goods or services, or customised products/services with substantial differences according to customer requirements.

Figure 2.7 shows overall responses to each of these individual "position statements".

Figure 2.7 Product Market Strategy positions



Base: All establishments in the private sector: 71,308 unweighted

Source: The UK Commission's Employer Skills Survey 2011

Responses to these individual product market positions were then aggregated to derive a composite product market "score"[9] on a scale from "very low" to "very high" as illustrated in Table 2.3.

[9] For the "standard range of goods / services – substantial differences by customer requirement" position, which was recorded as a 3 point scale, scores were coded as either 2, 3 or 4 to facilitate the aggregation.

Table 2.3 Overall composite product market scores

Aggregate product market score	Product market description	% of UK establishments	% of UK employment
<7	"Very low"	4	2
8 to 10	"Low"	16	10
11 to 13	"Medium"	34	32
14 to 16	"High"	26	33
17+	"Very high"	10	12

Base: All establishments in the private sector (71,308 unweighted)

Overall establishments were more likely to score a high level product market strategy position than a low one. A third of establishments describe a product market strategy which places them in the middle of their sector (34 per cent), with slightly more (36 per cent) categorised as having a high or very high product strategy.

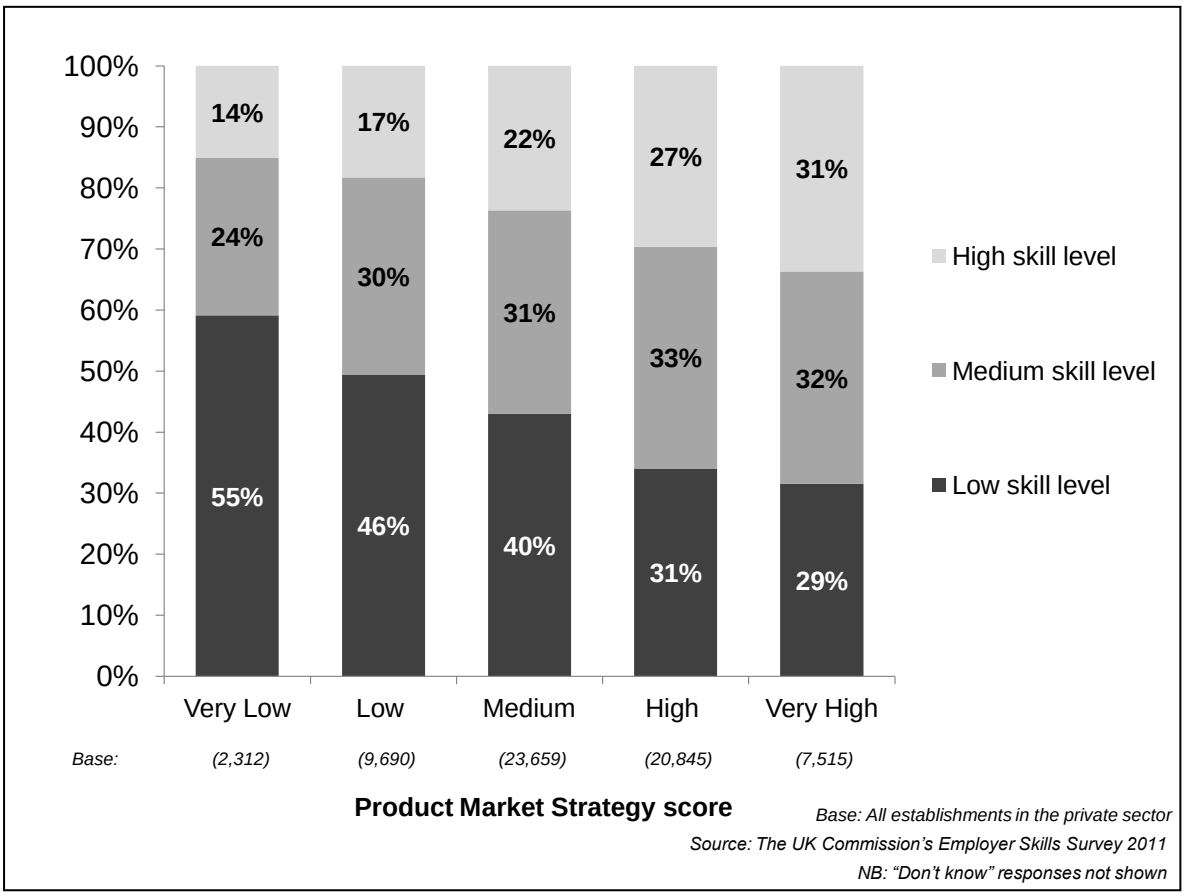
There were limited variations by size and by country. Establishments in Northern Ireland and Wales (25 per cent and 22 per cent respectively) were slightly more likely to have a low or very low strategy than those in England or Scotland (19 per cent and 17 per cent respectively).

Sectors characterised by a higher than average proportion of establishments scoring a high level product market strategy are Education (51 per cent high or very high), Manufacturing (44 per cent) and Health and Social Work (44 per cent). Aside from Manufacturing, establishments in the primary sectors tend to be characterised by a higher than average proportion scoring a *low* product market strategy, with Construction and Mining and Quarrying both on 25 per cent and Agriculture and Electricity, Gas and Water at 24 per cent.

2.2.3 Relationship between PMS and Skills

Establishments who score highly in the product market strategy measure also tend to have a higher level of skills among their staff (defined as the proportion qualified to at least Level 4, see Figure 2.6). Figure 2.8 shows how, as the product market strategy score increases, the proportion of establishments with a highly skilled workforce also increases (and conversely the proportion with low skilled workforce decreases).

Figure 2.8 Skill levels by Product Market Strategy



2.3 Structure of this report

The characteristics described in this chapter will be used to analyse the UK Commission's Employer Skills Survey 2011 data in the following areas:

- The work-readiness of leavers from education: which explores the incidence of recruiting education leavers and how well prepared they are for the working world.
- Recruitment and skill shortages, which looks at employer recruitment activity and measures the extent and causes of labour market shortages, focusing particularly on skill shortages, and identifying the impact that such labour market failure has on establishments.
- Internal skills mismatch, which explores the proficiency levels of establishments' existing workforce, measuring and describing skills gaps in detail. For the first time the survey also looks at the under-use of skills, where establishments report that employees have more skills and qualifications than required for their current job role.

- The extent and nature of employer training and workforce development, including the investment made in training.

3 Work-readiness of those leaving education

Chapter Summary

In the UK around a quarter of establishments (24 per cent) had recruited someone straight from education in the two to three years prior to the survey. A minority of employers found their recruits from education to be poorly prepared for work, and most often put this down to a lack of experience of the working world, life experience or maturity, or to poor attitude, personality or a lack of motivation.

In England, Northern Ireland and Wales most found these recruits to be well prepared for work, with this figure increasing with age / educational level:

- 59 per cent among those recruiting 16 year-old school leavers;
- 64 per cent of those recruiting 17-18 year-olds from school;
- 72 per cent of those recruiting 17-18 year-olds from Further Education;
- 82 per cent of those recruiting from Higher Education establishments.

In Scotland the proportion finding education leavers well prepared followed a similar pattern:

- 68 per cent of those employing Scottish school leavers;
- 82 per cent employing those leaving a Scottish FE college;
- 86 per cent employing those leaving a Scottish university.

3.1 Introduction

Before considering recruitment activity and skills levels more broadly (in Chapters Four and Five), this chapter looks at the recruitment and skill levels of education leavers. More specifically, it looks at the proportion of employers that have recruited anybody into their first job on leaving education in the past two to three years, before then exploring employers' perceptions of these recruits in terms of their readiness for work and their skills.

Employers in England, Wales and Northern Ireland were asked about four groups of leavers: 16 year-olds from school, 17-18 year-old school leavers, 17-18 year-old college leavers, and those entering employment straight from Higher Education.

In Scotland, employers were asked a different variation on these questions, focused on leavers from *Scottish* institutions specifically. This was to ensure consistency with how the measures had been captured in previous iterations of the Scottish Employer Skills Survey.

Because of this, aside from analysis relating to the overall incidence of recruitment of education leavers (asked in a consistent manner across all countries), the findings for employers in Scotland are reported separately.

3.2 Incidence of recruitment of school, college and HE leavers

In the last two to three years, close to a quarter of establishments across the UK (24 per cent) had recruited at least one education leaver to their first job on leaving education.[10] This was fairly consistent by nation at 24 per cent in each of England and Wales, 25 per cent Scotland and 27 per cent in Northern Ireland.

More specifically, across England, Northern Ireland and Wales, between seven and 10 per cent of establishments had taken on education leavers from each of the four groups (see Table 3.1); there was no significant difference in the propensity to recruit from each group by nation.

Table 3.1 Incidence of recruitment in the last 2-3 years of education leavers into their first jobs (England, Northern Ireland and Wales)

	Unwtd base		Any education leavers	16 year-olds from school	17-18 year-olds from school	17-18 year-olds from FE College	From University / other HE institution
Overall	*85,069*	%	24	7	9	8	10
Country							
England	*75,053*	%	24	7	9	8	10
Northern Ireland	*4,004*	%	27	6	11	8	12
Wales	*6,012*	%	24	8	8	10	10

Base: All establishments in England, Northern Ireland and Wales

Differences by nation are not statistically significant.

[10] It should be noted that this is a different timeframe to that asked about in the 2009 National Employer Skills Survey for England (which related to the last 12 months).

In Scotland, establishments were more likely to have recruited directly from a Scottish secondary school (14 per cent) than from either a Scottish FE College (eight per cent) or a Scottish University (nine per cent, see Table 3.2). This is the reverse of the pattern seen in England, Northern Ireland and Wales, though the difference may at least in part result from the fact that in Scotland the question related solely to Scottish educational establishments specifically (though graduates are more likely than other groups to be recruited from a wider pool).

Table 3.2 Incidence of recruitment in the last 2-3 years of education leavers into their first jobs (Scotland only)

	Unwtd base		Any education leavers	From Scottish secondary school	From Scottish FE college	From Scottish University
Country						
Scotland	*2,503*	%	25	14	8	9

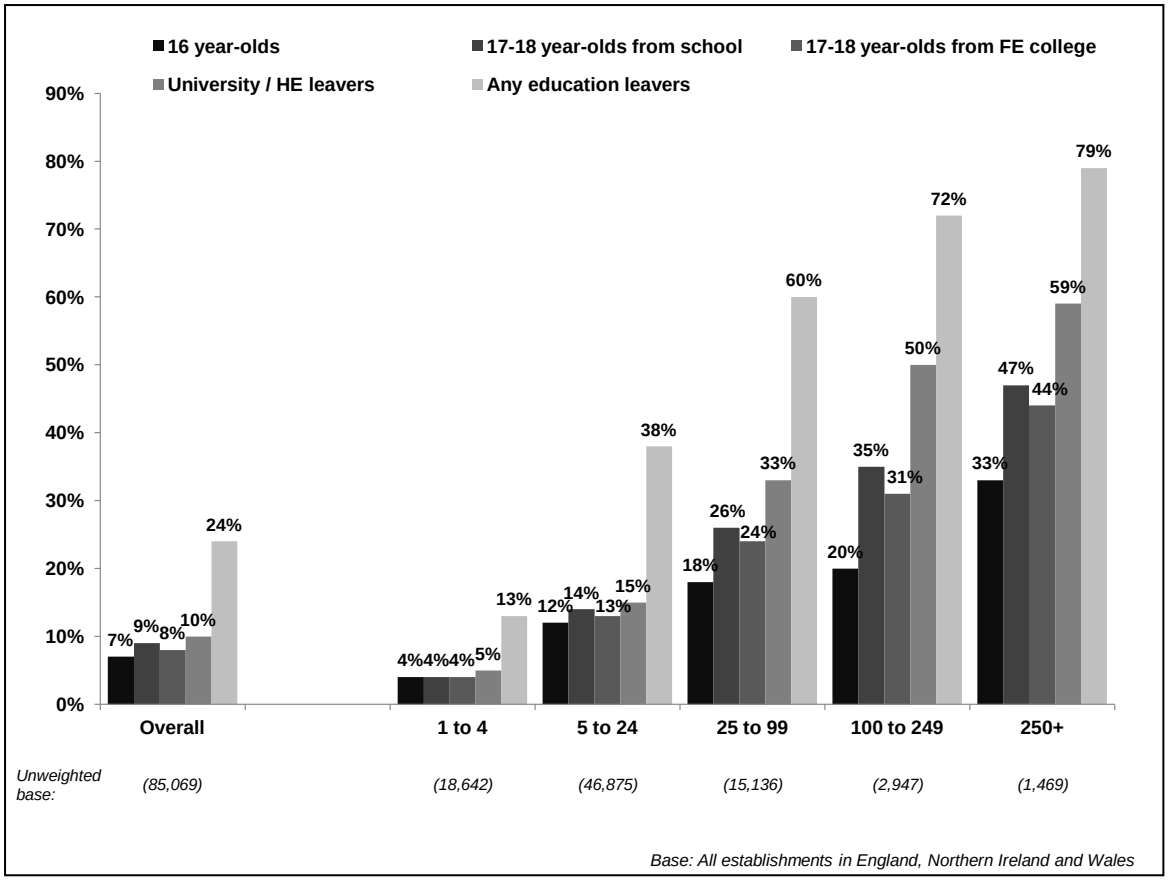
Base: All establishments in Scotland

The larger the establishment, the more likely they are to have taken on each type of recruit from education. In part, this is simply a product of larger establishments being more likely to recruit *per se* (current recruitment activity is discussed in Chapter Four).

In England, Northern Ireland and Wales, around four-in-five establishments with 250+ staff had recruited any education leavers in the last two to three years (79 per cent). This ranges from a third of the largest employers taking on 16 year-old school leavers (33 per cent), up to three-in-five (59 per cent) taking on graduates fresh from University.

In contrast, among employers with fewer than five staff, just 13 per cent had recruited people directly from education, with four to five per cent taking on individuals from each of the four groups of education leavers (see Figure 3.1).

Figure 3.1 Incidence of recruitment in the last 2-3 years of education leavers into their first jobs by size of establishment (England, Northern Ireland and Wales).



In Scotland, the likelihood of having taken on education leavers shows a similar pattern, rising from one-in-nine employers with 1-4 staff (12 per cent) up to over four-in-five among establishments with 250 or more staff (84 per cent, see Table 3.3).

Table 3.3 Incidence of recruitment in the last 2-3 years of education leavers into their first jobs by size of establishment (Scotland only)

	Unwtd base		Any education leavers	From Scottish secondary school	From Scottish FE college	From Scottish University
All Scotland	*2,503*	%	25	14	8	9
Size						
1 to 4 staff	*313*	%	12	6	3	3
5 to 24 staff	*895*	%	36	21	12	13
25 to 99 staff	*815*	%	59	35	27	31
100 to 249 staff	*323*	%	73	41	37	53
250+ staff	*157*	%	84	57	56	56

Base: All establishments in Scotland

The likelihood of having recruited directly from education varies considerably by sector. (A description of the types of establishment that fall into each of the sectors can be found in Appendix D). Across England, Northern Ireland and Wales, employers in Education were most likely to have hired straight from education in the last two to three years (45 per cent, see Table 3.4), and the proportion was higher than average in the following sectors: Hotels and Restaurants (33 per cent), Health and Social Work (29 per cent) and Community, Social and Personal Services (28 per cent; this sector includes, among other things, libraries, museums, sporting facilities and personal services such as hairdressing and cleaning). The sectors least likely to have recruited from education in the last two to three years were Agriculture, Mining and Quarrying and Transport and Communications (each 18 per cent).

By leaver group, establishments in England, Northern Ireland and Wales operating in the Education sector were most likely to have taken on graduates direct from Higher Education (34 per cent). In comparison, those in Construction and Agriculture were the least likely to have recruited directly from Higher Education (three per cent for both).

Those in Hotels and Restaurants had the highest levels of recruitment of 17-18 year-olds, whether straight from school (17 per cent) or directly from an FE college (15 per cent).

Establishments in the Wholesale and Retail sector were amongst the most likely to have recruited staff straight from school (11 per cent had recruited 16 year-olds from school, and 12 per cent 17-18 year-olds straight from school).

Table 3.4 Incidence of recruitment of education leavers by sector in the last 2-3 years (in England, Northern Ireland and Wales)

	Unwtd base		Any education leavers	16 year-olds from school	17-18 year-olds from school	17-18 year-olds from FE College	From University / other HE institution
Overall	*85,069*	%	24	7	9	8	10
Sector							
Agriculture	*850*	%	18	7	6	5	3
Mining and Quarrying	*164*	%	18	9	11	3	9
Manufacturing	*7,526*	%	23	8	9	7	7
Electricity, Gas, Water	*1,344*	%	21	6	7	8	8
Construction	*6,423*	%	21	10	6	7	3
Wholesale and Retail	*15,022*	%	26	11	12	11	9
Hotels and Restaurants	*8,251*	%	33	12	17	15	13
Transport and Communications	*7,660*	%	18	4	5	5	9
Financial Services	*1,790*	%	25	4	8	7	15
Business Services	*14,142*	%	19	3	5	5	11
Public Administration	*1,480*	%	24	4	9	9	17
Education	*5,275*	%	45	6	10	12	34
Health and Social Work	*7,953*	%	29	5	10	12	14
Community, Social and Personal Service activities	*7,189*	%	28	11	10	10	10

Base: All establishments in England, Northern Ireland and Wales.

Similar patterns were found in Scotland, where employers in Education were the most likely to have taken on education leavers (40 per cent), followed by those operating in the Hotels and Restaurants sector (32 per cent).

In Chapter 2 it was seen that establishments with a higher Product Market Strategy (PMS) rating[11] were more likely to have a high proportion of staff qualified to Level 4 or above. It might be expected then that they would be more likely to recruit from groups that have these qualifications, and indeed in England, Northern Ireland and Wales establishments scoring a higher PMS rating were more likely to take on education leavers from further and higher education. The incidence increases for 17-18 year-old school leavers from five per cent of establishments with a "Very Low" PMS rating to 10 per cent with a "Very High" rating; for 17-18 year-old FE College leavers from five per cent with a "Very Low" PMS rating to 11 per cent with a "Very High" rating; and for University leavers from five per cent among those with a "Very Low" rating to 14 per cent of those with a "Very High" rating. This pattern is not seen however for 16 year-old school leavers, with the incidence being eight or nine per cent for all Product Market Strategy groups.

Establishments in England, Northern Ireland and Wales where staff were highly qualified (i.e. over 80 per cent of staff had Level 4 qualifications or above) were more likely to recruit from universities (13 per cent had) than they were from school or college (four per cent for all groups).

3.3 Perceived work-readiness of education leavers

In order to gauge the perceived work-readiness of recruits that had been taken on in the last two to three years straight from education, employers who had taken any on were asked whether they considered these recruits to be very well prepared, well prepared, poorly prepared or very poorly prepared for work.

Across all countries, employers were more likely to feel that recruits from education were well prepared for work than poorly prepared, and the perceived level of work-readiness increased with the amount of time recruits had spent in education. Although this was not asked about in previous skills surveys in Northern Ireland and Wales, the 2011 figures are similar to those seen previously in England and Scotland.

In England, Northern Ireland and Wales, almost three-in-five recruiting 16 year-old school leavers found them to be well prepared (59 per cent), rising to 64 per cent of those recruiting 17-18 year-olds from school, 72 per cent of those recruiting from Further Education and 82 per cent of those recruiting from Higher Education establishments.

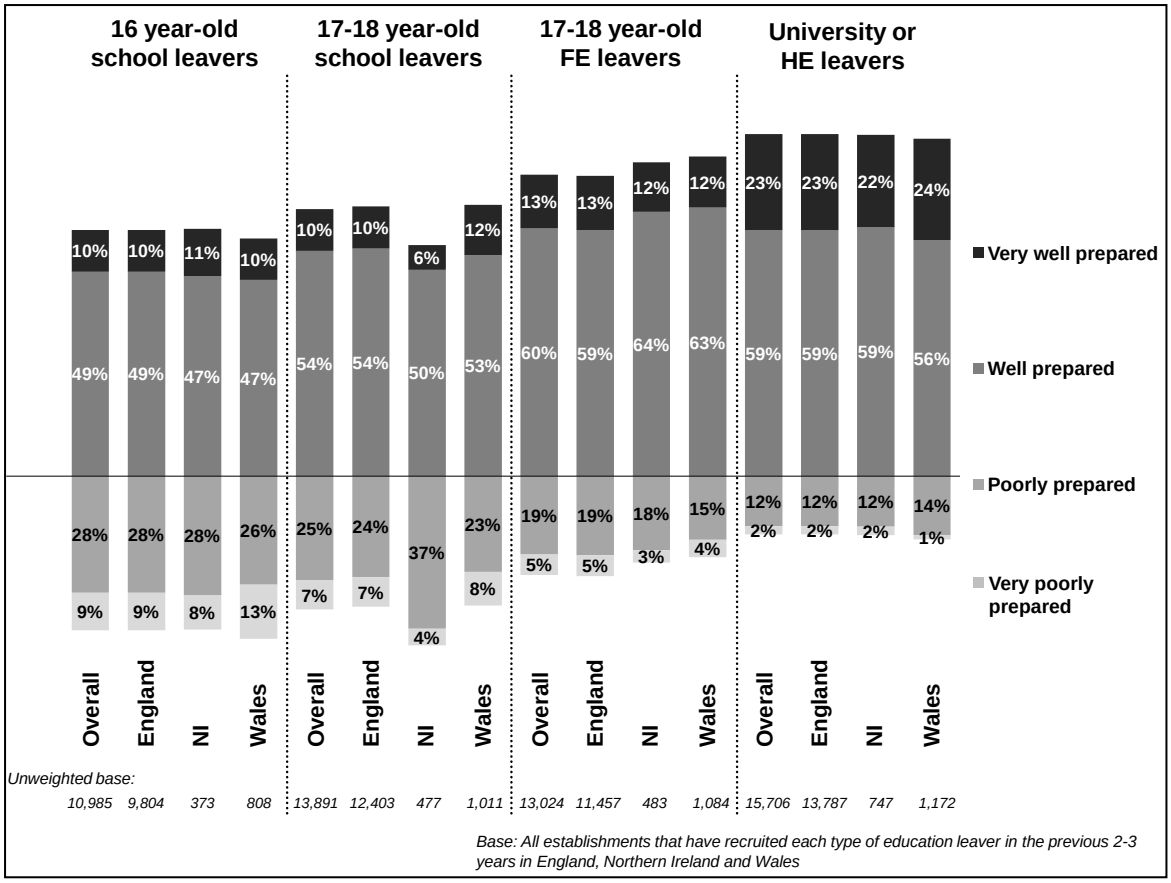
[11] "Product Market Strategy" is a measure calculated by combining responses to questions H1a-d; see section 2.2.2.

There are a number of possible reasons why recruits from Higher Education may be seen as better prepared for work than younger recruits: it could be because of the additional time graduates have spent in education or because employers may invest more resource in graduate recruitment and are therefore likely to find more suitable individuals. It may also simply be because graduates are older and therefore more mature.

There are also various factors that could explain why 17-18 year-old FE recruits are seen as being more work-ready than contemporaries recruited from schools. These include college students being more likely to be studying vocational courses, and college students also being more likely to combine work and learning and therefore to have amassed more work-relevant experience.

Results differ relatively little across England, Northern Ireland and Wales, with all generally showing the trend of being more positive as the level of education increases; however, employers in Northern Ireland showed a slightly different pattern with 17-18 year-old school leavers no more likely to be regarded as well prepared (56 per cent) than younger recruits from school (59 per cent, see Figure 3.2).

Figure 3.2 Work-readiness of those recruited straight from education in England, Northern Ireland and Wales



Although results are not directly comparable, in general, employers in Scotland reported higher levels of work-readiness among school and college leavers than elsewhere in the UK. In Scotland, 68 per cent of employers who hired Scottish secondary school leavers felt they were well prepared for work, and 82 per cent of those who recruited Scottish FE college leavers were of this opinion. Similarly high levels of employers felt that Scottish University leavers were well prepared for work (86 per cent). This mirrors the trend witnessed in previous skills surveys in Scotland.

Across England, Northern Ireland and Wales, there was a trend that the smaller the employer, the more likely they were to believe that the education leavers they had recruited in the last two to three years were poorly prepared for work.

This is demonstrated in Table 3.5, which shows the proportion of employers in each sizeband regarding recruits straight from education in the last 12 months as poorly prepared for work.

Table 3.5 Proportion of employers recruiting education leavers who felt they were poorly prepared for work, by size of establishment (England, Northern Ireland and Wales)

	16 year-olds from school		17-18 year-olds from school		17-18 year-olds from FE College		From University / other HE institution	
	Unwtd base	%	*Unwtd base*	%	*Unwtd base*	%	*Unwtd base*	%
Overall	*10,985*	37	*13,891*	32	*13,024*	24	*15,706*	14
Size								
1 to 4	*892*	42	*816*	44	*862*	34	*915*	21
5 to 24	*5,821*	35	*6,815*	28	*6,510*	21	*7,395*	13
25 to 99	*3,045*	34	*4,380*	26	*3,940*	18	*5,032*	8
100 to 249	*684*	31	*1,113*	21	*1,007*	15	*1,483*	7
250+	*543*	28	*767*	21	*705*	11	*881*	6

Base: All establishments that have recruited each type of education leaver in the previous 2-3 years in England, Northern Ireland and Wales combined

In Scotland very few employers felt that graduates from Scottish universities were poorly prepared (eight per cent overall), however this belief was slightly more common from those with 5-24 employees (13 per cent). In relation to recruits from Scottish FE colleges, 14 per cent of employers felt they were poorly prepared, though differences by size of company are very slight. Among those in Scotland who took on Scottish secondary school leavers, 29 per cent reported that their recruits had been poorly prepared for work, though as with graduates, this was most likely to be the case for employers with 5-24 employees (34 per cent).

Previous skills surveys in Scotland have also highlighted this difference in the preparedness for work of Scottish school leavers when compared with both Scottish college leavers and Scottish university graduates. This finding is true across all sizebands.

In addition, the same pattern of perceived preparedness of education leavers by size of establishment was seen in Scotland as was in the other UK nations. The larger establishments were less likely to say that the education leavers they had recruited were poorly prepared than those in smaller establishments (see Table 3.6).

Table 3.6 Proportion of employers recruiting education leavers who felt they were poorly prepared for work, by size of establishment (Scotland)

	Scottish Secondary school		Scottish FE college		Scottish University	
	Unwtd base	%	*Unwtd base*	%	*Unwtd base*	%
Overall	*743*	29	*552*	14	*636*	8
Size						
1 to 4	*27*	*24*	*11*	**	*7*	**
5 to 24	*199*	34	*105*	14	*114*	13
25 to 99	*289*	29	*229*	13	*259*	8
100 to 249	*127*	26	*120*	13	*168*	5
250+	*101*	14	*87*	17	*88*	1

Base: All establishments that have recruited each type of education leaver in the previous 2-3 years in Scotland

*'**' Figure not shown because of a low base (fewer than 25 respondents)*

Figures in italics: base size <50, treat figures with caution

The finding that employers tend to regard recruits as better prepared for work the higher the educational level attained is fairly consistent across sectors, although some sectoral differences emerge (the following results are based on employers in England, Northern Ireland and Wales):

- Education establishments were particularly likely to report that recruits from education were well prepared (rising from 61 per cent of 16 year-old school leavers to 92 per cent of university / Higher Education leavers);
- School leavers aged 16 were more likely than average to be seen as well prepared for work by Agriculture employers (64 per cent), in comparison with Manufacturing (52 per cent), Financial Services (50 per cent) and Public Administration (49 per cent);
- While those leavers aged 17-18 from school were viewed as well prepared by employers in the Wholesale and Retail (69 per cent), Health and Social Work (69 per cent) and Education (68 per cent) sectors. In contrast, establishments in Agriculture were less likely to say they were well prepared (49 per cent);
- Establishments in Construction and Transport and Communication reported lower proportions of their 17-18 year-old college leavers as well prepared for work (60 and 63 per cent respectively) than other sectors;

- Manufacturing and Construction reported lower levels than other sectors of well prepared recruits from Higher Education (75 and 73 per cent).

3.4 Skills and attributes lacking among education leavers

Those employers in England, Northern Ireland and Wales who reported that the education leavers they had recruited were poorly-prepared for work were asked to indicate what skills or attributes they were lacking.

The key findings are as follows (see Table 3.7):

- A lack of working world or life experience or maturity was most commonly cited among all groups as the reason they were not well prepared and was most common in younger recruits (23 per cent of all establishments recruiting any 16 year-olds from school). Interestingly, this was more likely to be cited in relation to 17-18 year-old school leavers than for FE college leavers of the same age (18 per cent compared with 13 per cent).
- Poor attitude, personality or a lack of motivation were commonly reported by employers recruiting 16-18 year-olds (and this is an issue for approaching one-in-five of these employers). This was deemed to be slightly less of an issue for those employers hiring graduates, where just four per cent taking on graduates felt they had a poor attitude, personality or a lack of motivation.
- Around one in 10 establishments taking on any 16-18 year-old school and college leavers felt they lacked specific skills or competencies, such as technical or job-specific skills, though this falls to six per cent in relation to recruits from Higher Education.
- Among each of the groups, only a very small proportion of employers cited a lack of literacy / numeracy skills (i.e. basic skills).

This mirrors the patterns seen in previous skills surveys in England.

England, Northern Ireland and Wales all saw broadly similar patterns of attributes lacked by their education leavers. However, there were some differences in Northern Ireland for 17-18 year-old school leavers, where employers were more likely to cite attitude, personality or motivation, or a lack of skills as attributes missing, whereas in the other nations, employers were more likely to cite a lack of working world experience.

Table 3.7 Skills and attributes lacking among recruits taken on direct from education in the last 2-3 years (spontaneous) (England, Northern Ireland and Wales)

Row percentages	*Base (unwtd)*	Lack of working world, life experience or maturity	Poor attitude, personality or lack of motivation	Lack of required skills or competencies	Lack of common sense	Literacy / numeracy skills	Poor education	Other
England/NI/Wales Total								
16 year-old school leavers	*10,985*	23	18	10	5	4	3	*
17-18 year-old school leavers	*13,891*	18	15	10	4	3	2	*
17-18 year-old FE college leavers	*13,024*	13	12	8	3	2	2	*
University / HE leavers	*15,706*	8	4	6	1	1	1	*
England								
16 year-old school leavers	*9,804*	23	18	9	5	4	3	*
17-18 year-old school leavers	*12,403*	19	15	10	4	3	2	*
17-18 year-old FE college leavers	*11,457*	13	12	8	3	2	2	*
University / HE leavers	*13,787*	8	5	6	1	1	1	*
Northern Ireland								
16 year-old school leavers	*373*	21	18	11	5	2	1	-
17-18 year-old school leavers	*477*	11	20	17	3	2	1	-
17-18 year-old FE college leavers	*483*	13	8	7	3	*	1	-
University / HE leavers	*747*	9	3	6	1	*	*	*
Wales								
16 year-old school leavers	*808*	21	19	9	6	3	6	*
17-18 year-old school leavers	*1,011*	18	14	8	4	4	4	*
17-18 year-old FE college leavers	*1,084*	10	9	8	1	3	1	*
University / HE leavers	*1,172*	7	4	7	3	2	1	*

Base: All establishments that have recruited each type of education leaver in previous 2-3 years in England, Northern Ireland and Wales

'*' denotes a figure greater than 0 per cent but less than 0.5 per cent

In Scotland, as in the rest of the UK, the main attribute felt to be lacking amongst Scottish school leavers and university leavers was a lack of working world or life experience, reported by 20 per cent of all those recruiting leavers from Scottish schools, and six per cent of those recruiting graduates from Scottish universities. In comparison, however, the most commonly mentioned attribute that was seen to be lacking among recruits from Scottish FE colleges was the lack of the required skills or competencies, which was mentioned by nine per cent of all those recruiting from this group.

Poor attitude was quite often experienced by establishments recruiting leavers from Scottish secondary schools (12 per cent) but was infrequently mentioned in relation to FE or HE leavers (two per cent and one per cent respectively, see Table 3.8).

Table 3.8 Skills and attributes lacking among young recruits taken on from educational institutions in Scotland in the last 2-3 years (spontaneous) (Scotland only)

	Scottish school leavers	Scottish FE college leavers	Scottish University leavers
Unweighted base:	*743*	*552*	*636*
	%	%	%
Lack of working world, life experience or maturity (including general knowledge)	20	5	6
Poor attitude, personality or lack of motivation (e.g. poor work ethic, punctuality, appearance, manners)	12	2	1
Lack of required skills or competencies (e.g. technical or job specific skills, IT skills, problem solving skills, team working skills)	6	9	3
Lack of common sense	4	1	2
Poor education	3	2	*
Literacy / numeracy skills	1	*	*
Other	1	-	-

Base: Establishments in Scotland that have recruited each type of education leaver in previous 2-3 years

'' denotes a figure greater than 0 per cent but less than 0.5 per cent; '-' denotes zero*

3.5 Conclusion

For those employers who recruit education leavers, the majority find them well prepared for work. Only a small number of employers find their recruits from education to be poorly prepared for work.

Across the UK around a quarter (24 per cent) of employers had recruited someone straight from education in the 2 to 3 years prior to the survey. Employers' views of the preparedness of such recruits increases both with age and time spent in education. So in England, Northern Ireland and Wales 59 per cent of 16 year-old school leavers were found to be well prepared, rising to 64 per cent of 17-18 year-old school leavers, 73 per cent of Further Education leavers and 82 per cent of Higher Education leavers. The one exception is for 17-18 year-old school leavers in Northern Ireland who were regarded as no more likely to be better prepared compared to 16 year-old school leavers. In Scotland, although the results are not comparable, higher levels of work-readiness among school and college leavers were seen compared to elsewhere in the UK, ranging from 68 per cent for Scottish secondary school leavers; through to 82 per cent of Scottish FE college leavers and 86 per cent of Scottish University leavers.

There may be several reasons why employers see recruits from Higher Education as better prepared for work than younger recruits. It may be as a result of the additional time graduates have spent in education or it may be related to employers investing more resource in graduate recruitment, so that they are more likely to find more suitable individuals, or simply because graduates are older and therefore more experienced and mature generally.

The employer characteristic that most determines satisfaction with work-readiness is size of employer. The smaller the employer the more likely they are to find education leavers less well prepared. This pattern is consistent across all school, college and higher education leavers. In England, Northern Ireland and Wales, in a micro-business (1-4 employees) 21 per cent of University leavers were found to be poorly prepared compared to 6 per cent of University leavers in a large business (250 or more employees). A similar pattern was also observed in Scotland with perceived levels of preparedness decreasing with employer size.

There is one further key finding on work-readiness. In England, Wales and Northern Ireland, there is a difference between employer views on 17-18 year-old college leavers and 17-18 year-old school leavers, with the former found to be better prepared. There could be a number of reasons for this, including college students being more likely to be studying vocational courses. College students may also be more likely to combine work and learning than their counterparts at school, and therefore have more work experience, which appeals to employers.

For the small minority of employers who find education leavers poorly prepared the main reason is a lack of working world experience, life experience or maturity. Again this was most common for younger recruits (23 per cent of those who recruited 16 year-olds and 13 per cent of Further Education leavers in England, Northern Ireland and Wales). A similar pattern was also observed in Scotland. This raises questions about how to improve the opportunities for pupils to gain experience in a workplace to help prepare them for their first job. Following this, concerns about attitudes and motivation were also important, whereas concerns about education or literacy and numeracy skills are cited by a very small number of employers, illustrating that they are seen to be less of a problem by employers.

4 Employers, recruitment and skill shortages

Chapter Summary

At the time of interview, 12 per cent of establishments had a vacancy (equating to 636,000 vacancies). In particular, there is comparatively high demand for Associate Professional roles.

The labour market is largely able to meet the requirements of most establishments. Four per cent had a vacancy they considered to be "hard-to-fill". This equates to 144,000 hard-to-fill vacancies, 23 per cent of all vacancies.

Three per cent of establishments reported having vacancies at the time of the survey that they had difficulties filling due to a lack of skills, qualifications or experience in applicants for the role (a "skill-shortage vacancy"). This equates to 103,000 skill-shortage vacancies (72 per cent of all hard-to-fill vacancies, 16 per cent of all vacancies). It is amongst Skilled Trades occupations where employers experience the greatest difficulties in meeting their demand for skills from the available labour market, a finding consistent with previous surveys.

While skill-shortage vacancies may not be common, where they do exist their impact can be significant, in particular the impact that they have on the workload of existing staff risking knock-on effects on morale and retention. The majority of establishments whose hard-to-fill vacancies were all a result of skill-shortages cited this as an issue (85 per cent). More direct impacts on performance were also commonly cited (47 per cent say they struggle to meet customer service objectives, 45 per cent have had to delay developing new products or services and 44 per cent have lost business to competitors).

4.1 Introduction

The UK entered a recession in September 2008 that lasted until the final quarter of 2009. Since this time economic growth has been slow[12] and indeed at the time of writing this report, the economy has re-entered recession.

[12] GDP figures for the period of the UK Commission's Employer Skills Survey fieldwork were 0.4 per cent and 0.1 per cent in the first two quarters of 2011.

Employers are therefore operating in a difficult and uncertain climate. Against this backdrop, employers might be expected to be cautious about taking on new staff, and current employees may be dissuaded from changing jobs at the risk of giving up relative job security.

The UK Commission's Employer Skills Survey 2011 provides us with a detailed understanding of levels of employer demand for new staff in Spring / Summer 2011 and the ability of the market to meet such demand. This sets the context for then exploring imbalances and mismatches in the labour market that result from a lack of skills.

Following an analysis of vacancies and hard-to-fill vacancies, this chapter will focus on skill-shortage vacancies, those vacancies that employers find difficult to fill specifically as a result of a lack of skills in the labour market. The chapter will examine their incidence, volume and profile, before exploring the specific skills that employers find lacking, the impact of skill-shortage vacancies and actions employers take to overcome them.

It should be noted that, whereas the previous chapter was a more general exploration of recruitment and perceptions of education leavers *over a 2-3 year period*, in this chapter the focus is on the situation *at the time of interview*.

4.2 What is the level of demand for new staff?

One-in-eight establishments (12 per cent) had a current vacancy at the time of the UK Commission's Employer Skills Survey fieldwork. This is comparable with the incidence of vacancies reported in previous skills surveys conducted in the individual countries of the UK[13]; these saw a post-recession fall in vacancy levels between 2007/8 and 2009/10. That the figures have remained similar through to 2011 suggests that the recruitment market has not yet seen a recovery from this downturn.

Those who had vacancies were more likely to report that they had decreased in size over the past 12 months than increased (26 per cent compared to 22 per cent; 51 per cent are "about the same"), suggesting that vacancies are more likely to replace staff who have moved on rather than to expand the size of the establishment.

In total, there were around 636,000 vacancies across the UK at the time of the survey (equivalent to 2.3 per cent of total employment). Amongst those with vacancies, this equates to an average of 2.3 vacancies per establishment.

[13] With the exception of Wales although this was conducted much earlier in 2005

Establishments in Northern Ireland were slightly less likely than those in the other three nations to report having a current vacancy, but the vacancy density (vacancies as a proportion of all employment) is higher (see Table 4.1).

There is substantial variation in the number of vacancies by size of establishment and by sector. Whilst the *incidence* of vacancies increases with the size of establishment, the *density* of vacancies is larger among the smaller establishments.

Establishments in Public Administration and in Education were most likely to have a vacancy (22 per cent); the density of vacancies was highest in Mining and Quarrying (7.2 per cent of the total workforce), Community, Social and Personal Service Activities (3.7 per cent; this sector includes, among other things, libraries, museums, sporting facilities and personal services such as hairdressing and cleaning), Hotels and Restaurants (3.3 per cent) and Business Services (3.0 per cent; this sector includes, among other things, real estate activities, consultancy, advertising and employment agencies). A description of the types of establishment that fall into each of the sectors can be found in Appendix D.

Table 4.1 Incidence and density of vacancies

		% of establishments with a vacancy (incidence)	Number of vacancies	Vacancies as a % of employment (density)	Average (mean) vacancies per establishment with vacancies	
	Unwtd base	%	Rounded to nearest 100	%	*Unwtd base*	
UK	*87,572*	12	635,900	2.3	*17,166*	2.3
Country						
England	*75,053*	12	545,100	2.3	*14,813*	2.3
Northern Ireland	*4,004*	9	19,600	2.5	*524*	3.4
Scotland	*2,503*	11	45,700	1.9	*729*	2.3
Wales	*6,012*	11	25,500	2.2	*1,100*	2.3
Size						
1-4	*18,955*	7	155,100	5.3	*1,462*	1.5
5-24	*47,770*	16	180,400	2.8	*7,869*	1.8
25-99	*15,951*	32	139,400	2.1	*5,213*	2.9
100-249	*3,270*	52	72,600	1.8	*1,698*	5.4
250+	*1,626*	58	88,500	1.2	*924*	13.2
Sector						
Agriculture	*939*	7	9,700	2.6	*87*	1.4
Mining and Quarrying	*188*	19	4,200	7.2	*36*	10.8
Manufacturing	*7,704*	13	39,100	1.6	*1,427*	2.3
Electricity, Gas and Water	*1,426*	13	5,200	1.9	*209*	3.7
Construction	*6,654*	6	28,300	2.0	*579*	2.0
Wholesale and Retail	*15,340*	11	91,300	2.0	*2,573*	1.9
Hotels and Restaurants	*8,471*	15	58,100	3.3	*2,081*	2.3
Transport and Communications	*7,885*	12	61,900	2.8	*1,407*	2.5
Financial Services	*1,881*	16	23,900	2.3	*333*	2.8
Business Services	*14,488*	11	138,700	3.0	*2,961*	2.3
Public Administration	*1,617*	22	29,100	1.9	*405*	5.0
Education	*5,439*	22	34,700	1.4	*1,487*	2.4
Health and Social Work	*8,161*	18	65,300	1.9	*1,995*	2.6
Community, Social & Personal Service Activities	*7,379*	14	46,300	3.7	*1,586*	2.0

Base: Columns 1 to 3 all establishments; Column 4: all establishments with vacancies

Percentages in Column 3 are shown as a proportion of all employment.

Establishments that are leading the way in their industries in terms of innovation, quality and customisation are more active in the recruitment market: the likelihood of establishments having a vacancy increases with their Product Market Strategy (PMS) rating, from six per cent among those with a "Very Low" PMS rating to 15 per cent among those with a "Very High" PMS rating. Establishments with vacancies in the "Very Low" group also had fewer vacancies per establishment, with a mean of 1.6 vacancies compared to the UK average of 2.3.

As well as variation by size and sector and other characteristics of establishment, the survey also identifies differences by occupational groups and jobs. For a definition of the occupational groups referred to, see Appendix E.

There is a particularly high level of demand for Associate Professional roles covering jobs like IT technicians and investment analysts: this is the occupation with the largest volume of vacancies both in overall terms (accounting for 16 per cent of all vacancies) and in relation to the size of the existing workforce (with 5.7 vacancies for every 100 people working as an Associate Professional); it is also the occupation for which employers were most likely to report vacancies (19 per cent of employers with vacancies do so). Demand for Associate Professionals was particularly high in the Community, Social and Personal Service Activities sector (12.7 vacancies for every 100 employment) and the Hotels and Restaurants (9.3 per 100 employment) and Business Services sectors (9.2 per 100). Conversely, in relation to Managers, there are just 0.4 vacancies for every 100 people already working in these roles (see Table 4.2).

Table 4.2 Vacancies and density by occupation

	% of establishments with vacancies who have a vacancy in this occupation	Number of vacancies		Vacancy density
	Base: 17,166	*Base: 87,572*	*Base for density*	%
Managers	7	23,600	*999*	0.4
Professionals	14	85,400	*3,032*	2.7
Associate Professionals	19	104,300	*3,186*	5.7
Administrative and Clerical	16	63,100	*2,661*	1.8
Skilled Trades	13	53,000	*2,222*	2.8
Caring, Leisure and Other services	12	72,200	*2,560*	3.1
Sales and Customer Service	14	91,500	*2,291*	2.6
Machine Operatives	7	39,300	*1,134*	2.0
Elementary occupations	15	88,000	*2,854*	2.2
TOTAL		**635,900**		**2.3**

Base: Column 1: all establishments with vacancies; Column 2: all establishments; Column 3: all establishments with vacancies in each occupation.
Column 4 percentages are based on all employment, rather than all establishments; figures therefore show the number of vacancies as a proportion of all employment.
Note: Vacancies are rounded to the nearest 100.

Other pockets of demand for specific occupations can be seen in the Mining and Quarrying sector, where there are 14.1 vacancies for every 100 existing Machine Operatives, and in the Construction and Electricity, Gas and Water sectors which show a high demand for Sales and Customer Service staff (13.4 and 10.8 vacancies per 100 employment respectively). These high ratios could show that there is high staff turnover in these occupations for these sectors, or it could be that there is a shortfall of available applicants in these areas. The following analysis of hard-to-fill vacancies explores these questions further.

4.3 The ability of the market to meet employer demand for new staff

For the vast majority of employers, the labour market is able to meet their requirements. Four per cent of all establishments reported having a vacancy that was proving hard-to-fill. Across the UK there were around 144,000 vacancies that were hard-to-fill at the time of the interview, representing just less than a quarter of all vacancies (23 per cent).

The incidence of establishments with hard-to-fill vacancies is relatively similar across each nation. However, the proportion of all vacancies which are deemed hard-to-fill varies by nation (see Table 4.3); in Wales one-third of vacancies are hard-to-fill and the figure is also relatively high in Northern Ireland at 28 per cent. In Northern Ireland these vacancies are concentrated into fewer establishments, with a mean of 2.8 hard-to-fill vacancies per establishment compared to a UK-wide mean of 1.6.

Table 4.3 also shows there is a clear relationship with size. Although smaller establishments are less likely to have vacancies and are thus less likely overall to have hard-to-fill vacancies, among those who do have vacancies they are far more likely to report their vacancies as being hard-to-fill (34 per cent of vacancies are hard-to-fill among establishments with 1-4 staff), suggesting that where they do exist they can considerably restrict the size of an establishment's workforce. Among other possibilities, this could relate to less demand from the workforce to work in smaller establishments, thus fewer applicants for each post or it could be that the smaller establishments have less resource to dedicate to recruitment, as they are unlikely to have their own Human Resource team and will be trying to fit recruitment around their everyday jobs. It is also possible that smaller establishments have less resource for training recruits so need their recruits to be of higher quality at the outset, which may be harder to find. The lower incidence of vacancies in this group also suggests that it is a less common occurrence for these establishments, so staff might not have the necessary knowledge or experience to recruit efficiently and effectively.

The proportion of vacancies proving hard-to-fill was particularly high in the Construction sector (40 per cent), Agriculture (38 per cent), Community, Social and Personal Service Activities (31 per cent) and Manufacturing (30 per cent).

Table 4.3 Incidence, volume and density of hard-to-fill vacancies by nation, size and sector

		% of establishments with a hard-to-fill vacancy	Number of hard-to-fill vacancies	% of vacancies which are hard-to-fill	
	Unwtd base	%	Rounded to nearest 100	*Unwtd base*	%
Total UK	*87,572*	4	143,600	*17,166*	23
Country					
England	*75,053*	4	120,400	*14,813*	22
Northern Ireland	*4,004*	3	5,500	*524*	28
Scotland	*2,503*	3	9,100	*729*	20
Wales	*6,012*	4	8,500	*1,100*	33
Size					
1-4	*18,955*	3	52,800	*1,462*	34
5-24	*47,770*	5	41,600	*7,869*	23
25-99	*15,951*	9	28,600	*5,213*	21
100-249	*3,270*	14	11,700	*1,698*	16
250+	*1,626*	14	8,800	*924*	10
Sector					
Agriculture	*939*	3	3,700	*87*	38
Mining and Quarrying	*188*	11	900	*36*	*22*
Manufacturing	*7,704*	6	11,600	*1,427*	30
Electricity, Gas and Water	*1,426*	4	700	*209*	13
Construction	*6,654*	2	11,400	*579*	40
Wholesale and Retail	*15,340*	3	16,600	*2,573*	18
Hotels and Restaurants	*8,471*	6	14,200	*2,081*	24
Transport and Communications	*7,885*	4	11,400	*1,407*	18
Financial Services	*1,881*	3	4,700	*333*	20
Business Services	*14,488*	4	31,400	*2,961*	23
Public Administration	*1,617*	5	6,400	*405*	22
Education	*5,439*	5	5,000	*1,487*	14
Health and Social Work	*8,161*	5	11,200	*1,995*	17
Community, Social & Personal Service Activities	*7,379*	5	14,400	*1,586*	31

Base: Columns 1 and 2: all establishments; Column 3: all establishments with vacancies

Percentages in Column 3 are based on all vacancies, rather than all establishments with vacancies; figures therefore show the percentage of vacancies which are hard-to-fill.

Differences by nation are not statistically significant except for proportion of vacancies that are hard-to-fill where Wales and Northern Ireland are significantly different to England and Scotland.

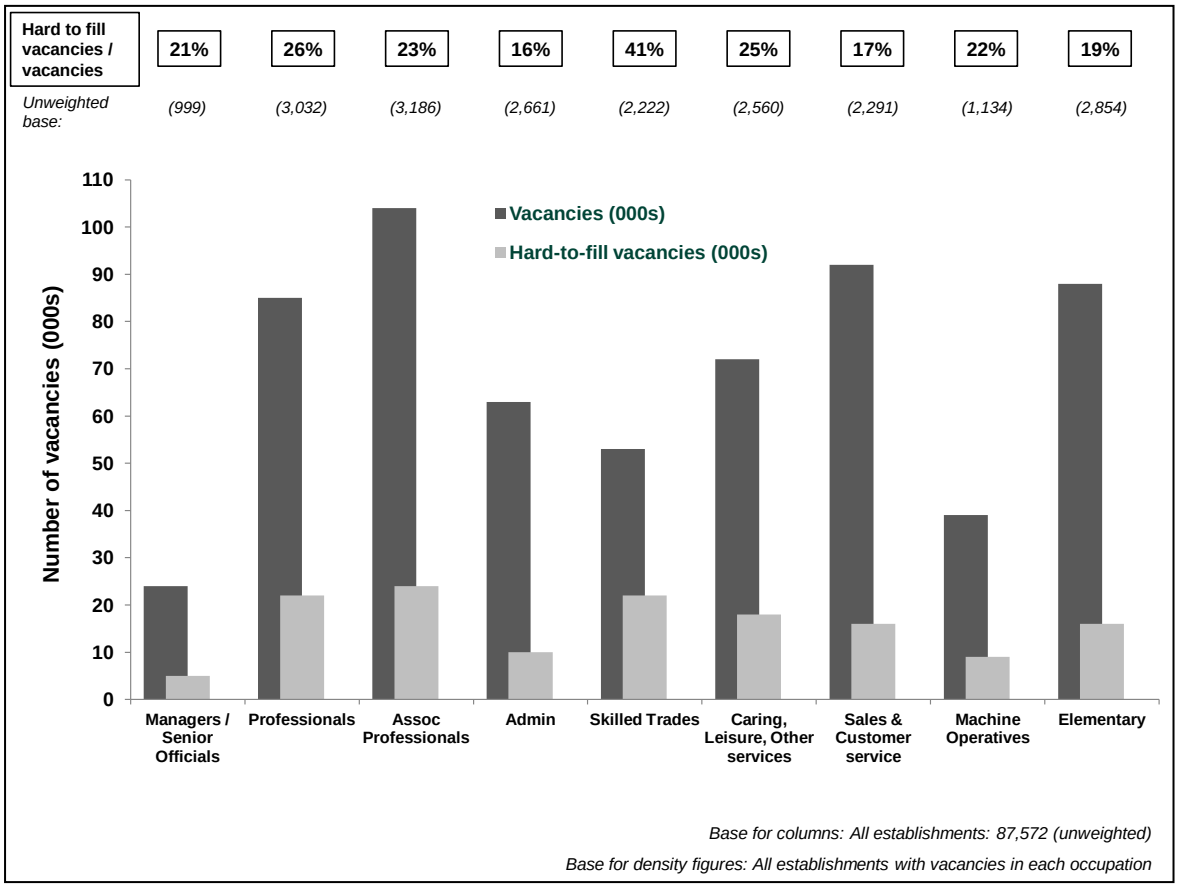
The proportion of vacancies deemed hard-to-fill varied according to an establishment's rating on the Product Market Strategy scale,[14] a high score on this index denotes that an establishment is innovative, often leads the way, is not price dependent and has customised goods or services. The proportion of vacancies establishments found were hard-to-fill tended to be higher for establishments at either end of the Product Market Strategy scale: in the "Very Low" group a third (34 per cent) of vacancies were hard-to-fill, and the figure was also high in the "Low" and "Very High" groups at 29 per cent. Vacancies in the "Medium" and "High" groups were less likely to be hard-to-fill at 24 and 23 per cent respectively.

Vacancies in establishments with high qualification levels among staff (over 80 per cent qualified to Level 4 or above) were more likely to be hard-to-fill (29 per cent) than those with medium or low qualification levels among staff (each 24 per cent in the other two groups).

As has been found in the previous skills surveys conducted in the individual countries of the UK, by occupation the market struggles most in terms of meeting demand for Skilled Trade occupations: this occupational group accounts for eight per cent of all vacancies but 15 per cent of hard-to-fill vacancies; and 41 per cent of vacancies for Skilled Trade occupations are hard-to-fill (Figure 4.1).

[14] "Product Market Strategy" is a measure calculated by combining responses to questions H1a-d; see section 2.2.2 of this report for full detail of its calculation.

Figure 4.1 Hard-to-fill vacancies by occupation



Percentages are based on all vacancies, rather than all establishments with vacancies; proportions therefore show the percentage of vacancies which are hard-to-fill.

The difficulty in recruiting for Skilled Trades is particularly evident in the Hotels and Restaurants and Wholesale and Retail sectors (48 per cent of all Skilled Trades vacancies in each are hard-to-fill, equating to around 4,300 hard-to-fill vacancies in Hotels and Restaurants and 2,900 in Wholesale and Retail), Manufacturing sector (44 per cent equating to 4,200 hard-to-fill vacancies) and Construction (35 per cent, equating to 3,100 hard-to-fill vacancies). Other pockets of hard-to-fill vacancies include Professionals in the Construction sector (39 per cent of vacancies are hard-to-fill, which equates to around 1,000) and Associate Professionals in the Community and Other Services sector (46 per cent, or 4,100 hard-to-fill vacancies).

4.4 Causes of hard-to-fill vacancies

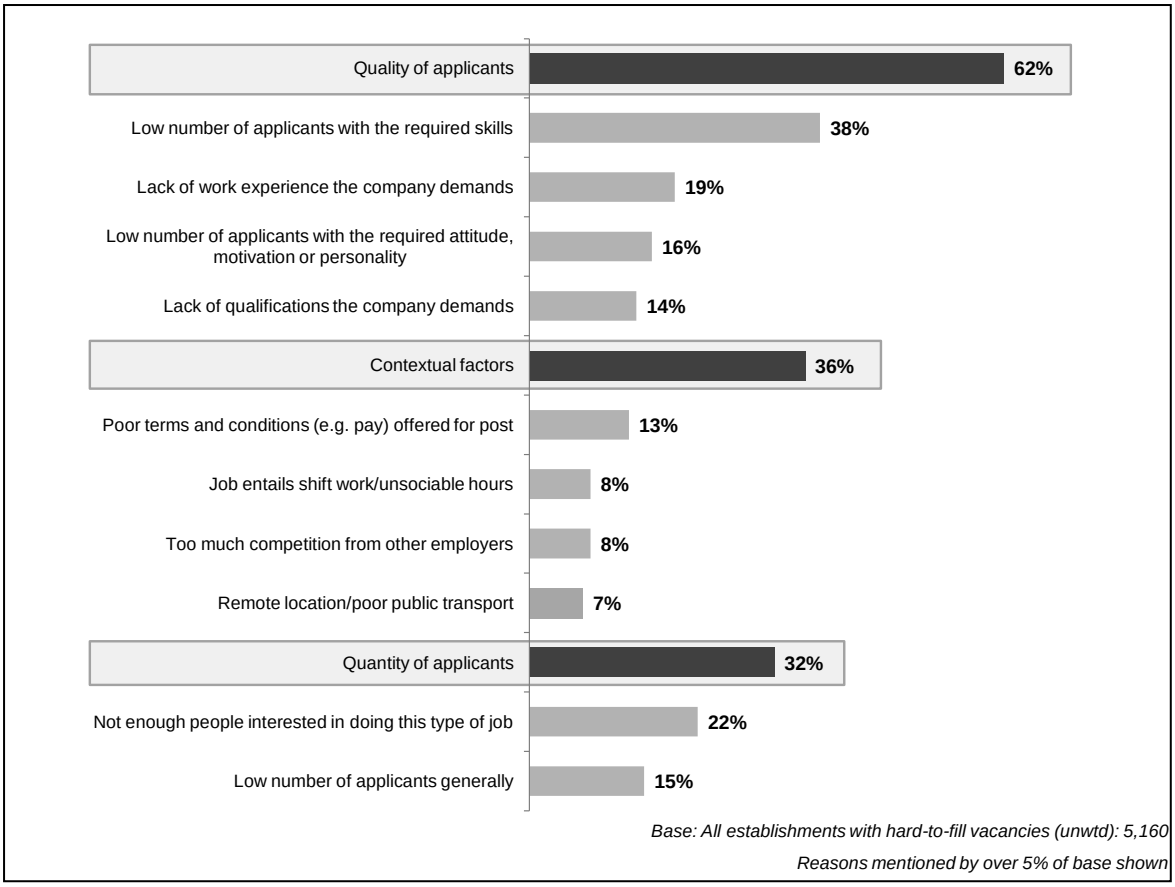
Understanding the causes of hard-to-fill vacancies is clearly a prerequisite to introducing effective measures aimed at easing recruitment difficulties and improving the effectiveness of the labour market. Most importantly, it can identify where there are issues finding applicants with the requisite skills to fill the role. The reasons can be broadly split into three areas: issues with the quality of applicants, the quantity of applicants and contextual factors such as issues with the role, organisation or the system.

The main causes of hard-to-fill vacancies tend to be related to the quality of the applicants, i.e. a lack of skills, qualifications, experience or the attitude of applicants, with these factors cited as a cause of 62 per cent of hard-to-fill vacancies. The quantity of applicants is also an issue, cited as a problem in a third of hard-to-fill vacancies.

Just over a third (36 per cent) of hard-to-fill vacancies are caused by contextual factors: this includes issues specifically with the job role, such as poor terms (13 per cent), unsociable hours (eight per cent) or a remote location (seven per cent), and high levels of competition from other employers (eight per cent).

Figure 4.2 shows the main reasons (with over five per cent of responses) employers cite for recruitment difficulties.

Figure 4.2 Main reasons given for having hard-to-fill vacancies (unprompted)



Results are based on hard-to-fill vacancies rather than establishments with hard-to-fill vacancies; the figures therefore show the proportion of hard-to-fill vacancies caused by each factor reported by employers.

Note: Summed percentages exceed 100 per cent because of multiple responses

There is some variation by nation in the reasons vacancies are hard-to-fill. This is particularly seen in Northern Ireland, where the second and third most commonly cited reasons are quite different to the rest of the UK: 35 per cent of hard-to-fill vacancies in Northern Ireland are caused at least in part by a lack of qualifications, compared to a UK average of 14 per cent, and 29 per cent by the competition from other employers, compared to a UK average of just eight per cent (Table 4.4).

Table 4.4 Main reasons given for having hard-to-fill vacancies (unprompted) by country

	UK	England	Northern Ireland	Scotland	Wales
	%	%	%	%	%
Unweighted base:	*5,160*	*4,409*	*155*	*219*	*377*
Low number of applicants with the required skills	38	39	35	30	36
Not enough people interested in doing this type of job	22	23	16	16	33
Lack of work experience the company demands	19	19	19	23	10
Low number of applicants with the required attitude, motivation or personality	16	18	16	7	9
Low number of applicants generally	15	16	15	15	15
Lack of qualifications the company demands	14	13	35	14	19
Poor terms and conditions (e.g. pay) offered for post	13	13	10	15	13
Job entails shift work/unsociable hours	8	8	10	5	7
Too much competition from other employers	8	7	29	4	3
Remote location/poor public transport	7	7	1	8	12

Base: All establishments with hard-to-fill vacancies

Percentages are based on all hard-to-fill vacancies, rather than all establishments with hard-to-fill vacancies; figures therefore show the proportion of hard-to-fill vacancies caused by each factor reported by employers.

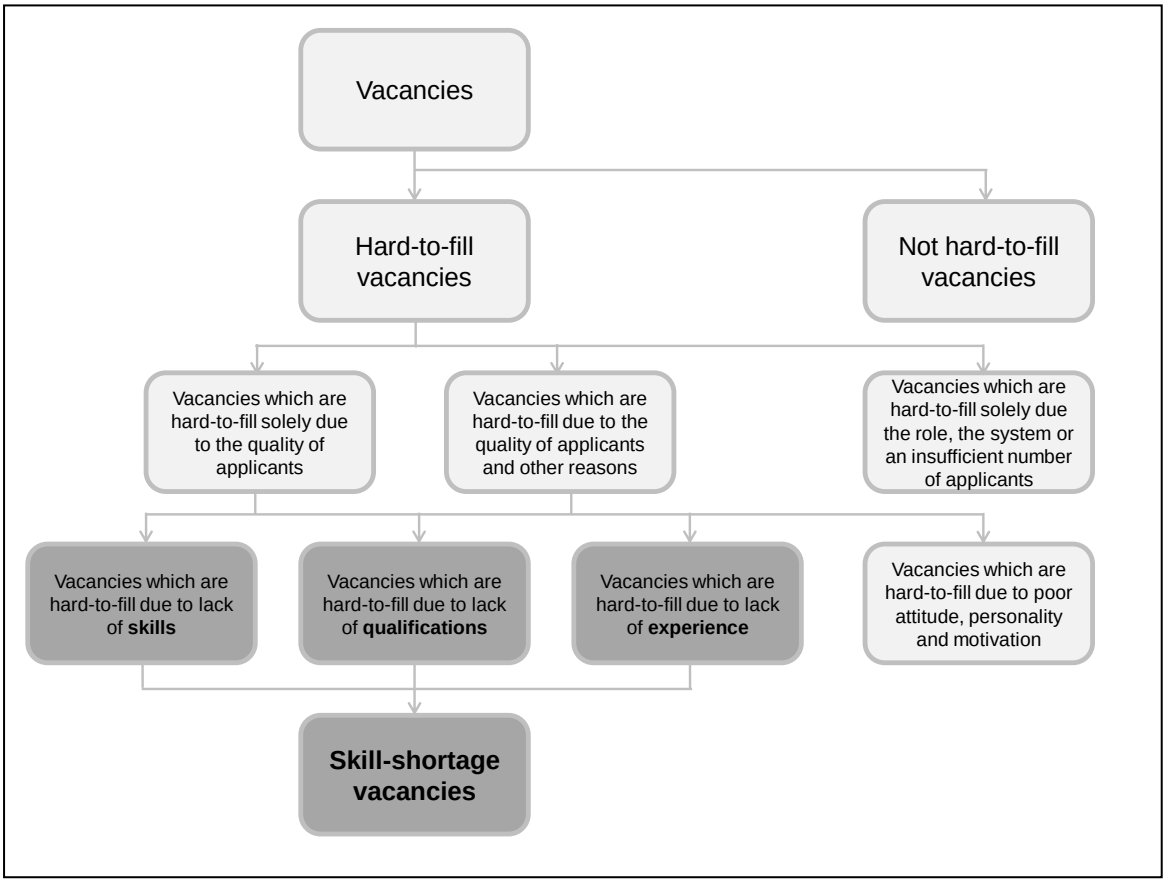
Hard-to-fill vacancies in Elementary occupations, such as bar staff or cleaners, are more likely to relate to contextual factors than for any of the other occupations (50 per cent). These recruitment difficulties are most likely to be due to a lack of interest in that type of work (31 per cent) or because the role involves shift work or unsociable hours (21 per cent). Those recruiting for Elementary roles also had difficulties finding applicants with the required motivation or personality (30 per cent).

Recruitment difficulties among the more senior roles of Managers, Professionals and Associate Professionals are most likely to be due to the quality of applicants (76, 72 and 75 per cent respectively), with each being more likely to attribute their hard-to-fill vacancies to a lack of skills, qualifications or experience from applicants.

4.5 Skill-shortage vacancies

As discussed above, recruitment difficulties are commonly caused by issues relating to the applicants, be it quality or quantity. Hard-to-fill vacancies caused specifically by a lack of **skills**, **qualifications** or **experience** among applicants are known as "skill-shortage vacancies"[15]. Where there is an issue with the attitude, personality or motivation of applicants, these are not skill-shortage vacancies. Figure 4.3 shows a "map" of how skill-shortage vacancies are defined.

Figure 4.3 Skill-shortage vacancies route map



[15] Employers were first asked to give their reasons for not being able to fill vacancies spontaneously (i.e. without being presented with a list of possible reasons). Any employers not reporting skills-related issues were then prompted as to whether any of their hard-to-fill vacancies were proving hard-to-fill due to a lack of skills, experience or qualifications among applicants, and these responses combined to give an overall picture of the incidence and volume of skill-shortage vacancies in the market.

4.5.1 The incidence, volume, density and distribution of skill-shortage vacancies

For the vast majority of establishments, demand for skills is met through successful recruitment (or through their current workforce, as will be explored in the next Chapter). Only three per cent of establishments reported having vacancies at the time of the survey that they were having difficulties filling due to a lack of skills, qualifications or experience in applicants for the role (a "skill-shortage vacancy"). This is in line with previous skills surveys conducted in the individual countries of the UK.

While it is relatively uncommon for employers to report skill shortages, in volume terms, this equates to over 103,000 current vacancies that were a result of skill shortages. Moreover, the majority of vacancies that employers found hard-to-fill were, at least in part, a result of a shortage of skills in the labour market (72 per cent of all hard-to-fill vacancies, 16 per cent of all vacancies).

While employers in England and Wales were more likely to report having skill-shortage vacancies, it is in Northern Ireland and Wales where vacancies were most likely to be a result of skill shortages or, in other words, where the likelihood of establishments encountering skills-related difficulties when recruiting is highest. Here 22 per cent of all vacancies were a result of skills deficiencies in the labour market, compared to 16 per cent in England and 14 per cent in Scotland.

While the incidence of skill-shortage vacancies increases with the size of establishment, establishments with fewer than 25 staff account for a disproportionately large share of all skill-shortage vacancies when compared with their share of all reported vacancies. As has been found in the previous skills surveys conducted in the individual countries of the UK, vacancies in smaller establishments continue to be disproportionately hard-to-fill due to the degree of difficulty in finding applicants with appropriate skills when recruiting, especially the case amongst the very smallest establishments (with 1-4 staff) where 22 per cent of vacancies were skill shortage vacancies. The reverse is true among establishments with 250 or more staff where only eight per cent of vacancies were a result of skill shortages (see Table 4.5).

Table 4.5 Incidence, number, density and distribution of skill-shortage vacancies by country and size

		% of establishments with skill-shortage vacancies	Number of skill-shortage vacancies	Skill-shortage vacancies as % of vacancies		Share of vacancies	Share of all skill-shortage vacancies
		Row percentages				Column percentages	
	Unwtd base			*Unwtd base*		*17,166*	*3,973*
Total	*87,572*	3	103,500	*17,166*	16	100	100
Country							
England	*75,053*	3	87,000	*14,813*	16	86	84
Northern Ireland	*4,004*	2	4,400	*524*	22	3	4
Scotland	*2,503*	2	6,500	*729*	14	7	6
Wales	*6,012*	3	5,700	*1,100*	22	4	5
Size							
1-4	*18,955*	2	34,100	*1,462*	22	24	33
5-24	*47,770*	4	31,200	*7,869*	17	28	30
25-99	*15,951*	6	21,000	*5,213*	15	22	20
100-249	*3,270*	11	10,000	*1,698*	14	11	10
250+	*1,626*	12	7,200	*924*	8	14	7

Base: Column 1 and 2: all establishments; Column 3 and 4: all establishments with vacancies; Column 5 all establishments with skill-shortage vacancies

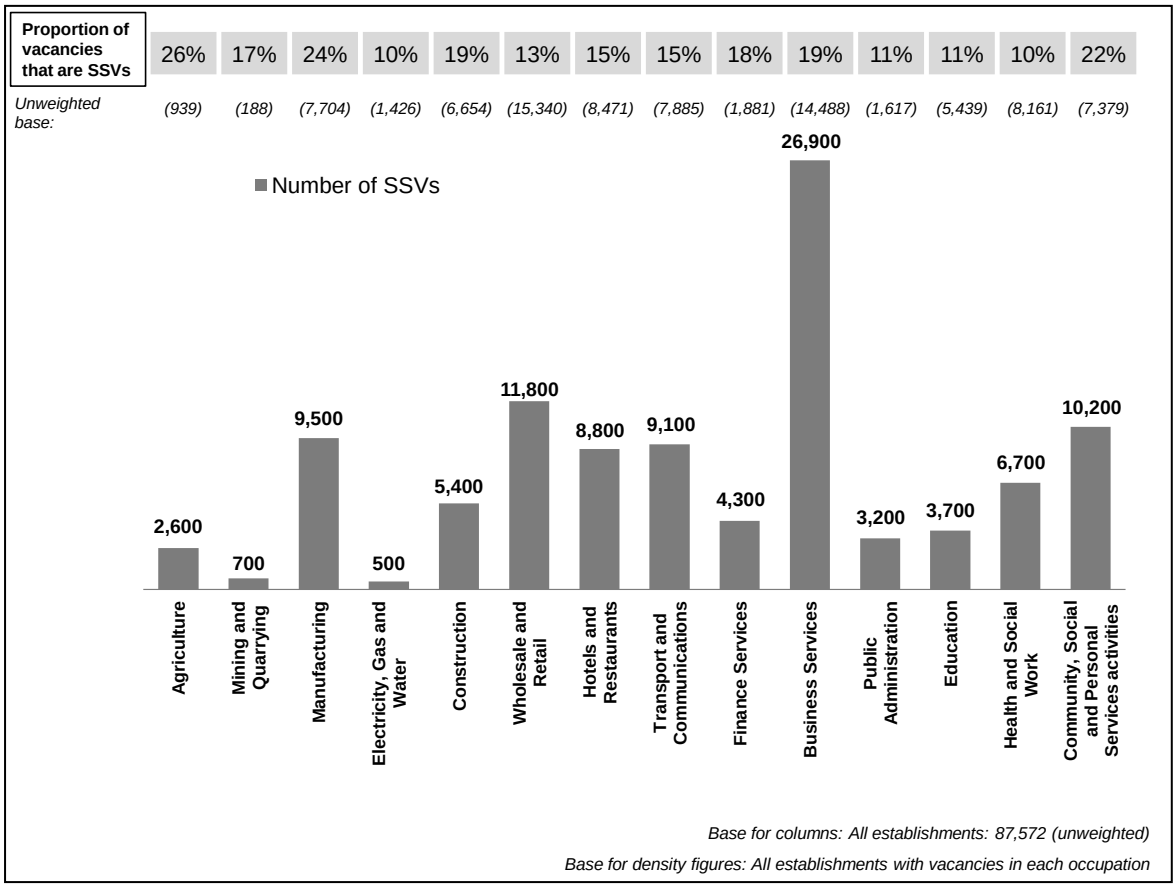
Percentages in Column 3 and 4 are based on all vacancies, rather than all establishments with vacancies; figures therefore show the proportion of vacancies caused by skill shortages (Column 3) and the percentage of vacancies falling into each subgroup (Column 4). Similarly in Column 5 the percentages are based on all skill-shortage vacancies rather than all establishments with skill-shortage vacancies, and figures therefore show the proportion of skill-shortage vacancies accounted for by each subgroup.

Notes: The number of skill-shortage vacancies has been rounded to the nearest 100

Differences by nation are not statistically significant

In volume terms, skill-shortage vacancies are concentrated in the Business Services sector (26 per cent of all skill-shortage vacancies were in this sector). To some extent this reflects the size of the sector, although its share of all skill-shortage vacancies is higher than its share of all vacancies (which stands at 22 per cent) illustrating a higher propensity for vacancies to be skill-shortage vacancies. Agriculture, Manufacturing, and Community, Social and Personal Services stand out as other sectors where employers tend to have more difficulties finding people with the right skills when they are seeking to recruit, as seen in Figure 4.4. (A description of the types of establishment that fall into each of the sectors can be found in Appendix D.)

Figure 4.4 Number and density of skill-shortage vacancies by sector



Percentages are based on all vacancies, rather than all establishments with vacancies; proportions therefore show the percentage of vacancies which are due to skill shortages.

As might be expected, establishments with a more highly skilled workforce are more likely to suffer skill-shortage vacancies. Almost a quarter of vacancies (23 per cent) in establishments with over 80 per cent of their staff qualified to Level 4 or above are hard-to-fill due to skill shortages, compared to just 16 per cent of vacancies in establishments with a lower skill level (i.e. under 20 per cent of the workforce are qualified to Level 3 or above).

Vacancies are most likely to be hard to fill because of skill-shortage at either end of the Product Market Strategy scale[16]: a quarter of all vacancies are hard to fill due to skill shortages in both the "Very Low" and "Very High" groups, but fewer than a fifth of vacancies are skill-shortage vacancies for the other groups (15 per cent for "Low", 17 per cent for "Medium" and 19 per cent for "High"). Given that those at the higher end of the PMS scale have more highly skilled workforces this might be expected (in line with the finding in the previous paragraph).

[16] "Product Market Strategy" is a measure calculated by combining responses to questions H1a-d; see section 2.2.2 of this report for full detail of its calculation.

By occupation, the greatest volume of skill-shortage vacancies were reported in Associate Professional, Professional and Skilled Trade occupations. (A description of occupational definitions can be found in Appendix E). Together these accounted for over half (54 per cent) of all skill-shortage vacancies across the economy (see Table 4.6).

As seen in previous skills surveys conducted in the individual countries of the UK, it is amongst Skilled Trades where 'density' (skill-shortage vacancies as a proportion of all vacancies) is highest and where employers experience the greatest problem in meeting their demand for skills from the available labour market. A third of all vacancies for Skilled Trade occupations were hard-to-fill as a result of a lack of skills. This compares to 16 per cent across all occupations. The density of skill-shortage vacancies was also higher amongst more highly skilled occupational groups such as Managers, Professionals and Associate Professionals than in for example Elementary occupations (see Table 4.6).

Table 4.6 Number, density and distribution of skill-shortage vacancies by occupation

	Number of skill-shortage vacancies		Skill-shortage vacancies as % of vacancies	Share of vacancies	Share of all skill-shortage vacancies
	Row percentages			Column percentages	
	Base (unwtd): 87,572	*Base (unwtd)*		*17,166*	*3,973*
Total	103,500	*17,166*	16	100	100
Occupations					
Managers	4,400	*999*	19	4	4
Professionals	18,100	*3,032*	21	13	18
Associate Professionals	20,000	*3,186*	19	16	19
Administrative/ Clerical staff	7,300	*2,661*	11	10	7
Skilled Trades occupations	17,400	*2,222*	33	8	17
Caring, Leisure and Other services	11,700	*2,560*	16	11	11
Sales and Customer services	7,800	*2,291*	9	14	8
Machine Operatives	5,400	*1,134*	14	6	5
Elementary staff	9,400	*2,854*	11	14	9
Unclassified	1,900	*257*	17	2	2

Base: Column 1: all establishments; Columns 2 to 3: all establishments with vacancies in each occupation; Column 4: all establishments with skill-shortage vacancies

Percentages in columns 1 to 3 are based on all vacancies, rather than all establishments with vacancies; proportions therefore show the percentage of vacancies which are caused by skill shortages. Percentages in Column 4 are based on all skill-shortage vacancies and therefore show the proportion of all skill-shortage vacancies accounted for by each subgroup.

Notes: The number of skill-shortage vacancies has been rounded to the nearest 100

Looking at the density and distribution of skill-shortage vacancies at an overall occupational level is revealing but it hides significant variation both within and across sector as Table 4.7 shows. Some key patterns by sector include:

- a concentration of skill-shortage vacancies for Skilled Trades occupations amongst Construction and Manufacturing employers;
- employers within the Education and Public Administration sectors being more likely to report skill-shortage vacancies for Professionals occupations;
- Financial Services employers particularly likely to find skills lacking for Associate Professional occupations;
- employers within the Hotels and Restaurant sector were particularly likely to report skill-shortage vacancies for Elementary staff;
- Wholesale and Retail employers were more likely to report skill-shortage vacancies for Sales and Customer Service staff.

Table 4.7 Distribution of skill-shortage vacancies by occupation within sector

	Number of skill-shortage vacancies			Managers	Professionals	Associate Professionals	Administrative / Clerical staff	Skilled Trades	Caring, Leisure and Other Services	Sales and Customer Services	Machine Operatives	Elementary staff	Unclassified
	Base (unwtd) 87,572	*Unwtd base*		Row percentages									
Total	103,500	*3,973*	%	4	18	19	7	17	11	8	5	9	2
Sector													
Agriculture	2,600	*28*	*%*	*7*	*5*	*-*	*-*	*20*	*13*	*	*20*	*36*	-
Mining and Quarrying	700	*13*	*%*	**	**	**	**	**	**	**	**	**	**
Manufacturing	9,500	*490*	%	3	15	17	4	40	-	6	12	2	1
Electricity, Gas and Water	500	*55*	%	14	18	24	2	26	-	7	5	4	1
Construction	5,400	*174*	%	6	17	9	5	45	-	2	8	6	1
Wholesale and Retail	11,800	*488*	%	9	3	14	5	21	*	37	6	4	*
Hotels and Restaurants	8,800	*491*	%	4	*	2	3	34	2	4	1	49	*
Transport and Communications	9,100	*430*	%	3	24	28	9	11	*	9	12	4	1
Financial Services	4,300	*61*	%	4	7	46	33	-	-	3	-	-	7
Business Services	26,900	*823*	%	3	28	26	9	10	6	4	2	8	5
Public Administration	3,200	*62*	%	4	36	9	3	*	48	*	-	-	-
Education	3,700	*208*	%	*	47	21	7	7	12	2	*	3	1
Health and Social Work	6,700	*330*	%	9	31	6	6	1	41	1	*	4	1
Community, Social and Personal Services activities	10,200	*320*	%	2	3	30	4	7	47	2	3	2	*

Base: Column 1: all establishments. All other columns: all establishments with skill-shortage vacancies

Percentages are based on all skill-shortage vacancies, rather than all establishments with skill-shortage vacancies; proportions therefore show the percentage of skill-shortage vacancies within each sector that fall into each occupation.

Notes: Percentages sum to 100 per cent in each row (subject to rounding); '' denotes a figure greater than 0 per cent but less than 0.5 per cent; The number of skill-shortage vacancies has been rounded to the nearest 100; '**' denotes figure not shown because of a low base (fewer than 25 respondents); Agriculture base size <50: treat figures with caution*

To a large extent these patterns reflect employment profiles and levels of recruitment activity for specific job roles in each sector. So, while 47 per cent of skill-shortage vacancies in the Education sector were for Professional occupations, 45 per cent of all vacancies were for the same occupation as was 40 per cent of all employment in the sector.

To overcome this, it is interesting to look at the density of skill-shortage vacancies, exploring specific occupations in specific sectors where a large proportion of vacancies are proving hard-to-fill as a result of skills deficiencies in the labour market. Table 4.8 provides an indication of the density of skill shortages by occupation and sector. As the base is the number of establishments reporting a vacancy in an occupation and within a sector, some of the base sizes are low, so the data are presented in an illustrative way only. Darker shading shows where the proportion of vacancies that are skill-shortage vacancies is higher, and lighter shading where it is lower.

Table 4.8 Density of skill-shortage vacancies by occupation and sector

	Managers	Professionals	Associate Professionals	Administrative / Clerical staff	Skilled Trades occupations	Caring, Leisure and Other Services	Sales and Customer Services	Machine Operatives	Elementary staff
Total									
Agriculture	**	**	**	**	**	**	**	**	
Mining and Quarrying	**	**	**	**	**	**	**	**	**
Manufacturing						**			
Electricity, Gas and Water	**	**				**	**		
Construction						**			
Wholesale and Retail						**			
Hotels and Restaurants		**							
Transport and Communications						**			
Financial Services		**			**	**		**	**
Business Services									
Public Administration					**		**	**	**
Education	**						**	**	
Health and Social Work							**		
Community, Social and Personal Services								**	

Base: All establishments with vacancies within each occupation by sector

Densities are based on skill-shortage vacancies as a proportion of all vacancies within each occupation by sector, rather than the number of establishments with vacancies.

*'**' Figure not shown because of a low base (fewer than 25 respondents)*

Dark shading highlights a higher percentage of vacancies are skill-shortage vacancies

A number of patterns and trends emerge from looking at skill-shortage vacancies in this way, although care should be taken to not over-extrapolate because of the small base sizes in places:

- The much higher than average density of skill-shortage vacancies for Skilled Trades occupations that was described earlier at an overall level is evident across most sectors;

- A number of sectors experience particular problems filling vacancies for Managerial and Professional positions because of a lack of available skills, qualifications and/or experience, most prominently in Manufacturing and Construction, and in Health and Social Work;
- In some sectors, employers are experiencing problems recruiting as a result of a lack of skills across a number of different occupational areas; this is the case particularly for employers in primary and secondary industries such as Manufacturing and Wholesale and Retail, but also for employers involved in Community, Social and Personal Services activities and those in the Business Services sector.

4.5.2 Skills lacking in the available labour market

This section examines the range of skills described as lacking from potential recruits.

Employers who reported having vacancies that were difficult to fill because of skill-shortages were read a list of types of skills and asked, for each occupation, which skills were lacking. Table 4.9 shows results based on the total number of skill-shortage vacancies (as opposed to establishments with skill-shortage vacancies).

Employers generally focused on technical, practical or job-specific skills. Two-thirds of all skill-shortage vacancies were ascribed to a lack of job-specific skills, and approaching a half (46 per cent) to a lack of technical or practical skills. Only 28 per cent of skill-shortage vacancies were reported as lacking neither job-specific nor technical and practical skills. A lack of technical, practical and job-specific skills was particularly likely to affect Skilled Trades, Professionals and Process, Plant and Machine Operative occupations. (A description of occupational definitions can be found in Appendix E).

Transferable or "softer" skills such as planning and organisation, customer handling, problem solving and team working were each cited in connection with between one-third and two-fifths of skills shortage vacancies. Generally, these skills were more lacking from Administrative / Clerical staff and Elementary staff.

In Wales, Welsh Language skills (both written and oral) were reported as being particularly hard to find for Associate Professionals, the occupational group which covers translators.

Table 4.9 Skills lacking overall and by occupation (prompted)

	Overall	Managers	Professionals	Associate Professionals	Administrative / Clerical staff	Skilled Trades occupations	Caring, Leisure and Other Services	Sales and Customer Services	Machine Operatives	Elementary staff
					Column percentages					
Unweighted base	*3,973*	*277*	*1,000*	*909*	*394*	*1,024*	*642*	*486*	*363*	*640*
	%	%	%	%	%	%	%	%	%	%
Job specific skills	66	71	72	66	61	71	66	53	70	63
Technical or practical skills	46	37	50	38	43	65	41	31	55	47
Planning and Organisation skills	41	44	39	31	50	42	42	47	32	56
Customer handling skills	40	43	28	34	56	33	50	55	37	58
Oral communication skills	38	36	29	31	42	35	46	49	35	62
Problem solving skills	37	35	27	25	52	40	39	48	36	52
Written communication skills	33	22	27	28	42	32	37	42	28	48
Team working skills	33	40	19	27	29	35	49	33	35	48
Strategic Management skills	29	57	35	24	42	23	20	32	18	33
Literacy skills	29	20	14	28	39	31	34	40	28	43
Numeracy skills	26	21	12	20	38	27	28	39	26	42
Advanced IT or software skills	21	19	30	25	42	16	11	20	12	12
Office admin skills	17	20	10	16	40	15	15	30	15	11
Basic computer literacy / using IT	16	17	10	18	33	16	15	24	17	11
Foreign language skills	16	14	13	12	27	15	17	20	12	25
Wales only *Base:*	*274*	*16*	*59*	*44*	*20*	*85*	*45*	*36*	*45*	*64*
Oral Welsh language skills	30	**	5	*78*	**	13	*37*	*6*	*5*	4
Written Welsh language skills	28	**	5	*77*	**	12	*22*	*2*	*7*	2

Base: All establishments with skill-shortage vacancies

Percentages are based on all skill-shortage vacancies, rather than all establishments with skill-shortage vacancies; proportions therefore show the percentage of skill-shortage vacancies within each occupation caused by lack of each skill.

*Note: Column percentages exceed 100 per cent because of multiple responses; skill-shortage vacancies unable to be coded to an occupational group have been included in the "Overall" figures, though have not been included in the more detailed breakdown; '**' denotes figure not shown because of a low base (fewer than 25 respondents)*

4.5.3 The impact of skill-shortage vacancies and actions taken to overcome skill-shortage vacancies

Although the survey does not measure the impact of skill-shortage vacancies on employers specifically (i.e. it does not ask employers with skill-shortage vacancies what the impacts of these are on the establishment, only the impact of hard-to-fill vacancies as a whole), we can isolate the effect of external skill deficiencies by exploring the impact of hard-to-fill vacancies in establishments where all the hard-to-fill vacancies were caused by skills-related issues (i.e. all hard-to-fill vacancies were skill-shortage vacancies)[17]. We can do the same when exploring the actions taken by employers in an attempt to overcome the difficulties they face in finding suitable candidates.

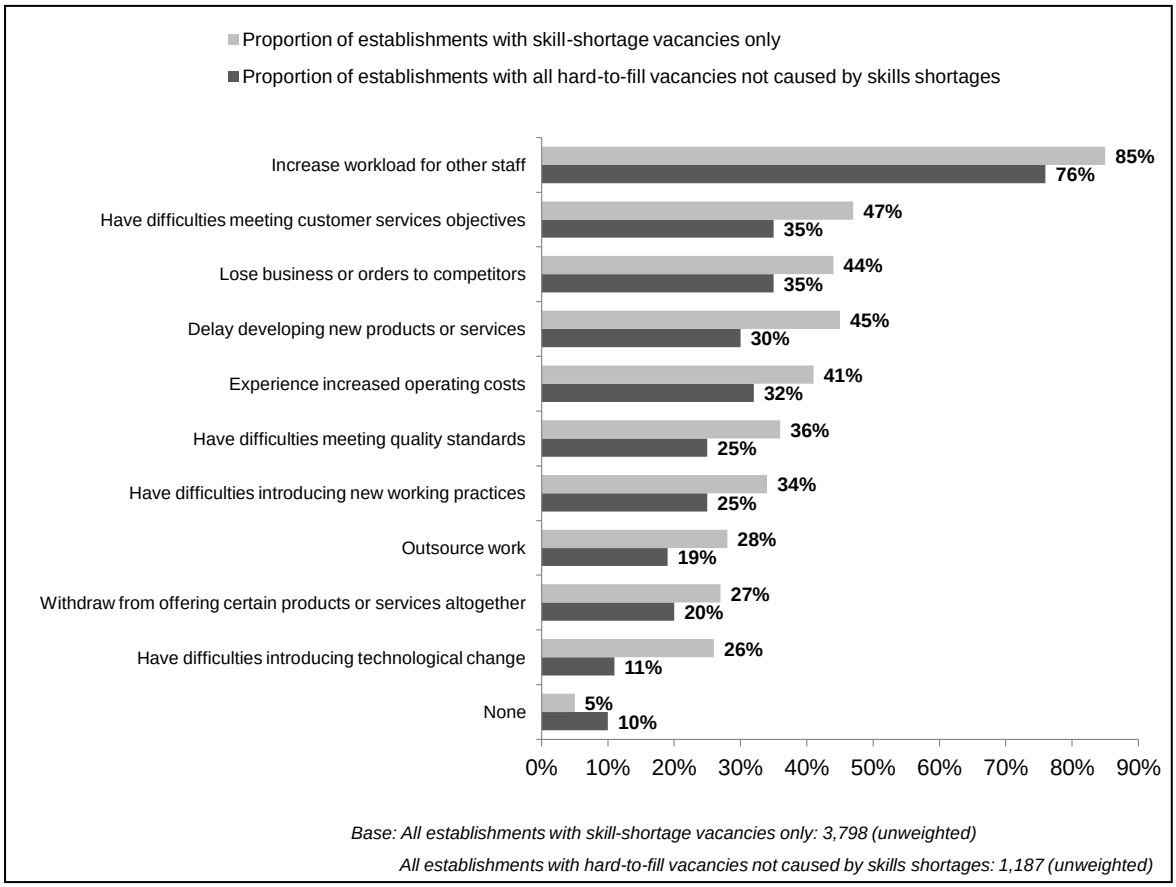
Although skill-shortage vacancies are only reported by a small minority of employers, for those that have them the impact can be significant. In total, 95 per cent of employers with hard-to-fill vacancies solely as a result of skill shortages reported that these were having an impact on the establishment with over eight in 10 (85 per cent) reporting that they result in an increase in workload for other staff.

At least four in 10 employers with hard-to-fill vacancies solely a result of skill shortages reported that they were having a more direct impact on the business in terms of causing difficulties in meeting customer service objectives (47 per cent), a loss of business or orders to competitors (44 per cent) and delays developing new products or services (45 per cent).

As shown in Figure 4.5, comparing the impacts of skill-shortage vacancies against the impacts of other hard-to-fill vacancies it can be seen that each of the impacts is more common where employers face skills-related recruitment difficulties. This is particularly the case in terms of causing delays to developing new products or services (45 per cent among employers with only skill-shortage vacancies compared to 30 per cent among employers with exclusively non skills-related recruitment difficulties) and difficulties introducing technological change (26 per cent vs. 11 per cent). One explanation may be that the recruits that employers are seeking but finding hard to find due to lack of skills or qualifications are those that would be primed to take these developments forward.

[17] The majority of establishments with hard-to-fill vacancies in fact fall into this group (74 per cent of establishments unweighted), as the majority just have one hard-to-fill vacancy; this is therefore a suitable sample from which we can gain a robust measurement.

Figure 4.5 Impact of skill-shortage vacancies



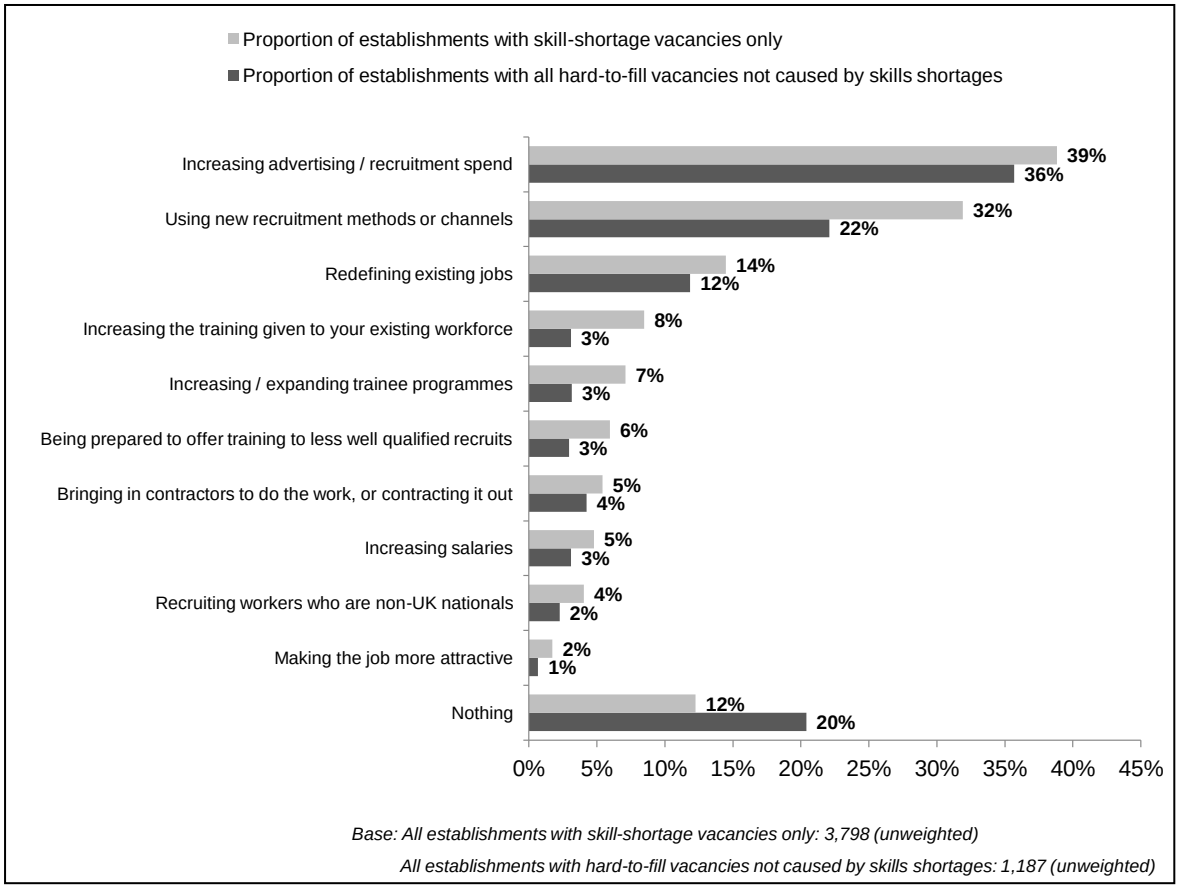
In terms of the actions taken to overcome difficulties filling hard-to-fill vacancies, there are again differences in employers' reactions depending on whether these vacancies are hard-to-fill exclusively because of skill shortages or for other reasons such as general disinterest in the role (Figure 4.6). Overall, while the vast majority of those experiencing recruitment difficulties had taken steps to try and overcome these problems, those specifically with skills-related difficulties were more likely than those with non-skills related recruitment difficulties to have taken some form of action (88 per cent compared to 80 per cent).

While the three most popular actions taken are the same for both groups, employers are much more likely to use new recruitment methods or channels as a result of skill-shortage vacancies whereas there is relatively little difference in the proportion of employers increasing advertising or recruitment spend or redefining the role.

Where employers are experiencing difficulties filling vacancies specifically due to skills shortages they are much more likely to turn to training in an attempt to address the situation, whether this be through increasing the training given to existing workforce, an expansion of trainee programmes, or being (more) prepared to offer training to less well qualified recruits. The relationship between skill-shortage vacancies and the training and development of existing staff is an issue that is explored in more depth in Chapter 6.

Given that 12 per cent of employers with hard-to-fill vacancies solely a result of skill shortages had not taken any action and that only five per cent reported that they had not had an impact on the establishment, there are clearly a small number of employers who do not respond to external skills deficiencies despite them impacting on their organisation. Among the reasons for this, it might be that the employer did not think the impact of the skill-shortage vacancies was serious enough to warrant further action or possibly that they have become so institutionalised as part of the landscape, that employers are simply used to working around them.

Figure 4.6 Action taken to overcome skill-shortage vacancies



Base: All establishments with skill-shortage vacancies only: 3,798 (unweighted)

All establishments with hard-to-fill vacancies not caused by skills shortages: 1,187 (unweighted)

4.6 Conclusion

Overall, 12 per cent of employers across the UK had a vacancy at the time of the survey. However, this equates to 636,000 vacancies, and whilst demand is largely met with very few employers reporting difficulties filling vacancies (4 per cent), there are persistent pockets of shortages which threaten future economic growth.

Workforce skill deficiencies are not spread evenly spread across the economy. In volume terms, skill-shortage vacancies are concentrated in the Business Services sector (26,900 vacancies). In part this reflects the size of the sector, although its share of all skill-shortage vacancies (26 per cent) is higher than its share of all vacancies (22 per cent) suggesting a higher propensity for vacancies to be skill-shortage vacancies. Manufacturing (24 per cent), Agriculture (26 per cent) and Community, Social and Personal Services activities (22 per cent) stand out as other sectors where employers tend to have more difficulties finding people with the right skills when they are seeking to recruit, as these sectors all have a high proportion of vacancies that are due to skill-shortage vacancies.

Moreover, it is amongst Skilled Trades occupations such as electricians, plumbers or chefs that the concentration of skills shortage vacancies is highest and where employers experience the greatest problem in meeting their demand for skills from the available labour market. One in every three vacancies for skilled trades people were caused by skill shortages, which is almost double the average figure for the entire economy. The concentration of skill-shortage vacancies was also higher than average amongst the more highly skilled occupational areas: Professionals (21 per cent); Associate Professionals (19 per cent) and Managers (19 per cent). These occupational patterns of skill shortage concentration reflect a persistent trend over time compared to earlier surveys.

There are also patterns for the skills that are missing when a vacancy is caused by a skill shortage. Most commonly cited skills sets were job specific skills (66 per cent of skills shortage vacancies), and technical and practical skills (46 per cent), followed by soft skills such as customer handling (40 per cent) and oral communication skills (38 per cent). Literacy (29 per cent) and numeracy (26 per cent) skills were not considered so much of a problem by employers.

Whilst only a small proportion of employers report skill-shortage vacancies, where they do exist they have a significant impact on business performance. In total, 95 per cent of employers with a skill shortage vacancy said it was having an impact on their business. The main impact felt by businesses was on the workload of existing staff, which has the potential to cause knock-on effects on morale and retention. Other impacts on business performance cited by significant numbers of employers included difficulties in meeting customer service objectives, loss of business or orders to competitors, delays developing new products or services, and increased operating costs.

5 Internal Skills Mismatch

Chapter Summary

Almost 1.5 million employees (five per cent of all employees) were deemed not fully proficient (have a skills gap) and 13 per cent of employers reported having at least one employee with a skills gap.

Skills gaps were most commonly experienced among Sales and Customer services staff and Elementary occupations, both in absolute terms and as a proportion of all staff within each occupation.

Where skills gaps exist their impact can be significant; most commonly on the workload of their other staff (reported by 48 per cent of those with skills gaps) but also through increased operating costs (28 per cent), difficulties in meeting quality standards (25 per cent) and difficulties introducing new working practices (23 per cent). However, around two-in-five employers reported that skills gaps do not have tangible impact on the establishment's performance.

Across England, Wales and Northern Ireland five per cent of all employers reported that there are specific jobs in which they have difficulties retaining staff.

Across the UK, almost half of all establishments (49 per cent) reported having at least one employee with **both** qualifications **and** skills that are more advanced than required for their current job role. In volume terms, this amounts to 16 per cent of the total UK workforce.

5.1 Introduction

Skills mismatch, on one hand where the skills of staff are not adequate to perform their job role, or on the other, where workforce skills and qualifications are not being fully used or retained, can have an impact on the efficient functioning of establishments. This chapter will focus predominantly on skills gaps, exploring their incidence, volume, profile and causes, before reviewing the specific skills that employers report are lacking from their staff; the impact of skills gaps and the actions employers take in an attempt to combat them.

The chapter will then turn to examine the extent to which employers face retention issues, including the factors underlying any retention issues and the impacts of and responses taken by employers in the face of such challenges.

Finally, the chapter will briefly look at under-use of skills in the workplace, where employees have skills and qualifications which are more advanced than those required for their current job role. The UK Commission's Employer Skills Survey 2011, trialled for the first time, a question which was designed to pick up a sense of whether employers felt there were people working for them that were not having their skills fully used[18] as the topic is usually researched from an individual's perspective. Under-use of skills is an important issue as an establishment may not be optimising its productivity or stretching its product strategy and innovating if it is not making full use of its human resources.

5.2 Skills gaps

5.2.1 The incidence, volume, density and distribution of skills gaps

For the majority of establishments (87 per cent), the entire workforce is regarded as being fully proficient at their job roles; just 13 per cent report having at least one member of staff that is not fully proficient (a 'skills gap'). This amounts to around 1.5 million workers considered to have skills gaps or five per cent of the total UK workforce. Both in terms of the proportion of establishments and the proportion of staff, this is a decrease from levels reported in previous skills surveys conducted in the individual countries of the UK.

Employers in Scotland are slightly more likely than employers elsewhere in the UK to experience skills gaps among their workforce (16 per cent), and conversely those in Northern Ireland are slightly less likely (10 per cent). The same proportion of employers in England and Wales report a lack of full proficiency (each 13 per cent). These differences are less than differences by size or sector, as will be shown below.

While the incidence of skills gaps increases with the size of establishment, the proportion of staff described as having a skills gap is broadly consistent in terms of establishment size, other than for the smallest establishments: just three per cent of the workforce employed by establishments with fewer than five staff were described as not fully proficient.

[18] This question wasat the end of the skills gaps section of the questionnaire, and was asked whilst employers were already in the frame of mind for answering about the proficiency of their staff.

Hotels and Restaurants (21 per cent), Public Administration (20 per cent), Education (19 per cent) and Health and Social Work (18 per cent) are the sectors showing the highest incidence of skills gaps (see Appendix D for definitions of the sectors used in the report). The overall proportion of staff in the Hotels and Restaurants sector with skills gaps is also higher than average (nine per cent compared to the all-sector average of five per cent) and its share of all skills gaps (10 per cent) is considerably higher than its share of employment (six per cent, see Table 5.1). Wholesale and Retail was the sector with the highest number of skills gaps, and a higher than average proportion of staff with skills gaps (seven per cent).

Table 5.1 Incidence, number, density and distribution of skills gaps by country, size and sector

		% of establishments with any skills gaps	Number of staff not fully proficient, i.e. number of skills gaps	% of staff reported as having skills gaps	Share of employment	Share of all skills gaps
	Unwtd base	Row percentages			Column percentages *87,572*	*20,839*
Total	*87,572*	13	1,489,500	5	100	100
Country						
England	*75,053*	13	1,281,800	6	84	86
Northern Ireland	*4,004*	10	33,600	4	3	2
Scotland	*2,503*	16	120,500	5	9	8
Wales	*6,012*	13	53,700	5	4	4
Size						
1-4	*18,955*	6	89,700	3	11	6
5-24	*47,770*	23	352,900	6	23	24
25-99	*15,951*	37	372,000	5	25	25
100-249	*3,270*	44	235,700	6	14	16
250+	*1,626*	47	439,300	6	27	29
Sector						
Agriculture	*939*	9	15,700	4	1	1
Mining and Quarrying	*188*	13	1,800	3	*	*
Manufacturing	*7,704*	17	145,500	6	9	10
Electricity, Gas and Water	*1,426*	16	15,500	6	1	1
Construction	*6,654*	11	66,900	5	5	4
Wholesale and Retail	*15,340*	16	293,700	7	16	20
Hotels and Restaurants	*8,471*	21	155,300	9	6	10
Transport and Communications	*7,885*	9	99,300	4	8	7
Financial Services	*1,881*	17	46,200	4	4	3
Business Services	*14,488*	9	223,100	5	17	15
Public Administration	*1,617*	20	83,200	5	6	6
Education	*5,439*	19	94,900	4	9	6
Health and Social Work	*8,161*	18	180,400	5	13	12
Community, Social and Personal Services activities	*7,379*	13	68,200	5	5	5

Base: Columns 1 to 4 all establishments;; Column 5 all establishments with skills gaps.

Percentages in columns 3 and 4 are based on all employment rather than all establishments; proportions therefore show the percentage of employees with a skills gap (Column 3) and the percentage of employment that falls into each subgroup (Column 4). Percentages in Column 5 are based on all skills gaps and figures therefore show the percentage of gaps that fall into each subgroup.

Notes: The number of employees not fully proficient has been rounded to the nearest 100.

'' denotes a figure greater than 0 per cent but less than 0.5 per cent*

Establishments in the higher Product Market Strategy (PMS) groups are characterised by being innovative and producing high quality, customised services and goods; Chapter 4 of this report demonstrated they were more likely to be active in the recruitment market than those with a lower PMS rating[19]. It takes time to train new staff to full proficiency, and this is one possible reason why establishments in the higher PMS groups were more likely to have skills gaps than those in the lower PMS groups, with incidence ranging from 14-15 per cent in the "Medium", "High" and "Very High" groups compared to 12 per cent in "Low" and 10 per cent in "Very Low".

Establishments with higher levels of qualifications among their staff were less likely to report having a skills gap: just six per cent of establishments where over 80 per cent of the workforce hold a Level 4 qualification or higher reported having skills gaps, compared to the UK average of 13 per cent. Establishments who conduct annual performance reviews are more likely to report skills gaps (17 per cent) than those that do not (eight per cent). It is likely that those holding annual reviews are identifying where gaps exist through this process, whereas skills gaps among employees who do not have annual reviews may remain hidden from view. Similarly establishments who hold Investors in People accreditation are more likely to report skills gaps. In order to achieve Investors in People accreditation, establishments need to have certain human resource practices in place that are likely to allow easier identification of potential skills gaps.

People employed in what are traditionally described as unskilled or semi-skilled occupations (Elementary and Sales and Customer Services positions) are the most likely to have skills gaps, with eight per cent of staff in each of these occupational groups described as lacking full proficiency. (A description of occupational definitions can be found in Appendix E). Two-in-five of the staff who were described by employers as lacking proficiency work in Elementary and Sales and Customer services occupations (40 per cent), despite their accounting for only just over a quarter (27 per cent) of all employment.

Conversely those in more highly skilled occupational areas, such as Managers and Professionals, are the least likely to be described as having skills gaps (three and four per cent respectively), and make up a lower share of skills gaps than they do employment (see Table 5.2).

This pattern by occupation is similar to that seen in previous skills surveys conducted in the individual countries of the UK.

[19] "Product Market Strategy" is a measure calculated by combining responses to questions H1a-d; see section 2.2.2 of this report for full detail of its calculation.

Table 5.2 Number, density and distribution of skills gaps by occupation

		Total employment ('000s)	Number of staff not fully proficient, i.e. number of skills gaps ('000s)	% of staff reported as having skills gaps	Share of employment	Share of all skills gaps
			Row percentages		Column percentages	
	Base (unwtd)				*(87,572)*	*(20,839)*
Overall	*87,572*	27,547	1,490	5	100	100
Occupations						
Managers	*83,138*	5,414	166	3	20	11
Professionals	*16,360*	3,136	130	4	11	9
Associate Professionals	*13,753*	1,833	90	5	7	6
Administrative/ Clerical staff	*50,780*	3,540	170	5	13	11
Skilled Trades occupations	*20,540*	1,885	101	5	7	7
Caring, Leisure and Other services	*12,731*	2,296	124	5	8	8
Sales and Customer services	*26,790*	3,493	289	8	13	19
Machine Operatives	*13,381*	1,933	115	6	7	8
Elementary staff	*30,663*	4,015	305	8	15	20

Base: Columns 1 to 4: all establishments; Column 5 all establishments with skills gaps

Percentages in Columns 1 to 4 are based on all employment rather than all establishments; proportions therefore show the percentage of employment with a skills gap (Column 3) and the proportion of employment falling into each occupation (Column 4). Percentages in Column 5 are shown as a proportion of all skills gaps rather than all establishments with skills gaps, figures therefore show the proportion of skills gaps falling into each occupation.

Different sectors experience these occupational patterns of skills gaps differently, largely reflecting the patterns of employment in each sector. For example, employers within the Education sector were more likely to report skills gaps within Professional occupations, Construction employers have a high proportion of skills gaps falling within Skilled Trades occupations, employers in Retail and Wholesale report high concentrations of skills gaps among Sales and Customer Services staff, and employers in the Manufacturing sector are particularly likely to identify skills gaps among Machine Operatives. These results are shown in Table 5.3.

Table 5.3 Distribution of skills gaps by occupation within sector

	Base (unwtd)	Number of skills gaps (000s)		Managers	Professionals	Associate Professionals	Administrative / Clerical staff	Skilled Trades occupations	Caring, Leisure and Other Services	Sales and Customer Services	Machine Operatives	Elementary staff
				Row percentages								
Overall	*20,839*	1,490	%	11	9	6	11	7	8	19	8	20
Sector												
Agriculture	*134*	16	%	18	2	2	6	20	1	2	15	34
Mining and Quarrying	*24*	2	%	**	**	**	**	**	**	**	**	**
Manufacturing	*1,896*	145	%	9	4	5	6	13	*	6	34	21
Electricity, Gas and Water	*269*	15	%	12	16	7	14	11	*	9	13	17
Construction	*1,151*	67	%	16	3	7	14	36	*	5	6	14
Wholesale and Retail	*4,335*	294	%	10	1	2	5	5	*	53	4	19
Hotels and Restaurants	*2,778*	155	%	9	*	1	3	5	1	14	1	66
Transport and Communications	*1,489*	99	%	11	11	9	14	6	2	16	15	17
Financial Services	*395*	46	%	18	4	6	25	*	*	44	1	1
Business Services	*3,077*	223	%	12	13	8	16	6	2	18	7	18
Public Administration	*391*	83	%	14	10	18	20	4	13	5	9	6
Education	*1,316*	95	%	12	29	11	18	1	14	3	1	11
Health and Social Work	*2,010*	180	%	7	21	7	15	2	39	2	*	8
Community, Social and Personal Services activities	*1,574*	68	%	12	3	5	13	6	28	16	2	15

Base: All establishments with skills gaps.

Percentages are based on all skills gaps rather than all establishments with skills gaps, figures therefore show the proportion of skills gaps in each sector falling into each occupation.

Notes: Percentages sum to 100 per cent in each row (subject to rounding); '' denotes a figure greater than 0 per cent but less than 0.5 per cent; '**' denotes figure not shown because of a low base (fewer than 25 respondents)*

As with external skills deficiencies, it is interesting to look at the density of skills gaps within both occupation and sector, so in which specific occupations in specific sectors are a large proportion of staff reported as not being fully proficient in their role? Again, in Table 5.4 darker shading shows where the proportion of employers with skills gaps is higher, and lighter shading where it is lower, and it is presented in this way because some of the base sizes are small, but the patterns are notable.

Table 5.4 Density of skills gaps by occupation and sector

	Managers	Professionals	Associate Professionals	Administrative / Clerical staff	Skilled Trades occupations	Caring, Leisure and Other Services	Sales and Customer Services	Machine Operatives	Elementary staff
Total									
Agriculture		**	**	**		**	**		
Mining and Quarrying	**	**	**	**	**	**	**	**	**
Manufacturing						**			
Electricity, Gas and Water		**				**			
Construction						**			
Wholesale and Retail						**			
Hotels and Restaurants									
Transport and Communications						**			
Financial Services					**	**		**	**
Business Services									
Public Administration								**	
Education								**	
Health and Social Work								**	
Community, Social and Personal Services activities									

Base: All establishments in each occupation by sector

Densities are based on skills gaps as a proportion of all employment within each occupation by sector, rather than the number of establishments.

*'**' Figure not shown because of a low base (fewer than 25 respondents)*

Dark shading highlights a higher percentage of the workforce having skills gaps

As Table 5.4 indicates, the higher density of skills gaps reported amongst Sales and Customer Services is seen in the majority of the sectors whereas the high proportion of Elementary staff lacking proficiency is more concentrated in a smaller number of sectors. Skills gaps for Elementary staff is a particular issue for employers in the Hotels and Restaurants sector with 11 per cent of such staff reported as lacking proficiency.

5.2.2 The causes of skills gaps

Staff being new to the role (either because they have recently started the job or have recently been promoted to a higher level role) and, related to this, training only being partially completed are by far the most common causes of skills gaps, with 47 per cent and 46 per cent of all skills gaps respectively being attributed, at least in part, to these reasons. Indeed, 12 per cent of all skills gaps are attributed solely to one or both of these (typically) transient factors.

Two other factors relating to training (training proving ineffective and staff not receiving the appropriate training) are also quite common causes (explaining at least in part 29 per cent and 23 per cent of skills gaps respectively).

A requirement for (further) training is also implicit in those skills gaps arising from the introduction of new working practices (23 per cent), the introduction of new technology (17 per cent) and the development of new products or services (15 per cent).

Approaching one-in-five skills gaps (18 per cent) result from an inability to recruit appropriately skilled individuals, and one-in-ten gaps (10 per cent) arise from retention difficulties. In both cases the underlying implication is that experienced staff have left and employers have had to fill these positions with people who do not have the required skill set.

The main causes of staff not being fully proficient by nation are presented in Table 5.5. Results are based on skills gaps rather than establishments with gaps. The figure shows what proportions of skills gaps are caused by the various factors reported by employers. Respondents could give more than one cause for skills gaps within each occupation. The hierarchy of causality is reasonably consistent across the nations, with the two factors of staff being new to the role and not having completed their training the dominant reasons across all nations. There are a few differences worthy of note however: in Northern Ireland skills gaps are more likely to be reported as being due to staff lacking motivation or training not leading to sufficient improvements, and in Wales, skills gaps were more likely to be due to the introduction of new products or services than they were elsewhere.

Table 5.5 Main causes of skills gaps by nation

Column Percentages	TOTAL	England	Northern Ireland	Scotland	Wales
Unweighted base	*20,839*	*18,060*	*627*	*797*	*1,355*
	%	%	%	%	%
They are new to the role	47	46	52	51	46
Their training is currently only partially completed	46	45	53	50	50
Staff lack motivation	32	32	44	27	31
They have been on training but their performance has not improved sufficiently	29	28	42	32	32
The introduction of new working practices	23	23	28	24	27
They have not received the appropriate training	23	22	24	23	25
Unable to recruit staff with the required skills	18	18	20	16	19
The introduction of new technology	17	16	21	17	20
The development of new products and service	15	15	16	17	21
Problems retaining staff	10	11	8	9	8

Base: All establishments with skills gaps

Percentages are based on all skills gaps followed up rather than all establishments with skills gaps, figures therefore show the proportion of skills gaps in each nation caused by each stated reason.

5.2.3 Skills lacking internally

Clearly a critical issue is the nature of the skills lacking among the workforce. This section therefore now turns to examine the range of skills described as lacking from current staff with skills gaps.

Employers who reported having skills gaps were read a list of types of skills and asked, for each occupation, which skills were lacking. Table 5.6 shows results based on the total number of gaps (as opposed to establishments) with each issue.

When describing the skills lacking among their staff, employers generally focused on technical, practical or job-specific skills (i.e. skills relating directly to the role in question): almost half (48 per cent) of employees described by their employers as lacking full proficiency were felt to lack job-specific skills, and over a quarter (27 per cent) were regarded as lacking technical or practical skills.

Employers were also likely to report skills gaps for planning and organisation (39 per cent), customer handling (38 per cent) and team working (38 per cent), as well as other soft, generic skills such as problem-solving (35 per cent) and oral communication skills (34 per cent).

Less common, though still found in between one-in-six and three-in-ten cases where staff lacked proficiency, were insufficient written communication skills (28 per cent), strategic management skills (19 per cent) and basic computer literacy skills (17 per cent). Clearly skills gaps in regard to managerial skills have particular potential to impact on business performance and growth.

Literacy skills gaps were slightly more commonly reported than numeracy skills gaps, with the former lacking in around one-in-five staff that have skills gaps (19 per cent) and the latter in around one-in-seven of those with gaps (15 per cent).

Table 5.6 shows, by nation, what skills employers reported their employees with skills gaps lack. Some notable differences can be seen, particularly between England and the rest of the UK. Across the board skills gaps in England were less likely to be attributed to each specific skill, but particularly in the areas of planning and organisation and problem solving, which were more likely to be reported as an issue for Northern Ireland, Scotland and Wales than they were in England. A lack of basic computer literacy was also less likely to lead to skills gaps in England than in the other nations. Literacy and numeracy skills gaps were more likely to be reported in Wales (26 and 22 per cent respectively, compared to 19 and 15 per cent UK average), and just over one-in-ten skills gaps in Wales was attributed at least in part to a shortage of Welsh Language skills.

Table 5.6 Skills lacking in skills gaps followed up by nation

Column Percentages	TOTAL	England	Northern Ireland	Scotland	Wales
Unweighted base	*20,839*	*18,060*	*627*	*797*	*1,355*
	%	%	%	%	%
Job specific skills	48	47	52	56	53
Technical or practical skills	27	26	31	31	34
Basic computer literacy / using IT	17	16	23	21	21
Advanced IT or software skills	15	14	19	17	21
Office admin skills	16	16	18	17	24
Planning and Organisation skills	39	37	51	45	48
Problem solving skills	35	33	46	42	41
Strategic Management skills	19	18	19	21	19
Literacy skills	19	18	18	16	26
Numeracy skills	15	15	17	16	22
Customer handling skills	38	38	45	38	39
Team working skills	38	37	49	42	40
Oral communication skills	34	34	41	33	36
Written communication skills	28	28	28	28	31
Foreign language skills	9	9	6	10	7
Wales only					
Oral Welsh language skills	n/a	n/a	n/a	n/a	12
Written Welsh language skills	n/a	n/a	n/a	n/a	11

Base: All establishments with skills gaps

Percentages are based on all skills gaps followed up rather than all establishments with skills gaps, figures therefore show the proportion of skills gaps in each nation caused by lack of each listed skill.

For comparative purposes, Table 5.7 also shows results presented in Chapter 4 with regards to the skills considered lacking from the available labour market. A similar hierarchy across both types of skills deficiency have been observed in the previous skills surveys conducted in the individual countries of the UK.

Table 5.7 Skills lacking where skills gaps and skill-shortage vacancies exist

		Skills gaps	Skill-shortage vacancies
Unweighted base		*20,839*	*3,973*
		%	%
Job specific skills		48	66
Technical or practical skills		27	46
Basic computer literacy / using IT		17	16
Advanced IT or software skills		15	21
Office admin skills		16	17
Planning and Organisation skills		39	41
Problem solving skills		35	37
Strategic Management skills		19	29
Literacy skills		19	29
Numeracy skills		15	26
Customer handling skills		38	40
Team working skills		38	33
Oral communication skills		34	38
Written communication skills		28	33
Foreign language skills		9	16
Wales only	*Base:*	*1,355*	*274*
Oral Welsh language skills		12	30
Written Welsh language skills		11	28

Base: Column 1: all establishments with skills gaps; Column 2: all establishments with skill-shortage vacancies.

Percentages are based on all skills gaps followed up / all skill-shortage vacancies rather than all establishments with skills gaps or skill-shortage vacancies, figures therefore show the proportion of skills gaps / skill-shortage vacancies in each nation caused by lack of each listed skill.

Note: Column percentages exceed 100 per cent because of multiple responses.

Table 5.8 shows the skills lacking by occupation amongst employees who are not fully proficient. Results are shown as column percentages, and are based on skills gaps discussed with respondents, rather than as an employer-based measure.

The table shows that a lack of technical, practical and job-specific skills were particularly likely to affect Skilled Trades, Professional and Machine Operative occupations. Generally, the softer skills were more lacking amongst Administrative / Clerical staff and Elementary staff.

Clearly a lack of managerial skills has the potential to impact on business performance and growth. While a deficiency of strategic management skills affects managerial level staff in particular (46 per cent), they were also commonly reported among professional staff (35 per cent).

In Wales, around one in 10 establishments reported staff lacking oral or written Welsh language skills, most commonly amongst the Associate Professional occupations (the occupational group which includes translators).

Table 5.8 Skills lacking by occupation

	Overall	Managers	Professionals	Associate Professionals	Administrative / Clerical staff	Skilled Trades occupations	Caring, Leisure, Other Services	Sales / Customer Services	Machine Operatives	Elementary staff
					Column percentages					
Unweighted base	*20,839*	*4,996*	*1,737*	*1,831*	*4,744*	*2,969*	*2,384*	*5,581*	*1,798*	*5,429*
	%	%	%	%	%	%	%	%	%	%
Job specific skills	48	38	44	51	45	58	53	47	51	51
Technical or practical skills	27	17	20	36	23	46	26	23	41	28
Basic computer literacy / using IT	17	18	9	16	24	15	23	16	19	13
Advanced IT or software skills	15	21	15	25	30	14	12	11	8	8
Office admin skills	16	23	10	15	39	10	15	16	9	9
Planning and Organisation skills	39	44	38	37	42	38	44	40	28	35
Problem solving skills	35	35	29	29	36	38	37	37	31	35
Strategic management skills	19	46	35	20	15	13	13	13	7	12
Literacy skills	19	10	9	13	19	19	33	16	23	24
Numeracy skills	15	8	6	10	16	16	21	16	18	21
Customer handling skills	38	28	37	27	37	26	38	56	18	45
Team working skills	38	38	39	31	32	33	45	40	37	42
Oral communication skills	34	33	19	27	30	26	38	41	33	40
Written communication skills	28	26	40	25	32	24	40	21	29	27
Foreign language skills	9	7	9	4	6	7	11	8	9	12
Wales only *Base:*	*1,355*	*304*	*100*	*108*	*305*	*204*	*160*	*328*	*115*	*365*
Oral Welsh language skills	12	16	14	39	14	6	10	13	3	10
Written Welsh language skills	11	15	10	38	13	6	9	11	4	8

Base: All establishments with skills gaps
Percentages are based on all skills gaps followed up rather than all establishments with skills gaps, figures therefore show the proportion of skills gaps in each occupation caused by lack of each listed skill.
Note: Column percentages exceed 100 per cent because of multiple responses.

5.2.4 The impact of skills gaps and employers' response

This section examines the impact of skills gaps on employers and the actions employers take to (try and) combat them.

For around two-in-five employers with skills gaps (39 per cent), the fact that (some) staff lack full proficiency has no tangible impact on the establishment's performance. In some establishments it could be that having skills gaps is a natural part of employees' development and they will come up to speed over time, so any impact is considered to be just part of how the establishment operates.

However, for around one-in-seven (15 per cent), skills gaps are felt to have a major impact on performance, and for a further 46 per cent there is a minor impact.

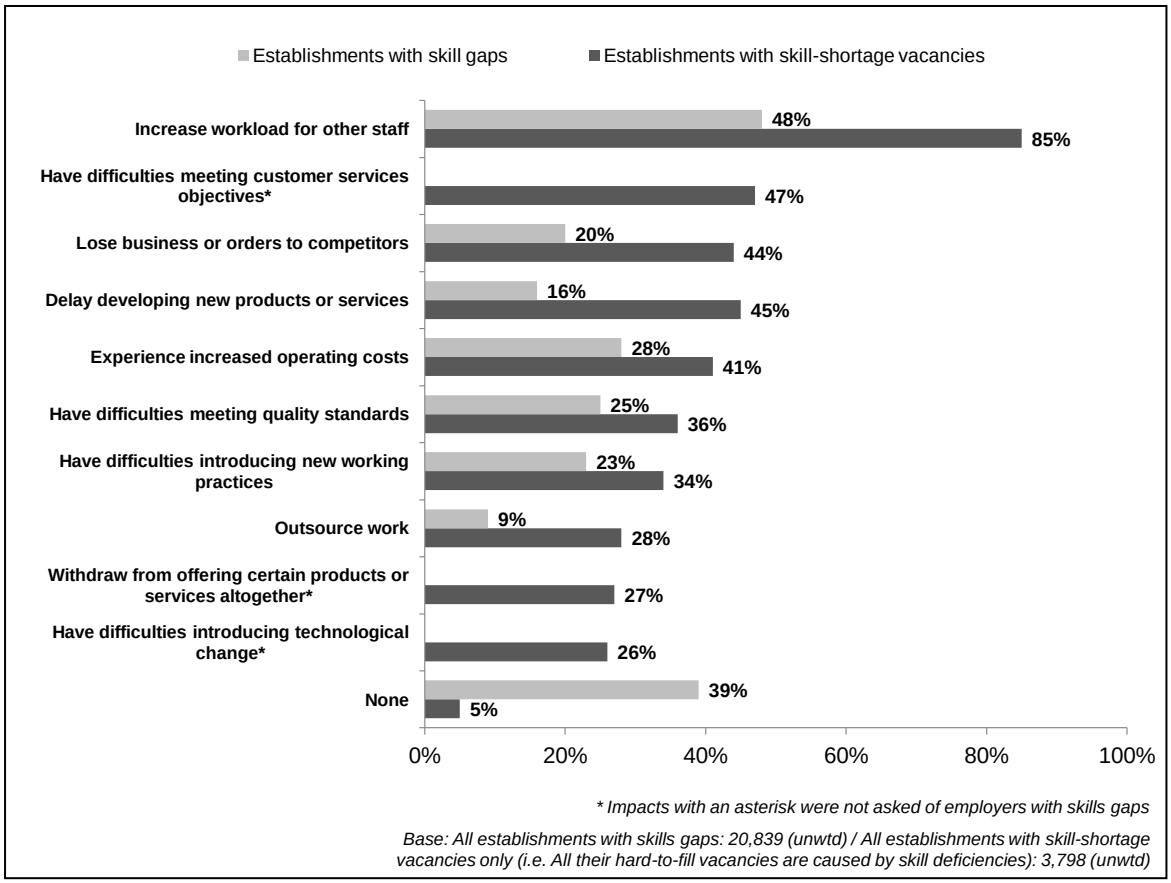
Compared to establishments with skill-shortage vacancies (see previous Chapter and Figure 5.1 below), fewer establishments with skills gaps among their current staff reported that the skills deficiencies they were experiencing were having an impact on their establishment. Establishments who have staff who are not fully proficient do at least have somebody in place doing the job, even though their performance is below par. Those with a skill-shortage vacancy however will often have nobody in the post they are trying to fill, therefore the impact on them can be larger. However, it is important to remember that skills gaps affect a much larger proportion of employers than skill-shortage vacancies.

Like skill-shortage vacancies, the most common impact of skills gaps is on other staff. Almost half of establishments experiencing skills gaps (48 per cent) reported an increase in the workload for other staff as a consequence of having staff who are not fully proficient. While in some cases increased workload can be absorbed by other staff, some employers will need to pay for overtime or bring in agency staff to cover the work: overall 28 per cent of employers with skills gaps reported that they had led to increased operating costs.

Difficulties in meeting quality standards or introducing new working practices were each adverse consequences for around a quarter of employers reporting internal skills deficiencies (25 per cent and 23 per cent respectively). Around a fifth of those with skills gaps (20 per cent) reported that they had lost business or orders to competitors as a result of these skills gaps.

As well as hindering innovation in working practices, skills gaps also hamper the development of new products and services: 16 per cent of employers with skills gaps have had to delay the development of new products and services as a result of their staff lacking full proficiency.

Figure 5.1 Impact of skills deficiencies

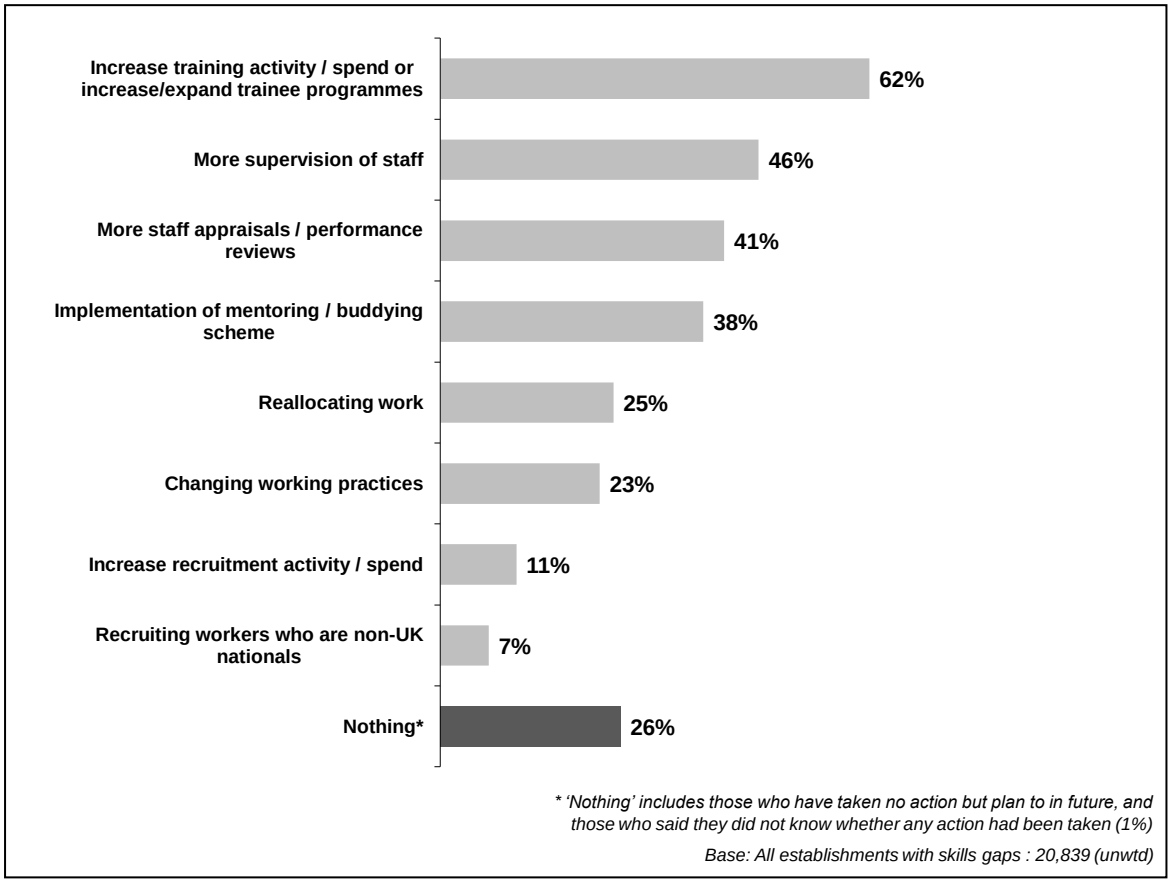


The majority of employers with skills gaps have taken some form of action to improve the proficiency of the staff concerned (75 per cent), and a further 13 per cent have plans to do so in future. For around one-in-10 establishments with skills gaps, however, no action has been taken or planned to tackle the issue (11 per cent), mostly where gaps are caused by their training not being fully complete (63 per cent) or staff being new to the role (53 per cent) so extra remedial action beyond completing their training was not required. Establishments who said their gaps were having an impact but that they did not plan to take any action were more likely than average to attribute gaps to staff lacking motivation (46 per cent compared to the UK average of 32 per cent) and to the introduction of new technology (28 per cent, compared to the UK average of 17 per cent).

Approximately three-in-five employers who have skills gaps among their workforce have either increased the amount of training they provide or increased the amount they spend on training (62 per cent) (Figure 5.2).

The next most common responses to skills gaps involve increasing supervision, reviews and/or mentoring, thereby broadly using the experience of existing staff to oversee and assist those lacking skills: 46 per cent have responded to skills gaps by supervising staff to a greater extent, 41 per cent have introduced more frequent appraisals or performance reviews for staff, and 38 per cent have implemented mentoring or buddying schemes.

Figure 5.2 Actions taken to overcome skills gaps



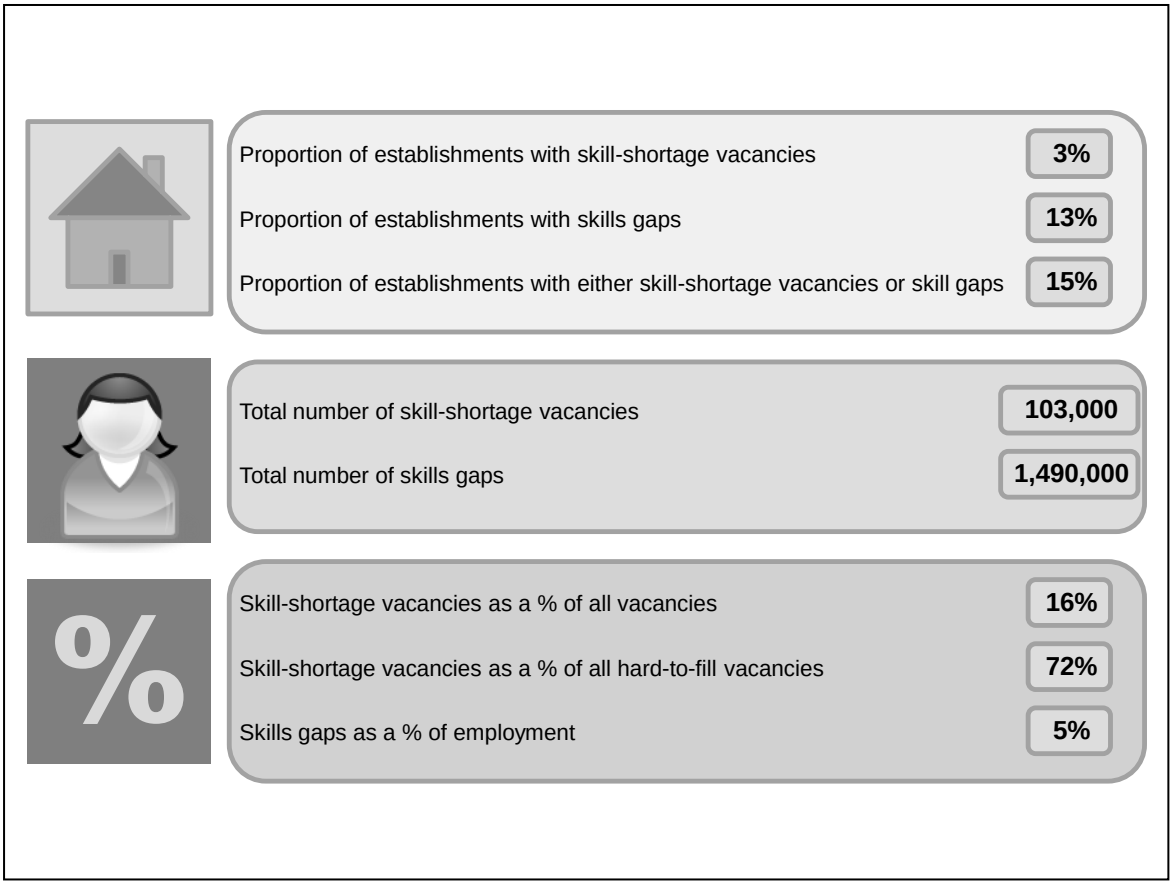
While most of these responses have cost implications for the establishments taking them, if employers are able to target this investment successfully then the long-term benefits to them of reducing the impacts may in many cases pay for itself through fewer business orders lost to competitors, reduced operating costs and by removing barriers to expansion by developing new products/services and introducing new working practices. These actions provide some evidence that, where there are skills gaps, the majority of employers are taking ownership of these and investing in solutions.

5.2.5 Summarising skill deficiencies

The previous chapter examined skill-shortage vacancies and this one has explored skills gaps. The identification of these two measures as separate phenomena may not reflect how employers experience them, however. But to what extent do businesses face both skills gaps and skills shortage vacancies or just one or other of these deficiencies?

Figure 5.3 shows that 15 per cent of establishments were suffering from either form of skill deficiency (one per cent reported both). Establishments that experience both are more likely to be larger, employing a greater number of staff and reporting a larger number of vacancies.

Figure 5.3 Skills deficiency measures



5.3 Retention difficulties

This chapter has so far focussed on the challenges faced by employers in terms of the skills, or lack of skills, their staff hold. This section now turns to the extent to which employers face difficulties retaining existing staff, including the factors underlying any retention issues and the impacts of and responses taken by employers in the face of such challenges. There will always be a time lag between people starting a new job and their becoming fully proficient at it; in some roles, full proficiency may be possible quite quickly, in others considerably more time may be needed. We have seen that most employers attribute most skills gaps to staff not having enough time in their job to have reached full proficiency. If retention difficulties for particular job roles coincide with skills gaps, there is likely to be a cumulative impact on productivity; and similarly where retention difficulties lead to unfilled posts (through hard-to-fill vacancies).

It should be noted that, due to questionnaire length constraints, questions relating to retention difficulties were only asked of employers in England, Northern Ireland and Wales, and as such no Scottish or UK-wide data is available.

5.3.1 Incidence and distribution of retention difficulties

Five per cent of establishments asked reported that there are specific jobs in which they have difficulties retaining staff.

Similar proportions of employers in England, Northern Ireland and Wales experience retention difficulties. The proportion of establishments reporting retention difficulties rises consistently with establishment size, however, from four per cent of establishments with 1-4 staff and approaching a sixth (17 per cent) of those with 250+ staff.

Employers operating in the Hotels and Restaurants sector are the most likely to experience retention difficulties (10 per cent, see Table 5.9), and as previously discussed this is also the sector with the highest incidence of skills gaps (21 per cent). Indeed, employers in the Hotels and Restaurants sector are particularly likely to attribute skills gaps (at least in part) to problems retaining staff: retention difficulties are linked to 17 per cent of skills gaps within this sector, compared with a pan-sector average of 10 per cent of skills gaps (see Appendix D for full description of sectors).

An employer's Product Market Strategy classification[20] and employee qualification levels had no impact on staff retention.

[20] "Product Market Strategy" is a measure calculated by combining responses to questions H1a-d; see section 2.2.2 of this report for full detail of its calculation.

Table 5.9 Incidence of retention difficulties by country, size and sector

	Unwtd base	**% of establishments with retention difficulties**		*Unwtd base*	**% of establishments with retention difficulties**
Total (excluding Scotland)	*85,069*	5	**Sector**		
			Agriculture	*850*	5
Country			Mining and Quarrying	*164*	9
England	*75,053*	5	Manufacturing	*7,526*	5
Northern Ireland	*4,004*	4	Electricity, Gas and Water	*1,344*	4
Wales	*6,012*	6	Construction	*6,423*	3
			Wholesale and Retail	*15,022*	4
Size			Hotels and Restaurants	*8,251*	10
1-4	*18,642*	4	Transport and Communications	*7,660*	5
5-24	*46,875*	7	Financial Services	*1,790*	4
25-99	*15,136*	9	Business Services	*14,142*	4
100-249	*2,947*	12	Public Administration	*1,480*	7
250+	*1,469*	17	Education	*5,275*	5
			Health and Social Work	*7,953*	7
			Community, Social and Personal Services activities	*7,189*	7

Base: All establishments in England, Northern Ireland and Wales.

Differences by nation are not statistically significant

Although there are some wide differences by sector, to a large extent these reflect the occupational profiles of their respective workforces. In overall terms, where employers experience retention difficulties these are most likely to mainly relate to Skilled Trades occupations or Elementary staff (19 per cent of establishments with retention difficulties cited each of these as the main occupation for which they had difficulties). In part this reflects the prevalence of these occupations across a wide range of sectors (particularly Elementary occupations), though this does not tell the whole story as 90 per cent of establishments employ Managers but only three per cent have retention difficulties in this area. (A description of occupational definitions can be found in Appendix E).

There are different patterns in different sectors, for example in Community, Social and Personal Services (this sector includes, among other things, libraries, museums, sporting facilities and personal services such as hairdressing and cleaning), Health and Social Work and Public Administration the main difficulty is in retaining Caring, Leisure and Other services staff (48, 41 and 40 per cent of those with retention difficulties cite these occupations as most problematic). In Financial Services and Transport and Communications the main issue is with Associate Professionals (37 and 29 per cent) and for Education the main challenge lies in Professional roles (34 per cent, see Table 5.10).

Table 5.10 Occupations in which most difficulty retaining staff within sector

	Unweighted base		**Managers**	**Professionals**	**Associate Professionals**	**Administrative / Clerical staff**	**Skilled Trades occupations**	**Caring, Leisure and Other Services**	**Sales and Customer Services**	**Machine Operatives**	**Elementary staff**
			Row percentages								
Overall	*5,866*	%	3	9	13	7	19	11	11	7	19
Sector											
Agriculture	*57*	%	-	2	-	9	25	10	7	8	39
Mining and Quarrying	*14*	%	**	**	**	**	**	**	**	**	**
Manufacturing	*473*	%	2	7	11	7	40	*	6	19	6
Electricity, Gas and Water	*67*	%	1	6	7	6	19	-	9	28	23
Construction	*261*	%	2	3	6	6	55	*	4	5	18
Wholesale and Retail	*805*	%	6	3	8	2	22	*	36	10	11
Hotels and Restaurants	*1,036*	%	2	-	1	2	37	3	4	1	51
Transport and Communications	*478*	%	*	11	29	3	8	*	16	19	8
Financial Services	*81*	%	4	6	37	39	-	-	12	-	*
Business Services	*843*	%	4	18	22	11	9	4	7	5	20
Public Administration	*126*	%	4	23	15	7	2	40	1	1	5
Education	*353*	%	1	34	10	4	3	15	1	*	33
Health and Social Work	*615*	%	5	17	9	17	3	41	1	1	5
Community, Social and Personal Services activities	*657*	%	3	5	15	6	3	48	7	1	11

Base: All establishments with retention difficulties in England, Northern Ireland and Wales.

Notes: Row percentages do not all add to 100 per cent, as a small proportion of occupations could not be classified into one of the nine occupational groups; '' denotes a figure greater than 0 per cent but less than 0.5 per cent; '**' denotes figure not shown because of a low base (fewer than 25 respondents)*

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As would be expected, establishments with retention difficulties are far more likely to have vacancies (44 per cent do, compared to 10 per cent of those without retention difficulties), and a higher proportion of their vacancies are classed as being hard-to-fill (40 per cent, compared to 18 per cent of all vacancies at establishments not suffering retention issues).

Those establishments with retention difficulties were more likely to cite problems with the role as being the reason for their hard-to-fill vacancies than those without retention problems: 30 per cent of hard-to-fill vacancies in this group were due to "not enough people wanting to do this kind of work" (compared to 18 per cent of those in establishments without retention problems) and 12 per cent were down to the shift patterns or unsociable hours required by the role (compared to five per cent of those in establishments without retention problems).

Employers with retention difficulties were much more likely to report that the number of staff at their establishment had decreased compared with 12 months previously (32 per cent compared to 17 per cent with no retention issues).

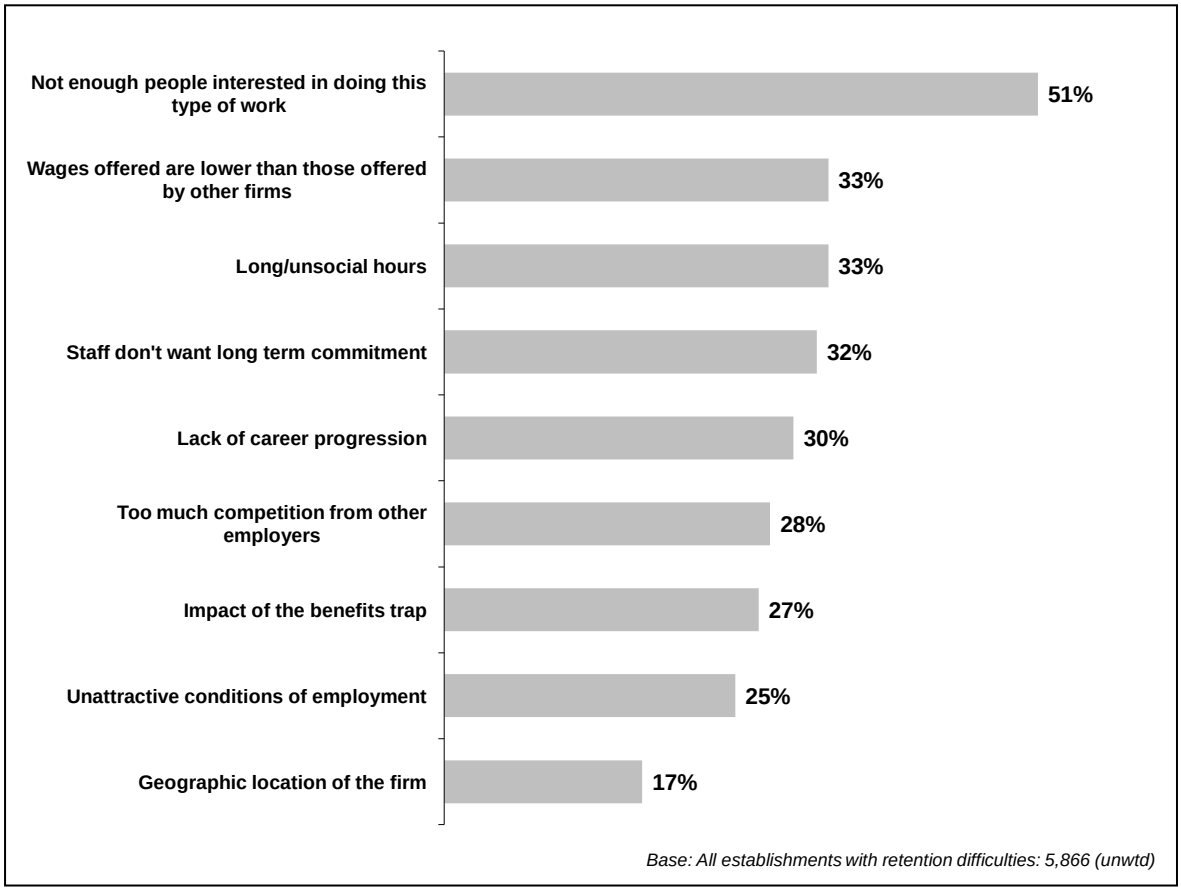
5.3.2 Main reasons for staff retention difficulties

Establishments were asked follow up questions on the causes and impacts of retention problems about the main occupation for which they were experiencing retention difficulties. By far the most common cause of retention difficulties is a lack of interest in the type of work in question, reported by half (51 per cent) of all employers with retention difficulties in particular for Machine Operative roles (69 per cent) and Elementary occupations (61 per cent). Three in 10 (30 per cent) cite a lack of career progression as a key reason for staff deciding to leave, particularly Managers (45 per cent) and Administrative / Clerical roles (40 per cent).

Various issues relating specifically to the job, such as low wages in comparison to other employers (33 per cent), long/unsocial hours (33 per cent), and unattractive conditions of employment (25 per cent), were reported by between a quarter and a third of employers with retention difficulties, while the location of the organisation was a factor for one-in-six employers with such difficulties (17 per cent). The similarity between the reasons for staff retention difficulties and the causes of hard-to-fill vacancies in those businesses that also report hard-to-fill vacancies, is striking.

Factors external to the employer are also evident as retention issues, with just over a quarter of establishments with retention difficulties citing too much competition from other employers (28 per cent) and the impact of the benefits trap (where employees perceive they were better off on benefits than they are working) (27 per cent, see Figure 5.4).

Figure 5.4 Main reasons for difficulties retaining staff



5.3.3 The impact of retention difficulties

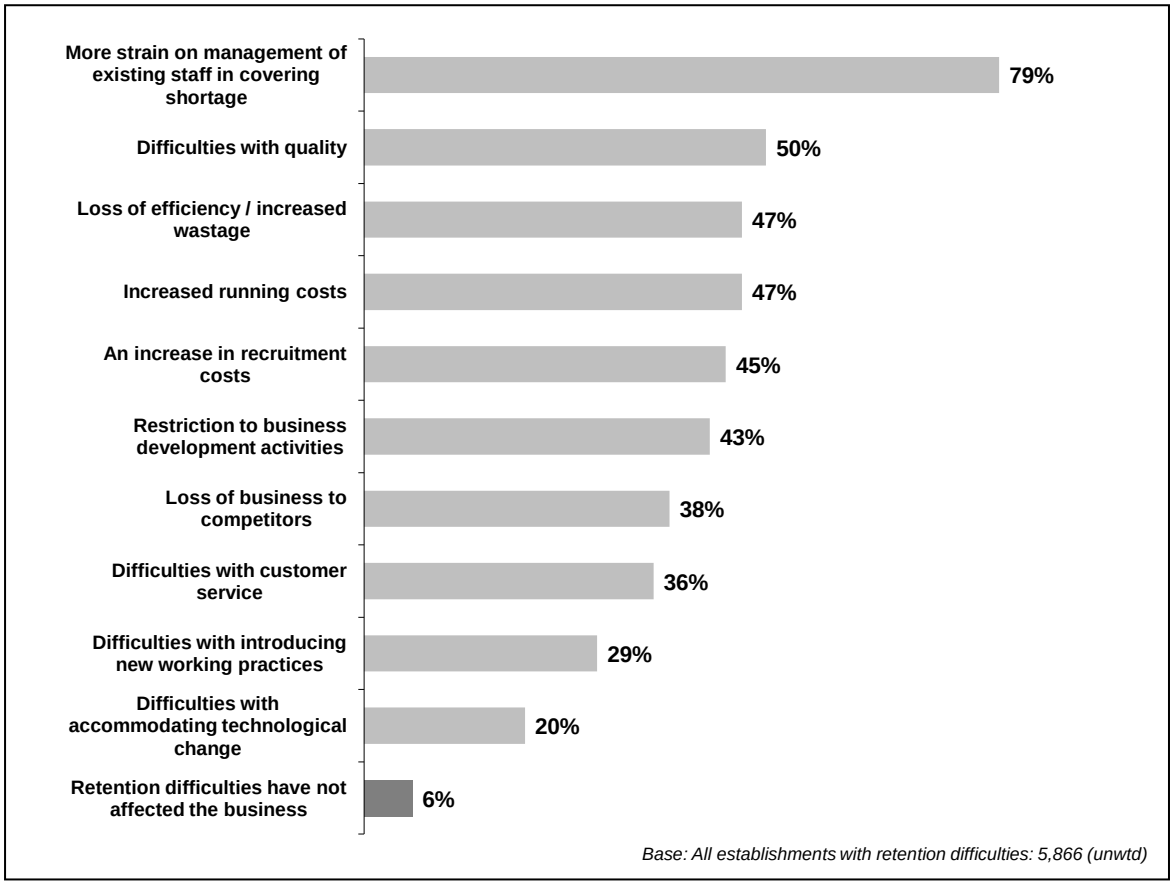
The overwhelming impact resulting from retention difficulties is an increased strain on remaining staff to cover the shortage, reported by 79 per cent of employers with retention difficulties. This is also the primary impact of hard-to-fill (and skill-shortage) vacancies as discussed in the previous chapter.

Approaching half of employers with retention difficulties experienced a drop in efficiency (47 per cent) and/or increased running costs (47 per cent). Other impacts directly affecting the "bottom line" include increased recruitment costs (45 per cent) and loss of business to competitors (38 per cent).

Difficulties retaining staff also act as a brake on future business expansion, with 43 per cent citing business development activities being restricted, three-in-ten reporting difficulties introducing new working practices (29 per cent) and one-in-five finding it hard to accommodate technological change (20 per cent).

Just six per cent of employers reported that their retention difficulties had not affected the business (see Figure 5.5).

Figure 5.5 Impacts of retention difficulties



There was some difference by occupation:

- establishments with retention difficulties in Skilled Trade Occupations were more likely to say that there was an impact on their running costs, with 60 per cent citing this as a problem (compared to 47 per cent overall);
- a loss of business to competitors was more likely to be suffered by those with retention difficulties for Associate Professionals (55 per cent, compared to 38 per cent overall), and restrictions to business development activities (56 per cent compared to 43 per cent overall);

- retention difficulties with managers, whilst rare, were most likely to lead to difficulties with quality (62 per cent compared to 50 per cent overall) and a loss of efficiency (69 per cent compared to 47 per cent overall).

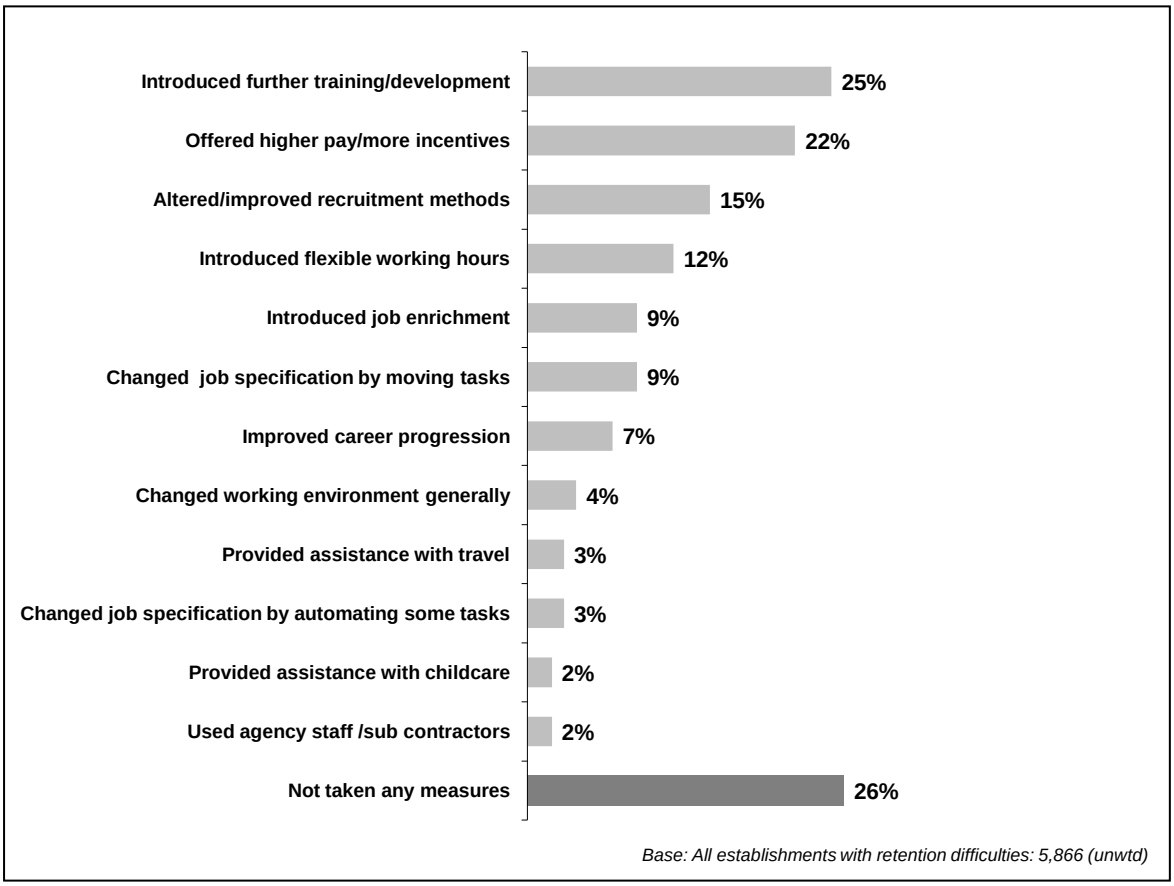
5.3.4 Measures taken to overcome difficulties

The response to retention difficulties most frequently centres around increased training and remuneration, with a quarter (25 per cent) reporting that they had introduced further training and development opportunities, and around one-in-five (22 per cent) offering higher pay and/or incentives than normal (see Figure 5.6).

The introduction of improved recruitment methods, flexible working hours, job enrichment and changes to job specifications were each reported by between one in 10 and one-in-seven employers with retention difficulties (15 per cent, 12 per cent, nine per cent and nine per cent respectively).

Around a quarter of employers (26 per cent) reported that they had not taken any measures to try and overcome difficulties retaining staff. Where employers with retention difficulties also experience skill-shortage vacancies and/or skills gaps, however, this proportion falls to 20 per cent, demonstrating that the cumulative impact of multiple skills and retention issues necessitates a greater reaction / response on the part of employers.

Figure 5.6 Measures taken to overcome retention difficulties[21]



5.4 Under-use of skills in the workplace

Historically, employer skills surveys in the UK have tended to focus on those imbalances and mismatches in the labour market that result from a lack of skills, either in the form of staff not being fully proficient, or employers reporting difficulties filling vacancies because of a lack of candidates with the required skills, work experience or qualifications, the measures of skills deficiency that we have examined above, and in the previous chapter. However, further imbalances are caused when the skills held by individuals in work are not used to their full extent. This phenomenon is variously referred to as over-skilling, over-qualification[22] and / or under-employment (although in economic terms this is a broader concept that also encapsulates involuntary part-time work as well as unemployment). Here we will refer to it as under-use of skills.

This kind of mismatch between the types of skills or qualifications that an individual has and the type that are required for their job can have a negative impact on their job satisfaction and earnings. This in turn can lead to lower levels of motivation, which in turn (and in numbers) fuels a loss of productivity and of competiveness. Ultimately, where individuals are not being used to their full potential, the result is economic inefficiency.

There has been a relatively large investment in skills supply in recent years. This has led to increasing participation and achievement in tertiary and, in particular, higher education. Despite this, there remains a well documented productivity gap with comparator countries. This suggests that the skills problem is related not only to skills supply but also to weak demand and inefficient use of skills. Increasingly policy makers are recognising the importance of demand side measures such as how businesses organise their work and manage their people in delivering improvements in skills and, ultimately, in productivity.

[22] When specifically referring to the qualifications that individuals possess over and above those that are required for their job

Measuring skill mismatch between workers and jobs is no easy task. Although there is considerable variation in estimates of the extent of the problem, most studies seem to suggest that somewhere in the region of a third to a half of all employees hold qualifications and skills at a higher level than they need for their job[23]. While a number of studies have attempted to measure the extent and, on occasion, the nature and impact of skills under-use, these have tended to be through research among individuals, rather than among employers. This is generally a reflection of the fact that individuals are more likely to know the level of skills and qualifications they hold. However, even at an individual level, the majority of research and academic literature focuses on qualification mismatches.

Notwithstanding these challenges, the UK Commission's Employer Skills Survey 2011 included a question which asked employers how many of their staff they considered to have **both** qualifications **and** skills that are more advanced than required for their current job role. Although this allows only limited analysis at an overall rather than an occupational level, it does allow us to explore the under-use of skills from an employer perspective and contribute to the wider evidence base on the subject.

5.4.1 Incidence and density of skill under-use

Across the UK, almost half of all establishments (49 per cent) report having at least one employee with **both** qualifications **and** skills that are more advanced than required for their current job role. In volume terms, this amounts to just under 4.5 million workers or 16 per cent of the total UK workforce.

The under-use of skills can be voluntary, for example a mother returning to work after maternity leave may choose to take a lower-level job than the one she held before in order to avoid long working hours or the stress of her previous role. Or it could be due to the situation in the labour market, for example, a graduate may take a lower-level job in their field than a graduate would normally expect to enter at because there are no vacancies at the higher graduate level. The research suggests that under-use of skills affects a significantly larger proportion of employers and their workforce than skills deficiencies do (see Table 5.11).

[23] See, for example, Brinkley, I. et al. (2009) *Knowledge Workers and Work*, The Work Foundation and Felstead, A. Gallie, D. Green, F. and Zhou, Y. (2007) *Skills at Work*, 1986-2006.

Table 5.11 Incidence, number, density and distribution of staff who are both over-qualified and over-skilled by country, size and sector

		% of establishments with over-qualified and over-skilled staff	Number of over-qualified and over-skilled staff	% of staff reported as being over-qualified and over-skilled	Share of employment	Share of all over-qualified and over-skilled staff
	Unwtd Base	Row percentages			Column percentages	
Total	*87,572*	49	4,456,000	16	100	100
Country						
England	*75,053*	48	3,762,000	16	84	84
Northern Ireland	*4,004*	43	117,000	15	3	3
Scotland	*2,503*	58	411,000	17	9	9
Wales	*6,012*	45	165,000	14	4	4
Size						
1-4	*18,955*	49	1,003,000	34	11	23
5-24	*47,770*	48	1,205,000	19	23	27
25-99	*15,951*	50	860,000	13	25	19
100-249	*3,270*	49	467,000	12	15	10
250+	*1,626*	48	921,000	13	27	21
Sector						
Agriculture	*939*	39	77,000	21	1	2
Mining and Quarrying	*188*	44	15,000	27	*	*
Manufacturing	*7,704*	43	247,000	10	9	6
Electricity, Gas and Water	*1,426*	43	28,000	10	1	1
Construction	*6,654*	43	259,000	18	5	6
Wholesale and Retail	*15,340*	52	801,000	18	16	18
Hotels and Restaurants	*8,471*	60	445,000	26	6	10
Transport and Communications	*7,885*	48	345,000	15	8	8
Financial Services	*1,881*	52	171,000	16	4	4
Business Services	*14,488*	46	756,000	17	17	17
Public Administration	*1,617*	54	217,000	14	6	5
Education	*5,439*	54	341,000	13	9	8
Health and Social Work	*8,161*	50	484,000	14	13	11
Community, Social and Personal Services activities	*7,379*	52	269,000	22	5	6

Base: All establishments.

Percentages in Columns 3 to 5 are based on all employment rather than all establishments, figures therefore show the proportion of staff in each subgroup who are over-qualified and over-skilled (Column 3), and the proportion of staff that fall into each subgroup (Columns 4 and 5).

Notes: The number of over-qualified and over-skilled staff has been rounded to the nearest 1,000.

'' denotes a figure greater than 0 per cent but less than 0.5 per cent*

Employers in Scotland are more likely than employers elsewhere in the UK to have staff who they consider to be over-skilled and over-qualified (58 per cent), and conversely those in Northern Ireland and Wales slightly less likely (43 and 45 per cent respectively). In terms of the proportion of staff who they describe as having both the skills and qualifications that are more advanced than required for their current job role, there is a similar pattern although differences are fairly small.

To some extent these differences by country can be attributed to workforce qualification profiles, given that the workforce in Scotland is more highly qualified than the workforce in Wales and Northern Ireland (this survey also shows that businesses with higher qualification levels amongst staff were more likely to report under-use).

While the incidence of under-use is broadly consistent in terms of establishment size, the proportion of staff described as over-skilled and over-qualified is considerably higher amongst smaller establishments, in particular establishments with fewer than five staff where a third of all staff are considered over-skilled and over-qualified. To some extent this is likely to reflect the more 'hands-on' (and perceptually lower skilled) roles that senior staff are likely to take on in smaller establishments. It may also reflect a greater level of knowledge and awareness of qualifications and skill levels in establishments with fewer staff.

In sector terms, both incidence and density are greatest in the Hotels and Restaurants sector. This is a sector typically characterised by lower skills requirements and as seen in Chapter 2, where there is a particularly high proportion of staff employed in Elementary occupations. Despite this, the sector still employs a relatively large number of people with Level 3 and Level 4 qualifications.

The survey suggests that some employers are aware that a proportion of their staff have a higher level of skills and qualifications than are necessarily being used and previous research tells us there are a variety of reasons for this. Further analysis of this and results from surveys of individuals is required to provide a fuller picture.

Establishments with high levels of qualifications among their staff were more likely to have staff who were under-used: 60 per cent of those with high qualification levels had staff under-used compared to 38 per cent of those with low levels of qualifications. Tied in with this, as their staff tend to have higher levels of qualifications, establishments in the higher Product Market Strategy groups[24] were also more likely to have staff who were under-used, from 53 per cent in the "Very High" group and 51 per cent in "High" falling to 48 per cent in "Medium" and 44 per cent in the "Low" and "Very Low" groups.

5.5 Conclusion

This chapter has addressed the issue of mismatch, that is the extent to which individuals and their skills are matched (or not) to those that employers require. It has also addressed the issue of retention, and the extent to which this has been a problem for businesses.

Overall, across the UK 13 per of employers reported having at least one skills gap, and 1.5 million employees (5 per cent of the UK workforce) have such skills deficiencies. Encouragingly, this marks a decrease from levels reported in previous skills surveys, both in terms of the proportion of establishments and the proportion of employers. Nonetheless, these skills gaps continue to be particularly concentrated in specific sectors, for example, in Hotels and Restaurants (where 9 per cent of staff have a skills gap) and Wholesale and Retail (7 per cent). Similar concentrations are found in specific occupations including Sales and Customer Services and Elementary occupations (both 8 per cent).

Where skills gaps exist, their impact on business performance can be significant, though impacts were reported by a smaller proportion of employers than for skills shortage vacancies (61 per cent as opposed to 95 per cent - see chapter 4 for more information on skills-shortage vacancies). The most common impact was on the workload of other staff. Around half of employers (48 per cent) reported as increase in workload for other staff, which may in turn led to an increase in operating costs through paying for overtime or agency staff. Other direct business impacts included losing business to competitors and delays in developing new products and services.

[24] "Product Market Strategy" is a measure calculated by combining responses to questions H1a-d; section 2.2.2 of this report for full detail of its calculation.

For the first time, this survey introduced an experimental question to look at how employers perceived potential under-use of skills in the workplace. This single question led to half of UK establishments (49 per cent) reporting having at least one employee with **both** qualifications **and** skills that are more advanced than required for their current role. In volume terms, this is 4.5 million employees (16 per cent total UK workforce). It should be noted that this indicative finding requires more investigation and follow-up work, and was reached in a single question, rather than an established suite of questions, as for skills gaps. However, the early indications we can glean from it show that under-use of skills is an issue that employers understand and can recognise in their workforce. This inevitably has consequences for the overall productivity of the UK economy as a whole.

The other area investigated in this chapter was retention issues faced in Northern Ireland, England and Wales (no data for this section is available in Scotland). Overall, five per cent of establishments in these three nations reported having difficulties retaining staff. Employers operating in the Hotels and Restaurants sector were the most likely to experience retention difficulties. The main issues cited as being reasons for problems with retention were a lack of interest in the type of work in question; and a lack of career progression. As with skill-shortage vacancies and skills gaps, the most commonly cited impact of retention issues was an impact on other staff, particularly a strain on management or other staff covering the shortage.

The survey shows the similarity in the causes and effects of recruitment and retention difficulties and skills gaps. Training is often a solution to these problems and a lack of training, or a time-lag in seeing the impact of training, can be a cause of these problems. The next chapter explores employer investment in training and in the skills of their staff.

6 Employer Investment in Training and Skills

Chapter summary

Most establishments (59 per cent) had provided off- or on-the-job training for at least one of their staff members in the previous 12 months. Employers had funded or arranged training in this period for approximately 15 million staff (equivalent to 54 per cent of the total UK workforce at the time of the survey) and provided 117 million days of training (equivalent to 4.3 days per employee per annum and 7.8 days per person trained).

Employees in particular sectors and occupations are more likely to be trained than in others and there is also sectoral variation in the likelihood to train towards nationally recognised qualifications. However, high training sectors are not necessarily more likely to train towards nationally recognised qualifications.

Employer expenditure on training in the previous 12 months was £49bn, equivalent to £1,775 per employee and £3,275 per person trained. Half of total expenditure is accounted for by the cost of paying staff while they are being trained, while just eight per cent is accounted for by fees to external providers.

Fewer than half of workplaces (45 per cent) had either a training plan (38 per cent) or a budget for training expenditure (29 per cent). Many workplaces undertake training on an *ad hoc* basis, indeed almost half of those providing training did not have a formal training plan in place.

The most common reason for not training is that employers consider their staff to be fully proficient and / or that their staff did not need training (mentioned spontaneously by 64 per cent of non-trainers). Few point to failures in training supply as a reason for not training, though a lack of suitable provision is one of a number of factors (the main one of which is the financial cost) preventing employers that train providing more training.

6.1 Introduction

The UK Commission in its '*Employer Ownership of Skills'* published in December 2011 (UKCES, 2011) argues that developing skills is a key part of securing growth and prosperity in the UK, and calls for a transformation in the way that the skills system works for employer-led training in order to create the space for employers to develop the skills they need, framed within a skills agenda which is employer rather than government owned.

Clearly employers, through funding and arranging training and development for their staff, have a critical role to play in increasing productivity and skill levels within the UK. This chapter reports on the quantity and quality of training and development activity undertaken by employers. More specifically the chapter explores:

- the proportion of workplaces that have funded or arranged training for their staff over the previous 12 months, and how this varies by size, sector and other characteristics of the employer;
- the extent to which employers plan and budget for their training;
- the nature of the training provided in terms of such things as the means by which it is delivered (the balance between off-the-job training and on-the-job training, and the extent of broader workforce development practices), the broad area that it was designed to develop, and how much of the training provided is intended to lead to qualifications;
- the proportion of staff that have benefited from employer-funded or arranged training over the last 12 months, and how this differs by occupation;
- employer expenditure on training;
- the extent to which employers assess the impact of their training;
- the barriers that restrict and/or prevent employer training activity.

Throughout the chapter, unless otherwise stated, an employer is described as providing training if in the previous 12 months they had funded or arranged one or both of the following for any of their employees based at their site:

- off-the-job training or development: training away from the individual's immediate work position, whether on their premises or elsewhere;
- on-the-job or informal training or development: activities which take place at the individual's immediate work position which would be recognised as training by recipients.

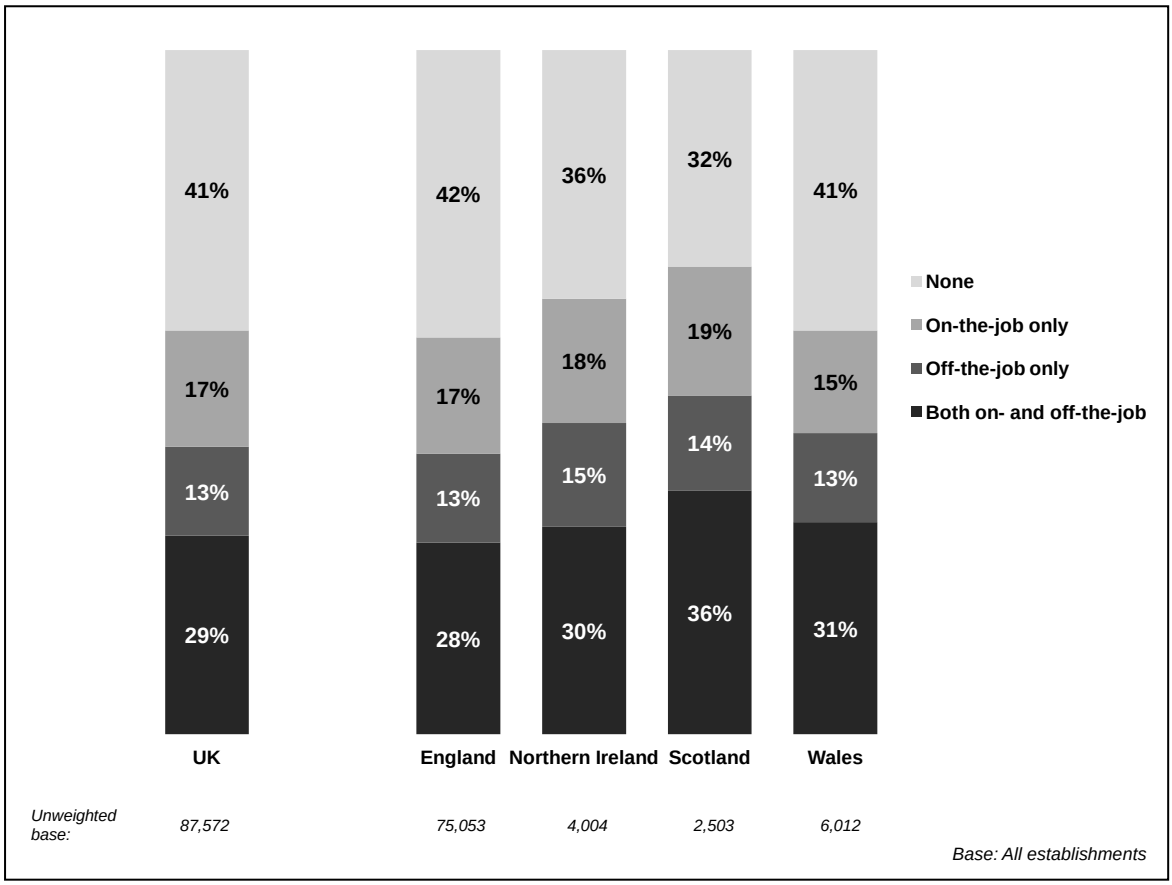
Training as defined in this way is intended to capture all activity which employers and employees would recognise as training. However, broader activity can take place which leads to skill development but which may not be classified as training. For this reason the UK Commission's Employer Skills Survey 2011 also asked employers whether they had engaged in any broader development activities, specifically: supervision to ensure that employees are guided through their job role over time; opportunities for staff to spend time learning through watching others perform their job roles; and allowing staff to perform tasks that go beyond their strict job role and providing feedback on how well they had done. As we see later in this chapter, employers that did not provide off- or on-the-job training often did engage in some of these broader development activities. However, unless otherwise stated it is on- and off-the-job training activity which is described in this chapter.

6.2 The extent of training and workforce development activity

Three-fifths of workplaces had funded or arranged on-the-job or off-the-job training for at least one of their employees in the 12 months preceding the survey (59 per cent). Slightly more had provided on-the-job training (46 per cent of all workplaces) than had provided off-the-job training (42 per cent); three in 10 workplaces (29 per cent) had provided both types of training.

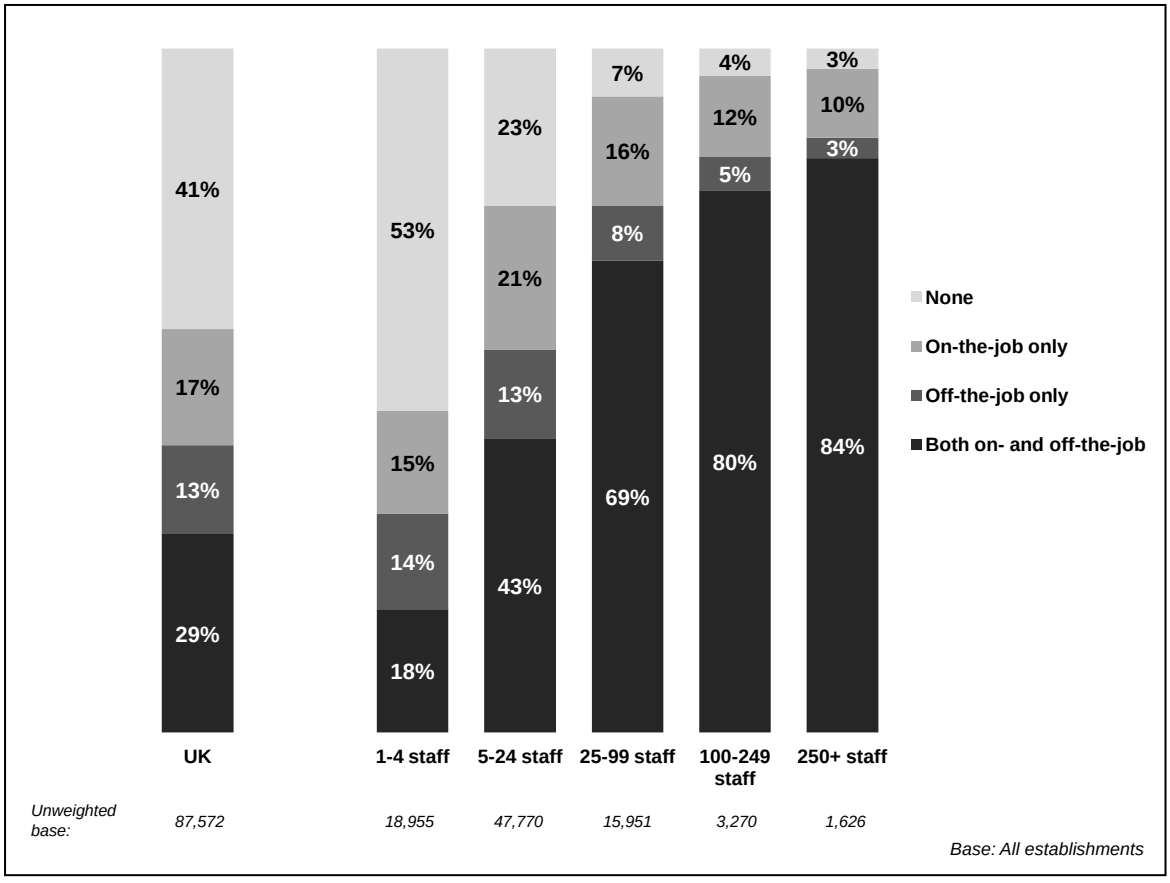
Similar proportions of employers in England and Wales had provided training in the last 12 months (58 and 59 per cent respectively), with slightly more doing so in Northern Ireland (64 per cent), and considerably more in Scotland (68 per cent). This pattern is repeated specifically for off-the-job training: two-fifths of workplaces in England (41 per cent) had provided off-the-job training in the last 12 months rising to almost half (49 per cent) in Scotland; the incidence of this training in Wales and Northern Ireland was approximately midway between these levels (44 and 46 per cent respectively). Results on a UK wide basis and by individual country are shown in Figure 6.1. Comparisons with previous skills surveys in the countries where training questions were asked in the same way suggest a lower incidence of training in 2011 in Northern Ireland than found in 2008 or 2005, while the incidence in England is very similar to the levels found since 2005.

Figure 6.1 Incidence of training in the last 12 months, UK and by country



As has been found in the previous skills surveys conducted in the individual countries of the UK, the likelihood that training is provided in a workplace is closely related to the number of staff working at the establishment. Just under half (47 per cent) of workplaces with fewer than five staff provided any training in the previous 12 months, rising to over three-quarters (77 per cent) of those where 5-24 staff are employed, and to more than nine in 10 where 25 or more people are employed. Results by size of establishment are presented in Figure 6.2.

Figure 6.2 Incidence of training in the last 12 months, by size of establishment



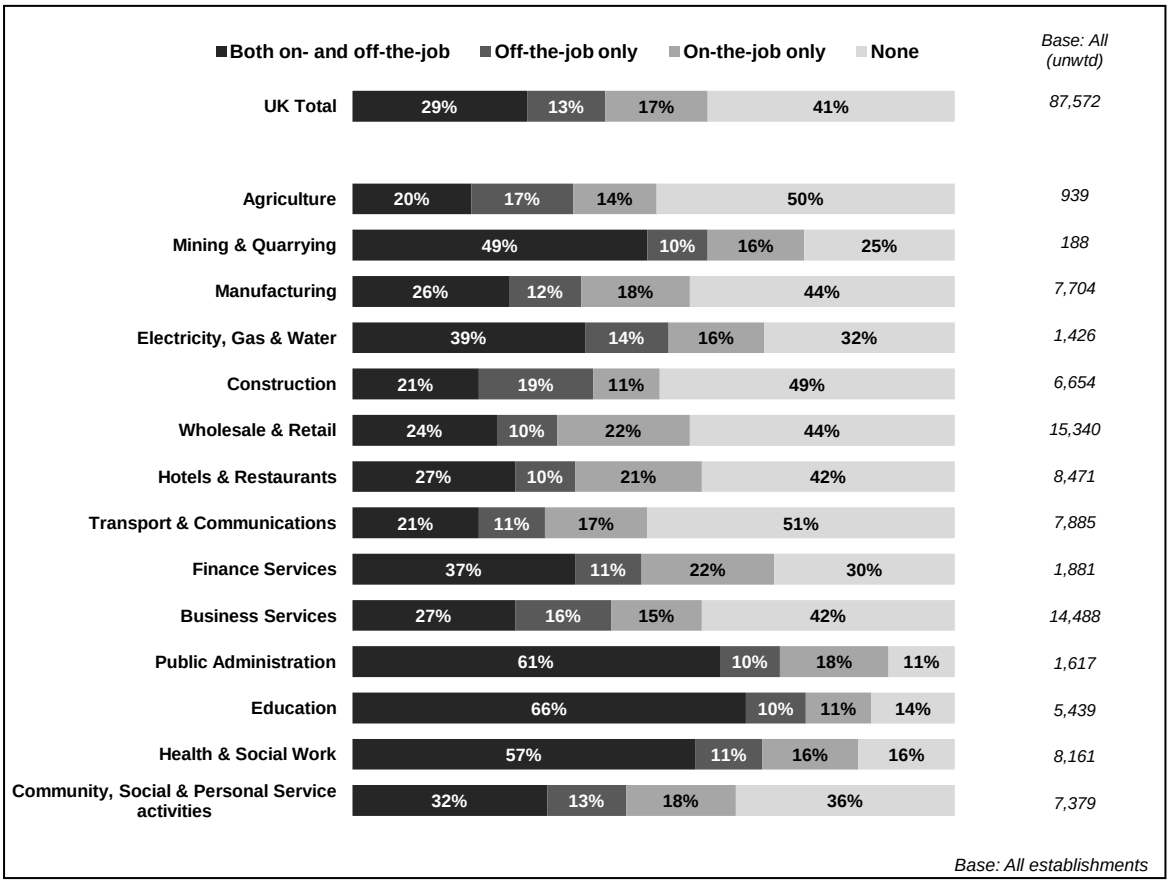
As discussed in Chapter 2, population data, to which the survey results have been weighted, showed Scotland had a lower proportion of establishments with fewer than five staff (59 per cent) than the rest of the UK (64 per cent). This partly explains the higher than average incidence of training among employers in Scotland. However, it is also the case that among the smallest establishments with fewer than five staff, those in Scotland were more likely to train than those in the rest of the UK (57 per cent compared with 46 per cent for the rest of the UK).

Among employers that train, large workplaces are more likely to provide more formal, off-the-job training. The proportion of employers that train that provide off-the-job training increases from 67 per cent of these workplaces with fewer than five staff, to 72 per cent of those with 5-24 staff, to 83 per cent of those with 25-99 employees, to 88 per cent of those with 100 or more employees. Hence not only are smaller workplaces less likely to provide training, but when they do it is more likely than average to be on-the-job training.

Incidence of training varies widely by sector, as shown in Figure 6.3. A description of the types of establishment that fall into each of the sectors can be found in Appendix D. There are four broad categories:

- those where only around half the employers in the sector had provided off- or on-the-job training in the last 12 months. This applies to Transport and Communications (49 per cent), Agriculture (50 per cent) and Construction (51 per cent). These sectors all have above average numbers of micro establishments with fewer than five staff (76, 82 and 77 per cent respectively, compared with the UK all-sector average of 64 per cent);
- those where around three-fifths train (for each of the following sectors the incidence ranges from 56 to 60 per cent): Manufacturing, Wholesale and Retail, Hotels and Restaurants, and Business Services (this sector includes, among other things, real estate activities, consultancy, advertising and employment agencies);
- sectors where two-thirds to three-quarters of workplaces train. This covers Electricity, Gas and Water (68 per cent), Financial Services (70 per cent) and Mining and Quarrying (75 per cent);
- those with a very high incidence of training, covering Health and Social Work (84 per cent), Education (86 per cent) and Public Administration (89 per cent). It should be noted that these three sectors all have a relatively high proportion of larger establishments: whereas eight per cent of establishments across the UK have 25 or more employees, in these three sectors the proportions are 18, 40 and 33 per cent respectively.

Figure 6.3 Incidence of training in the last 12 months, by sector



As shown in Figure 6.3 there is quite wide variation by sector in how employers deliver training. A number of sectors are characterised by employers being more likely than average to only provide on-the-job training. While across the UK, 17 per cent of employers had provided only on-the-job training in the last 12 months, this was higher in Wholesale and Retail (22 per cent), Financial Services (22 per cent) and Hotels and Restaurants (21 per cent). Similarly, while across the UK 13 per cent of employers had provided only off-the-job training in the last 12 months, this was higher in Construction (19 per cent), Agriculture (17 per cent) and Business Services (16 per cent).

Size of establishment is a key determinant of how training is delivered. A minority of establishments with fewer than five staff provided both off- and on-the-job training in the last 12 months (18 per cent), compared with almost half (43 per cent) of establishments which employ 5-24 staff, and almost three-quarters (71 per cent) among larger establishments that train.

The incidence of training also varies by the type of product market strategy being adopted. An establishment's product market strategy rating is derived from responses to a number of questions on the extent to which their products and services are innovative, customised, price dependent and premium or basic quality compared to others in their industry. A very high score means the firm is innovative, often leads the way, is not price dependent and has customised goods or services, a very low score indicates the opposite.

The higher the scoring on this index, the more likely it is that a workplace provides training. Although it is the case that the higher the product market strategy positioning the larger the average size of establishment (so that it would be expected that those with a higher positioning would be more likely to train), it is also the case that within sizeband those with a higher product market positioning are more likely to train. Results are shown in Table 6.1.

The difference in the incidence of training by product market strategy is particularly marked within smaller establishments with either 1-4 or 5-24 staff (among larger establishments the vast majority train whatever their product market strategy).

Table 6.1 Incidence of training in the last 12 months by Product Market Strategy

	Very low	Low	Medium	High	Very high
Unweighted base	*2,312*	*9,690*	*23,659*	*20,845*	*7,515*
Total	**41%**	**50%**	**56%**	**63%**	**65%**
1-4 staff	32%	41%	44%	50%	53%
5-24 staff	64%	69%	76%	80%	80%
25-99 staff	88%	89%	91%	94%	93%
100-249 staff	**	94%	96%	98%	95%
250+ staff	**	93%	95%	98%	99%

Base: All establishments in the private sector with a PMS rating within each sizeband.

Each cell shows the percentage of establishments of that type that train (not column or row percentages).

*'**' Figure not shown because of a low base (fewer than 25 respondents)*

Those with skills gaps are far more likely to train than those without (83 per cent v. 56 per cent). Although large establishments are more likely to have skills gaps, and hence would be expected to be more likely to train, within each sizeband those with skills gaps are more likely to train. This is shown in Table 6.2. For example, among establishments with fewer than five staff, 68 per cent of those with skills gaps provided training in the last 12 months compared with 46 per cent of those without. This confirms that training is a common response to having staff lacking proficiency (we have seen in Chapter 5 that increasing training activity is the most frequent action taken by employers with skills gaps to improve staff proficiency: over four-fifths of employers with skills gaps who had taken action to increase proficiency had increased staff training).

Table 6.2 Incidence of training in the last 12 months by skills gap or not within size of establishment

	1-4 staff		5-24 staff		25-99 staff		100-249 staff		250+ staff	
	Skills gap	No Skills gap	Skills gap	No Skills gap	Skills gap	No Skills gap	Skills gap	No Skills gap	Skills gap	No Skills gap
Unweighted base	*1,507*	*17,448*	*11,126*	*36,644*	*5,937*	*10,014*	*1,492*	*1,778*	*777*	*849*
% that train	68	46	85	75	96	91	98	95	98	96

Base: All establishments in each sizeband with and without skills gaps

6.3 The planning and budgeting of training

Approaching two-fifths of all workplaces (38 per cent) have a training plan that specifies in advance the level and type of training employees will need in the coming year, and around three in 10 (29 per cent) have a budget for training expenditure, with 45 per cent having at least one of these. Given that we have seen that 59 per cent of workplaces had provided training in the last 12 months, clearly training quite often takes places on *ad hoc* basis without being formally planned. Just over a third of sites that had provided training in the last 12 months did not have either a training plan or budget covering their workplace (36 per cent); only just over half of those providing training said they had a formal training plan (53 per cent).

The existence of a training plan or budget is not a guarantee that training will take place, as 16 per cent of employers with a training plan and or a budget had not funded or arranged any training for staff at their site in the previous 12 months.

The likelihood of an establishment being covered by either a training plan or budget increases with the size, as shown in Table 6.3.

Table 6.3 Training plan and budget, by size of establishment

	All	1-4 staff	5-24 staff	25-99 staff	100-249 staff	250+ staff
	%	%	%	%	%	%
Unweighted base:	*87,572*	*18,955*	*47,770*	*15,951*	*3,270*	*1,626*
Have a training plan	38	27	52	73	78	84
Have a training budget	29	20	37	63	77	86
Either or both	**45**	**33**	**60**	**84**	**91**	**96**

Base: All establishments

There is very wide variation by sector. In three sectors a third or fewer workplaces are covered by either a training plan or a training budget: Agriculture (30 per cent), Construction (30 per cent) and Transport and Communications (33 per cent). In contrast, more than three-quarters of establishments in Health and Social Work (77 per cent), Education (80 per cent) and Public Administration (86 per cent) are covered by a training plan or budget.

These sector differences relate closely to the size of establishments within the sector. Those sectors cited above as having relatively few employers with a training plan or budget are the three with the highest proportion of establishments with fewer than five employees, while those mentioned as the most likely to have such plans or budgets are the three sectors with the highest proportion of establishments with at least five staff.

Government-funded workplaces are far more likely to be covered by training plans and / or budgets (85 per cent) than those seeking to make a profit (40 per cent). Charities/voluntary sector/social enterprises fall roughly mid-way between the two (67 per cent).

Results differed much less by geography, though more workplaces in Scotland than the rest of the UK were covered by either a training plan (45 per cent of establishments in Scotland) or a training budget (33 per cent): 53 per cent had one or the other.

6.4 Broader development activity

Within this chapter to date we have discussed the provision of off- and on-the-job training. Employers were also asked whether they had done any of the following broader activities to aid the development of their employees in the last 12 months:

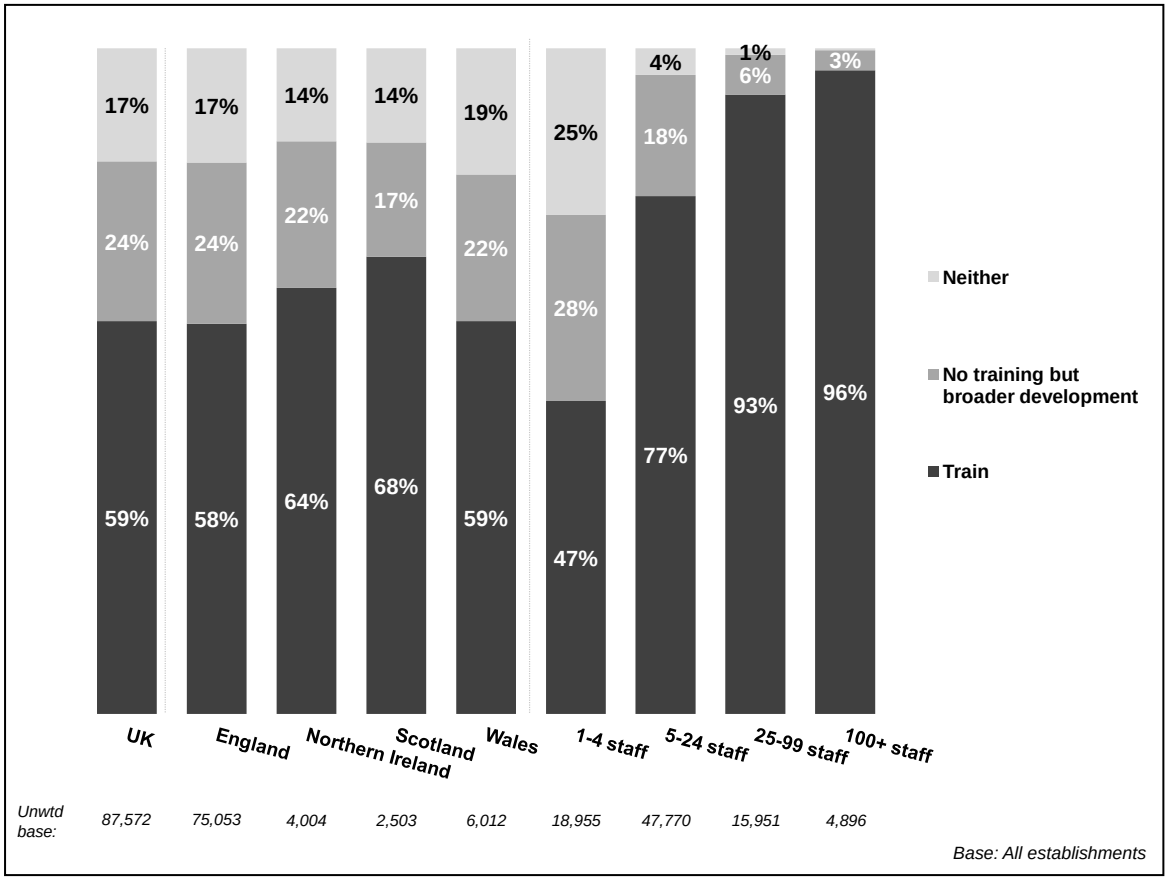
- supervision to ensure that employees are guided through their job role over time;
- the provision of opportunities for staff to spend time learning through watching others perform their job roles;
- allowing staff to perform tasks that go beyond their strict job role and providing them with feedback as to how well they have done.

Around three-fifths of employers indicated that they had undertaken each of these activities in the previous 12 months (62 per cent for supervision, and 58 per cent for the two other activities), and overall three-quarters of establishments (76 per cent) indicated that at least one of the three activities had taken place over the last 12 months.

In the main, these informal, broader development activities are used to complement other training activity; those providing off- or on-the-job training were particularly likely to provide at least one of the broader development activities (88 per cent). However, a majority of non-trainers (58 per cent) had also done so.

A quarter of all workplaces (24 per cent) had undertaken broader development activity but not activity which they categorised as either off- or on-the-job training, and overall more than four-in-five establishments (83 per cent) had provided training and/or broader development for their staff. This leaves around one-in-six establishments (17 per cent) that had neither provided training nor any of these broader development activities in the previous 12 months. The majority of these were in the 1-4 sizeband (25 per cent of 1-4s had provided no training or broader development for staff); among those with five or more staff just four per cent had not provided any training or broader development. And while by country the incidence of providing off- or on-the-job training varied relatively widely (by 10 percentage points, see Figure 6.4), there is much less variation when considering the provision of training or wider development activity (five percentage points).

Figure 6.4 Incidence of training and broader development activity in the last 12 months, by country and workplace size



There was wide variation by sector in the likelihood that broader development activity had taken place in the previous 12 months. Generally speaking, those sectors more likely to provide off- or on-the-job training were more likely to provide broader development activity, and vice versa. Employers operating in Public Administration, Education, and the Health and Social Work sectors were particularly likely to have provided broader development activity (91-92 per cent), and these are sectors where employers are more likely to train than average. On the other hand, employers in Agriculture, Construction, and Transport and Communications, sectors with below average incidence of training, were the least likely to provide broader development opportunities (65, 65 and 68 per cent respectively). The one exception to the pattern was Hotels and Restaurants, where the incidence of training (58 per cent) was on par with average (59 per cent), but where the incidence of providing broader development opportunities (83 per cent) was higher than average (76 per cent).

6.5 The proportion of the workforce receiving training, and the pattern of training by occupation

Having briefly considered broader development activities, the remainder of this section deals with on- and off-the job training.

In the previous 12 months employers had provided off- or on-the-job training to approximately 15 million staff. Notwithstanding possible double counting (staff being trained by two or more different employers in a 12 month period), this is equivalent to 54 per cent of the total UK workforce. Results are presented in Table 6.4.

Employees in the smallest firms are least likely to be trained: the number trained in the last 12 months in firms with 1-4 staff is equivalent to 41 per cent of the overall workforce at the time of the survey, compared with 56 per cent of those with five or more staff. Workers employed in establishments with 25-99 or 100-249 staff are the most likely to be trained (59 per cent and 61 per cent respectively). In comparison, just over half of those employed in establishments with 5-24 staff or 250 or more staff had been trained over the previous 12 months (53 per cent and 54 per cent respectively).

The proportion of the workforce trained in each of the countries in the UK was fairly consistent.

There were wide variations by sector. Consistent with nations' previous skills surveys, a much higher proportion of staff than average is trained in the Health and Social Work (66 per cent) and Education (65 per cent) sectors, and to a slightly lesser extent in Public Administration (61 per cent) and Financial Services (59 per cent). On the other hand the following sectors are all characterised by a lower than average proportion of staff receiving training: Agriculture (40 per cent) Transport and Communications (43 per cent), Manufacturing (46 per cent), Mining and Quarrying (47 per cent) and Construction (49 per cent). Generally, the pattern is that those sectors that are more likely than average to have provided training over the last 12 months are also those that have trained a higher proportion of their staff in that period. The main exception is Mining and Quarrying: despite a high incidence of training (75 per cent), the proportion of staff trained was below average.

Table 6.4 The proportion of the workforce trained in the last 12 months by country, size of establishment and sector

UK	*(87,572)*	**54%**	Agriculture	*(939)*	40%
			Mining and Quarrying	*(188)*	47%
England	*(75,053)*	54%	Manufacturing	*(7,704)*	46%
Northern Ireland	*(4,004)*	56%	Electricity, Gas and Water	*(1,426)*	55%
Scotland	*(2,503)*	58%	Construction	*(6,654)*	49%
Wales	*(6,012)*	56%	Wholesale and Retail	*(15,340)*	52%
			Hotels and Restaurants	*(8,471)*	54%
Size of establishment:			Transport and Communications	*(7,885)*	43%
1-4 staff	*(18,955)*	41%	Financial Services	*(1,881)*	59%
5-24 staff	*(47,770)*	53%	Business Services	*(14,488)*	51%
25-99 staff	*(15,951)*	59%	Public Administration	*(1,617)*	61%
100-249 staff	*(3,270)*	61%	Education	*(5,439)*	65%
250+ staff	*(1,626)*	54%	Health and Social Work	*(8,161)*	66%
			Community, Social & Personal Service Activities	*(7,379)*	55%

Base: All establishments

Percentages are based on all employment rather than all establishments, figures therefore show the proportion of all staff trained in each subgroup.

Differences by nation are not statistically significant

The proportion of staff trained increases with an establishment's product market strategy positioning, as shown in Table 6.5. This suggests either that employers with a higher product market positioning have a greater need for skill development among their staff and / or that those with a higher positioning are more aware of the need for skill development and have more ambition to 'stretch' their staff.

Table 6.5 Proportion of staff trained by Product Market Strategy

	All	Very low	Low	Medium	High	Very high
Unweighted base	*87,572*	*2,312*	*9,690*	*23,659*	*20,845*	*7,515*
% of workforce trained	54%	36%	42%	50%	56%	57%

Base: All establishments for the 'All' column, and for the remainder all establishments in the private sector with a PMS rating. PMS ratings were derived from the sum of answers to questions H1a-H1d which sought responses on a 1 to 5 scale, with 'very low' defined as a score of below 8, 'low' as a score of 8-10, 'medium' as a score of 11-13, 'high' as a score of 14-16 and 'very high' as a score of 17 or higher.

Percentages are based on all employment in each subgroup rather than all establishments, figures therefore show the proportion of all staff trained in each subgroup.

Establishments with any staff deemed not fully proficient train a higher proportion of staff than those without (58 per cent v 52 per cent). This is not just because larger workplaces are more likely to report skills gaps: *within each sizeband*, those with skills gaps train a higher proportion of their staff, with the difference particularly marked within the smallest establishments: workplaces with fewer than five employees who have skills gaps trained 52 per cent of their the workforce, compared to just 40 per cent for those in this sizeband without skills gaps.

Table 6.6 Proportion of staff trained in the last 12 months by skills gap within size of establishment

	1-4 staff		5-24 staff		25-99 staff		100-249 staff		250+ staff	
	Skills gap	No Skills gap	Skills gap	No Skills gap	Skills gap	No Skills gap	Skills gap	No Skills gap	Skills gap	No Skills gap
Unweighted base	*1,507*	*17,448*	*11,126*	*36,644*	*5,937*	*10,014*	*1,492*	*1,778*	*777*	*849*
% of the workforce trained	52%	40%	57%	51%	61%	57%	62%	59%	55%	53%

Base: All establishments in each sizeband with and without skills gaps

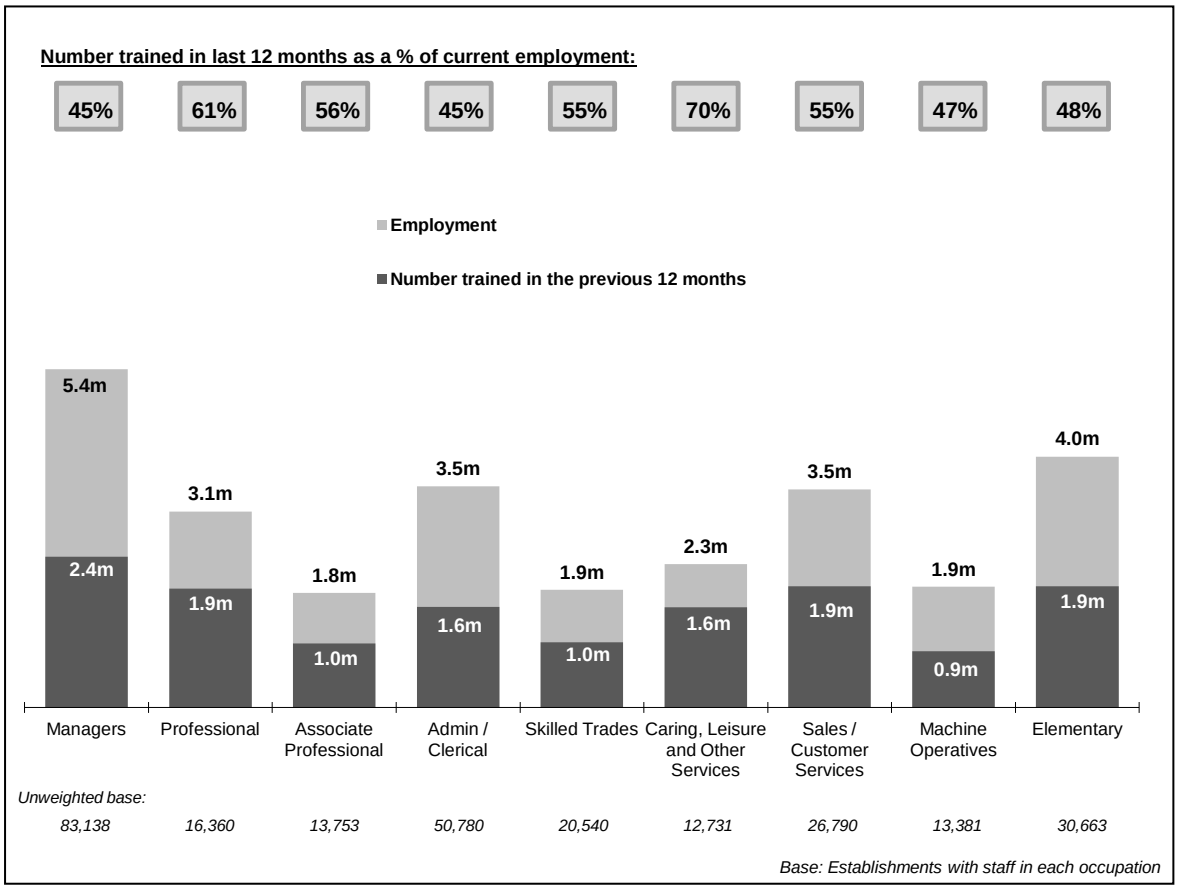
Percentages are based on all employment rather than all establishments, figures therefore show the proportion of all staff trained in each subgroup.

Figure 6.5 illustrates how the provision of training varies by occupation, and shows the number employed in each occupation (the full height of each bar), the number trained in the last 12 months (the darker subdivision), and the number trained in the last 12 months as a proportion of total employment (presented in the boxes along the top of the chart). A description of occupational definitions can be found in Appendix E. It is worth noting that the occupational profile shown is derived from employers describing their workforce structure within the survey, and differs somewhat from that used in the Labour Force Survey which derives its profile from a survey of individuals.

While more Managers are trained than any other occupational group, this is because they are the most numerous group of employees: in proportional terms, Managers are the least likely occupational group to benefit from training (alongside Administrative and Clerical staff).

Staff employed in Caring, Leisure and Other Services roles are the most likely occupational group to be trained (70 per cent).

Figure 6.5 Distribution of training by occupation



Percentages are based on all employment rather than all establishments, figures therefore show the proportion of all staff trained in each subgroup.

6.6 The types of training provided

The most common type of training provided by employers is job-specific training (mentioned by 84 per cent of employers that trained staff in the last 12 months), followed by health and safety/first aid training (71 per cent). Around half of training employers had provided induction training for new recruits (52 per cent) and / or training in new technology (47 per cent), while a third had funded or arranged management or supervisory training (34 per cent and 32 per cent respectively). A similar hierarchy has been observed in the previous skills surveys conducted in the individual countries of the UK. The likelihood that an employer that trains provides each type of training increases with the size of the establishment: among workplaces with 100 or more staff that train more than seven in 10 had provided each type of training.

Table 6.7 Main types of training provided, by size of establishment (prompted)

	All	1-4 staff	5-24 staff	25-99 staff	100-249 staff	250+ staff
	%	%	%	%	%	%
Unweighted base:	*66,916*	*9,598*	*37,758*	*14,832*	*3,150*	*1,578*
Job-specific training	84	80	87	93	95	98
Health and safety / first aid	71	59	80	93	96	96
Induction	52	35	63	83	90	94
New technology	47	45	46	56	70	80
Management	34	23	37	61	78	88
Supervisory	32	21	37	56	73	83

Base: All establishments that train

By sector, the greatest variation was observed in the provision of management or supervisory training. For management training, for example, employers in the following sectors were at least 10 percentage points more likely than average to have provided such training in the last 12 months (figures are based on employers that train): Education (57 per cent), Public Administration (52 per cent), Mining and Quarrying (49 per cent), Health and Social Work (46 per cent) and Financial Services (45 per cent). In contrast, in the following sectors trainers[25] were far less likely than average (10 percentage points or more) to provide management training: Transport and Communications (24 per cent), Construction (19 per cent) and Agriculture (18 per cent). These sectors are all characterised by establishments that are smaller than the UK average, so these differences could be in part related to size.

[25] We occasionally use the term 'trainer' in this chapter. This denotes establishments that had provided training for their staff in the previous 12 months, and is not used in the sense of their being a learning or training provider as their business .activity

Table 6.8 Type of training provided, by sector (prompted)

Row percentages	*Unwtd base:*		Job-specific training	Health & safety / first aid	Induction	New technology	Management	Supervisory
Agriculture	*556*	%	81	65	31	42	18	20
Mining and Quarrying	*143*	%	80	95	72	39	49	48
Manufacturing	*5,329*	%	81	73	53	45	27	29
Electricity, Gas and Water	*1,077*	%	88	82	64	45	32	39
Construction	*4,422*	%	75	75	44	39	19	26
Wholesale and Retail	*11,078*	%	84	75	60	47	40	39
Hotels and Restaurants	*6,206*	%	86	85	65	29	43	47
Transport and Communications	*5,451*	%	83	58	39	61	24	23
Financial Services	*1,469*	%	90	63	57	55	45	43
Business Services	*11,360*	%	86	59	41	53	29	23
Public Administration	*1,466*	%	91	80	58	55	52	49
Education	*5,129*	%	92	87	68	61	57	41
Health and Social Work	*7,536*	%	87	86	67	42	46	44
Community, Social and Personal Service activities	*5,694*	%	84	72	51	41	30	29

Base: All establishments that train

Induction and health and safety / first aid training differ somewhat from the other types of training listed in Table 6.8 as in some cases they are delivered by employers because it is a legal requirement[26], and, although not in all instances, such training may only incidentally contribute to the kind of skill development that enhances productivity for some employees. Employers that delivered induction or health and safety training were asked what proportion this represented of their total training activity. Overall just under three in 10 employers that trained (28 per cent) indicated that at least half of their training in the last 12 months had been induction and health and safety / first aid training; seven per cent of employers that trained indicated that in the last 12 months they had only arranged induction and health and safety / first aid training.

The figure varied little by size of establishment, but did by sector. Employers that train in Construction and the Hotels and Restaurants sector were the most likely to say all their training was induction or health and safety / first aid training (13 per cent and 10 per cent respectively), though still the vast majority provided other forms of training. Those in Education and Financial Services were the most likely to say this type of training accounted for a small part of their training (in each just three per cent said it accounted for all their training over the last 12 months).

Results for employers in England (the only country where a comparable question was asked on the most recent country-specific employer skills survey) show a slight increase in 2011 compared with 2009 in the proportion of employers that train who indicate that at least half of their training in the last 12 months had been induction and / or health and safety / first aid training. However, the proportion only providing this kind training was little changed. This suggests that although some employers had concentrated more of their training on areas that they are required to provide, few had switched exclusively to just providing training of this sort.

6.7 The quantity of training provided (training days)

Employers across the UK had funded 117 million days of training over the previous 12 months. This is equivalent to 4.3 days per employee and 7.8 days per person trained. The following table shows how these figures vary by country, size and sector.

26 ''The provision of training, including induction training is not generally subject to legislation except that employers must provide instruction and training (as is reasonably practicable) to ensure health and safety." ACAS 'Induction Training' http://www.acas.org.uk/media/pdf/r/1/S05_1.pdf

Table 6.9 Training days provided in the last 12 months

	Unwtd base:	**Total training days**	**Days per annum per employee**	*Unwtd base:*	**Days per annum per trainee**
UK	*87,572*	117.3m	4.3	*66,916*	7.8
Country					
England	*75,053*	99.6m	4.3	*57,117*	8.0
Northern Ireland	*4,004*	2.7m	3.4	*2,941*	6.2
Scotland	*2,503*	10.0m	4.2	*2,177*	7.3
Wales	*6,012*	5.0m	4.2	*4,681*	7.5
Size					
1-4 staff	*18,955*	12.5m	4.2	*9,598*	10.4
5-24 staff	*47,770*	30.3m	4.7	*37,758*	9.0
25-99 staff	*15,951*	32.9m	4.8	*14,832*	8.3
100-249 staff	*3,270*	16.3m	4.0	*3,150*	6.6
250+ staff	*1,626*	25.3m	3.4	*1,578*	6.4
Sector					
Agriculture	*939*	1.1m	2.8	*556*	7.1
Mining and Quarrying	*188*	0.1m	1.7	*143*	3.7
Manufacturing	*7,704*	9.0m	3.7	*5,329*	7.9
Electricity, Gas and Water	*1,426*	1.3m	4.7	*1,077*	8.5
Construction	*6,654*	5.1m	3.5	*4,422*	7.3
Wholesale and Retail	*15,340*	20.2m	4.5	*11,078*	8.7
Hotels and Restaurants	*8,471*	10.7m	6.2	*6,206*	11.3
Transport and Communications	*7,885*	6.5m	2.9	*5,451*	6.8
Financial Services	*1,881*	4.1m	3.9	*1,469*	6.7
Business Services	*14,488*	16.2m	3.5	*11,360*	6.9
Public Administration	*1,617*	9.6m	6.1	*1,466*	10.1
Education	*5,439*	9.0m	3.6	*5,129*	5.5
Health and Social Work	*8,161*	18.3m	5.2	*7,536*	7.8
Community, Social and Personal Service activities	*7,379*	6.2m	5.0	*5,694*	9.0

Base: Columns 1 and 2: All establishments; Column 3: All establishments that train

Results indicate that although employers in England are less likely to train, and train a smaller proportion of their workforce than other countries of the UK, they provide more training days per trainee per annum (8.0, the figure was lowest in Northern Ireland, at 6.2 days per trainee).

Similarly, while the smallest workplaces with fewer than five staff are the least likely to provide training, and train a smaller proportion of their workforce, they provide the most training days for each employee that they do train (10.4 per annum). As the size of establishment increases the number of days training provided per trainee decreases.

The pattern by sector for the number of days training provided per employee or per trainee does not simply reflect the incidence of training or the proportion of staff trained. It is not the case that those sectors more likely to train or which train a higher proportion of their staff also provided the most days per employee or trainee. In particular, while employers in the Education sector are far more likely to provide any training and train a higher proportion of their workforce than average, they provide fewer training days than average whether looked at on a per trainee or a per employee basis. Conversely, Hotels and Restaurants provide many more training days per employee (6.2) and per person trained (11.3) than average, despite the proportion of staff being trained in this sector exactly matching the all-sector average.

6.8 Training to qualifications

This section explores the extent to which employers train staff to nationally recognised qualifications and the level of the qualifications to which staff are trained.

A minority of employers (25 per cent, equivalent to 43 per cent of those that train) had funded or arranged training which was intended to lead to a nationally recognised qualification (whether it did lead to the that qualification being obtained or not). There was no significant difference by country (25 per cent of all establishments in England, 26 per cent in Northern Ireland and Wales, 30 per cent in Scotland).

Size is again a key discriminator here: the larger the establishment the more likely it is to provide training leading to qualifications. Just over a sixth of the smallest establishments said some of their training led to qualifications (16 per cent of those with fewer than five staff), rising to over a third of those with 5-24 staff (37 per cent), almost three-fifths of those with 25-99 staff (58 per cent) and two-thirds of those with 100 or more staff (67 per cent).

Results also vary widely by sector. A description of the types of establishment that fall into each of the sectors can be found in Appendix D. Employers operating within Education, Mining and Quarrying, and Health and Social Work were particularly likely to train to qualifications (55, 51 and 51 per cent respectively), compared with only around a third of those in Agriculture, Wholesale and Retail, and Transport and Communications (20, 19 and 17 per cent respectively).

More employers had provided training to Level 3 qualifications than other levels.[27] Survey results suggest that in the 12 months preceding the fieldwork nine per cent of all employers (equivalent to 16 per cent of those that trained in this period) had trained staff to Level 3 qualifications. Slightly fewer establishments had trained staff to Level 2 qualifications (nine per cent of all employers and 14 per cent of employers that trained). Seven per cent of all employers had trained to Level 4 or higher qualifications in the last 12 months and five per cent to Level 1 qualifications.

Results indicate that 3.4 million employees had received training in the last 12 months intended to lead towards nationally recognised qualifications. This is equivalent to 12 per cent of all employees and to 23 per cent of employees that received training over the last 12 months. Results by country, size and sector are presented in Table 6.10.

In terms of the proportion of employees trained to qualifications, those working within establishments with 5-24, 25-99 or 100-249 staff were the most likely to be trained to qualifications (13 to 14 per cent in each). Employees working within the very largest establishments with 250 or more employees were the least likely to have been trained to a qualification over the last 12 months (nine per cent).

In terms of the likelihood that people trained had been trained towards a qualification, there was a linear pattern by size of the workplace, such that the larger the establishment the lower the proportion of trainees that had been trained to a qualification. In establishments with fewer than five staff 28 per cent of people trained had been trained to a qualification, among those with 100-249 staff the comparative figure was 22 per cent and among those with 250 or more staff it was 16 per cent.

[27] It should be noted that employers were prompted with example qualifications at each level. In Scotland not only were the example qualifications slightly different (for example, SVQs instead of NVQs), but also it was pointed out that the numeric description they are known by (level 1, level 2 etc) may be different from the rest of the UK. For qualifications at Level 1, for example, employers in England, Northern Ireland and Wales were asked whether they had trained staff to '*Level 1 qualifications such as an NVQ Level 1 or BTEC Introductory Diploma*.' In Scotland they were asked if they had trained staff to '*Level 1 qualifications (in Scotland they may be known as Level 4 qualifications) such as an SVQ Level 1 or BTEC Introductory Diploma or General Standard.'*

Table 6.10 Training to nationally recognised qualifications in the last 12 months

Row %s		% of all establishments providing any training to a qualification		% of *training* establishments providing any training to each level					% of individuals trained to a qualification	
		Unwtd base:		*Unwtd base*	L1	L2	L3	L4+	Employees	Trainees
UK	%	*87,572*	25	*66,916*	8	14	16	12	12	23
Country										
England	%	*75,053*	25	*57,117*	8	15	16	12	12	23
Northern Ireland	%	*4,004*	26	*2,941*	7	14	14	11	10	17
Scotland	%	*2,503*	30	*2,177*	12	7	11	12	12	21
Wales	%	*6,012*	26	*4,681*	8	15	17	13	14	24
Size										
1-4 staff	%	*18,955*	16	*9,598*	7	9	9	8	11	28
5-24 staff	%	*47,770*	37	*3,775*	9	17	19	13	14	27
25-99 staff	%	*15,951*	58	*14,832*	11	28	30	22	14	24
100-249 staff	%	*3,270*	67	*3,150*	12	33	34	32	13	22
250+ staff	%	*1,626*	66	*1,578*	16	36	36	37	9	16

Base: All establishments (Columns 1 and 6); all establishments that train (Columns 2 to 5, Column 7).

Percentages in Column 6 are based on all employment rather than all establishments, figures therefore show the proportion of all employees accounted for by each subgroup. Percentages in Column 7 are based on all trainees rather than all establishments that train, figures therefore show the proportion of all trainees accounted for by each subgroup.

Differences by nation are not statistically significant

Employees in some sectors were more likely to have been trained to nationally recognised qualifications over the last 12 months. This particularly applied to those working in Mining and Quarrying (21 per cent), Community, Social and Personal Service activities (18 per cent; this sector includes, among other things, libraries, museums, sporting facilities and personal services such as hairdressing and cleaning), Construction (17 per cent), and Health and Social Work (17 per cent). While in all four sectors the proportion of trainees trained to nationally recognised qualifications was higher than average, this particularly applied to Construction (35 per cent of those trained in this sector in the last 12 months had been trained to a nationally recognised qualification) and Community, Social and Personal Service activities (32 per cent).

By contrast Wholesale and Retail and Financial Services were characterised by a low proportion of all employees (nine per cent and seven per cent respectively) and all trainees (17 per cent and 13 per cent) having been trained to a nationally recognised qualification in the last 12 months.

Although slightly more *employers* had trained staff to Level 3 than Level 2 qualifications in the last 12 months, more *staff* had been trained to Level 2 than to any other level. Results suggest that just over one million employees had received training intended to lead towards a Level 2 qualification in the last 12 months, equivalent to 3.7 per cent of all employees. Just over three-quarters of a million had received training intended to lead towards Level 3 qualifications (equivalent to 2.7 per cent of all employees). Approximately 545,000 staff had received training intended to lead towards Level 4 or higher qualifications (2.0 per cent of all employees), and 391,000 to Level 1 qualifications (1.4 per cent of all employees). Results are shown in Table 6.11.

Table 6.11 Number and proportion of staff trained / studying towards each level over the last 12 months

Level	Number of employees	Proportion of all employees
Level 1	391,200	1.4%
Level 2	1,032,400	3.7%
Level 3	754,700	2.7%
Level 4 or higher	544,700	2.0%

Base: All establishments

Percentages are based on all employment rather than all establishments, figures therefore show the proportion of all employees training to each level.

Figures rounded to nearest 100

All except four sectors matched the UK-wide pattern found in the 2011 survey whereby employees are most likely to have been trained to Level 2 qualifications over the previous 12 months. The exceptions were: Agriculture (where employees were most likely to be trained to Level 1 qualifications), Education (where staff were most likely to be trained to Level 3 qualifications) and Financial Services and Business Services (where employees were most often trained to Level 4 qualifications).

6.9 Employer expenditure on training

A follow-up study was conducted to the main UK Commission's Employer Skills Survey 2011 among more than 11,000 workplaces that train to measure employer expenditure on training.

Across the UK, total employer expenditure on training in the 12 months prior to the survey is estimated to have been £49 billion. This splits relatively evenly between expenditure on on-the-job training (£25.8bn) and off-the-job training (£23.2bn). Previous skills surveys investigating the costs of training conducted in England (2009) and Northern Ireland (2008) also showed overall that costs split evenly between on- and off-the-job training.

Table 6.12 presents a breakdown of the overall figure by component elements. Half of total expenditure is accounted for by the cost of paying staff while they are being trained (50 per cent). In comparison a relatively small share of overall spend is accounted for by fees to external providers (eight per cent, or 17 per cent of expenditure on off-the-job training).

Table 6.12 Training expenditure over the previous 12 months and the components of training expenditure

	Overall cost	%
Total training spend:	**£49.0bn**	**100**
Off-the-job training: Total:	**£23.2bn**	**47**
Off-the-job training: course-related:	**£19.3bn**	**39**
Trainee labour costs	£5,417m	11
Fees to external providers	£2,776m	6
On-site training centre	£2,986m	6
Off-site training centre (in the same company)	£653m	1
Training management	£6,794m	14
Non-training centre equipment and materials	£404m	1
Travel and subsistence	£480m	1
Levies minus grants	£-251m	-1
Off-the-job training: other (seminars, workshops etc.):	**£3.9bn**	**8**
Trainee labour costs	£2,806m	6
Fees to external providers	£1,128m	2
On-the-job training: Total:	**£25.8bn**	**53**
Trainee labour costs	£16,076m	33
Trainers' labour costs	£9,717m	20

Base: All trainers completing the Investment in Training survey (11,117).

Clearly a large component of the overall training expenditure figure presented in the previous table is the wages of staff being trained, and in comparison relatively little is spent on payments to external training providers. Because of these very different elements within the overall figure it is useful to breakdown the overall figure between direct and indirect costs. In the following analysis[28], the following categories are used:

- Indirect costs - the trainee labour costs (wages) of paying workers while they are not producing.
- Direct costs - all other costs.

[28] This analysis was devised and undertaken by David Morris, Steven McIntosh and Andy Dickerson at Sheffield University.

Direct costs have been further broken down into i) external direct costs, elements that could in theory be outsourced to another organisation to provide and ii) internal direct costs, those elements that could not be transferred or outsourced to another organisation. External direct costs have been defined as fees to external providers and off-site training centre costs. Internal direct costs include on-site training centre costs, equipment and materials, travel and subsistence and levies minus grants. The costs of managers and supervisors being involved in organising and providing training has been treated as internally provided (not able to be outsourced) except where this involvement represented a reasonable amount of managers'/supervisors' time, since then this provision could potentially be externally outsourced by buying in a dedicated training organiser. It was classified as an 'external' direct cost where the training work of the managers/supervisors represented the work of one full person (i.e. where multiplying the average proportion of time spent on training matters by the number of people involved in organising/providing training within the establishment was at least one).

Across UK employers as a whole, costs split evenly between direct (£24.7bn) and indirect costs (£24.3bn). External direct costs represent a slightly higher proportion of total training expenditure (27 per cent and £13.5bn) than internal direct costs (23 per cent and £11.2bn).

There is a very clear size pattern, such that the larger the establishment, the higher the proportion of their training expenditure which is spent on indirect costs (i.e. trainee labour costs). The larger the workplace the greater the proportion of their training spend which goes towards Direct tradeable costs which could be externally provided. On the other hand the smaller the establishment the greater the proportion of their expenditure on Direct non-tradeable (internally provided) costs (43 per cent of total expenditure for those with fewer than five staff but only six per cent for those with 100 or more employees). Results are presented in Table 6.13.

This also shows quite wide variation in the nature of training expenditure by sector, with employers in Manufacturing, Hotels and Restaurants, Public Administration, and Education spending a lower proportion on Direct costs and a higher proportion on Indirect costs (i.e. trainee labour costs) (in each sector Direct costs account for around two-fifths of total expenditure compared against the 50 per cent average). A description of the types of establishment that fall into each of the sectors can be found in Appendix D.

Table 6.13 Training expenditure by country, size and sector

Row percentages	*Unweighted base*	**Expenditure on training**		**Per cent spent on: Direct tradeable**	**Direct non-tradeable**	**Indirect costs**
UK	*11,117*	£49.0bn	%	27	23	50
Country						
England	*7,929*	£41.6bn	%	28	22	50
Northern Ireland	*1,002*	£1.4bn	%	26	33	41
Scotland	*685*	£4.3bn	%	27	29	44
Wales	*1,501*	£1.7bn	%	28	23	49
Size						
1-4 staff	*1,864*	£7.5bn	%	18	43	38
5-24 staff	*6,542*	£12.7bn	%	23	36	41
25-99 staff	*2,160*	£12.0bn	%	28	20	51
100+ staff	*551*	£16.8bn	%	35	6	60
Sector						
Agriculture	*88*	£851m	%	22	55	23
Mining and Quarrying	*29*	*£82m*	*%*	*22*	*33*	*45*
Manufacturing	*819*	£3,471m	%	27	16	57
Electricity, Gas, Water	*137*	£320m	%	36	24	40
Construction	*660*	£2,774m	%	25	28	47
Wholesale and Retail	*1,827*	£5,447m	%	27	27	45
Hotels and Restaurants	*1,060*	£3,421m	%	21	17	62
Transport and Communications	*869*	£3,524m	%	36	25	38
Financial Services	*220*	£1,520m	%	25	24	51
Business Services	*2,053*	£9,482m	%	30	26	44
Public Administration	*236*	£3,469m	%	33	9	58
Education	*560*	£6,709m	%	25	16	59
Health and Social Work	*1,525*	£5,431m	%	24	23	53
Community, Social and Personal Service activities	*1,034*	£2,485m	%	26	36	39

Base: All trainers completing the Investment in Training survey (11,117).

Notes: Figures for Mining and Quarrying have a base below 50 establishments: treat with caution.

Differences by nation are not statistically significant.

Moving now to spend per person, the overall training expenditure figure is equivalent to approximately £3,275 per person trained, and to £1,775 per employee in the UK workforce. Results are shown in Table 6.14.

Table 6.14 Training expenditure per capita and per trainee

Per capita training expenditure (total workforce)	£1,775
Per capita training expenditure (training employers' workforce)	£2,050
Per trainee training expenditure	£3,275

Base: All trainers completing the Investment in Training survey (11,117).

Note: Per capita and per trainee figures are calculated using employment and trainee numbers from main ESS2011 data (unweighted base 87,572).

Per capita and per trainee expenditure rounded to the nearest £25.

Table 6.15 details training expenditure by country, size of establishment[29] and by sector. It shows the total expenditure, and then calculates the average expenditure per employee and per trainee.

Column A shows total training expenditure and column B the proportion of overall UK expenditure this represents.

Column C presents a comparative percentage: the proportion of all employees trained in the UK that each country, sizeband or sector accounts for. If a sector's share of training expenditure is higher than its share of all UK trainees, this indicates that the sector spends more per trainee than the UK average.

The next two columns (D and E) show how expenditure for each country, sizeband and sector splits between off-the-job and on-the-job training. The final two columns (F and G) show spend per trainee and per employee.

[29] In discussing training expenditure by size of establishment, we analyse by 100 plus employees as the largest size category. Weighting of the Investment in Training survey data was conducted using 100 plus employees as the largest size category (rather than the 250 plus category used for the main UK Commission's Employer Skills Survey 2011 survey) because of lower base sizes.

Table 6.15 Training expenditure by country, size and sector

	Unweighted base	A Expenditure on training	B % of total UK training expenditure	C % of UK trainees	Proportion of total expenditure (row %) D Off-the-job	E On-the-job training	F Spend per trainee	G Spend per employee
Country								
England	*7,929*	£41.6bn	85	83	47	53	£3,325	£1,800
Northern Ireland	*1,002*	£1.4bn	3	3	54	46	£3,100	£1,725
Scotland	*685*	£4.3bn	9	9	52	48	£3,125	£1,800
Wales	*1,501*	£1.7bn	4	4	46	54	£2,600	£1,450
Size								
1-4 staff	*1,864*	£7.5bn	15	8	56	44	£6,325	£2,575
5-24 staff	*6,542*	£12.7bn	26	23	50	50	£3,775	£1,975
25-99 staff	*2,160*	£12.0bn	24	27	44	56	£3,000	£1,750
100+ staff	*551*	£16.8bn	34	43	44	56	£2,625	£1,475
Sector								
Agriculture	*88*	£851m	2	1	73	27	£5,725	£2,275
Mining and Quarrying	*29*	*£82m*	*	*	*57*	*43*	*£3,050*	*£1,425*
Manufacturing	*819*	£3,471m	7	8	37	63	£3,050	£1,425
Electricity, Gas, Water	*137*	£320m	1	1	42	58	£2,125	£1,150
Construction	*660*	£2,774m	6	5	50	50	£3,975	£1,925
Wholesale and Retail	*1,827*	£5,447m	11	16	37	63	£2,350	£1,200
Hotels and Restaurants	*1,060*	£3,421m	7	6	37	63	£3,625	£1,975
Transport and Communications	*869*	£3,524m	7	6	52	48	£3,650	£1,575
Financial Services	*220*	£1,520m	3	4	39	61	£2,450	£1,450
Business Services	*2,053*	£9,482m	19	16	51	49	£4,050	£2,075
Public Administration	*236*	£3,469m	7	6	44	56	£3,650	£2,200
Education	*560*	£6,709m	14	11	53	47	£4,075	£2,650
Health and Social Work	*1,525*	£5,431m	11	16	50	50	£2,325	£1,550
Community, Social and Personal Service activities	*1,034*	£2,485m	5	5	54	46	£3,625	£2,000

Base: All trainers completing the Investment in Training survey (11,117).

Note: Per capita and per trainee figures are calculated using employment and trainee numbers from main ESS2011 data (unweighted base 87,572, see Table 6.4).

Per capita and per trainee expenditure rounded to the nearest £25.

Mining and Quarrying row in italics due to base size of less than 50: treat with caution.

'' denotes a figure greater than 0 per cent but less than 0.5 per cent*

Training expenditure by establishments in Wales is lower than in the rest of the UK, with an average spend per trainee of £2,600, as compared to upwards of £3,100 per trainee in England, Scotland and Northern Ireland. Establishments in England spend the most on training per trainee (£3,325). However, this is driven by establishments in London (where the average spend is £4,275 per trainee). The average expenditure per trainee across other regions of England (£3,050 per trainee) is similar to the figure in Scotland (£3,125) and Northern Ireland (£3,100). Furthermore, the spend per *employee* is relatively equal across England, Scotland and Northern Ireland (between £1,725 and £1,800).

Previous surveys have been conducted in England and Northern Ireland which closely match the survey methodology adopted for the UK Commission's Employer Skills Survey 2011. However, direct comparisons cannot be made because different populations were employed for the 2011 survey compared to the previous employer skills surveys undertaken in the constituent nations. However, comparisons suggest a fall in real terms in overall training expenditure in both countries, indeed an absolute fall in Northern Ireland.

- The National Employer Skills Survey in 2009 showed training expenditure in England in the previous 12 months was £39.2bn. Only workplaces with employment of two or more were included in that survey. If those establishments with one employee only are excluded from the 2011 findings (to make the two surveys consistent in their coverage) total expenditure in England in 2011 is approximately five per cent higher than found in 2009. The UK Consumer Price Index in the period from the end of the 2009 survey to the start of the 2011 survey (August 2009 to May 2011) shows a rise of 7.3 per cent, hence the survey results indicate a fall in real terms.

- The Northern Ireland Skills Monitoring Survey 2008 (NISMS 2008) showed an overall training expenditure of £1.5bn. Eligibility for the 2008 survey was that establishments had to have at least one employee. Excluding workplaces with no employees from the 2011 results (i.e. those with two plus working proprietors but no employees) to make the two comparable has little impact on the overall expenditure figure in 2011 of £1.4bn, indicating a fall in expenditure. This is consistent with the fact that the proportion of employers in Northern Ireland providing training in the 12 months prior to the survey fell from 74 per cent in 2008 to 64 per cent in 2011.

The smallest establishments (those with fewer than five staff) have the greatest training expenditure per trainee (£6,325). Smaller employers account for a much higher share of total training expenditure than the proportion of all trainees that they train: overall, 30 per cent of all staff trained across the UK work in establishments with fewer than 25 staff, yet these establishments account for 41 per cent of total training expenditure. The expenditure per trainee declines with establishment size, with the largest establishments (100+ staff) spending the least (£2,625 per trainee). This is likely to be due to the fact that smaller employers are unable to take advantage of economies of scale in managing training of employees, and have less purchasing power when buying in training services, as seen above. Larger establishments have better access to internal training facilities and dedicated training staff, and hence are less dependent on bought-in services. Indeed, a greater proportion of expenditure in the smallest establishments goes on off-the-job training (56 per cent in establishments with fewer than five staff, compared to 44 per cent in establishments with 100 plus staff).

The Business Services sector spends more on training than all other sectors in absolute terms. This translates to a higher than average spend per trainee (£4,050, compared to £3,275 across all sectors). Spend on each trainee is also higher than average in the Education sector (£4,075 per trainee).

The Wholesale and Retail and the Health and Social Work sectors account for a substantial proportion of the total UK training spend. Each of these sectors accounts for one in every nine pounds of training spend (11 per cent) across the UK. This investment is, however, spread across a high volume of trainees, leading to a below average spend per person trained.

Table 6.16 details how expenditure on training varies according to the Product Market Strategy adopted by the employer. Whether examining results in terms of spend per trainee or spend per employee, the general pattern emerges that the higher an establishment's product market strategy the higher their training expenditure. Spend per trainee for example, increases from £3,100 among establishments with 'low' quality product market strategy scores, to £3,625 among establishments with a 'high' quality score and to £4,200 among those in the 'very high' category.

Table 6.16 Training expenditure by Product Market Strategy

	Unweighted base	Proportion of total expenditure (row %)		Spend per trainee	Spend per employee
		Off-the-job	On-the-job		
Overall: Private sector	*8,630*	45	55	£3,325	£1,700
Very low	*214*	57	43	£2,650	£960
Low	*1,114*	43	57	£3,100	£1,300
Medium	*2,972*	43	57	£2,950	£1,475
High	*2,780*	43	57	£3,625	£2,000
Very high	*992*	46	54	£4,200	£2,400

Base: All trainers in the private sector completing the Investment in Training survey (8,630). Note: 558 of these employers could not be classified according to Product Market Strategy.

Note: Per capita and per trainee figures are calculated using employment and trainee numbers from main ESS2011 data (unweighted base 87,572, see Table 6.4).

Per capita and per trainee expenditure rounded to the nearest £25.

Findings therefore show that firms with a higher Product Market Strategy positioning train a higher proportion of their staff (see Table 6.5) and spend more per trainee (Table 6.16).

6.10 Training and Investors in People status

In this section we examine how patterns of training behaviour differ between establishments accredited with the Investors in People (IIP) standard, and those not. Investors in People is a business improvement through people tool. Overall 16 per cent of establishments are accredited with the award. Table 6.17 compares training expenditure between establishments covered by the Investors in People (IIP) standard and those without this accreditation, as well as other information about the incidence of training within IIP and non-IIP establishments, and more general information about their size profile (we have seen throughout the chapter that size is a key determinant of training activity and behaviour).

Establishments with IIP accreditation are much larger than average (18 per cent employ 25 or more staff, compared to six per cent among non-IIP workplaces), hence it is no surprise that they are more likely to have provided training over the previous 12 months (76 per cent) than establishments not covered by IIP (56 per cent). The number of staff trained by workplaces accredited with IIP over the previous 12 months is equivalent to three-fifths (61 per cent) of their total workforce at the time of the survey, higher than the proportion in non-IIP establishments (51 per cent).

Investors in People (IIP) accredited establishments provide more days training per trainee per annum (8.2) than non-IIP workplaces (7.1). Results from the Investment in Training survey suggest that a greater proportion of this training is on-the-job training (consistent with the fact they tend to be larger employers): 55 per cent of overall training expenditure among IIP workplaces is for on-the-job training compared with 51 per cent among than non-IIP workplaces.

Training expenditure per trainee is similar in IIP workplaces (£1,950 per employee) and non-IIP establishments (£2,100). However, spend per trainee over the previous 12 months was higher among non-IIP workplaces (£4,150) than IIP workplaces (£3,175). This is again consistent with the finding presented earlier in this chapter that the smaller the size of the workplace the higher the spend per trainee.

Table 6.17 Size, training activity and training expenditure by Investors in People status

	Currently accredited with the IIP Standard	Not IIP accredited
Unweighted base:	*19,859*	*54,405*
Size	%	%
1-4 staff	46	69
5-24 staff	36	25
25-99 staff	13	5
100-249 staff	3	1
250+ staff	2	*
% of employers that provided training in the last 12 months	76%	56%
% of staff trained in the previous 12 months	61%	51%
Days training per annum per trainee	8.2 days	7.1 days
Days training per annum per employee	4.9 days	3.6 days
Unweighted base	*2,727*	*8,390*
% of total expenditure on off-the-job training	45%	49%
% of total expenditure on on-the-job training	55%	51%
Spend per trainee	£3,175	£4,150
Spend per employee	£1,950	£2,100

Base for all except the last four rows is all establishments knowing their IIP status, and for last four rows is those trainers completing the Investment in Training survey knowing their IIP status.

Note: Per capita and per trainee figures are calculated using employment and trainee numbers from main ESS2011 data (unweighted base 87,572). Per capita and per trainee expenditure rounded to the nearest £25.

'' denotes a figure greater than 0 per cent but less than 0.5 per cent*

6.11 Assessing the impact of training

Two-thirds of workplaces that train (65 per cent) formally assess whether the training received by employees impacts on their performance. Results in 2011 among employers in England were roughly level with those found in 2009 (67 per cent in 2011 v. 66 per cent in 2009); the question was not asked in the most recent legacy surveys in the other countries of the UK), suggesting that the recession has had some affect in terms of making employers more likely to assess the impact, and hence value for money, of their training activity. This is especially so given that from 2005 to 2009, in England, this figure had been falling.

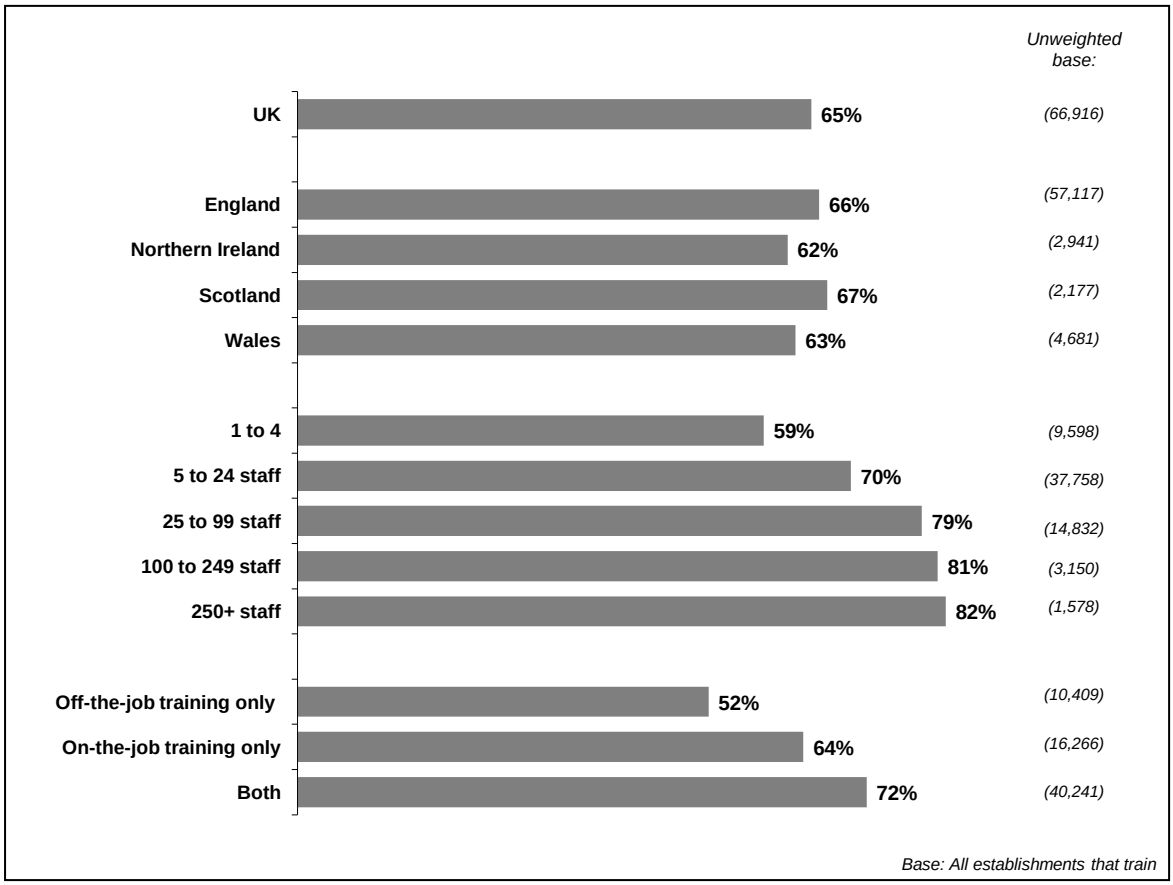
The larger the size of the workplace the more likely they are to assess the impact of their training activity, the figure increasing from 59 per cent among establishments that train who have fewer than five staff, up to 82 per cent among those with 250 or more staff.

There were noticeable differences by sector, with those operating in Public Administration (80 per cent), Education (78 per cent), Financial Services (77 per cent) and Health and Social Work (75 per cent) all noticeably more likely than average to assess the impact of their training. The majority of establishments in three of these sectors (Public Administration, Education, and Health and Social Work) are government-funded or charities, and there is a marked difference in the likelihood that training activity is formally assessed by whether the establishment is government-funded (78 per cent), a charity / operates in the Voluntary sector (69 per cent) or whether it is profit-seeking (64 per cent).

Differences are also apparent by the type of training undertaken: those providing both on- and off-the-job training for their staff over the last 12 months were the most likely to assess the impact of their training (72 per cent). Those providing only off-the-job training were less likely than those providing only on-the-job training to assess its impact (52 per cent and 64 per cent respectively). Although the latter may seem counter-intuitive (in that off-the-job training is more likely to bear a direct cost for the employer), it should be borne in mind that those whose training activity was restricted to exclusively off-the-job training modes were particularly likely to be the smallest establishments with fewer than five staff, whereas those training both on- and off-the-job were much larger than average. The pattern described by mode of training provided is as found in previous employer skills studies, including NESS 2009 in England.

By country no significant differences were seen.

Figure 6.6 The proportion of employers that train that assess the impact of their training



Differences by nation are not statistically significant

6.12 Barriers to providing more training

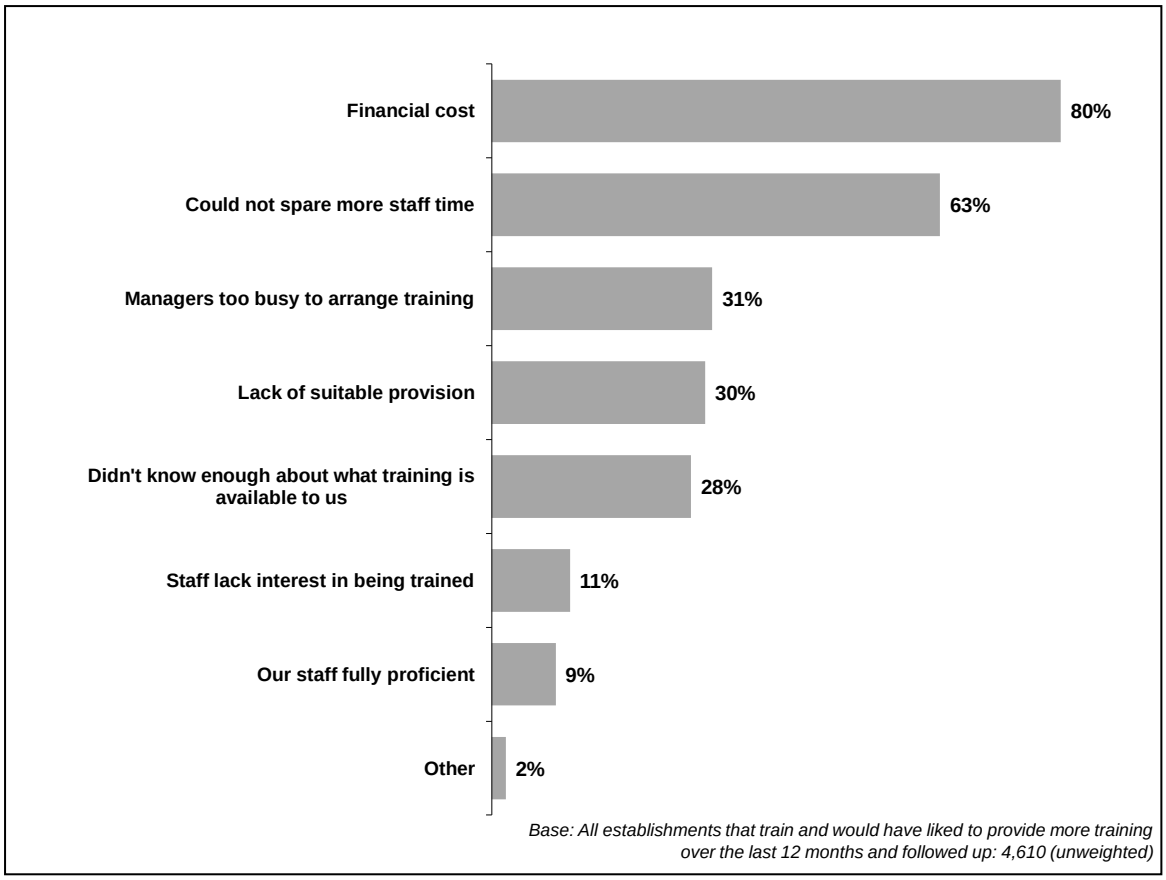
Almost half of employers that had funded or arranged training for staff over the last 12 months (48 per cent) would have liked to provide more training than they actually undertook. The figure is almost identical to that found in the most recent employer skills surveys in Scotland in 2010 and in England in 2009 (the question was not asked in the most recent employer skills surveys in Northern Ireland and Wales). This suggests little recent change as a result of the challenging economic situation, or indeed other factors, in the extent to which employers that do train have been restricted in their ability to provide the amount of training that they would like.

Results in 2011 varied relatively little by size of establishment (ranging from 48 per cent to 54 per cent across all sizebands).

Those employers that would have liked to provide more training were constrained by a range of factors, most commonly the financial cost (mentioned on this prompted question by 80 per cent of those that would have liked to undertake more training) and not being able to spare more staff time for training (63 per cent). Less often cited as constraints, though mentioned by around three in 10 employers that would have liked to undertake more training, were managers being too busy to organise additional training (31 per cent), a perceived lack of suitable provision (30 per cent), and not knowing enough about what training is available (mentioned by 28 per cent of employers that train who would have liked to provide more training over the last 12 months). Results are shown in Figure 6.7.

A lack of funds for training / the cost, followed by not being able to spare the time for staff to undertake more training, were also the two most common barriers cited in the most recent employer skills surveys in England and Scotland (the question was not asked for the equivalent surveys in Wales and Northern Ireland). The exact extent to which each issue is affecting employers though cannot be compared as the previous surveys asked the question on a spontaneous basis whereas for the 2011 survey the list of potential factors was visible to respondents.

Figure 6.7 Reasons for not providing more training in the last 12 months (prompted)



Base: All establishments that train and would have liked to provide more training over the last 12 months and followed up: 4,610 (unweighted)

The limiting factors cited varied by size. The larger the establishment the less likely they were to be constrained by the financial costs of training (from 84 per cent of those with fewer than five staff to 66 per cent of those with 100 or more staff), but the more likely they were to cite not being able to spare more staff time for training or for managers to organise it.

6.13 Reasons for not providing training

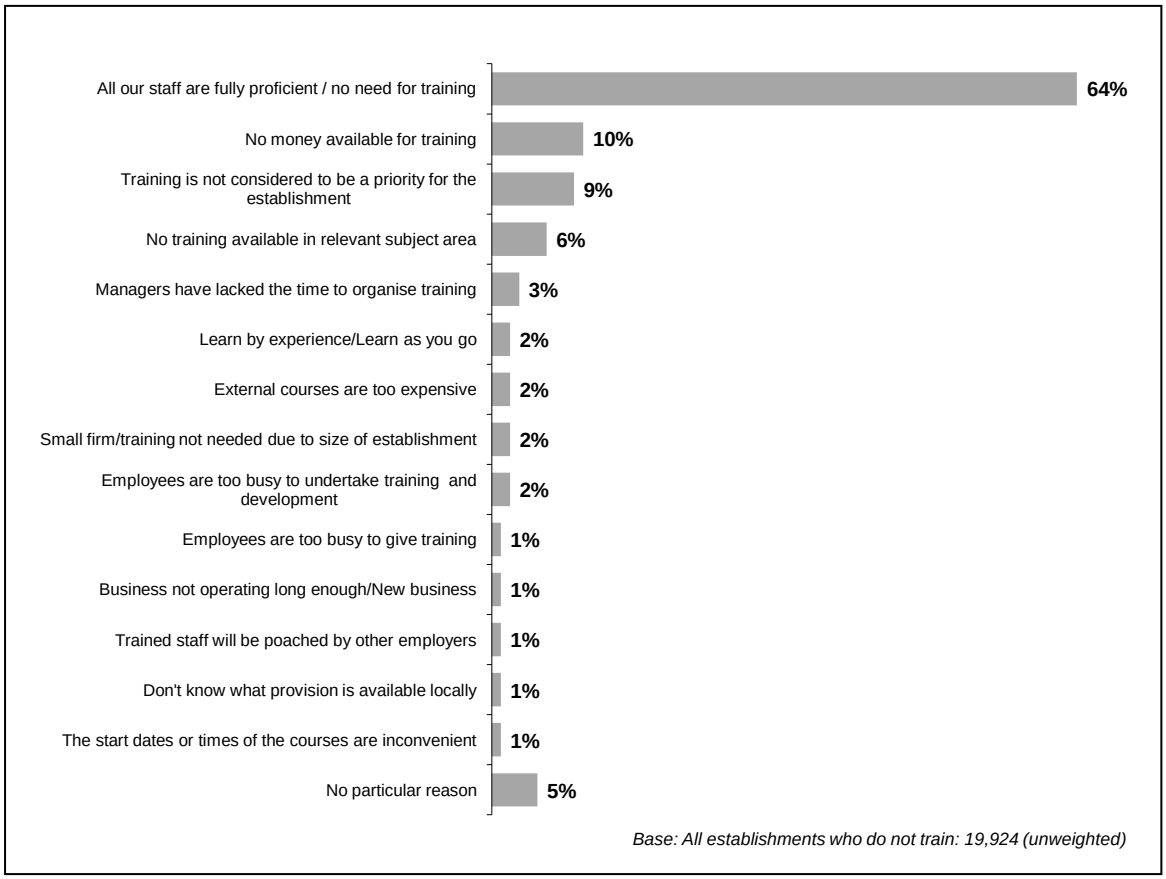
All employers that had not funded or arranged any off-the-job or on-the-job training for staff at their site over the last 12 months were asked why they had not done so. Results are summarised in Figure 6.8.

The most common reason given, as found in the previous skills surveys conducted in each country of the UK, was that they consider their staff to be fully proficient and / or that their staff did not need training. This was mentioned spontaneously by almost two-thirds of non-trainers (64 per cent): this figure falls with the size of the establishment, from 66 per cent of non-trainers with fewer than five staff, to 58 per cent of those with 5-24 staff to 41 per cent of those with 25 or more employees. Predictably those that identified skills gaps amongst their staff were less likely to give this response, though a third (34 per cent) of employers with skills gaps that did not train gave as their reason that training was not needed, suggesting there is still work to be done persuading employers of the benefits of training for tackling skill deficiencies. However, it should be noted that just over half of establishments (53 per cent) not training for the reason of staff being seen as fully proficient and / or the employer not seeing the need for training, did provide the kinds of informal workforce development discussed earlier in the chapter (see the 'Broader development activity' section), suggesting that many of these employers do seek to develop the skills of their staff, though not through activity that would be identified by the employer or employee as training.

A lack of money for training, and training not being a key priority for the establishment, were secondary reasons for not training (10 per cent and nine per cent respectively). Issues relating to training supply were relatively infrequently mentioned: six per cent said a reason for not training was that they do not feel there is training available in relevant subject area, and two per cent said at least part of the reason was that external courses are too expensive.

Figure 6.8 lists the reasons given for not training mentioned by at least one per cent of non-training employers to this spontaneous question.

Figure 6.8 Reasons for not funding or arranging training in the last 12 months (spontaneous)



6.14 Conclusion

The majority of employers (59 per cent) do invest in the skills and development of their workforce. Whilst the overall volume and total expenditure of £49 billion on training seems high, it is unevenly and unequally distributed. There are noticeable geographic differences as more employers in Scotland (68 per cent) train their staff than in the rest of the UK. The other notable national difference is that Welsh employers spend less per trainee on training, though the impact of comparative wage levels on this measure has not been explored in this report.

Looking at the breakdown of expenditure into indirect and direct costs, it is also notable that internally provided direct costs, such as training management, account for a larger proportion of expenditure for smaller businesses than larger ones. This reflects the extent to which smaller businesses could benefit from collaborating on the procurement of training to help save these costs, and illustrates the importance of employers establishing networks to help facilitate this.

In terms of the relationship between levels of training and other indicators, it is notable that employers with skills gaps are more likely to train their staff than those without. This confirms that training is a common response to having a skills deficiency, as seen elsewhere in the report. However, it also reflects the extent to which skills gaps should not necessarily be viewed in isolation as a negative issue. Those businesses with skills gaps are engaged enough to have identified an issue with their staff and in the vast majority of cases are taking action to overcome these problems, if they require attention.

Across the sectors there are also significant variations in skills investment. The public sector remains an important driver for much of the skills investment activity. Employers in sectors such as Public Administration (89 per cent), Education (86 per cent) and Health and Social Work (84 per cent) have the highest incidence of involvement in training. Important sectors such as Transport and Communications (49 per cent), Agriculture (50 per cent), and Construction (51 per cent) are where the lowest proportions of employers provide training.

Just under half of all employees miss out on training and involvement varies markedly by occupation. In particular, it is Managers (45 per cent receive training), those in Administration/Clerical occupations (45 per cent) and Machine Operatives (47 per cent) who are least likely to receive training. Those employed in small establishments (53 per cent) are also less likely to receive training compared to those employed in medium sized businesses (61 per cent).

As well as raising questions about the volume and scale of skills investment, the findings also raise important questions about the quality of the training. Significantly, only a small proportion of all employees (12 per cent) undertake training leading to a nationally recognised qualification. If qualification attainment encourages transferability and is a good indicator of quality it might be expected that this would be higher. Again there are some important variations by sector where employees working in Mining and Quarrying (21 per cent), Community, Social and Personal service activities (18 per cent) and Construction (17 per cent) are more likely to be trained towards a nationally recognised qualification. The sectors most likely to provide training, described above, are not the most likely to train towards qualifications.

There is unmet demand for more skills investment, as amongst employers who already undertake training nearly half (48 per cent) would have liked to have provided more training. They are constrained by a range of factors mainly financial (80 per cent of those who reported barriers to undertaking more training) and not being able to release staff (63

per cent). This shows the extent to which there is a desire amongst many employers to invest more in the skills of their staff if the barriers preventing them from doing so can be removed. That almost two-thirds of establishments that don't train report no need for training also highlights pockets of low-demand, even in some cases where skills gaps exist in the workforce.

7 Conclusions

The UK Commission's Employer Skills Survey 2011 is a large-scale employer survey, covering an extensive range of topics including recruitment, internal skills gaps, investment in training, and product market strategies. This concluding chapter summarises the key messages coming out of the project.

7.1 Few differences between the nations

For the first time, this survey has enabled an analysis of skill deficiencies and training across all establishments employing staff in the UK on a comparable basis. There are few major differences between the nations in the experience of skills deficiency: instead size, sector and other factors such as product market strategy appear to inform the experience of a business more than geography at an aggregate level. However, differences within nation are likely to be greater than between nations, and these more detailed breakdowns will be explored in reports on the specific nations.

There was some national variation in the incidence of training. Employers in Scotland were more likely to report that they had trained their staff than establishments in the rest of the UK, whilst those in Wales recorded a lower training spend per trainee than the other nations.

Collectively, these are relatively minor differences by nation given the range of factors explored within the survey, and wider variations are found by other characteristics such as sector and occupation.

7.2 Concentrated pockets of skills deficiencies by sector and occupation

A minority of employers were recruiting at the time of the survey (12 per cent) and relatively few were experiencing problems filling these vacancies (four per cent of all establishments). However, this overall picture hides concentrated pockets of skills shortages which have the potential to impact on the current economic recovery from recession and future economic growth. These pockets are unevenly spread across the economy. Skill-shortage vacancies, where vacancies are hard to fill because of skill shortages among applicants, are most numerous in the Business Services sector, which includes accountants, solicitors and marketing firms, while the occupational group where employers face the greatest problem in meeting their demand for skills from the labour market is Skilled Trades occupations, such as electricians, plumbers and chefs. Among

this occupational group one in every three vacancies are hard to fill because of skill shortages among applicants (double the average figure for the entire economy). Employers have reported difficulty meeting skill needs from the labour market for this occupational group in previous surveys in the constituent nations of the UK, hence skill shortages for Skilled Trades occupations appear to be a persistent feature of the UK labour market, and a continuing cause for concern.

In the pockets where skill-shortage vacancies are being experienced, nearly all employers reported that the inability to fill these vacancies was having an impact on their business performance. Key impacts included increasing the workload for other staff, difficulties meeting customer service targets, and losing business or orders to competitors.

Skills gaps, where existing employees are not fully proficient at their jobs, are reported by a minority of employers (13 per cent), but the number of staff affected equated to five per cent of the UK workforce. The survey findings can only report those employers that are aware of the skills gaps they face, and other evidence of the low-skill equilibrium at work within the UK (for example see original paper by Finegold and Soskice, 1988) suggests that many employers not registering problems may be doing so because of a lack of desire to build up skills, innovate, grow and move up the value chain. Hence the survey results on the extent of skills gaps may in reality mask a much deeper problem reflecting under recognition of skills deficiencies and a lack of employer ambition.

It also needs to be borne in mind that having a skills gap can be a transient issue where some employees may be new to the role and developing proficiency, or where the nature of the role is changing to meet new business opportunities. In such cases skills gaps would be expected to decrease over time, and are not necessarily a negative thing as they may reflect a business that is innovating and evolving its offer to keep competitive.

This is not always the case, however, and like skill-shortage vacancies, skills gaps are concentrated in specific sectors and occupations. Skills gaps are particularly concentrated in Sales and Customer Service roles and in Elementary occupations (such as bar staff and cleaners; in each category eight per cent of staff are reported as having skill gaps), and in the Hotels and Restaurants sector (where nine per cent of staff are not fully proficient). Similar to skill-shortage vacancies, where these skills gaps do exist, they impact on business performance in the majority of cases, for example through increasing the workload of other staff and leading to increased operating costs (caused for example by having to pay overtime or to bring in temporary staff).

7.3 Retention

The survey also explored retention difficulties as a factor which contributes to the overall demand and supply of suitably skilled people in the labour market. Those reporting retention difficulties were more likely, unsurprisingly, to report vacancies, but those vacancies were more likely to be hard-to-fill. The causes of hard-to-fill vacancies and retention difficulties are similar, focused on the nature of the role in question. Further, those with retention difficulties were more likely to report decreased levels of employment in the previous 12 months, though no causality can be inferred.

7.4 Investment in Training

Encouragingly, in the face of the current challenging economic conditions employers are continuing to invest in the skills and development of their employees. A total of 1.4 million employers, equivalent to 59 per cent of all establishments, invested £49bn in the skills development of their employees in the 12 months prior to the survey. However, the indication is that at best these levels are static if not declining in real terms compared with the previous data points available. Of the £49bn spent on training, 50 per cent was indirect costs (costs of paying wages to staff whilst training); 27 per cent was direct tradeable, outsourceable costs (for example fees to external providers); and 23 per cent was spent on non-tradeable direct costs that cannot typically be outsourced by the establishment (such as management of training). The proportion of training costs spent on non-tradeable direct costs was higher in smaller businesses (43 per cent in the very smallest establishments), illustrating the extent of potential benefits that could be gained by greater collaboration amongst this group of employers in lowering training costs.

While the £49bn aggregate investment in training figure is substantial, across the sectors of the economy there are significant variations. Public Administration, Education, and Health and Social Work are the sectors with the highest involvement in skills development (these three sectors are the most likely to provide any training, and train the highest proportion of their workforce). Within key private sectors, such as Transport and Communications and Construction, investment in skills development is lower than other sectors which raises questions about how quickly they will be able to benefit from any upturn in the economy.

Skills investment and training is not provided to all employees. Overall, 54 per cent of employees were trained in the previous 12 months. This varies markedly by occupation. Those in Elementary occupations, such as bar staff and cleaners, semi-skilled operative roles, such as taxi drivers and machinists, Administrative and Clerical workers and those in the Managerial occupational group are the least likely to receive training. For many of

these groups this is not a new trend, and continues patterns previously seen, especially within England, where managers have been the least likely to receive training for several years. This evidence is worrying in the face of the perceived management and leadership skill gap that has been identified as an issue in the UK since the 1980s (see UKCES, *Ambition 2020*, 2009 for a discussion of this).

As well as raising questions about the volume and scale of skills investment, the survey findings raise important issues about the quality of the training. If qualification attainment is taken as a good indicator of the quality of training being provided then it is noteworthy that only around 3.4 million employees in the last 12 months undertook training leading to a nationally recognised qualification, representing 12 per cent of all employees. This may indicate that there is a lack of alignment between the current qualifications designed to meet employer demand and the reality of employer requirements.

Despite the volume and scale of the skills investment, it is not fully meeting employer demand. Nearly half those employers who already undertake skills investment and provide training to their employees would have liked to provide more training over the last 12 months. These employers are constrained by a number of factors, including cost, time, a perceived lack of suitable provision and a lack of information. These findings combine to raise questions about the current adequacy and appropriateness of training and skills investment, the integration of workforce development within business strategies to improve business performance, and whether this investment is ultimately sufficient to ensure significant growth in the future. Amongst the large minority (41 per cent) of employers that do not train, a large proportion report that this is due to all their staff being fully proficient, which again raises questions regarding the levels of innovation and stretch that many employers have to maintain competitive advantage.

7.5 The work-readiness of education leavers

Despite a sometimes negative press about young people, the survey finds that for the quarter of employers who had recruited education leavers in the last 2-3 years the majority find such young people well prepared for work. However, employers' views of the preparedness of such recruits increases with the age of the recruit and their time spent in education. Higher Education leavers are seen as being better prepared on the whole than younger recruits, or those that have spent less time in education. There seem to be several reasons for this which may include: the additional time Higher Education leavers spend in education developing their skills and experience; employers may simply invest more in graduate recruitment to help them identify a more appropriately suited recruit; or it may just be that graduates are older, more experienced and more mature generally.

Challengingly, for the small minority of employers who find education leavers poorly prepared for work, the main reason is a lack of experience. Unsurprisingly, this lack of experience is more common for younger recruits, which is difficult to ameliorate, though suggests many employers may support the idea of increased work experience opportunities for young people within the education system. Experience and maturity are key concerns for employers, whereas the literacy and numeracy skills of education leavers do not appear to be causing significant problems for their new employers, reflecting a broader trend whereby literacy and numeracy are cited low on the lists of skills missing from recruits for skill-shortage vacancies and current staff with skills gaps within the survey.

7.6 Product Market Strategies

Private sector businesses employ a variety of business strategies to drive performance. These Product Market Strategies can be rated according to the approach adopted by the employer, compared to others within their industry, on a series of key characteristics including price dependency, innovation, quality and customisation of products and services.

Within the survey, the PMS adopted by a business appears to have a bearing on responses in a number of key areas. In particular, employers that score highly in the product market strategy measure tend to have more highly qualified staff and train more of their employees. This implies that these businesses either have a greater need for skills and therefore skill development amongst their staff and / or that they are more aware of the need for skill development and have a greater sense of ambition than other employers who are less likely to innovate and push the quality and customisation of their offer.

7.7 Further avenues for analysis and future reports

This report has shown that there is ongoing skills investment by employers, but also unmet demand for skills and opportunities to raise employer ambition and investment further. This report, however, has merely scratched the surface of the rich data available from the UK Commission's Employer Skills Survey 2011. Further analysis of other areas of the survey, including High Performance Working Practices (HPWP), and national time series information, will be provided in subsequent reports. In addition, evidence from this project will form the bedrock of a series of sectoral studies which will be released over the summer of 2012. There is also the potential for advanced analysis techniques, such as regression and cluster analysis to potentially draw out further information on themes such

as retention, recruitment and training. There is the scope to look at how different themes fit together, and more broadly how employer characteristics can be used to predict likely behaviour. In this way the data allows deeper understanding of the challenges and the opportunities to work with employers to tackle the skill deficiencies which test growth and business success, and raise ambitious demand for highly skilled people in UK businesses.

Appendix A: National Time Series Tables

The UK Commission's Employer Skills Survey 2011 was designed in such a way as to preserve key time series measures from the previous surveys carried out previously by the individual nations.

The eligible employer population and weighting strategy for the 2011 survey was different to that used in each nation's individual surveys, so data from this report is not directly comparable with the time series data for each nation. However a separate re-weighting exercise was carried out in each nation to match the approach taken in their previous surveys in order to produce data to continue the time series.

Separate nation reports have been produced detailing this time series information in full; this appendix shows a summary of the key measures over time. Note that due to the different weighting strategy adopted the figures for 2011 do not match the figures in this main report; these are to be used for historical comparison only.

England Legacy Time Series: Key Figures

	UKCESS 2011	NESS 09	NESS 07	NESS 05
Vacancies and skill-shortage vacancies				
% of establishments with any vacancies	**15%**	12%	18%	17%
% of establishments with any hard-to-fill vacancies	**5%**	3%	7%	7%
% with SSVs	**4%**	3%	5%	5%
% of all vacancies which are SSVs	**16%**	16%	21%	25%
Number of vacancies	**533,400**	385,700	619,700	573,900
Number of hard-to-fill vacancies	**115,500**	85,400	183,500	203,600
Number of skill-shortage vacancies	**85,500**	63,100	130,000	143,100
Skills gaps				
% of establishments with any staff not fully proficient	**18%**	19%	15%	16%
Number of skills gaps	**1.32m**	1.70m	1.36m	1.26m
Number of staff not fully proficient as a % of employment	**6%**	7%	6%	6%
Training				
% of establishments training staff over the last 12 months	**66%**	68%	67%	65%
% of establishments providing off-the-job training in the last 12 months	**47%**	51%	46%	46%
% of workforce trained	**53%**	56%	63%	61%
Total number of training days	**102m**	109m	n/a	n/a
Total training expenditure	**£40.5bn**	£39.2bn	£38.6bn	£33.3bn

n/a: question not asked or not asked in a comparable manner in previous years' surveys

Northern Ireland Legacy Time Series: Key Figures

	UKCESS 2011	NISMS 08	NISMS 05
Vacancies and skill-shortage vacancies			
% of establishments with any vacancies	**10%**	12%	11%
% of establishments with any hard-to-fill vacancies	**4%**	4%	6%
% with SSVs	**3%**	3%	4%
% of all vacancies which are SSVs	**28%**	18%	34%
Number of vacancies	**19,800**	17,400	n/a
Number of hard-to-fill vacancies	**6,400**	5,050	n/a
Number of skill-shortage vacancies	**5,500**	3,100	n/a
Skills gaps			
% of establishments with any staff not fully proficient	**12%**	n/a	n/a
Number of skills gaps	**33,600**	58,700	n/a
Number of staff not fully proficient as a % of employment	**5%**	8%	n/a
Training			
% of establishments training staff over the last 12 months	**63%**	74%	68%
% of establishments providing off-the-job training in the last 12 months	**47%**	53%	34%
% of workforce trained	**60%**	n/a	n/a
Total number of training days	**2.88m**	n/a	n/a

n/a: question not asked or not asked in a comparable manner in previous years' surveys

Scotland Legacy Time Series: Key Figures

	UKCESS 2011	SESS10	SESS08	SESS06
Vacancies and skill-shortage vacancies				
% of establishments with any vacancies	**13%**	13%	18%	19%
% of establishments with any hard-to-fill vacancies	**4%**	5%	10%	12%
% with SSVs	**3%**	3%	5%	8%
% of all vacancies which are SSVs	**17%**	18%	24%	30%
Number of vacancies	**45,800**	43,900	69,800	76,700
Number of hard-to-fill vacancies	**10,200**	15,400	34,700	37,000
Number of skill-shortage vacancies	**7,900**	8,000	16,400	23,200
Skills gaps				
% of establishments with any staff not fully proficient	**17%**	15%	20%	22%
Number of skills gaps	**122,400**	139,100	179,000	164,800
Number of staff not fully proficient as a % of employment	**5%**	6%	8%	8%
Training				
% of establishments training staff over the last 12 months	**71%**	n/a	n/a	n/a
% of establishments providing off-the-job training in the last 12 months	**52%**	n/a	n/a	n/a
% of workforce trained	**61%**	n/a	n/a	n/a
Total number of training days	**9.74m**	n/a	n/a	n/a

n/a: question not asked or not asked in a comparable manner in previous years' surveys

Wales Legacy Time Series: Key Figures

	UKCESS 2011	FSW 05
Vacancies and skill-shortage vacancies		
% of establishments with any vacancies	**13%**	21%
% of establishments with any hard-to-fill vacancies	**5%**	10%
% with SSVs	**4%**	4%
% of all vacancies which are SSVs	**20%**	14%
Number of vacancies	**25,700**	37,900
Number of hard-to-fill vacancies	**8,300**	13,200
Number of skill-shortage vacancies	**5,100**	5,400
Skills gaps		
% of establishments with any staff not fully proficient	**17%**	18%
Number of skills gaps	**64,500**	63,800
Number of staff not fully proficient as a % of employment	**5%**	6%
Training		
% of establishments training staff over the last 12 months	**67%**	n/a
% of establishments providing off-the-job training in the last 12 months	**50%**	n/a
% of workforce trained	**55%**	n/a
Total number of training days	**5.22m**	n/a

n/a: question not asked or not asked in a comparable manner in previous years' surveys

Appendix B: A Note on Proficiency and Skills Gaps

To ascertain the number of staff with skills gaps, respondents were asked, for each major (one-digit SOC 2010) occupation where they employed staff, how many of those they employed were fully proficient. If respondents asked for clarification, then a proficient employee was described as 'someone who is able to do their job to the required level'. 'Proficient employee', however, is clearly a subjective and relative term to the extent that:

- different managers in an organisation may have different views on whether an individual member of staff is able to do the job to the required level. Indeed they may have different views on what the required level is that the organisation is looking for within an occupational category;
- an employee could be regarded as fully proficient but if the requirements of the job change (for example, some new machinery or technology is introduced) then they could be regarded as not being able to do their job to the required level, despite the fact that their skills were unchanged;
- the same is true if a person were to be promoted to a more demanding position – the company might go from having no skills gaps to saying that this newly promoted member of staff was not fully proficient in the new job, despite having the same proficiency as before;
- different companies may be more demanding and 'critical' of their staff than others: an individual considered fully proficient by one company might be seen as having a skills gap if performing the same role to the same standard in another company.

A final point to note is that the survey categorises all staff as either fully proficient or not: it takes no account of the range that can clearly exist between those who are very nearly proficient and those who significantly lack the skills that employers require. While from a policy perspective, therefore, there is clearly interest in raising the skill levels of the workforce, survey data can only identify changes year on year in the proportion of staff reported as fully proficient, not cases where skills levels have been raised but where staff still remain below full proficiency.

Appendix C: Technical Appendix

A full Technical Report accompanies this document and can be downloaded from the UKCES website. This appendix provides brief details on the key areas of sampling, fieldwork and analysis.

The survey had three facets:

- Wave 1: the main skills survey, covering business strategy, retention, recruitment, skills gaps and high performance working;
- Wave 2, Investment in Training Survey: covering the financial investment establishments make in training their staff;
- Skills Equilibrium: covering whether trainers would have liked to have done more training, or whether they were satisfied with the amount of training completed.

UK Commission's Employer Skills Survey: Wave 1

Sampling

All establishments in the UK with one or more people working at them excluding "one man bands" (where the only person working at the site also owns the organisation) were eligible for the survey.

Historically, the English Employer Skills and Welsh Employer Skills Surveys, as well as the Employer Perspectives Surveys, have covered all establishments with **2+ employment**, i.e. sites with at least 2 people working at them (regardless of their working status). Meanwhile, the Scottish and Northern Irish Employer Skills Surveys have in the past covered all establishments with **1+ employees**, i.e. sites with at least 1 member of staff in addition to any working proprietors. The approach taken for the UK survey ensures that all establishments who were previously eligible for their nation's skills survey are also eligible for this survey, allowing the data to be cut to provide time series comparisons.

The diagram below summarises the survey eligibility associated with the "1+ employees" and "2+ employment" approaches. The percentages within each quadrant relate to the proportion of all establishments / employment that each population segment accounts for (according to the latest ONS IDBR estimates).

		2+ Employment	
		Yes	**No**
1+ Employees	**Yes**	All establishments with 2+ employees, or 1 working proprietor and 1 employee *EN: 63% / 96%* *SC: 67% / 97%* *NI: 62% / 95%* *WL: 63% / 96%* ***UK: 63% / 96%***	Establishments with 1 employee and no working proprietors *EN: 23% / 2%* *SC: 19% / 1%* *NI: 8% / 1%* *WL: 15% / 1%* ***UK: 22% / 2%***
	No	Establishments with at least 2 working proprietors and no employees (potential recruiters/engagers) *EN: 5% / 1%* *SC: 5% / 1%* *NI: 7% / 1%* *WL: 9% / 2%* ***UK: 5% / 1%***	Establishments with 1 working proprietor and no employees (one-man bands) *EN: 10% / 1%* *SC: 10% / 1%* *NI: 23% / 2%* *WL: 13% / 1%* ***UK: 11% / 1%***

The sample design was based on a three-dimensional grid, crossing sizeband (defined by employment) by 14 broad SIC-based sectors (see Appendix C for definitions) within region (9 English GOR regions, Northern Ireland, Scotland and Wales). Quotas were set on this basis, proportioned to give a robust base size in each subgroup of the overall sample. In addition non-interlocking targets were set for the 151 English LEAs, and sub-regions in Wales and Northern Ireland.

87,572 interviews were carried out in total; boosts took place in Northern Ireland and Wales:

Country	Number of interviews
England	75,053
Northern Ireland	4,004
Scotland	2,503
Wales	6,012

Sample was drawn from Experian's business database.

Fieldwork

A total of 87,572 interviews were conducted by telephone using computer-assisted telephone interviewing (CATI) technology. Fieldwork across the regions was undertaken by three research agencies, as follows:

Agency	Regions
BMG	South West West Midlands Yorkshire and Humberside
IFF Research	Northern Ireland Wales
Ipsos MORI	East of England East Midlands London North East North West South East Scotland

Interviews were conducted with the most senior person at the site with responsibility for recruitment, human resources and workplace skills.

Fieldwork for Wave 1 took place from March to July 2011.

Response rate

The overall response rate for the survey was 39%, calculated as a proportion of all completed contacts. A detailed breakdown of survey outcomes in shown below:

Outcome	Number of contacts	% of all sample	% of complete contacts
Total sample	***594,120***	100%	
Ineligible	72,310	12%	
'Live' / not available during fieldwork / out of quota	215,639	36%	
Unobtainable number	82,129	14%	
Total complete contacts	***224,042***	***38%***	***100%***
Achieved interviews	87,572	15%	39%
Respondent refusal	107,208	18%	48%
Quits during interview	7,033	1%	3%
Company policy refusal	22,229	4%	10%

Questionnaire design

The questionnaire design harmonised previous questionnaires used by the four nations of the UK in their own skills surveys. This included the National Employer Skills Survey series in England, the Scottish Employer Skills Surveys, the Northern Ireland Skills Monitoring Surveys and Future Skills Wales.

A task and finish group chaired by the UK Commission and including IFF Research, and representatives from each of the four nations, was set up to drive this process.

The group's aim was to develop a questionnaire that answered the Employer Skills Survey objectives, whilst maintaining time series data for each nation as far as was feasible in the framework of the ESS. The questionnaire is available on the UK Commission's website at: http://employersurveys.ukces.org.uk/ess/ess11/default.aspx.

Weighting / Grossing up

Data for the survey was weighted and grossed up to population estimates of establishments and to the population of employees, as derived from the 2010 Inter-Departmental Business Register (IDBR).

The grossing-up procedure on which this report has been based was undertaken at a regional level; within each region grossing up took place on a 14 sector and eight sizeband interlocking grid (i.e. 112 cells). In instances where no interviews had been completed in a cell but the IDBR indicated establishments existed, and in instances where a low number of interviews were conducted in relation to the population of that cell, cells were merged primarily within sizeband (i.e. across industries) but where necessary across sizeband as well.

Employer Skills Survey: Investment in Training follow-up

A separate Investment in Training study was conducted by IFF Research to provide detailed estimates of employer expenditure on training. The approach replicated that of previous Cost of Training studies in England and Northern Ireland.

Sampling

At the end of the Wave 1 questionnaire those respondents who had arranged or funded training for their staff in the previous 12 months were asked if they would be willing to take part in a follow up study on training expenditure. Those agreeing to participate formed the sample for this follow-up survey.

Quotas were set on the basis of training type by size within region.

Fieldwork

Employers who had indicated agreement to take part were called by an IFF interviewer to confirm participation and contact details. They were then sent a datasheet via email or fax containing the questions that were to be asked in the full interview (a copy of which can be seen below). Sending this datasheet in advance allowed the respondent time to collect the relevant information and increase the accuracy of responses. A few days after sending, an interviewer called back to conduct the full interview.

In total, information on training expenditure was collected from 11,595 establishments, though 478 were rejected because of incompleteness (a large number of 'don't know'); hence analysis is based on data from 11,117 establishments.

Fieldwork was undertaken by IFF Research from 16th May to 29th July 2011.

Weighting/grossing up

In order to weight the Investment in Training study, population figures were calculated from weighted Wave 1 data which had in turn been weighted using the IDBR figures used for the main survey analysis. Data was weighted on the basis of interlocking grids on size by sector by the type of training they carried out, with a regional rim weight.

Employer Skills Survey: Skills equilibrium follow-up

Web survey

Once the Wave 1 survey fieldwork had been completed, all those who stated in the survey that they had arranged or funded any training for their staff and were willing to take part in follow-up surveys were emailed a web survey to investigate whether the extent of their training was sufficient for their needs, or if they would have preferred to have done more.

The survey fieldwork was initially scheduled for one and a half weeks in November; this was extended by a further five days to maximise the response rate.

In total 4,610 employers responded to the survey from an initial mail out of 35,025 records; a response rate of 13 per cent, a reasonable level for an internet-based survey such as this.

Weighting/grossing up

The data from the follow up questions has a separate set of weights applied to it than the Wave 1 ESS data, because the sample profile differs.

Data was weighted to the profile of establishments who train in Wave 1 of the Employer Skills Survey. This was completed within country on a size by training status basis, with a non-interlocking rim weight for sector.

Data modelling

In order to calculate overall training expenditure, each record in the dataset needed to have a response to each question (even if it is a zero in relation to types of training the establishments does not supply). As expected, not every respondent was able to supply every piece of information. In order to 'fill in' the missing data, averages were drawn from those respondents who were able to answer each question and applied to those cases with missing data.

Matching the approach taken in the Cost of Training Survey in England in 2009, when a respondent could not provide an exact (integer) answer the survey was set up to prompt respondents to give a range answer ('between £500 and £999' and so forth). Although this range answer still needs transferring into an exact figure within the range, it guides and greatly improves the accuracy and reliability of the modelling process (for example compared with Learning and Training at Work (LTW) 2000, where this prompting did not occur) since the modelling for these range responses is based on those respondents who gave an exact answer which fell into that range rather than simply being an average of all responses.

The modelling process for those questions not relating to salaries was to calculate mean responses for those giving an exact answer (excluding zero) within each of the ranges, and an overall mean. These means were calculated within five employment sizebands, which differed slightly from the standard sizebands used for analysis within this report, in that five to 24 band was split into five to nine and 10 to 24, and all 100 plus employment sites were included in one band. Where a respondent gave a range answer, they were assigned the mean for the establishments within their sizeband giving an exact answer falling within their range response. Where they were unable to give either an exact or a range answer, they were assigned the overall mean for the question within their sizeband.

For salaries, a slightly different approach was taken to modelling 'don't know' answers, again based on that used in the previous Cost of Training Surveys in England in 2005, 2007 and 2009, and LTW 2000. Initially, as above, range and overall means were calculated. Rather than size of establishment, location of establishment (London or non-London) was seen to be the major determinant of salary levels; so means were split on this basis rather than by the sizebands used for other 'don't know' answers. Where a range had been given, the appropriate mean was used as the simulated value.

For those respondents unable to give even a salary range, a method was used which takes account of not only their location but also evidence from other salary questions on the datasheet in order to determine whether they pay salaries above or below the average and to what degree. Where exact answers had been given for other salary questions, a ratio was calculated between their actual answer and the London/non-London mean (as appropriate) for that question. This gave, for each exact salary answer recorded, a ratio that expressed the degree to which that employer over-paid or under-paid employees in the roles discussed, compared with the mean. Where salary answers were missing (and no range information was provided) the assigned value would be calculated as the London or non-London mean multiplied by the first available of these ratios (the order of selection being different for each question and dependent on which questions were adjudged to be the most closely related) in order to up-weight or down-weight the estimate in keeping with their pay for other roles.

The simulation procedure and the precise order of selection used for salary questions is shown in the table below, along with the proportion modelled using range information and the proportion modelled that did not provide range information.

Treatment of missing values

Question	Value given to missing data	Base	% modelled within range	% modelled without range
Q1	Mean within 5 employment sizebands (within recorded range where available)	8,302	1	0.1
Q2	Mean within 5 employment sizebands (within recorded range where available)	7,930	5	0.9
Q3	Mean calculated within London/non-London establishments within recorded ranges where available. Where range information not provided: 1. if Q17 answered (and an exact answer given), calculate proportion above or below the Q17 average for the establishment and up-lift or reduce the appropriate Q3 mean (London or non-London) by this proportion to generate Q3 figure for this establishment 2. if Q17 not answered with an exact value apply procedure at 1. to Q21 3. if Q21 not answered with an exact value, apply procedure at 1. to Q24 4. if Q24 not answered with an exact value apply procedure at 1. to Q10 5. if Q10 not answered with an exact value use appropriate Q3 mean (London or non-London) unadjusted	7,930	29	-
Q4	Mean within 5 employment sizebands (within recorded range where available)	7,930	16	9
Q6A	Mean within 5 employment sizebands (within recorded range where available)	616	21	36
Q6B	Mean within 5 employment sizebands (within recorded range where available)	616	15	20
Q7A	Mean within 5 employment sizebands (within recorded range where available)	2,805	>0.1	0.1
Q8	Mean within 5 employment sizebands (within recorded range where available)	7,930	0.4	0.3
Q9	Mean within 5 employment sizebands (range information not recorded for this question)	7,148	-	5

continued…

Treatment of missing values (continued)

Question	Value given to missing data	Base	% modelled within range	% modelled without range
Q10	Same procedure as Q3 but different order of selection: Q24, Q3, Q17, Q21	7,148	21	11
Q11	Mean within 5 employment sizebands (within recorded range where available)	7,930	13	7
Q12	Mean within 5 employment sizebands (within recorded range where available)	7,930	16	5
Q13	Mean within 5 employment sizebands (within recorded range where available)	7,930	4	9
Q14	Mean within 5 employment sizebands (within recorded range where available)	7,930	4	9
Q15	Mean within 5 employment sizebands (within recorded range where available)	8,302	0.9	0.6
Q16	Mean within 5 employment sizebands (within recorded range where available)	5,670	3	2
Q17	Same procedure as Q3 but different order of selection: Q3, Q21, Q24, Q10	5,670	20	7
Q18	Mean within 5 employment sizebands (within recorded range where available)	5,670	13	14
Q19	Mean within 5 employment sizebands (within recorded range where available)	9,367	2	0.8
Q20	Mean within 5 employment sizebands (within recorded range where available)	8,693	9	2
Q21	Same procedure as Q3 but different order of selection: Q3, Q17, Q24, Q10	8,693	26	6
Q22	Mean within 5 employment sizebands (within recorded range where available)	8,693	2	0.9
Q23	Mean within 5 employment sizebands (within recorded range where available)	8,124	8	2
Q24	Same procedure as Q3 but different order of selection: Q10, Q3, Q17, Q21	8,124	22	8

Cost calculations

Following data modelling – which ensured all respondents had exact answers for all questions – individual questions were combined to calculate 12 total annual costs components. This was necessary because, in order to make the questionnaire easier for respondents to complete, some costs were collected in monthly rather than yearly terms, per trainee terms rather than total, and so on. Factors were also included in these calculations to account for differences between employee salaries (more easily reported by respondents) and total labour costs (including tax and other costs) and the amount of time employees spend at work. The factors used are detailed in the table below.

Factor	Value	Explanation
Labour cost up-weight	24.2%	It was found during the pilot stage of LTW 2000 that employers were far better placed to report the salaries of their employees than the total cost of employing them. Respondents were, therefore, asked for the average basic salaries of those receiving and providing training. An up-weight of 24.2 per cent was then applied to these answers to take account of National Insurance, employer pension contributions, overtime and other additional elements. The source of the 24.2 per cent figure was Eurostat. In the UK, direct remuneration (wages and salaries including bonuses) made up 80.51 per cent of labour costs. Hence an uplift of 100/80.51 (i.e. 1.242 or 24.2%) is required to convert direct remuneration to total labour costs. http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tps00113&plugin=1
Days worked per year	215.1	Used to calculate the per-working-day salary of an employee in order to calculate the cost, for example, of training an employee for one working day per year on the basis of their annual salary. Working age employees in England (from Labour Force Survey Quarter 4 (Oct to Dec) 2010): •Worked an average of 4.8 days per week •Received an average of 25.3 paid days holiday, plus 9.2 bank / public holidays 9.2 days bank holiday as extra Royal Wedding bank holiday in England, bringing total to 9, and 9 and 10 in Scotland and NI respectively. This gives: 52 x 4.8 (= 249.6) possible working days a year, less 25.3 days annual leave and 9.2 days bank/public holiday = 215.1 days worked per year.

Factor	Value	Explanation
Hours worked a day	6.6	Used to convert number of working hours of training to working days. Derived from average hours worked a week at 31.7 (SUMHRS variable) divided by average days worked a week = 4.8) Source: Labour Force Survey Quarter 4 (Oct to Dec) 2010.
Working months in a year	11	Used to convert monthly training figures given in the on-the-job section of the datasheet into annual figures.
Full/part-time adjustment to training centre labour costs	0.75	Training centre labour costs are collected in terms of '*total basic annual salaries*' and as such the datasheet does not distinguish those working part-time from those working full-time. In order not to overestimate costs, therefore, this factor is applied to down-weight costs. In UK there are approximately the following numbers whose main job is adult or other education (SIC07 85.5): 185,000 working full-time and 134,000 part-time. The full-time workers work on average 32.4 hours, whilst the part-time workers work on average 13.2 hours. Converting the part-time workers into full-time equivalence (FTE) gives a FTE of 0.75 of the total (e.g. PT of 13.2 = 0.41 of FT hours of 32.4, so 185,000 x FT + 134,000 x 0.41 of FT = 239,940 divided by headcount of 319,000, which gives 0.75) Source: Labour Force Survey Quarter 4 (Oct to Dec) 2010

The formulae used to convert raw data to the comparable annual cost components were as follows. All calculations were performed using modelled data.

	Annual cost component	Formula
A	Trainee labour costs (Q1–3)	Q1 * Q2 * 124.2% * Q3 / 215.1
B	Fees to external providers (Q4)	Q4
C	On-site training centre (Q6a/b)	(124.2% * 0.75 * Q6a) + Q6b
D	Off-site training centre (in the same company) (Q7a)	Q7
E	Training management (Q8–Q10)	Q8 * Q9/100 * 124.2% * Q10
F	Non-training centre equipment and materials (Q11)	Q11
G	Travel and subsistence (Q12)	Q12
H	Levies minus grants (Q13–Q14)	Q13-Q14
	Sub-total (course related)	**A + B + C + D + E + F + G + H**
I	Labour costs (Q15–Q17)	Q15 * Q16 * 124.2% * Q17 / 215.1
J	Fees to external providers (Q18)	Q18
	Sub-total (other off-the-job training)	**I + J**
	OFF-THE-JOB TOTAL	**A + B + C + D + E + F+ G + H + I + J**
K	Trainee's labour costs (Q19–Q21)	Q19 * Q20 * 124.2% * Q21 * 11 / (215.1 * 6.6)
L	Trainers' labour costs (Q22–Q24)	Q22 * Q23 * 124.2% * Q24 * 11 / (215.1* 6.6)
	ON-THE-JOB TOTAL	**K + L**
	TOTAL TRAINING SPEND	**A + B + C + D + E + F+ G + H + I + J +K + L**

Note: Where derived employment-based training spend figures are shown in this report (expenditure per trainee, or per capita, for example) and there is a choice between taking the measure given in the main UKCESS11 data and that in the data for the training expenditure survey, the data from the main survey are used. This is because base sizes are larger in the main survey and a separate employment weight is available to ensure a closer match to the actual workforce profile.

Appendix D: Industry Coding

Each establishment was allocated to one of 14 sectors, based on their Standard Industrial Classification (SIC). SIC 2007 was used to classify establishments using the following method. Using the four-digit Standard Industrial Classification (SIC) supplied for each record from the Experian database, a description of business activity was read out to each respondent. If they agreed that this description matched the main activity undertaken at the establishment, then the SIC on Experian's database was assumed to be correct. If however the respondent felt the description did not correspond to their main business activity at the site, a verbatim response was collected to find out what they do (see question A7 on the survey questionnaire available at www.ukces.org.uk). At the analysis stage this was coded to a four-digit SIC which was then used as the basis for allocation into sector.

The table below shows the 14 sectors and their corresponding SIC 2007 definitions.

Sector	SIC 2007
1. Agriculture	A - Agriculture, forestry and fishing (01-03) Including farming, hunting and other related service activities, forestry and logging, fishing and aquaculture
2. Mining & Quarrying	B - Mining and quarrying (05-09) Including mining of coal, metals, sand/stone/clay, and extraction of crude petroleum and natural gas
3. Manufacturing	C - Manufacturing (10-33) Including manufacture of food and beverage, textiles, chemicals and chemical products, basic pharmaceutical products, other mineral products, manufacture of metals and metal products, machinery, computer and electronic products and equipment, motor vehicles and other transport equipment, furniture, and repair and installation of machinery and equipment
4. Electricity, Gas and Water	D - Electricity, gas, steam and air conditioning supply (35) E - Water supply, sewerage, waste management and remediation activities (36-39) Including electric power generation, transmission and distribution, manufacture of gas and distribution of gaseous fuels, steam and air conditioning supply, water collection, treatment and

Sector	SIC 2007
	supply, sewerage and waste collection, treatment and disposal activities and materials recovery
5. Construction	F - Construction (41-43) Including the construction of buildings, civil engineering (constructing roads, railways and other utility projects), demolition, and specialised activities such as electrical installation, roofing and scaffold erection
6. Wholesale and Retail	G - Wholesale and retail trade; repair of motor vehicles and motor cycles (45-47) Including sale, maintenance and repair of motor vehicles, parts and accessories, non-vehicle wholesale (for example agriculture, food, household goods), and the retail trade of all products whether in stores, stalls, markets, mail order or online
7. Hotels and Restaurants	I - Accommodation and food service activities (55-56) Including hotels, campsites, youth hostels, holiday centres, villages and other short stay accommodation, restaurants and takeaways, event catering and licensed clubs, pubs and bars
8. Transport and Communications	H - Transport and storage (49-53) J - Information and communication (58-63) Including land, water and air transport (passenger and freight), warehousing and support activities for transportation, postal and courier activities, publishing (books, journals, newspapers etc and software/computer games), television, film and music production, broadcasting, telecommunications, computer programming and consultancy, information service activities (e.g. data processing and hosting)
9. Financial Services	K - Financial and insurance activities (64-66) Including banks and building societies, activities of holding companies, trusts, funds and similar financial entities, credit granting, pensions, insurance and reinsurance

Sector	SIC 2007
10. Business services	L - Real estate activities (68) M - Professional, scientific and technical activities (69-75) N - Administrative and support service activities (77-82) Including the buying, selling and renting of real estate, legal activities, accounting, bookkeeping and auditing, management consultancy, architectural and engineering activities, scientific research and development, advertising and market research, specialist design, photographic activities, translation and interpretation, veterinary activities, renting and leasing of tangible goods (motors, household, machinery), employment agencies, travel agencies and tour operations, security and investigation activities, office administration and business support
11. Public Administration	O - Public administration and defence; compulsory social security (84) Including administration of the State and economic and social policy of the community, provision of services to the community as a whole such as defence activities, foreign affairs, justice and judicial activities, fire service and compulsory social security activities
12. Education	P - Education (85) Including pre-primary, primary, secondary and higher education, other education (such as sports, driving schools, cultural education), educational support activities
13. Health and Social work	Q - Human health and social work activities (86-88) Including Hospitals, medical and dental practices, residential care, social work activities
14. Other Community, Social and Personal Services	R - Arts, entertainment and recreation (90-93) S - Other service activities (94-96) Including performing arts, libraries and museums, gambling and betting, sports facilities, amusement and recreation activities, activities of membership organisations (religious, political, trade union,

Sector	SIC 2007
	professional), personal services (hairdressing, beauty, textile cleaning, well-being activities, funeral activities)
	T - Activities of households as employers; undifferentiated goods and services producing activities of households for own use (97-98)
NOT COVERED IN SURVEY	U - Activities of extraterritorial organisations and bodies (99) Including households as employers of domestic personnel, private households producing goods for own use

Appendix E: Occupational Coding

The occupational data collected in the survey were collected both pre-coded and verbatim. The former included the occupational breakdown of employment (question D5 to D8) where respondents were asked how many of their workforce fell into each of the nine major (one-digit) Standard Occupation Classification (SOC) 2010 categories (Managers, Directors and Senior Officials through to Elementary Occupations). However, on vacancy measures (for example the occupations in which vacancies exist – question C2) this information was collected verbatim. This was then coded at the analysis stage, where possible to a four-digit level SOC, if not three, two- or one-digit level.

Examples of what might fall into each occupational band are as follows:

Occupational group	Primary sectors (Agriculture, manufacturing, construction etc)	Service sectors (retail, business, finance, transport etc)	Public sector (Public Admin, Health, Education etc)
Managers, Directors and Senior Officials	Site managers, Department Heads, Shift Managers (not supervisors)	Directors, Managers / Branch/site managers, shift managers (not supervisors	Police inspectors and above, department heads, Head teachers, Senior Officials
Professionals	Professional engineers, software and IT professionals, accountants, chemists, scientific researchers	Solicitors, lawyers, accountants, IT professionals, economists, architects, actuaries	Doctors, nurses, midwives, teachers, social workers, librarians
Associate Professionals	Science and engineering technicians, lab technicians, IT technicians, accounting technicians	Insurance underwriters, finance/investment analysts and advisers, writers/journalists, buyers, estate agents	Junior police/fire/prison officers, therapists, paramedics, community workers, H&S officers, housing officers
Administrative staff	Secretaries, receptionists, PAs, telephonists, bookkeepers	Secretaries, receptionists, PAs, communication operators, market research interviewers, clerks	Secretaries, receptionists, PAs, local government officers and assistants, office assistants, library and database assistants
Skilled Trades	Farmers, electricians, machine setters / tool makers, carpenters, plasterers	Motor mechanics, printers, TV engineers, butchers	Chefs
Caring, Leisure and Other Service Occupations	Care assistants, nursery nurses	Travel agents, travel assistants, hairdressers, housekeepers	Care assistants, home carers, nursery nurses, ambulance staff, pest control, dental nurses, caretakers
Sales and customer service occupations	Customer facing roles: sales staff and call centre agents	Sales assistants and retail cashiers, telesales, call centre agents	Customer care operations
Process, plant and machine operatives	Routine operatives, drivers, machine operators, sorters and assemblers	HGV, van, fork-lift, bus and taxi drivers	Drivers, vehicle inspectors
Elementary occupations	Labourers, packers, goods handling and storage staff	Bar staff, shelf fillers, catering assistants, waiters/waitresses, cleaners	Labourers, cleaners, road sweepers, traffic wardens, security guards

Appendix F: Sampling Error and Statistical Confidence

Sampling error for the survey results overall and for different sub-groups by which analysis is presented in the report is shown in Table F.1. Figures have been based on a survey result of 50 per cent (the 'worst' case in terms of statistical reliability), and have used a 95 per cent confidence level. Where the table indicates that a survey result based on all respondents has a sampling error of +/- 0.32 per cent, this should be interpreted as follows: 'for a question asked of all respondents where the survey result is 50 per cent, we are 95 per cent confident that the true figure lies within the range 49.68 per cent to 50.32 per cent'.

As a note, the calculation of sampling error has taken into account the finite population correction factor to account for cases where we are measuring a significant portion of the population universe (i.e. even if two sample sizes are the same, the sampling error will be lower if in one case a far higher proportion of the population was covered).

These confidence intervals are based on the assumption of a normal distribution of responses.

Sampling error (at the confidence 95 per cent level) associated with findings of 50 per cent

	Population	Number of interviews	(Maximum) Sampling Error
Overall	**2,299,921**	**87,572**	**+/-0.32**
By country			
England	1,960,298	75,053	+/-0.35
Northern Ireland	65,559	4,004	+/-1.5
Scotland	175,114	2,503	+/-1.94
Wales	98,950	6,012	+/-1.22
By size of establishment			
1-4	1,466,397	18,955	+/-0.99
5-24	648,446	47,770	+/-0.61
25-99	147,319	15,951	+/-1.03
100-249	25,945	3,270	+/-2.27
250+	11,814	1,626	+/-3.12

	Population	Number of interviews	(Maximum) Sampling Error
By sector			
Agriculture	98,458	939	+/-3.18
Mining & Quarrying	2,222	188	+/-6.84
Manufacturing	128,255	7,704	+/-1.08
Electricity, Gas and Water	10,583	1,426	+/-3.35
Construction	241,429	6,654	+/-1.18
Wholesale and Retail	441,365	15,340	+/-0.78
Hotels & Restaurants	167,215	8,471	+/-1.04
Transport and Communications	210,801	7,885	+/-1.08
Financial Services	52,381	1,881	+/-2.22
Business Services	551,612	14,488	+/-0.80
Public Administration	26,058	1,617	+/-2.36
Education	65,499	5,439	+/-1.27
Health and Social Work	140,269	8,161	+/-1.05
Community, Social and Personal Services	163,774	7,379	+/-1.11

Appendix G: Weighted base sizes

Throughout this report figures have been reported next to their unweighted base sizes to demonstrate statistical reliability. For reference, the following table shows the weighted number of employers this represents for the key measures in the report.

Number of employers…	UK	England	NI	Scotland	Wales
Overall	**2,299,921**	**1,960,298**	**65,559**	**175,114**	**98,950**
Chapter 3: Work-readiness of those leaving education					
Taking on leavers from education in the last 2-3 years	509,173	467,925	17,584	41,126	23,664
16 year-olds from school	154,307	142,768	4,023	n/a	7,516
17-18 year-olds from school	182,756	167,266	7,311	n/a	8,180
17-18 year-olds from FE College	172,389	157,650	5,139	n/a	9,600
From university	216,792	198,463	8,026	n/a	10,304
From Scottish secondary school	n/a	n/a	n/a	24,228	n/a
From Scottish FE College	n/a	n/a	n/a	14,622	n/a
From Scottish university	n/a	n/a	n/a	15,908	n/a
Chapter 4: Employers, Recruitment and Skills shortages					
With a vacancy	274,778	237,624	5,741	20,093	11,320
With a hard-to-fill vacancy	90,770	78,627	1,942	5,942	4,260
With a skill-shortage vacancy	67,965	59,032	1,442	4,285	3,206
Chapter 5: Internal Skills Mismatch					
With at least one skills gap	300,941	252,791	6,769	28,417	12,963
With retention difficulties	105,929	97,013	2,862	n/a	6,053
With at least one employee with more qualifications and skills than job role requires	1,118,691	944,509	28,044	101,762	44,376
Chapter 6: Employer Investment in Training and Skills					
Providing any training	1,361,249	1,141,562	41,668	119,848	58,172
On-the-job training only	392,395	332,457	11,643	33,290	15,005
Off-the-job training only	301,617	255,540	10,061	23,644	12,373
Both on- and off-the-job training	667,237	553,565	19,964	62,914	30,794
Providing no training for staff	938,672	818,736	23,891	55,266	40,778
Providing training towards nationally recognised qualifications	584,797	490,513	17,283	51,727	25,274

Appendix H: Unweighted base sizes

This annex shows a reference table of the key unweighted base sizes used in this report. Note that throughout the report, figures are not reported where the base is under 25 and are highlighted in italics where the base is 25 to 49.

			Establishments with…			
	Overall	**Vacancies**	**Hard-to-fill vacancies**	**Skill-shortage vacancies**	**Skills gaps**	**Estab's that train**
UK	87,572	17,166	5,160	3,973	20,839	66,916
Country						
England	75,053	14,813	4,409	3,409	18,060	57,117
Northern Ireland	4,004	524	155	124	627	2,941
Scotland	2,503	729	219	166	797	2,177
Wales	6,012	1,100	377	274	1,355	4,681
Size						
1-4	18,955	1,462	575	420	1,507	9,598
5-24	47,770	7,869	2,547	1,955	11,126	37,758
25-99	15,951	5,213	1,387	1,059	5,937	14,832
100-249	3,270	1,698	438	358	1,492	3,150
250+	1,626	924	213	181	777	1,578
Sector						
Agriculture	939	87	35	28	134	556
Mining and Quarrying	188	36	16	13	24	143
Manufacturing	7,704	1,427	576	490	1,896	5,329
Electricity, Gas and Water	1,426	209	66	55	269	1,077
Construction	6,654	579	219	174	1,151	4,422
Wholesale and Retail	15,340	2,573	637	488	4,335	11,078
Hotels and Restaurants	8,471	2,081	696	491	2,778	6,206
Transport and Communications	7,885	1,407	512	430	1,489	5,451
Financial Services	1,881	333	72	61	395	1,469
Business Services	14,488	2,961	956	823	3,077	11,360
Public Administration	1,617	405	92	62	391	1,466
Education	5,439	1,487	284	208	1,316	5,129
Health and Social Work	8,161	1,995	530	330	2,010	7,536
Community, Social and Personal Service activities	7,379	1,586	469	320	1,574	5,694
Occupation						
Managers	*83,138*	999	277	231	4,996	41,315
Professionals	*16,360*	3,032	1,000	799	1,737	11,847
Associate Professionals	*13,753*	3,186	909	760	1,831	9,282
Administrative/ Clerical staff	*50,780*	2,661	394	286	4,744	24,820
Skilled Trades occupations	*20,540*	2,222	1,024	846	2,969	12,734
Caring, Leisure and Other services	*12,731*	2,560	642	430	2,384	10,589

	Overall	Establishments with… Vacancies	Hard-to-fill vacancies	Skill-shortage vacancies	Skills gaps	Estab's that train
Sales and Customer services	*26,790*	2,291	486	366	5,581	16,030
Machine Operatives	*13,381*	1,134	363	257	1,798	7,373
Elementary staff	*30,663*	2,854	640	367	5,429	16,195

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