THE SECTOR SKILLS ALMANAC

UK 2007

skills FOR BUSINESS

DATA DISCLAIMER

The data has been sourced from the Office for National Statistics (including Labour Force Survey, Annual Business Inquiry, Annual Survey of Hours and Earnings, and the Inter-departmental Business Register) and employer skills surveys from England, Wales, Northern Ireland and Scotland.[1] Neither the SSDA nor Experian are able to control or verify the accuracy of the raw data, therefore neither the SSDA nor Experian gives any warranty as to the accuracy or fitness for purpose of the data.

Data reliability has been maintained by adhering to the guidance provided by the administrator or owner of the data sets used. Where data is not shown because of sample size and/or confidentiality, the data cell is starred (*). Where no data is available (i.e. because it is not collected), the data cell is denoted by n/a.

The data provides a view on the 'health' of the sectors in terms of economic performance, workforce, skill demand and imbalances. However, this is just one part of the picture. It does not constitute advice and should not be used as the sole basis for any business decision. Neither the SSDA nor Experian take responsibility for or shall be liable for any use of the data, nor for any decisions taken on the basis of the data. We recommend that users seeking richer, deeper intelligence on, employer and employee needs within a particular sector contact the relevant Sector Skills Council (SSC)[2].

[1] *For more information on the data sources used see Appendix G.*

[2] *For more information on SSCs see Appendix C*

CONTENTS

Each of the Sector Profile sections is a compendium of labour market indicators, covering size, economic performance, workforce composition, skills demand and skills imbalance.

INTRODUCTION

The UK has a strong economy but future prosperity depends on sustained economic growth driven both by increased employment and productivity. This presents numerous and significant challenges. Recent studies of the UK's competitiveness relative to other countries have highlighted the importance of skills and a highly trained workforce in creating economic growth.

Skills can impact directly by increasing the human capital of individual workers, which enhances their capability and performance and hence their ability to secure and retain employment[3]. Evidence also suggests, that the more skilled a worker is the better paid they are likely to be[4]. Beyond the individual, greater benefits are shown to accrue to businesses and thereby the UK economy in terms of productivity levels. However, the Leitch Review of Skills[5] has identified the UK's relatively poor skills levels. There is a shortage of basic and employability skills, vocational and technical skills, and intermediate and higher level skills are more plentiful in the workforces of other countries. Similarly the UK's productivity level relative to its competitor countries is weak. The difference is stark when per hour or per worker measures of productivity are considered.

The Leitch Review of Skills acknowledged the challenges posed to the UK's economy by the demographic, technological global changes taking place and the increasing pace of those changes. However, great opportunities are afforded by the very same pressures if the UK can improve its position relative to its competitor nations. A fundamental part of this positioning will be the skills held by the UK's workforce. The UK is starting from a position of disadvantage and significant progress is required if we are to take these opportunities, close the productivity gap with competitor countries and ensure a strong economy in the future. However, the productivity gap and skills challenge has a strong sectoral dimension highlighting the importance of action carefully targeted by sector.

The Sector Skills Almanac for the UK (2007) is designed to provide a clear statement of the state of skills in the UK using robust and consistent official national sources of information allowing comparisons to be made across broad economic sectors. The Sector Skills Almanac will every year add to the evidence base on UK skills by providing a sector by sector portrait of the skills of the UK workforce. Furthermore, by highlighting the sectoral variations in productivity and skill needs it supports action appropriate to meet the specific requirements of sectors. It is this approach which is taken by the Skills for Business network, comprising 25 Sector Skills Councils (SSCs) led and co-ordinated by the Sectoral Skills Development Agency (SSDA). The four key goals of the Skills for Business network are to:

- Reduce skills gaps and shortages
- Improve productivity, business and public service performance
- Increase opportunities to boost the skills and productivity of everyone in the workforce
- Improve learning supply including apprenticeships, higher education and National Occupational Standards.

One of the prerequisites[6,7], for the success of this approach is the ability to identify and articulate sector skills needs and it is this purpose which The Sector Skills Almanac, and the SfBn's broader work to provide sectoral labour market intelligence, is designed to meet. Official sources of information analysed by sector are an important input into the research of SSCs which are charged with providing richer and deeper sector specific labour market information. The research reports produced by the SSDA and in partnership with other Agencies with a remit for skills can be accessed from the research pages of the SSDA's website[8]. Research reports and labour market information produced by SSCs can also be accessed from their individual websites. Details of the 25 SSCs and how to contact them can be found in Appendix C. Further information about the Skills for Business network can be obtained from **www.ssda.org.uk**.

The Almanac is organised in to two key sections; **Themes** and **Sectors**, each presenting the same information structured in different ways. The **Themes** section presents information for all sectors under each of the themes, thereby allowing sectors to be compared and differences understood. Measures of sector size, economic performance, workforce composition, skill demand and skill imbalance are presented and discussed as themes. In the **Sector** section a chapter is dedicated to each sector. This allows the reader to view all the information about a single sector organised by the same themes used in the previous section[9]. The Almanac uses the 27 sector categorisation which is employed in the SSDA's Sector Skills Matrix, where the majority of data set out in the Almanac is available electronically and capable of interrogation[10]. The 27 sector categorisation covers the whole economy and preserves the primary, manufacturing and service sector split. The network of 25 SSCs currently covers up to 85% of the UK's workforce.

The Almanac was commissioned and managed by Dr Richard Garrett (Acting Principal Research Adviser) at the SSDA and produced by Dr Fiona Harris, Corinne Telling, Edmund Lowe, Sara Cronlund, Eleanor Jukes and Tom Butler of Experian. Advice and guidance was provided by Professor Mike Campbell (Director of Development) and Lesley Giles (Acting Director of Strategy and Research) of the SSDA.

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[3] *Tamkin et al., (2004) Skills Pay: The contribution of skills to business success. Research Report 5, SSDA.* **http://www.ssda.org.uk/ssda/pdf/Report5.pdf**

[4] *Dickerson A. (2005) A study on the rates of return to investment in Level 3 and Higher Qualifications. London DTI.* **http://www.dti.gov.uk/files/file19870.pdf**

[5] *Prosperity for all in the global economy – world class skills. Final report, December 2006, HM Treasury.* **www.hm-treasury.gov.uk/leitch**

[6] *Ashton, D. (2006) Lessons from Abroad: Developing sector based approaches to skills. SSDA Catalyst Issue 2.* **http://www.ssda.org.uk/ssda/default.aspx?page=2491**

[7] *Sung, J., Raddon, A. and Ashton, D (2006) Skills Abroad: A comparative assessment of International policy approaches to skills leading to the development of policy recommendations for the UK. Research Report 16, SSDA.* **http://www.ssda.org.uk/ssda/pdf/060628%20R%20Research%20Report%2016.pdf**

[8] **http://www.ssda.org.uk/ssda/default.aspx?page=28**

[9] *To see the data included in the Sector section listed by indicator rather than by sector, see Appendix A.*

[10] *Appendix E provides further information on the SSDA's Sector Skills Matrix.*

1 THEMES

This section discusses key aspects of the labour market on a thematic basis to allow results to be compared across sectors. The themes discussed are: sector size including output and workforce size; economic performance including productivity and business creation; workforce composition; skill demand; and skill imbalance. A number of the themes also include an international comparison. Each statistic is accompanied by a ranking (presented in brackets) which indicates the placement of the sector in comparison with other sectors, thus the sector with the highest number is ranked one and the sector with the lowest number is ranked 27.

1.1 SECTOR SIZE

1.1.1 Output and output growth

Table 1.1 shows the contribution of sectors to the total output of the UK economy in 2004. The service sector predominates, but manufacturing remains a major sector despite continuing relative decline. Law, accounting, architecture and other business activities not elsewhere classified account for the largest share of UK output, the second largest sector is Real estate, renting and research and development. For more detailed information describing past and future changes in output please see the commentary around figure 1.1 below.

Table 1.1: Output (% of total)

Sector	% of total UK output**	Rank
Agriculture, hunting, forestry, fishing	1.1	(23)
Mining and quarrying	0.4	(27)
Food, drink and tobacco	2.4	(17)
Textiles and textile products	0.6	(26)
Wood, pulp and paper products	0.7	(24)
Publishing, printing and reproduction of recorded media	1.8	(20)
Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement	3.9	(12)
Basic metals and fabricated metal products	1.7	(22)
Machinery, electrical and optical equipment	3.2	(16)
Transport equipment	1.9	(19)
Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	0.7	(25)
Electricity, gas, water supply	1.8	(21)
Construction	6.3	(4)
Sale, maintenance and repair of motor vehicles; fuel retail	2.4	(18)
Wholesale trade	5.1	(9)
Retail trade	6.3	(5)
Hotels and restaurants	3.8	(13)
Transport	5.1	(10)
Post and telecommunications	3.3	(14)
Financial services	5.0	(11)
Real estate, renting and research and development	7.7	(2)
Computer and related activities	3.3	(15)
Law, accounting, architecture and other business activities nec	7.9	(1)
Public admin and defence; compulsory social security	5.4	(7)
Education	5.9	(6)
Health and social work	7.2	(3)
Community, social, personal service activities	5.3	(8)

***Percentages have been rounded, but rankings reflect accurate values*
Source: IER (2006)

While the performance of the UK economy as a whole has been healthy relative to peer nations in the OECD[11], the performance of sectors within the UK continue to vary widely, as shown in Figure 1.1.

The Agriculture, hunting, forestry and fishing sector is expected to grow faster in the 2004 to 2014 period than it did during the 1994 to 2004 period. However, the strong relationship between EU agricultural policy and farming output makes predicting future growth particularly difficult.

Output in the Mining and quarrying sector shrank by an average of 2.6 per cent per annum between 1994 and 2004 and is forecast to decline at a marginally slower rate of 2.3 per cent per annum in the 2004 to 2014 period. The mining sector in the UK is small in terms of both output and employment.

The Food, drink and tobacco manufacturing sector is forecast to continue modest growth in the period 2004 to 2014. Continued growth is likely to be related to the strong comparative productivity of this sector: it is one of the few UK sectors that is more productive than both the US and the EU15 (for more detail see section 1.2.2).

The manufacture of textile products was the weakest performing UK sector in the 1994 to 2004 period, with output shrinking by an average of 5.6 per cent per annum. This performance is likely to be repeated, perhaps with slight improvement in the 2004 to 2014 period. The weak performance of this sector will have been exacerbated by the end of the Multi Fibre Agreement (MFA) on December 31 2004, which signalled an end to EU quotas on textile imports from low cost manufacturers outside the EU. Despite the end of quotas, higher value-added UK textile producers can continue to compete successfully in both domestic and foreign niche markets.

Output of wood, pulp and paper products is forecast to experience modest positive annual growth between 2004 and 2014, compared to negative growth seen in the period 1994-2004. Publishing, printing and reproduction of recorded media is predicted to increase output by 1.4 per cent per annum in the 2004 to 2014 period, after a decade of little positive growth between 1994 and 2004. The coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement sector grew by an average of 1.2 per cent per annum between 1994 and 2004, and is predicted to more than double to 2.5 per cent per annum between 2004 and 2014.

Output in the Basic metal and fabricated metal products sector recorded negative average annual rates of growth between 1994 and 2004. The Machinery, electrical and optical equipment sector showed zero growth over the same period. However, both sectors are forecast to experience turnarounds and enjoy positive growth between 2004 and 2014. The manufacture of Transport equipment is forecast to grow by an average of 2.0 per cent over the forecast period, practically unchanged from the 2.1 per cent seen in the 1994 to 2004 period. The Furniture, jewellery, musical instruments, sports goods, games and toys, and recycling sector is also forecast to see strong expansion (at an average of 2.3 per cent) in the 2004 to 2014 period, compared with the barely expansionary average annual growth rates seen over the period 1994 to 2004.

In general the manufacturing sector is forecast to fare better in the 2004 to 2014 period than in the 1994 to 2004 period. ONS manufacturing indexes from 2006 show modest expansion of manufacturing sectors in the 2004 to 2006 period[12].

Output in the Electricity, gas, and water supply sector increased by an average of 1.7 per cent per annum in the 1994 to 2004 period, but is forecast to experience slower growth of 1.1 per cent annum in the 2004 to 2014 period. The consistency of output growth is a consequence of the fact that the utility sector is a mature market operating within a well-established long-term regulatory framework.

The Construction sector grew at an average of 2.2 per cent per annum between 1994 and 2004, outperforming the average growth rate of the economy as a whole. Average output is forecast to roughly halve to 1.4 per cent per annum during the period 2004 to 2014.

Output in the Sale, maintenance and repair of motor vehicles and fuel retail sector is forecast to expand at 1.6 per cent per annum in the 2004 to 2014 period, a rate of expansion well below the 2.5 per cent average experienced between 1994 and 2004.

Retail has been one of the strongest performing sectors in the UK since in the 1994 to 2004 period (the third fastest growing sector) as employment and output expanded to meet increased consumer expenditure. The Wholesale trade is forecast to expand at an average annual rate of 2.8 per cent between 2004 and 2014, similar to the 2.9 per cent average growth rate seen in the 1994 to 2004 period. However, the Retail trade is forecast to grow by just 2.1 per cent per annum between 2004 and 2014, below half the average annual growth rate of 4.3 per cent seen between 1994 and 2004.

The Hotel and restaurant sector grew by an average of 2.6 per cent per annum between 1994 and 2004, and is forecast to grow by 1.9 per cent between 2004 and 2014. The forecast for Transport growth in the 2004 to 2014 period is 1.7 per cent, well below the 2.9 per cent performance recorded in the 1994 to 2004 period. The average annual rate of growth for the Post and telecommunications sector is forecast to be 5.6 per cent between 2004 and 2014, a substantial expansion on the 3.1 per cent average seen over the period 1994 to 2004.

Financial service provision grew at an annual rate of 3.5 per cent between 1994 and 2004; this pace of expansion is predicted to slow to 2.5 per cent per annum during 2004-2014, marginally above the 2.4 per cent forecast made for the economy as a whole.

Real estate renting and research and development output grew by an average of 4.0 per cent between 1994 and 2004, making it one of the best performing sectors of the economy. However, this rate of growth is predicted to fall to just 2.3 per cent in the 2004 to 2014 period.

The rapid pace of technological change in the Computer and related activities sector has resulted in output growth faster than in any other area of the economy. Output boomed, expanding at an average of 11.6 per cent per annum in the 1994 to 2004 period, and though slowing it is forecast to remain the fastest growing sector of the economy in the 2004-2014 period with average annual growth of 5.8 per cent.

[11] *In the 1994 to 2004 period the average annual increase in UK real GDP was 3.0 per cent, compared with 2.7 per cent for the OECD as a whole. For more information see:* **http://www.oecd.org/dataoecd/6/27/2483806.xls**

[12] *For more information see Office of National Statistics: Index of Production. Available online at:* **http://www.statistics.gov.uk**

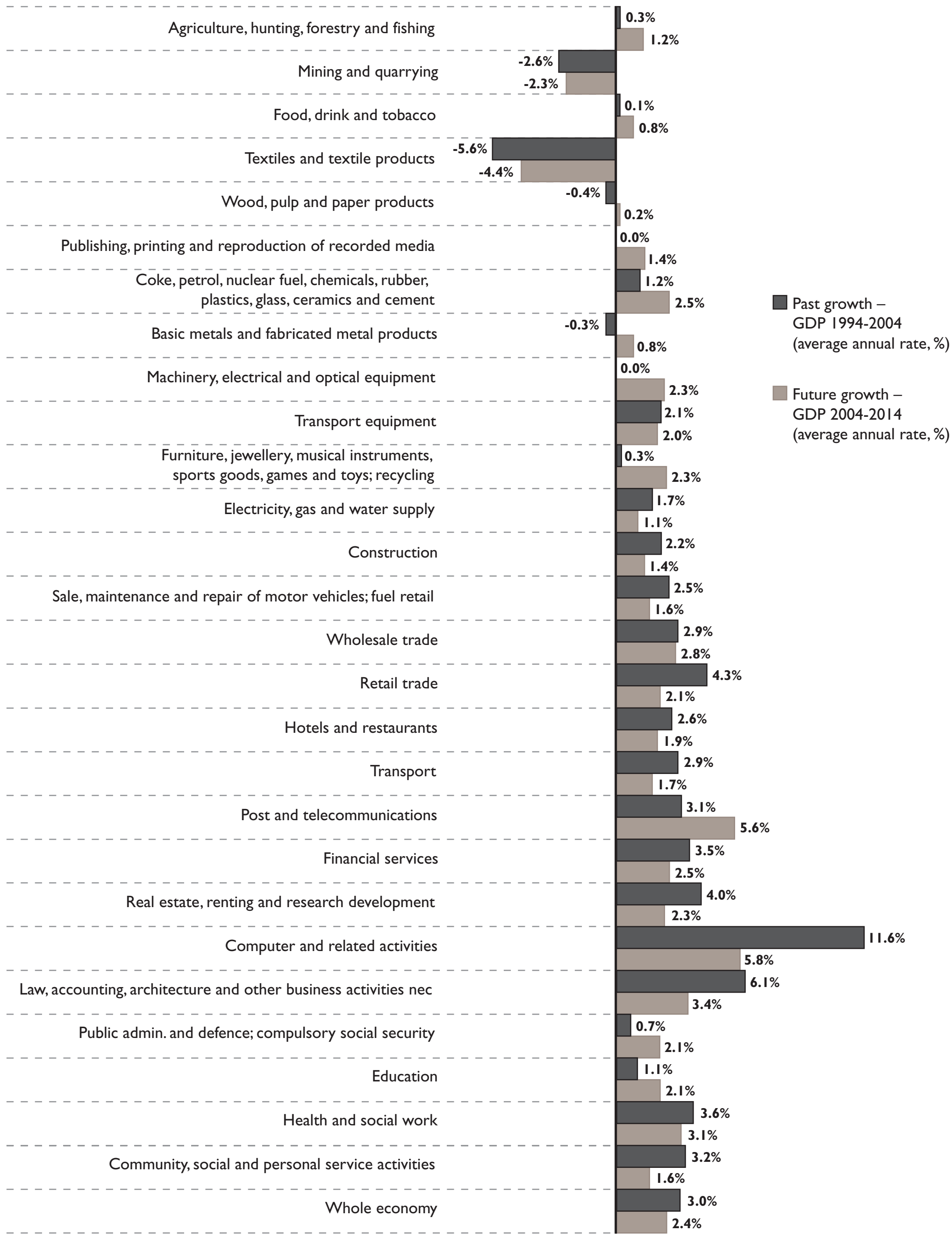
Law, accounting, architecture and other business activities not elsewhere classified expanded at an impressive average annual rate of 6.1 per cent per annum over the 1994 to 2004 period. This growth is forecast to moderate to 3.4 per cent in the forecast period.

Public administration and defence; compulsory social security output grew by an average of 0.7 per cent over the years 1994 to 2004, and is forecast to grow by 2.1 per cent between 2004 and 2014. Measuring output in this sector is made more difficult by the fact that very little output is sold at the market price. Consequently the value added created by an activity is hard to calculate. Future output growth, measured in whatever fashion, is largely dependent on government fiscal policy.

Education output is forecast to grow at 2.1 per cent per annum between 2004 and 2014, almost doubling the average 1.1 per cent average annual growth recorded between 1994 and 2004. By contrast, output growth in the Health and social work sector is forecast to slow from an average of 3.6 per cent per annum in the 1994 to 2004 period to 3.1 per cent in the 2004 to 2014 period. Both the Education and Health sectors are largely comprised of state controlled organisations and as such suffer from the same difficulties in measuring output as the Public administration and defence; compulsory social security sector.

The Community, social and personal service activity sector grew by an average 3.2 per cent per annum in the 1994 to 2004 period, average growth is forecast to halve to an average of 1.6 per cent per year in the 2004 to 2014 period.

Figure 1.1: Output growth by sector (% per annum), 1994–2014



Source: IER (2006)

1.1.2 UK workforce size and growth

The Labour Force Survey (LFS) measure indicates that the UK labour force averaged 28,024,500 in 2005 while the IER (2004) estimate for 2004 was 30,099,000. The Annual Business Inquiry recorded 26,025,000 employees.[13]

Table 1.2 shows the distribution of employment throughout the sectors of the UK economy. The largest employer in the UK is the Law, accounting, architecture and other business activities nec sector, followed by the Health and social work sector. Together, these two sectors account for over twenty per cent of UK employment, and illustrate the extent to which the UK economy is dominated by service provision.

Table 1.2: Employment (% of total)

Sector	% of total UK employment**	Rank
Agriculture, hunting, forestry, fishing	1.4	(20)
Mining and quarrying	0.2	(27)
Food, drink and tobacco	1.5	(19)
Textiles and textile products	0.6	(24)
Wood, pulp and paper products	0.6	(25)
Publishing, printing and reproduction of recorded media	1.3	(21)
Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement	2.0	(15)
Basic metals and fabricated metal products	1.6	(18)
Machinery, electrical and optical equipment	2.3	(13)
Transport equipment	1.2	(22)
Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	0.8	(23)
Electricity, gas, water supply	0.4	(26)
Construction	6.9	(5)
Sale, maintenance and repair of motor vehicles; fuel retail	2.1	(14)
Wholesale trade	4.2	(10)
Retail trade	10.4	(3)
Hotels and restaurants	6.5	(6)
Transport	4.3	(9)
Post and telecommunications	1.8	(16)
Financial services	3.9	(11)
Real estate, renting and research and development	2.6	(12)
Computer and related activities	1.8	(17)
Law, accounting, architecture and other business activities nec	11.5	(1)
Public admin and defence; compulsory social security	5.1	(8)
Education	8.1	(4)
Health and social work	10.7	(2)
Community, social, personal service activities	6.2	(7)
Whole economy	28,024,500	

***Percentages have been rounded, but rankings reflect accurate values (2005)*
Source: Labour Force Survey (2005)

[13] *A number of factors account for the variance in these figures. Firstly they are all estimates, and as such are grossed up from sample surveys using complex, and differing, methodologies. Secondly, the estimates were made at different dates, and in the case of the IER figure the estimate is for 2004 but was based on ABI 2003 data. Thirdly, the ABI measure of employment excludes the self-employed, unlike the IER and LFS measures.*

Regional employment

The composition of the regional and national economies in the UK varies widely as shown in Table 1.3. The North West contains 11 per cent of the total UK workforce but 17 per cent of the workforce of the Wood, pulp and paper products sector, 17 per cent of the workforce of the Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement sector, and 18 per cent of the Textile and textile products sector. Yorkshire and the Humber is similarly well represented across a range of manufacturing sectors.

The East Midlands sectoral mix includes a particularly large proportion of employment in the manufacture of Textiles and textile products. The West Midlands has a very high concentration of employment in Transport equipment: 21 per cent of all workers in this sector are based in the West Midlands. The East of England appears to have a well-balanced economy with no significant concentrations of activity in a single sector.

Greater London accounts for just 12 per cent of the total UK workforce, however its unique position in the UK economy has resulted in substantial concentrations of economic activity in a limited number of sectors. Twenty-one per cent of employment in Financial services is in located in Greater London, as is 21 per cent of employment in Law, accounting, architecture and other business activities not elsewhere classified, and 20 per cent of Publishing, printing and reproduction of recorded media employment.

The South East accounts for 15 per cent of the UK workforce but 27 per cent of people working in the Computer and related activities sector are based there. It is strong representation in this fast growing sector that has made the South East one of the most prosperous of the English regions and one of the reasons why growth in the South East is likely to outpace the national average in future. The South West, like Northern Ireland, has a large agricultural workforce relative to the size of its total workforce. Scotland employs 47 per cent of all people employed in the Mining and quarrying sector, despite accounting for less than 9 per cent of the total UK workforce.

Table 1.3: Regional employment (% of total)

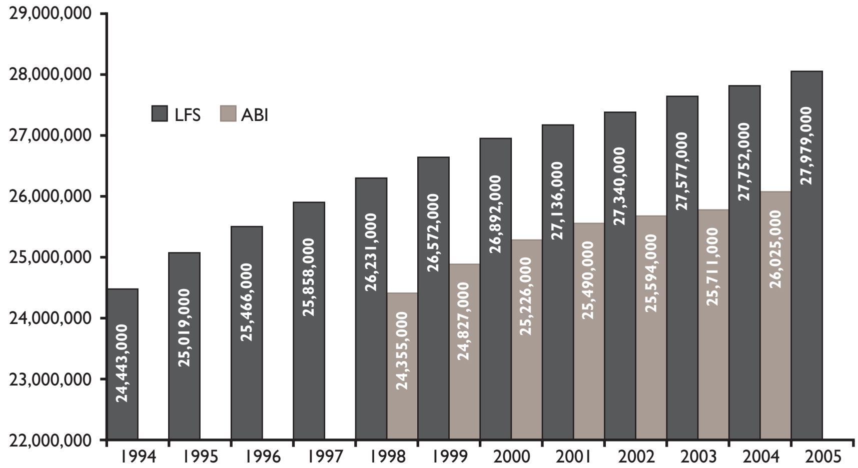
Sector	North East	North West	Yorkshire and Humber	East Midlands	West Midlands	East of England	Greater London	South East	South West	Wales	Scotland	Northern Ireland	Whole Economy
Agriculture, hunting, forestry, fishing	2	6	8	9	6	10	3	17	13	8	11	8	100
Mining and quarrying	5	2	4	8	3	5	3	7	9	4	47	3	100
Food, drink and tobacco	3	12	14	11	9	9	4	6	9	5	12	6	100
Textiles and textile products	2	18	12	15	5	7	9	7	7	4	9	4	100
Wood, pulp and paper products	3	17	12	10	7	11	5	11	7	6	8	2	100
Publishing, printing and reproduction of recorded media	3	9	10	7	5	11	20	18	10	2	5	2	100
Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement	5	17	9	10	10	9	7	13	7	4	7	2	100
Basic metals and fabricated metal products	6	10	13	11	17	8	4	9	7	7	7	2	100
Machinery, electrical and optical equipment	4	9	7	9	12	11	6	18	9	5	8	2	100
Transport equipment	4	12	5	11	21	8	3	11	11	6	5	3	100
Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	3	12	14	11	9	9	6	14	7	7	5	2	100
Electricity, gas, water supply	8	8	8	7	11	9	5	13	11	5	13	2	100
Construction	4	11	9	7	9	10	10	14	9	4	9	3	100
Sale, maintenance and repair of motor vehicles; fuel retail	4	11	9	8	12	11	7	15	10	5	7	3	100
Wholesale trade	3	11	8	10	10	11	10	16	8	4	8	2	100
Retail trade	4	12	8	8	8	10	11	14	9	5	8	3	100
Hotels and restaurants	4	11	9	7	8	8	13	13	10	6	10	2	100
Transport	4	12	8	8	9	10	13	16	6	3	9	2	100
Post and telecommunications	4	10	9	7	10	11	14	13	8	5	8	2	100
Financial services	2	9	7	4	7	12	21	16	8	3	10	2	100
Real estate, renting and research and development	3	10	7	6	9	12	16	16	8	3	8	1	100
Computer and related activities	2	9	5	6	7	11	17	27	8	2	5	1	100
Law, accounting, architecture and other business activities nec	3	10	7	6	7	10	21	17	7	3	6	2	100
Public admin and defence; compulsory social security	5	11	7	6	7	9	13	13	10	5	9	5	100
Education	4	11	9	7	9	10	11	15	9	5	8	2	100
Health and social work	4	12	9	7	9	9	11	13	9	5	10	3	100
Community, social, personal service activities	4	10	7	7	8	8	17	15	9	5	9	2	100
Whole economy	4	11	8	7	9	10	12	15	9	5	9	3	100

Source: Labour Force Survey (2005)

Employment growth

As Figure 1.2 demonstrates, the UK workforce has seen substantial growth since the end of the last recession in 1994. Currently immigration is a major factor fuelling workforce growth though it is acknowledged by the Office for National Statistics that figures for the number of working age migrants from the A8[14] are likely to be under-estimates[15].

Figure 1.2: UK Workforce growth, 1994–2005[16]



Source: IER (2006)

However, Figure 1.3 demonstrates workforce growth has not been evenly distributed across the economy. Agriculture, hunting forestry and fishing; Mining and quarrying; some manufacturing sectors, and Electricity, gas, water supply have all seen significant reductions in their workforce while the labour market has been buoyed by strong expansion of worker numbers in Public administration, defence and compulsory social security; Education; Health and social work; Computing and related activities; Law, accounting, architecture and other business activities nec.

It is important to note that falls in the number of workers within a sector is not a certain indicator of a decline in output. For example, Electricity, gas, and water supply is a mature sector in which output is rising, albeit relatively slowly; falls in the number of workers in the sector are a result of efficiency gains (or capital accumulation) that allows higher output with smaller labour inputs. Likewise, the substantial fall in the manufacturing workforce has not been accompanied by a fall in manufacturing output in absolute terms.

A further feature of UK employment growth between 1994 and 2005 has been that a large proportion of the job gains in the period have been in the provision of state services: Public administration, defence, and compulsory social security; Education; and Health and social work. These gains have been made possible by a strong and sustained rise in public spending both in absolute terms and as a percentage of GDP. In the long term this allocation of resources towards the public sector is likely to slow and may, subject to political developments, even reverse. Consequently, the private sector is likely to account for a greater proportion of net jobs growth in future than it has done in the 1994 to 2004 period. However, employment growth in the UK has not solely been driven by public sector expansion; there has also been substantial employment growth in the sectors of Real estate, renting and research and development; construction; and Computer and related activities.

This is demonstrated by the substantial average annual employment growth seen in the Computer and related activities sector of 8.3 per cent for the period 1994–2004. This private sector in particular has experienced massive employment growth around seven times greater than the average annual growth rates experienced by the economy as a whole, at just 1.2 per cent for the same period. A sharp slow-down in employment growth to 2.6 per cent over the 2004-2014 period is forecast for this sector.

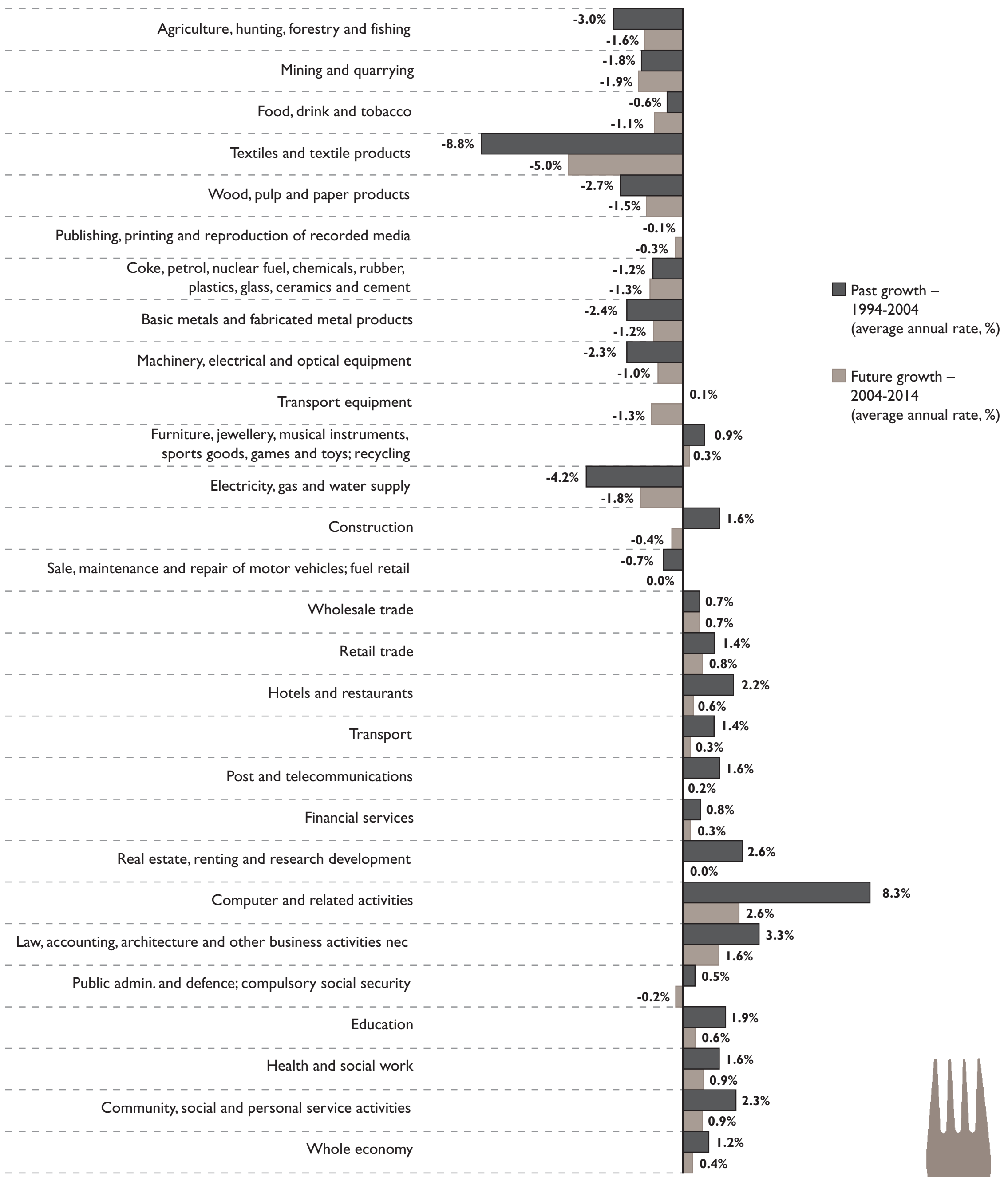
[14] For a list of the A8 and EU 15 countries please see Appendix F.

[15] The Labour Force Survey tends to under-estimate the number of workers in communal housing and with irregular housing arrangements, and anecdotal evidence suggests that large numbers of A8 migrants have accommodation of this kind. In addition, the Worker Registration Scheme (WRS) only monitors inflows of migrants and does not offer a measure of the stock of migrant workers.

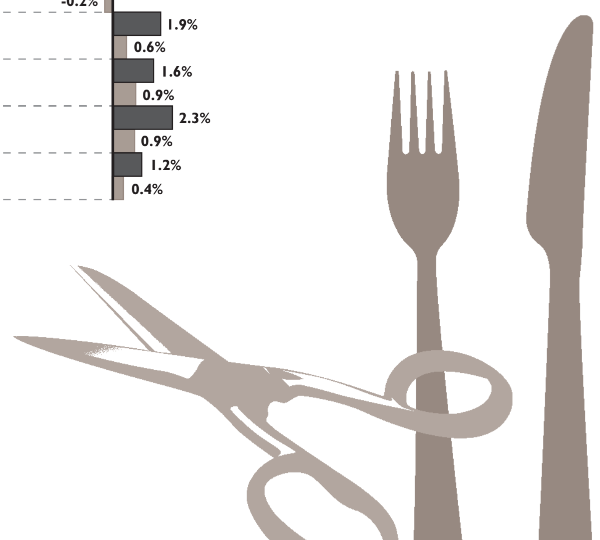
[16] The Labour Force Survey total employment figure for 2005 presented in Figure 1.2 differs from the figure presented in Table 1.2 and elsewhere in the report. This is because the employment total in the time series and employment total used elsewhere are calculated from a different set of LFS quarters. The LFS quarters used are determined by the data available when the Matrix is updated.

Similarly other high employment growth sectors over the 1994–2004 period such as Real estate, renting and research and development; and Construction are forecast to experience slow-downs in annual rates of employment expansion. Construction is in fact set to see negative growth of 0.4 per cent per annum over 2004–2014, down from 1.6 per cent annual growth in the preceding decade. Likewise the Real estate, renting and research and development sector is predicted to experience zero per cent average annual average growth, over 2004-2014, compared to a rapid average rate of 2.6 per cent per year over 1994-2004.

Figure 1.3: Employment growth, 1994–2014 (% per annum)



Source: IER (2006)



1.1.3 International comparisons with the UK workforce

As illustrated by Table 1.4, UK workforce growth means that the employment rate in the UK is now significantly greater than its closest comparator economy France, which has a population of similar size, approximately equivalent levels of GDP, and broadly similar patterns of economic activity. Although the German workforce remains much larger, a result of a population almost a third higher than the UK's, the UK employment rate is significantly higher.

Table 1.4: Population, economic activity and employment rates in EU15

	Population	Working age population	Working age population as % of population	Economic activity rate (%)	Employment rate (%)
Austria	8,206,500	5,596,833	68.2	73.8	68.6
Belgium	10,445,900	6,852,510	65.6	69.5	61.1
Denmark	5,411,400	3,587,758	66.3	80.7	75.9
Finland	5,236,600	3,498,049	66.8	76.8	68.4
France	62,518,600	40,699,609	65.1	72.8	63.1
Germany	82,500,800	55,523,038	67.3	74.9	65.4
Greece	11,082,800	7,503,056	67.7	69.9	60.1
Ireland	4,109,200	2,790,147	67.9	72.0	67.6
Italy	58,462,400	38,994,421	66.7	65.3	57.6
Luxembourg	455,000	305,760	67.2	68.1	63.6
Netherlands	16,305,500	11,022,518	67.6	77.9	73.2
Portugal	10,529,300	7,107,278	67.5	75.1	67.5
Spain	43,038,000	29,481,030	68.5	72.5	63.3
Sweden	9,011,400	5,866,421	65.1	80.3	72.5
United Kingdom	60,059,900	39,519,414	65.8	76.5	71.7

Source: Eurostat Labour Force Survey (2005)

Although the EU has expanded rapidly since the end of the Cold War, most of the new entrants have populations, workforces and economies that are small in comparison to those of the original EU15. Thus, despite the political ramifications and historic resonance of the enlargement, the immediate economic impact of A8[17] accession has not been dramatic to date.

However, the accession of the A8 countries in 2004 did have a large and more direct impact on the UK labour market due to the arrival of predominantly low-skilled migrant workers in numbers far greater than anticipated. Studies prior to accession estimated the net migration flow to the UK from A8 countries at between 5,000 and 17,000 people per annum, peaking in 2005[18], whereas figures published in November 2006 showed net migration from A8 countries at 49,000 in 2004 and 64,000 in 2005.[19] In the longer term the expansion of the EU has also had a less direct effect on the UK labour market as investment in industrial plant moves east to take advantage of lower costs.

Employment in Agriculture, hunting, forestry and fishing varies substantially by country within the EU, as illustrated by Table 1.5. The UK has a farm sector efficient by European standards, and as a result only one per cent of the workforce is employed in the sector. The Spanish, Austrian and Finnish farm sectors all employ approximately five per cent of their countries' workforce, while Ireland, despite being one of the richest countries in the union, has a farm sector that employs six per cent of the total workforce. In Portugal and Greece, two members of the EU with relatively low GDP per capita, agriculture, hunting, forestry and fishing employ 12 per cent of the workforce. Mining employs only a small proportion of the European workforce which reflects both the fact that mining requires high capital but low labour inputs, and also the fact that for many natural resources the deposits that can be extracted most cost-effectively are located outside Europe.

The proportion of the workforce engaged in manufacturing activity ranges from highs of 22 per cent in Germany and 21 per cent in Italy to lows of 13 per cent in the UK and Greece. The southern European countries of Portugal and Italy have the largest textile manufacturing sectors (3 and 6 per cent respectively) while Finland and Germany both had concentrations of employment in Machinery, electrical and optical equipment. Germany also has a relatively high proportion of the workforce engaged in the manufacture of Transport equipment.

In all European countries the proportion of the workforce employed in Electricity, gas and water supply is very low. Construction is a major employer in all the EU economies, but building booms have pushed employment in the sector to reach 13 per cent of total employment in Ireland, 11 per cent in Portugal, and 12 per cent in Spain.

Employment in the Retail trade also varies considerably: from 12 per cent of the workforce in Greece, and 11 per cent of the workforce in the UK, to just 6 per cent in Luxembourg. In the Hotel and restaurant sector employment varies from just 2 per cent of the workforce in Denmark to 7 per cent in both Spain and Greece.

[17] *For a list of the A8 and EU 15 countries please see Appendix F.*

[18] *Portes, J. and French, S. (2005) The Impact of Free Movement of Workers from Central and Eastern Europe on the UK Labour Market: Early Evidence, Working Paper no.18. London: DWP.* **http://www.dwp.gov.uk/asd/asd5/WP18.pdf**

[19] *ONS (2006) International Migration 2005 News Release. London: ONS.* **http://www.statistics.gov.uk/pdfdir/intmigrat1106.pdf**

Despite the concentration of high value added financial service provision in central London, only four per cent of the UK workforce are employed in the provision of Financial Services. By contrast, eleven per cent of the Luxembourg workforce work in the Financial Services sector, though in absolute terms the size of the Luxembourg financial sector is tiny in comparison with that of the UK (22,000 workers compared with 1,176,500 workers).

Italy, the Netherlands, and Sweden all have a higher than average proportion of the workforce engaged in Law, accounting, architecture and other business activities not elsewhere classified. Belgium and Luxembourg both have higher than average proportions of the workforce engaged in Public administration and defence; compulsory social security.

Despite popular perceptions of under-investment in education in the UK, nine per cent of the UK workforce is employed in the Education sector, higher than any other European country with the exception of Sweden and Belgium.

The average proportion of the workforce working in the Health and social work sector across the EU 15 is higher than for any other sector. This sector employs 12 per cent of the UK workforce (slightly higher than the EU 15 average) but 18 per cent of the Swedish workforce, and 16 per cent of the Danish workforce.

Table 1.5: EU15 sector employment (% of total)

Sector	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Ireland	Italy	Luxembourg	Netherlands	Portugal	Spain	Sweden	UK
Agriculture, hunting, forestry, fishing	5	2	3	5	4	2	12	6	4	2	3	12	5	2	1
Mining and quarrying	0	0	0	0	0	0	0	0	0	*	0	0	0	0	0
Food, drink and tobacco	2	3	3	2	3	3	3	3	2	1	2	2	3	1	1
Textiles and textile products	1	1	0	1	1	1	2	0	3	*	0	6	2	0	1
Wood, pulp and paper products	2	1	1	3	1	1	1	1	1	*	1	2	1	2	1
Publishing, printing and reproduction of recorded media	1	1	1	1	1	1	1	1	1	*	2	1	1	1	1
Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement	2	4	3	2	3	3	2	3	3	3	2	2	3	2	2
Basic metals and fabricated metal products	4	3	2	3	2	3	2	1	3	2	2	2	2	3	2
Machinery, electrical and optical equipment	4	3	4	5	3	5	1	4	5	1	2	2	2	4	3
Transport equipment	1	2	1	1	2	3	0	0	1	*	1	1	2	2	2
Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	2	1	1	1	1	1	1	1	2	*	3	1	1	1	1
Electricity, gas, water supply	1	1	1	1	1	1	1	1	1	*	1	0	1	1	1
Construction	7	6	7	7	7	7	8	13	9	8	6	11	12	6	8
Sale, maintenance and repair of motor vehicles; fuel retail	2	2	3	2	2	2	3	2	2	2	1	3	2	2	2
Wholesale trade	4	3	5	4	4	3	3	3	4	3	3	3	4	5	2
Retail trade	10	8	7	7	8	9	12	9	9	6	9	9	9	6	11
Hotels and restaurants	6	3	2	3	3	4	7	6	5	4	4	5	7	3	4
Transport	5	6	5	5	5	4	5	4	4	5	4	3	4	5	5
Post and telecommunications	2	2	2	2	2	1	1	2	1	2	2	1	2	2	2
Financial services	4	4	3	2	3	4	3	4	3	11	3	2	2	2	4
Real estate, renting and research and development	1	1	2	3	2	1	0	1	1	*	2	1	1	3	2
Computer and related activities	1	1	2	2	1	2	0	2	1	1	2	1	1	2	2
Law, accounting, architecture and other business activities nec	6	6	6	7	7	7	6	6	8	7	8	4	7	8	7
Public admin and defence; compulsory social security	6	10	6	5	9	8	8	5	6	12	7	7	6	6	7
Education	6	9	7	7	7	6	7	6	7	7	7	6	6	11	9
Health and social work	9	12	18	15	12	11	5	10	7	10	15	6	6	16	12
Community, social, personal service activities	5	4	5	6	4	6	4	5	5	3	4	3	4	5	6

Source: Eurostat Labour Force Survey (2005)

1.2 ECONOMIC PERFORMANCE

1.2.1 Productivity in the UK[20]

Measures of GVA per head derived from the ABI data set show that the average UK worker produced output worth £30,200 in 2004. Productivity varies widely by sector, as can be seen in Table 1.6. For example, Real estate, renting, and research and development saw employment grow relatively rapidly between 1994 and 2004 (see Figure 1.3) but productivity remains well below average (see table 1.6). By contrast many manufacturing sectors are highly productive but still suffering from falling employment, such as Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement and Transport equipment.

Table 1.6: Productivity by sector

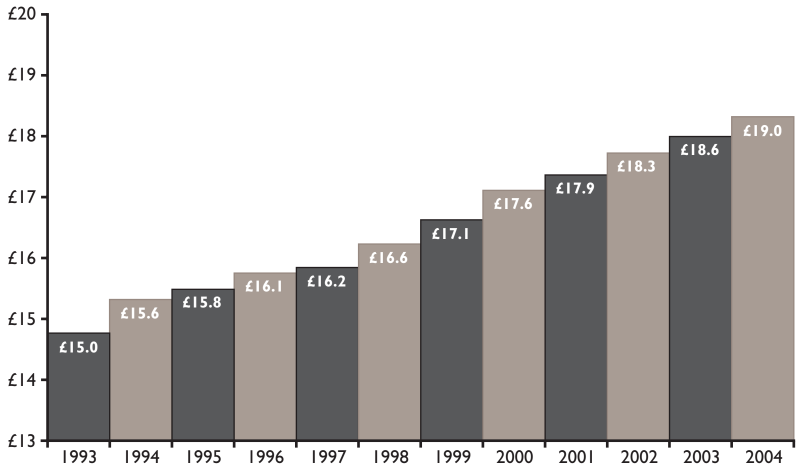
Sector	Output (GVA) per employed job (£000s)	Rank
Agriculture, hunting, forestry, fishing	25.4	(19)
Mining and quarrying	308.7	(1)
Food, drink and tobacco	47.1	(9)
Textiles and textile products	23.7	(20)
Wood, pulp and paper products	36.6	(14)
Publishing, printing and reproduction of recorded media	47.6	(8)
Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement	53.9	(5)
Basic metals and fabricated metal products	36.0	(15)
Machinery, electrical and optical equipment	43.1	(10
Transport equipment	49.6	(6)
Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	32.7	(17)
Electricity, gas, water supply	142.8	(2)
Construction	40.6	(12)
Sale, maintenance and repair of motor vehicles; fuel retail	40.2	(13)
Wholesale trade	49.5	(7)
Retail trade	19.4	(22)
Hotels and restaurants	15.4	(23)
Transport	41.9	(11)
Post and telecommunications	59.6	(3)
Financial services	n/a	n/a
Real estate, renting and research and development	21.6	(21)
Computer and related activities	59.4	(4)
Law, accounting, architecture and other business activities nec	33.7	(16)
Public admin and defence; compulsory social security	n/a	n/a
Education	2.2	(25)
Health and social work	12.4	(24)
Community, social, personal service activities	29.9	(18)
Whole economy	30.2	

Source: ABI (2004)

[20] *Measuring productivity is complex. For example, state-dominated sectors where the good produced is largely free at the point of consumption (such as healthcare or teaching) require productivity calculations that differ from those used in more market-orientated sectors. Given the size of the state sector in the UK this issue has a significant impact on calculations of average productivity on some parts of the economy. For more information on productivity issues please see the 'Understanding the Matrix' section of the Matrix website. Available online at:* **http://www.ssdamatrix.org.uk/**

Estimates by Experian Business Strategies of Gross Value Added (GVA) per hour worked (Figure 1.4) show that the value produced per hour worked in the UK rose from £15 in 1993 to approximately £19 in 2004: a cumulative increase of 26.6 per cent over an 11 year period. GVA per hour worked productivity figures are considered to be more accurate representations of underlying productivity than productivity per job figures.[21]

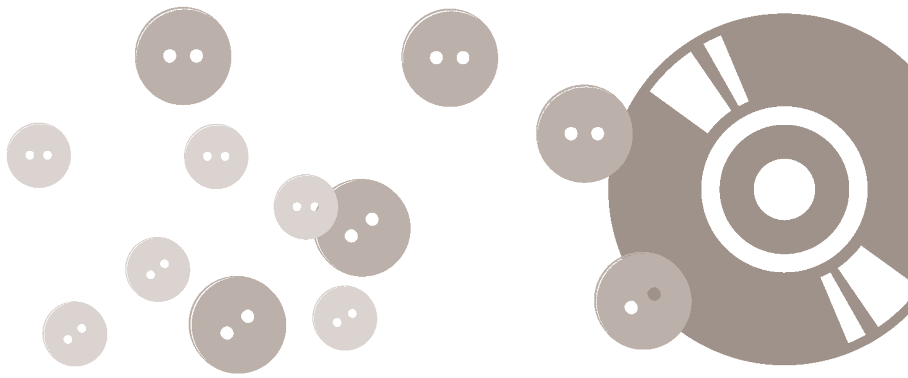
Figure 1.4: Productivity growth in the UK, 1993–2004



Source: Experian (2005)

Low productivity in some service sector activities, such as Hotels and Restaurants, is a consequence of the limited applicability of technological advances to what will essentially remain a personal service sector. Productivity growth is usually fastest in manufacturing where technological advance and increases in capital intensity have a greater impact than in other sectors. As a consequence, countries with a relatively small manufacturing sector and a relatively large service sector are likely to show slower rates of overall productivity growth than more manufacturing-reliant economies, all else being equal.

Table 1.7 shows IER predictions of labour productivity growth for the years 2004 to 2014. Productivity across the economy is expected to grow by 2 per cent per annum, in line with trends from the 1990s onwards[22]. Expectations are that Post and telecommunications; Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement; and Transport equipment; and Machinery, electrical, and optical equipment will show the fastest productivity gains, while Mining and quarrying; Community, social, personal service activities; Textiles and textile products; and Retail trade are forecast to see the least growth.



[21] *Productivity per person employed figures can misrepresent underlying productivity as the number of hours worked varies from sector to sector and country to country. Employment per job productivity figures tend to favour the UK in international comparisons as average working hours in the UK are higher than the EU average (though lower than in the US).*

[22] *HM Treasury estimates labour productivity growth averaged 2.02% between 1986 and 1997. Source: HM Treasury (2006) Productivity in the UK 6: Progress and New Evidence. London: HM Treasury. Available online at:* **http://www.hm-treasury.gov.uk/media/1E4/71/bud06_productivity_513.pdf**

Table 1.7: Forecasts of productivity growth by sector, 2004–2014 (average annual rate, %)

Sector	Productivity growth (%)	Rank
Agriculture, hunting, forestry, fishing	2.81	(7)
Mining and quarrying	-0.38	(27)
Food, drink and tobacco	1.86	(15)
Textiles and textile products	0.70	(25)
Wood, pulp and paper products	1.71	(18)
Publishing, printing and reproduction of recorded media	1.68	(19)
Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement	3.79	(2)
Basic metals and fabricated metal products	2.00	(13)
Machinery, electrical and optical equipment	3.31	(4)
Transport equipment	3.35	(3)
Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	1.98	(14)
Electricity, gas, water supply	2.96	(6)
Construction	1.84	(16)
Sale, maintenance and repair of motor vehicles; fuel retail	1.61	(20)
Wholesale trade	2.11	(12)
Retail trade	1.31	(24)
Hotels, restaurants	1.36	(23)
Transport	1.38	(22)
Post and telecommunications	5.46	(1)
Financial services	2.21	(10)
Real estate, renting and research and development	2.26	(9)
Computer and related activities	3.12	(5)
Law, accounting, architecture and other business activities nec	1.77	(17)
Public admin and defence; compulsory social security	2.30	(8)
Education	1.52	(21)
Health and social work	2.12	(11)
Community, social, personal service activities	0.69	(26)
Whole economy	2.0	

Source: IER (2006)

1.2.2 International productivity comparisons

Experian Business Strategies sector estimates of international productivity, based on data from the Groningen Growth and Development Centre (GGDC)[23], are illustrated in Figure 1.5. The statistics measure output per hour worked based on purchasing power parity.

The productivity figures shown in Figure 1.5 are derived from statistics for Gross Value Added (GVA), and though they take account of hours worked, are unable to compensate for varying levels of capital investment per worker. Total factor productivity (TFP) calculations aim to remove this distortion and solely measure the efficiency with which capital and labour inputs are used. Thus TFP measurements aim to be a measurement of organisational and technological efficiency[24] and are sometimes considered a better measurement of 'true' productivity.

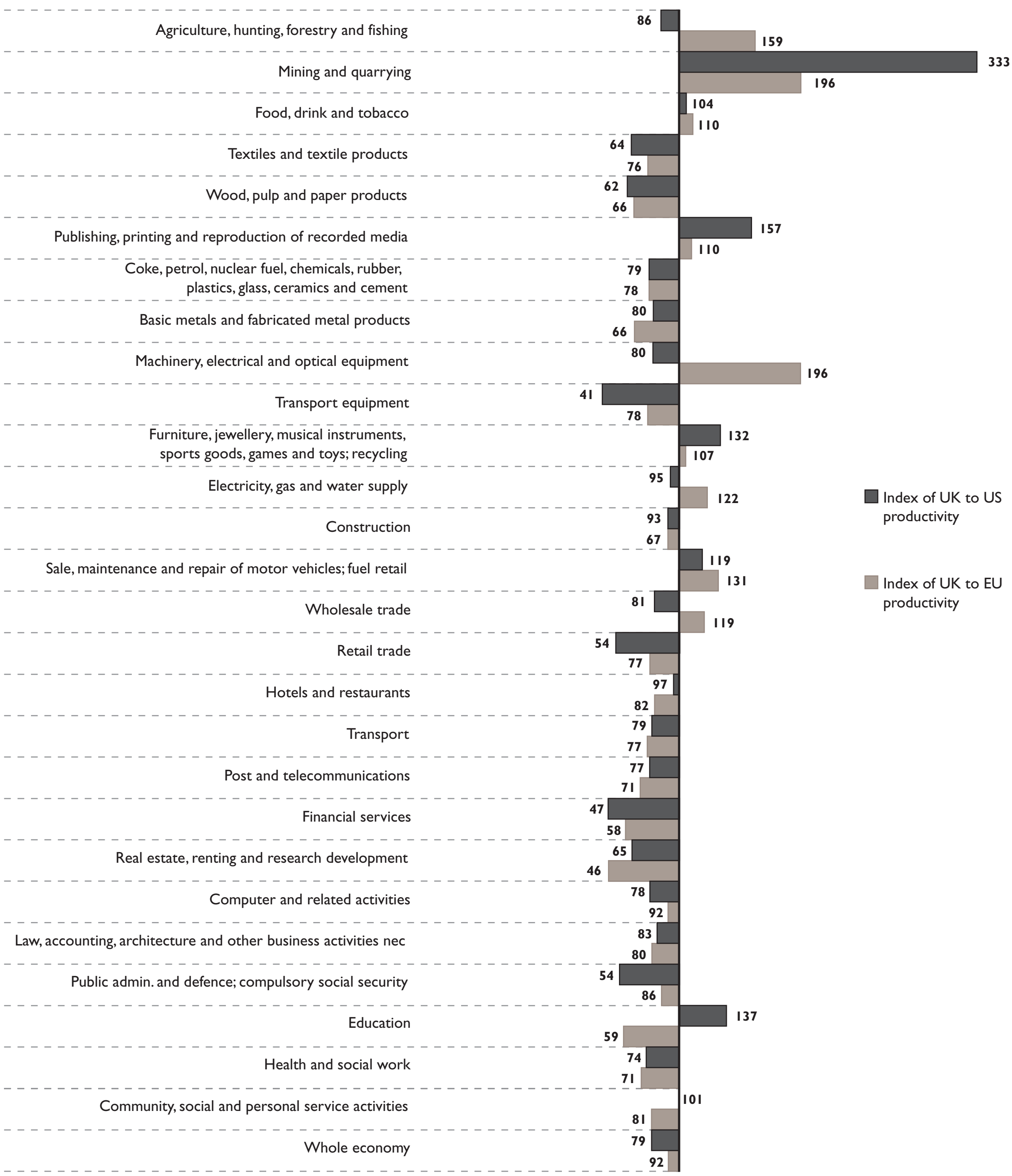
On average UK productivity per worker per hour in 2003 was lower than that of our key competitor nations. For the whole economy UK productivity per worker per hour was 92 per cent of EU 15 levels and just 79 per cent of US levels.

[23] *For more information see* **www.ggdc.net**

[24] *Jagger et al. (2005) Sectors Matter: An International Study of Sector Skills and Productivity. London: SSDA.*
http://www.ssda.org.uk/ssda/pdf/Final%20Report%20Sectors%20Matter%20R%20050927.pdf

However, these statistics conceal the fact that the UK has some sectors that are extremely competitive by international standards. It appears that mining in the UK is highly productive,[25] the UK Publishing, printing and reproduction of recorded media sector also appears to be internationally competitive, but retail trade appears to be lagging both the US and the EU. Thus national productivity performance is largely determined by the mix of high and low productivity sectors within the national economy.

Figure 1.5: Sector productivity, 2003 (EU/US productivity = 100)



Source: Experian (2006), Groningen Growth and Development Centre, 60 industry database

1.2.3 Business creation

Businesses need to register for VAT when their turnover rises above £61,000 per annum.[26] The net number of new businesses registered in each year provides a rough measure of the rate at which the entrepreneurs are creating new businesses and hence a measure both of 'entrepreneurialism' and the current state of the business climate.

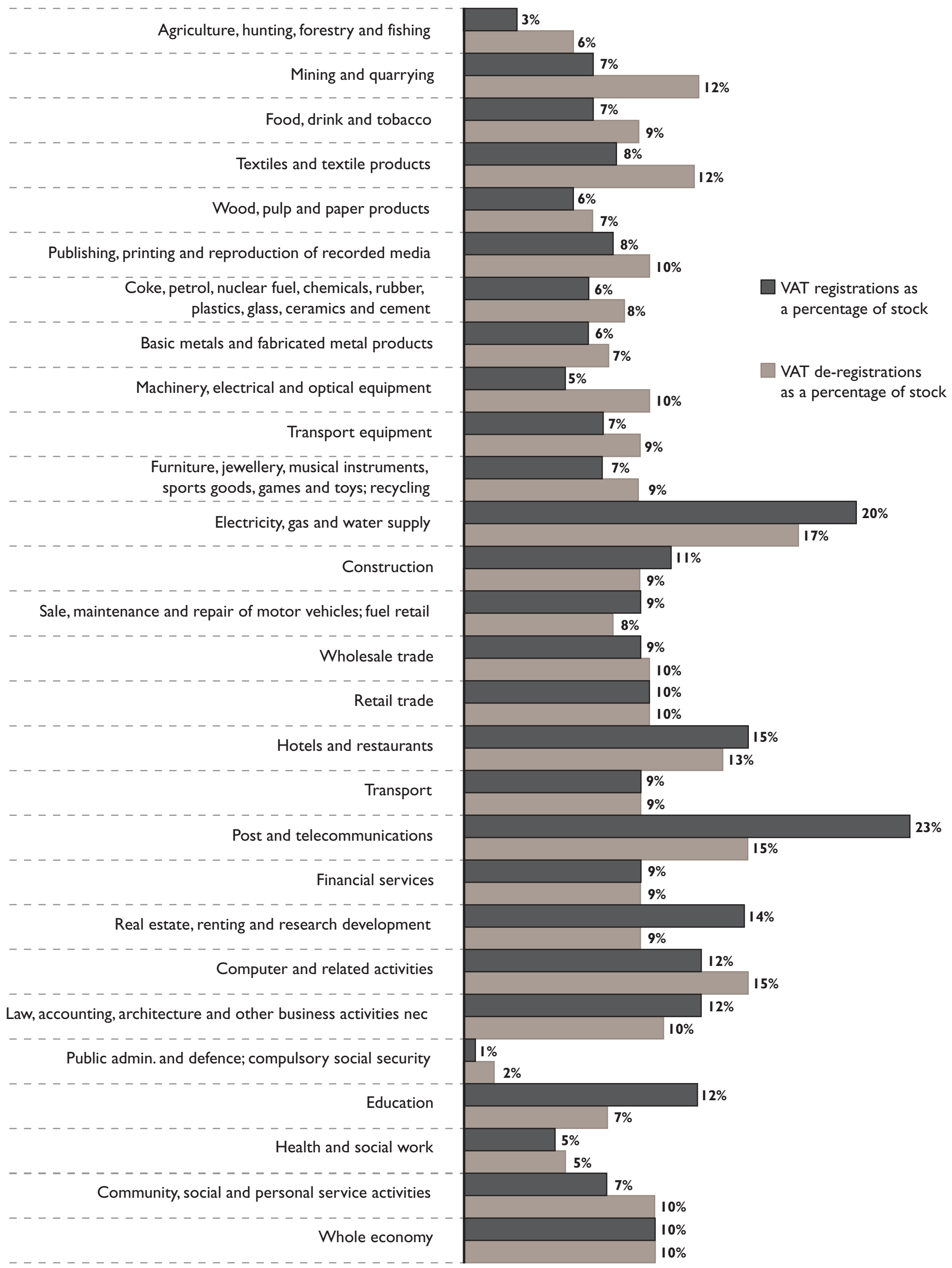
[25] *Mining productivity depends on the market price of the metal being extracted. Volatile commodity prices mean that productivity measurements may not be good indicators of effective management, technology and working practices in the sector.*

[26] *The £61,000 threshold has been in place since April 1 2006 and is adjusted on a yearly basis.*

The net number of new VAT registrations in the UK is marginally positive, but, as Figure 1.6 shows, there are major differences between regions. Businesses in Greater London have the highest rate of registrations and deregistrations, indicating an economic dynamism that is positively correlated with a higher level of GDP per head.

The number of VAT deregistrations as a percentage of stock varies substantially by sector, and correlates strongly with the number of registrations in a sector. The number of registrations will reflect both business conditions and the varying barriers to market entry present in each sector.[27] The relatively rapid nature of technological and market changes (which make it harder for established companies to consistently maintain a competitive advantage) in the Computer and related activities and the Post and telecommunications sector is at least partially responsible for the higher than average rate of deregistrations in these sectors, as inefficient companies are replaced by new, more efficient ones. In the Electricity, gas and water supply sector there is also a very high rate of registrations and deregistrations, however the business base is small, so the absolute number of businesses registering and deregistering is low.

Figure 1.6: Business registrations and deregistrations, 2004



Source: IDBR, (2004)

[27] *Examples of barriers to entry include: existing competition, high capital requirements for new start-ups etc.*

1.3 WORKFORCE COMPOSITION

1.3.1 Size of firms

An overwhelming proportion of UK businesses employ less than fifty people, as Table 1.8 shows, and very few firms grow to a size where their workforce exceeds 200 employees. Furthermore, the ABI methodology counts businesses with at least one employee and therefore excludes sole traders.

This pattern of economic activity, with a preponderance of smaller companies, is common across all the regions of the UK. However, analysis by sector shows considerable variation: Education; and Public administration and defence, compulsory social security, have the largest proportion of workplaces with more than 50 employees.

The Computer and related activities; Real estate, renting and research and development; and Construction sectors, by contrast, have a very high proportion of small firms. In the Construction sector, this is result of a business model that entails heavy reliance on large numbers of small sub-contractors.

Table 1.8: Proportion of firms employing less than 50 employees (% of total)

Sector	% **	Rank
Agriculture, hunting, forestry, fishing	98	(4)
Mining and quarrying	92	(20)
Food, drink and tobacco	84	(24)
Textiles and textile products	94	(15)
Wood, pulp and paper products	94	(16)
Publishing, printing and reproduction of recorded media	96	(12)
Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement	88	(22)
Basic metals and fabricated metal products	95	(14)
Machinery, electrical and optical equipment	92	(18)
Transport equipment	86	(23)
Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	97	(9)
Electricity, gas, water supply	81	(26)
Construction	98	(3)
Sale, maintenance and repair of motor vehicles; fuel retail	98	(6)
Wholesale trade	97	(8)
Retail trade	97	(10)
Hotels, restaurants	97	(11)
Transport	96	(13)
Post and telecommunications	90	(21)
Financial services	94	(17)
Real estate, renting and research and development	99	(2)
Computer and related activities	99	(1)
Law, accounting, architecture and other business activities nec	98	(7)
Public admin and defence; compulsory social security	81	(25)
Education	80	(27)
Health and social work	92	(19)
Community, social, personal service activities	98	(5)
Whole economy	96	

***Percentages have been rounded, but rankings reflect accurate values*
Source: ABI (2004)

Although 96 per cent of firms in the UK employ less than 50 workers the remaining four per cent of firms employ 55 per cent of all employees (though less than 55 per cent of all workers as the ABI does not offer coverage of self-employed workers and sole traders).

As Table 1.9 shows, 71 per cent of employees engaged in the Education sector work in establishments with more than 200 employees. This is the highest proportion of any sector by a considerable margin. (This sector also has the second lowest proportion of workers working in establishments with a head count of less than 50). The Computer and related activities sector has the smallest number of workers working in businesses with a workforce of more than two hundred (just 4 per cent). This sector also had the highest proportion of workers working in businesses employing less than 50 people (74 per cent).

Table 1.9: Proportion of workforce employed in small, medium and large businesses (% of total)

	1-49 employees (%)	Rank	50-199 employees (%)	Rank	200+ employees (%)	Rank
Agriculture, hunting, forestry and fishing	*	*	*	*	*	*
Mining and quarrying	53	(9)	30	(8)	17	(21)
Food, drink and tobacco	28	(21)	33	(3)	39	(10)
Textiles and textile products	21	(22)	30	(6)	49	(5)
Wood, pulp and paper products	63	(4)	22	(19)	14	(24)
Publishing, printing and reproduction of recorded media	55	(8)	19	(22)	26	(16)
Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement	60	(6)	22	(18)	17	(20)
Basic metals and fabricated metal products	33	(19)	37	(1)	30	(14)
Machinery, electrical and optical equipment	16	(25)	30	(5)	54	(3)
Transport equipment	34	(18)	18	(23)	48	(6)
Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	17	(24)	24	(14)	59	(2)
Electricity, gas and water supply	56	(7)	24	(13)	20	(18)
Construction	40	(15)	20	(21)	40	(8)
Sale, maintenance and repair of motor vehicles; fuel retail	72	(2)	21	(20)	8	(25)
Wholesale trade	44	(14)	23	(16)	33	(12)
Retail trade	34	(17)	30	(7)	36	(11)
Hotels and restaurants	29	(20)	26	(10)	45	(7)
Transport	20	(23)	29	(9)	52	(4)
Post and telecommunications	46	(12)	24	(12)	30	(13)
Financial services	65	(3)	17	(25)	18	(19)
Real estate, renting and research and development	53	(10)	18	(24)	30	(15)
Computer and related activities	74	(1)	22	(17)	4	(26)
Law, accounting, architecture and other business activities nec	52	(11)	33	(4)	15	(22)
Public admin and defence; compulsory social security	37	(16)	24	(15)	40	(9)
Education	12	(26)	17	(26)	71	(1)
Health and social work	61	(5)	25	(11)	15	(23)
Community, social and personal service activities	45	(13)	35	(2)	20	(17)
Whole economy	46		24		31	

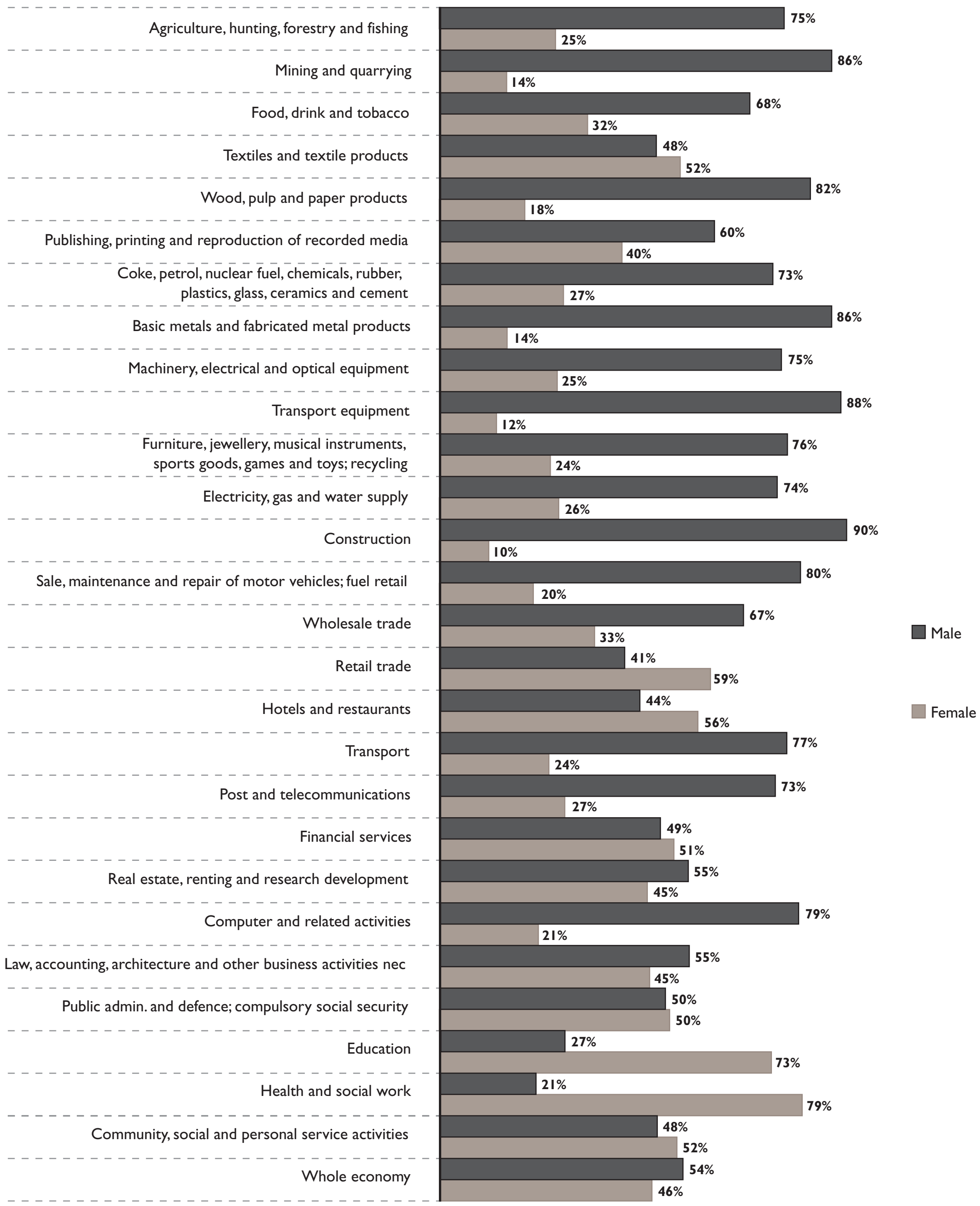
The table excludes data for Agriculture, hunting, forestry and fishing as the ABI excludes farm based agriculture data (SIC class 0100).
Source: ABI (2004)

1.3.2 Profile of the workforce

Gender

As shown in Figure 1.7, the gender profile of the workforce varies considerably by sector. Construction and the manufacture of Transport equipment have the most disproportionately male workforce (90 per cent and 88 per cent respectively) while the workforce in the Health and social work sector is 79 per cent female, and the Education sector workforce is 73 per cent female.

Figure 1.7: Gender profile, 2005 (% of total)

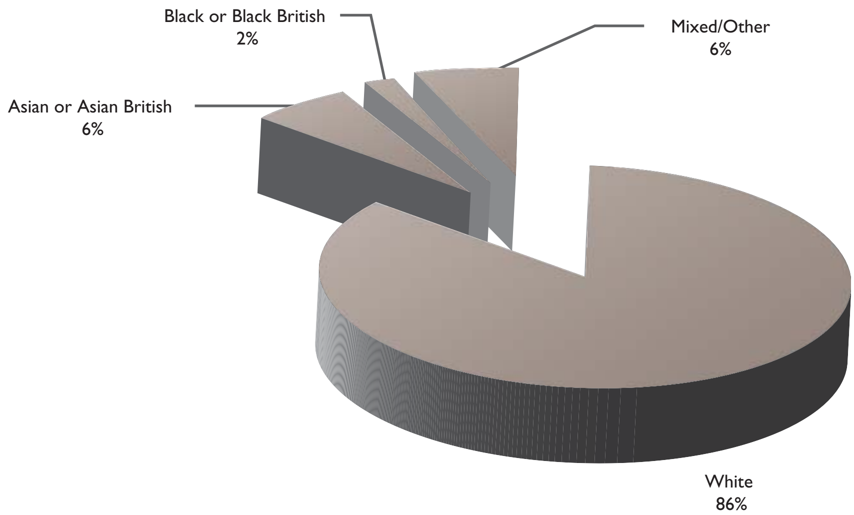


Source: LFS (2005)

Ethnicity

The UK workforce remains overwhelmingly white (Figure 1.8), and this is broadly speaking a reflection of the ethnicity of the population as a whole.

Figure 1.8: UK workforce by ethnicity, 2005



Source: LFS

The ethnic composition of the workforce varies widely by sector. Black and minority ethnic groups form a very high proportion of the workforce in the Hotel and restaurants, and the Health and social Work sector, but are relatively under-represented in the manufacturing (apart from Food, drink and tobacco and Textile and textile products), Agricultural, and Construction sectors (Table 1.10).

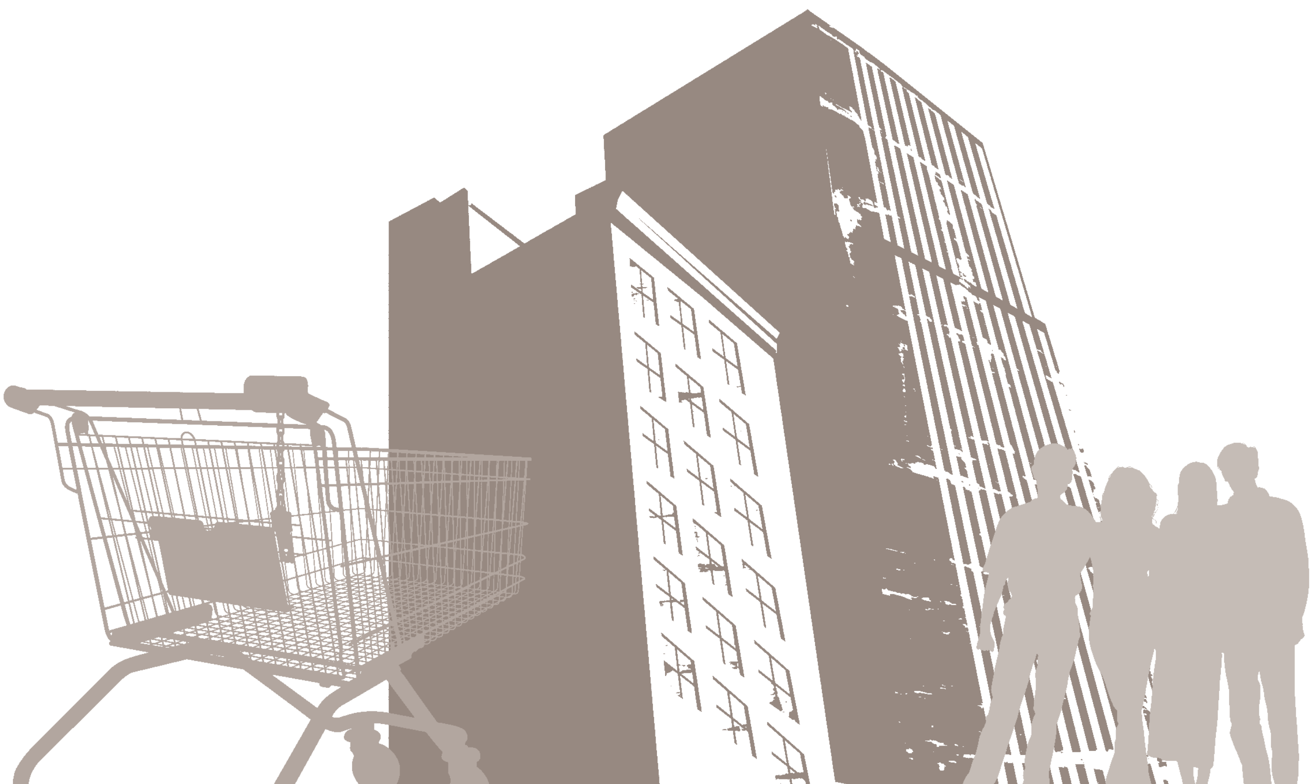
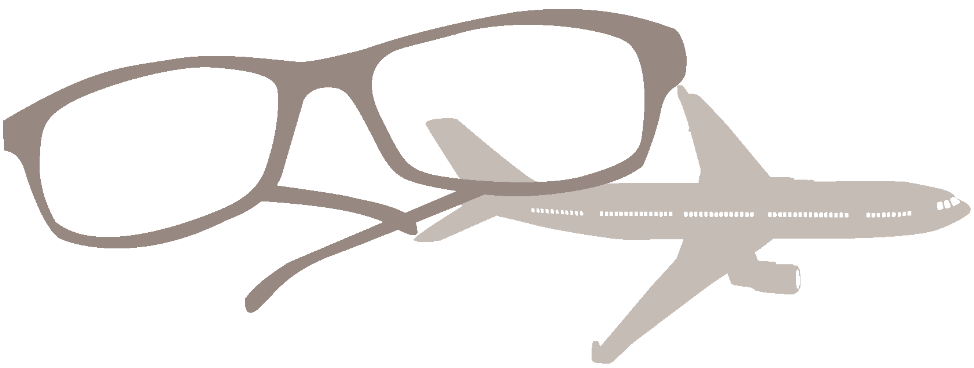


Table 1.10: Proportion of workforce Black and Minority Ethnic (BME) (% of total)		
Sector	**% BME****	**Rank**
Agriculture, hunting, forestry, fishing	1	(27)
Mining and quarrying	3	(25)
Food, drink and tobacco	9	(8)
Textiles and textile products	14	(2)
Wood, pulp and paper products	2	(26)
Publishing, printing and reproduction of recorded media	3	(23)
Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement	5	(20)
Basic metals and fabricated metal products	4	(22)
Machinery, electrical and optical equipment	6	(13)
Transport equipment	5	(21)
Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	6	(14)
Electricity, gas, water supply	5	(19)
Construction	3	(24)
Sale, maintenance and repair of motor vehicles; fuel retail	5	(18)
Wholesale trade	6	(17)
Retail trade	9	(7)
Hotels, restaurants	15	(1)
Transport	10	(5)
Post and telecommunications	10	(4)
Financial services	8	(10)
Real estate, renting and research and development	8	(11)
Computer and related activities	11	(3)
Law, accounting, architecture and other business activities nec	9	(9)
Public admin and defence; compulsory social security	7	(12)
Education	6	(15)
Health and social work	10	(6)
Community, social, personal service activities	6	(16)
Whole economy	8	

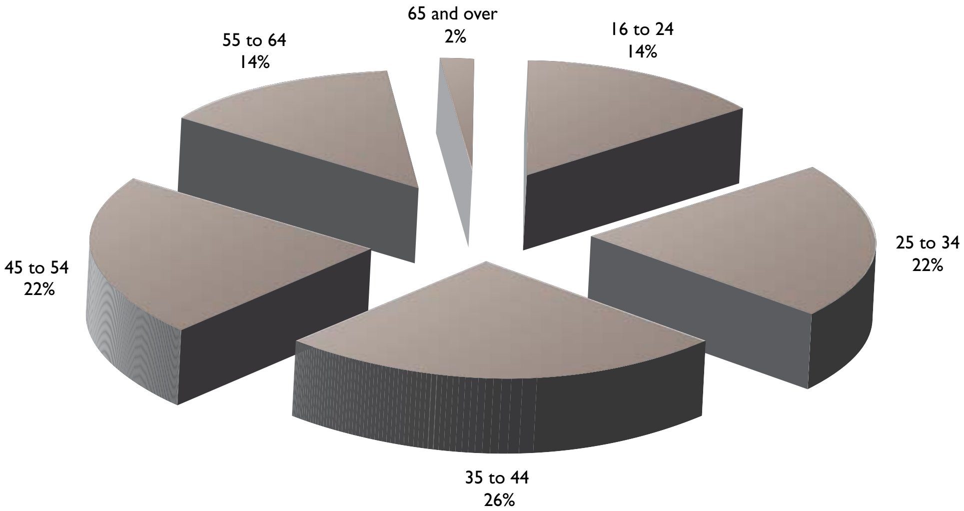
***Percentages have been rounded, but rankings reflect accurate values*
Source: LFS (2005)



Age

As Figure 1.9 shows, the largest proportion of the UK workforce is aged between 25 and 44 years old.

Figure 1.9: UK workforce by age, 2005



Source: LFS

This profile is forecast to change over the next few decades as the population ages. The 2006 Employment Equality (Age) Regulations show that legislation is already moving to take account of the anticipated greying of the workforce. Anticipated further increases in life expectancy and the consequent pressure on state and private sector pension provision suggest that changes to retirement norms will move beyond the requirements of these regulations, driven by a mixture of economic necessity, changes in cultural attitudes and further legislation.

Sectors with a particularly large proportion of the workforce over the age of 45 include: Agriculture, hunting, forestry, fishing; Mining and quarrying; and Education, as illustrated by Table 1.11.

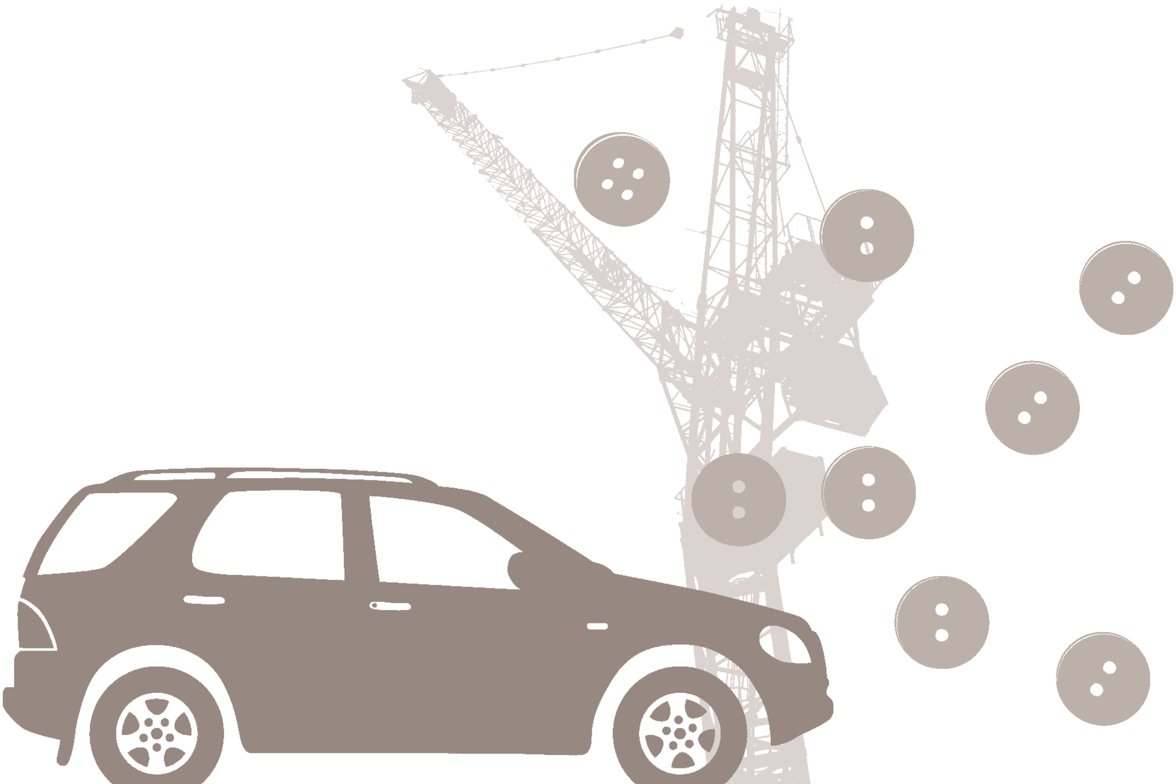


Table 1.11: Proportion of workforce aged over 45 (% of total)		
Sector	**% over 45****	**Rank**
Agriculture, hunting, forestry, fishing	50	(1)
Mining and quarrying	48	(3)
Food, drink and tobacco	37	(20)
Textiles and textile products	44	(5)
Wood, pulp and paper products	39	(13)
Publishing, printing and reproduction of recorded media	39	(14)
Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement	38	(16)
Basic metals and fabricated metal products	46	(4)
Machinery, electrical and optical equipment	42	(9)
Transport equipment	40	(11)
Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	37	(19)
Electricity, gas, water supply	34	(23)
Construction	37	(18)
Sale, maintenance and repair of motor vehicles; fuel retail	35	(22)
Wholesale trade	41	(10)
Retail trade	31	(24)
Hotels, restaurants	24	(27)
Transport	44	(7)
Post and telecommunications	38	(17)
Financial services	25	(26)
Real estate, renting and research and development	43	(8)
Computer and related activities	25	(25)
Law, accounting, architecture and other business activities nec	39	(12)
Public admin and defence; compulsory social security	39	(15)
Education	49	(2)
Health and social work	44	(6)
Community, social, personal service activities	37	(21)
Whole economy	38	

***Percentages have been rounded, but rankings reflect accurate values*
Source: LFS (2005)

Work status

Seventy-five per cent of the UK workforce is full-time, the remainder works part time. Table 1.12 shows that workers in the Retail and Hotel and restaurant sector are particularly likely to work part time, this reflects the way demand for these services varies on a daily and weekly basis and the consequent need for a flexible workforce. Education, Health and social work, and Community, social, personal service activities are also sectors with high levels of part time working. Manufacturing sectors such as Wood, pulp and paper products; Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement; Basic metals and fabricated metal products; Machinery, electrical and optical equipment; and Transport equipment tend to have lower rates of part time working.

Table 1.12: Part time/Full time by sector (% of total)				
Sector	**% Full time****	**Rank time****	**% Part**	**Rank**
Agriculture, hunting, forestry, fishing	81	(20)	19	(8)
Mining and quarrying	95	(2)	*	*
Food, drink and tobacco	90	(10)	10	(18)
Textiles and textile products	82	(18)	18	(10)
Wood, pulp and paper products	91	(8)	9	(20)
Publishing, printing and reproduction of recorded media	82	(19)	18	(9)
Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement	93	(3)	7	(25)
Basic metals and fabricated metal products	92	(5)	8	(23)
Machinery, electrical and optical equipment	92	(7)	8	(21)
Transport equipment	96	(1)	3	(26)
Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	89	(11)	11	(17)
Electricity, gas, water supply	93	(4)	7	(24)
Construction	92	(6)	8	(22)
Sale, maintenance and repair of motor vehicles; fuel retail	86	(13)	14	(15)
Wholesale trade	85	(15)	15	(13)
Retail trade	51	(27)	49	(1)
Hotels and restaurants	52	(26)	48	(2)
Transport	87	(12)	13	(16)
Post and telecommunications	85	(14)	15	(14)
Financial services	84	(16)	16	(12)
Real estate, renting and research and development	79	(21)	21	(7)
Computer and related activities	90	(9)	10	(19)
Law, accounting, architecture and other business activities nec	77	(22)	23	(6)
Public admin and defence; compulsory social security	82	(17)	18	(11)
Education	62	(25)	38	(3)
Health and social work	63	(24)	37	(4)
Community, social, personal service activities	65	(23)	35	(5)
Whole economy	75		25	

***Percentages have been rounded, but rankings reflect accurate values*
Source: LFS (2005)

As Table 1.13 shows, ninety-four per cent of the UK workforce works in a permanent position. The sectors with the greatest proportion of temporary posts are Hotels and restaurants and Education.

Table 1.13: Permanent/Temporary working (% of total)

Sector	% Permanent**	Rank	% Temporary**	Rank
Agriculture, hunting, forestry, fishing	94	(22)	6	(6)
Mining and quarrying	95	(19)	*	*
Food, drink and tobacco	94	(21)	6	(7)
Textiles and textile products	98	(3)	*	*
Wood, pulp and paper products	97	(4)	*	*
Publishing, printing and reproduction of recorded media	96	(11)	4	(15)
Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement	97	(7)	3	(19)
Basic metals and fabricated metal products	97	(6)	3	(20)
Machinery, electrical and optical equipment	96	(12)	4	(14)
Transport equipment	96	(10)	4	(16)
Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	98	(2)	*	*
Electricity, gas, water supply	96	(13)	*	*
Construction	96	(14)	4	(13)
Sale, maintenance and repair of motor vehicles; fuel retail	99	(1)	*	*
Wholesale trade	97	(5)	3	(21)
Retail trade	95	(18)	5	(10)
Hotels and restaurants	90	(26)	10	(2)
Transport	95	(15)	5	(12)
Post and telecommunications	96	(9)	4	(17)
Financial services	97	(8)	3	(18)
Real estate, renting and research and development	95	(17)	5	(9)
Computer and related activities	95	(16)	5	(11)
Law, accounting, architecture and other business activities nec	94	(24)	6	(4)
Public admin and defence; compulsory social security	95	(20)	5	(8)
Education	88	(27)	12	(1)
Health and social work	94	(23)	6	(5)
Community, social, personal service activities	91	(25)	9	(3)
Whole economy	94		6	

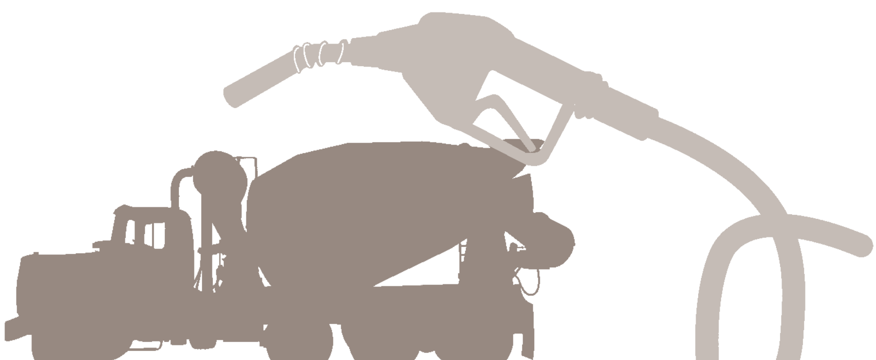
*** Percentages have been rounded, but rankings reflect accurate values*
Source: LFS (2005)

Eighty-seven per cent of the UK workforce is employed by somebody else; the remaining 13 per cent is self-employed, as illustrated by Table 1.14. Agriculture, hunting, forestry and fishing has the largest number of self-employed workers reflecting the relatively large number of small enterprises in the sector. The Construction sector has the second highest proportion of self-employed workers (37 per cent), a result of an industrial structure where even large contracts are divided between large numbers of very small subcontractors. Law, accounting, architecture and other business activities not elsewhere classified also has a high rate of self-employment.

Table 1.14: Employee/Self employed (% of total)

Sector	% Employee**	Rank	% Self-employed**	Rank
Agriculture, hunting, forestry, fishing	46	(27)	50	(1)
Mining and quarrying	95	(9)	*	*
Food, drink and tobacco	96	(4)	3	(23)
Textiles and textile products	84	(19)	15	(9)
Wood, pulp and paper products	91	(13)	9	(15)
Publishing, printing and reproduction of recorded media	88	(17)	11	(11)
Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement	96	(5)	4	(22)
Basic metals and fabricated metal products	92	(12)	7	(16)
Machinery, electrical and optical equipment	95	(8)	5	(19)
Transport equipment	97	(3)	3	(24)
Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	87	(18)	12	(10)
Electricity, gas, water supply	98	(2)	*	*
Construction	62	(26)	37	(2)
Sale, maintenance and repair of motor vehicles; fuel retail	84	(20)	15	(8)
Wholesale trade	89	(16)	10	(12)
Retail trade	90	(15)	10	(13)
Hotels and restaurants	90	(14)	9	(14)
Transport	84	(21)	16	(6)
Post and telecommunications	93	(10)	6	(18)
Financial services	96	(7)	4	(20)
Real estate, renting and research and development	84	(22)	15	(7)
Computer and related activities	83	(23)	16	(5)
Law, accounting, architecture and other business activities nec	76	(24)	24	(4)
Public admin and defence; compulsory social security	99	(1)	1	(25)
Education	96	(6)	4	(21)
Health and social work	93	(11)	7	(17)
Community, social, personal service activities	76	(25)	24	(3)
Whole economy	87		13	

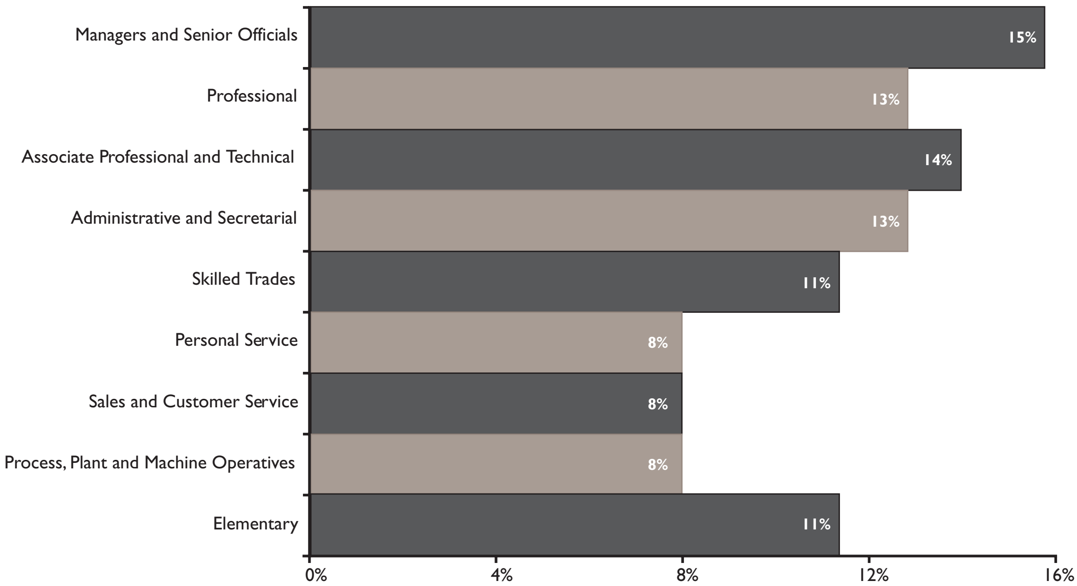
*** Percentages have been rounded, but rankings reflect accurate values*
Source: LFS (2005)
Where totals do not sum to 100% the balance is composed of unpaid family workers



Occupational structure
A high proportion of the workforce engaged in managerial occupations is considered an indicator of a developed economy. The relationship is not precise, though it is generally true that sectors with relatively high proportions of lower-skilled workers will be less productive than sectors with a higher proportion of managers and senior officials.

Highly skilled workers tend to outnumber lower skilled workers in the UK workforce. As shown in Figure 1.10, 42 per cent are employed as Managers and senior officials, Professionals, or Associate professionals and technical workers, compared to 27 per cent working in Sales and customer service; Process, plant and machine operatives; and Elementary occupations.

Figure 1.10: Occupational composition of the UK workforce, 2005



Source: LFS(2005)

Some sectors of the economy use a particularly high proportion of Managers and Senior Officials, as shown in Table 1.15; this is particularly true of the Wholesale trade sector and Computer and related activities. At the opposite end of the scale, both Education; and Health and social work have a relatively low management density, but if the analysis were to include professionals also, both sectors would move significantly further up the rankings.

Table 1.15: Proportion of workforce employed as managers and senior officials (% of total)

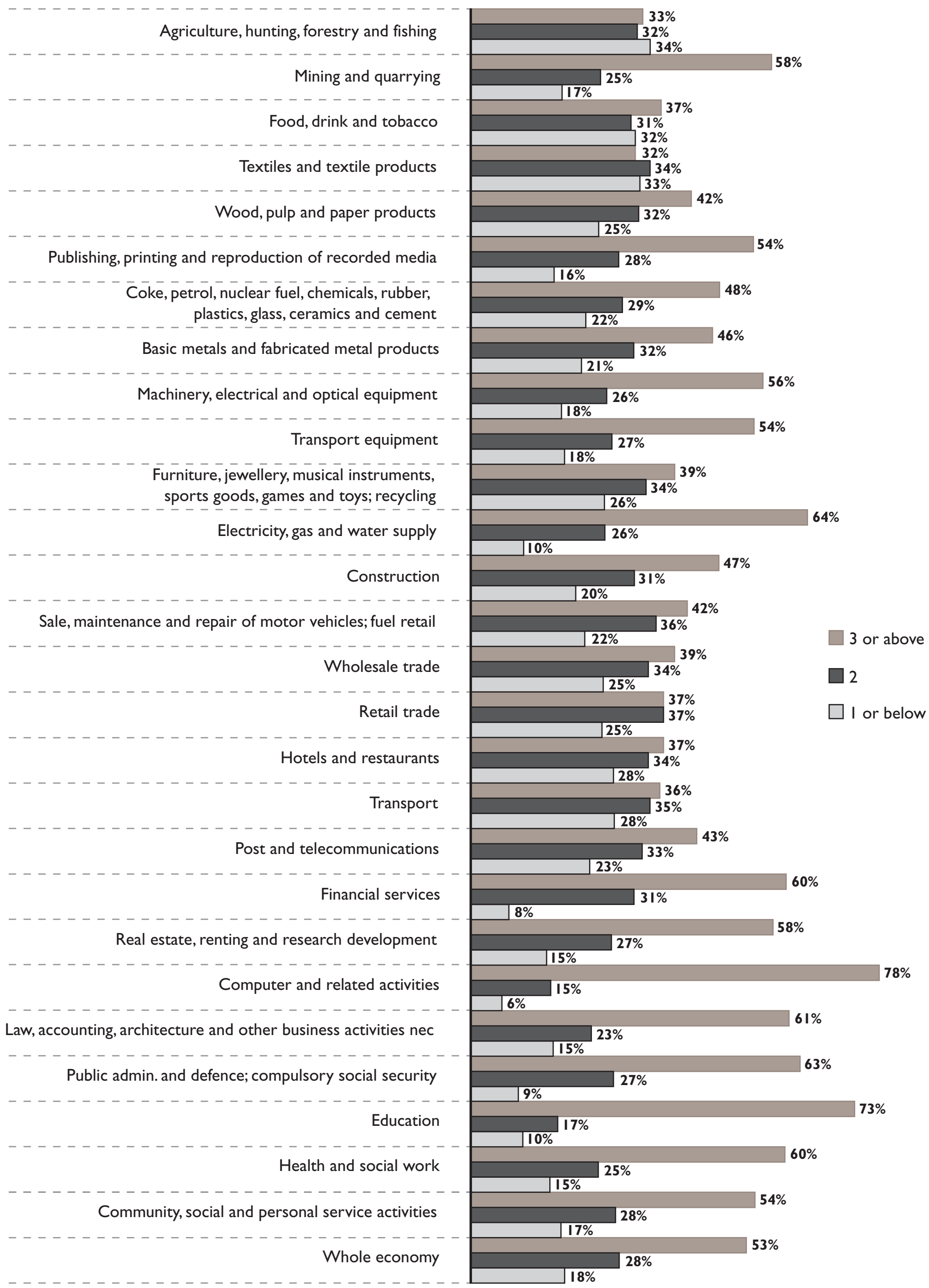
Sector	% of total employment**	Rank
Agriculture, hunting, forestry, fishing	12	(25)
Mining and quarrying	17	(13)
Food, drink and tobacco	17	(16)
Textiles and textile products	16	(17)
Wood, pulp and paper products	17	(15)
Publishing, printing and reproduction of recorded media	22	(5)
Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement	20	(7)
Basic metals and fabricated metal products	15	(19)
Machinery, electrical and optical equipment	21	(6)
Transport equipment	12	(22)
Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	17	(14)
Electricity, gas, water supply	20	(8)
Construction	12	(23)
Sale, maintenance and repair of motor vehicles; fuel retail	18	(11)
Wholesale trade	29	(1)
Retail trade	18	(10)
Hotels, restaurants	19	(9)
Transport	13	(21)
Post and telecommunications	17	(12)
Financial services	26	(4)
Real estate, renting and research and development	26	(3)
Computer and related activities	28	(2)
Law, accounting, architecture and other business activities nec	15	(18)
Public admin and defence; compulsory social security	12	(24)
Education	3	(27)
Health and social work	9	(26)
Community, social, personal service activities	13	(20)
Whole economy	15	

** *Percentages have been rounded, but rankings reflect accurate values*
Source: LFS (2005)

1.3.3 Workforce qualifications

Fifty three per cent of the UK workforce holds qualifications equivalent to an NVQ at level 3 or above (Figure 1.11). The sector with the highest proportion of the workforce at this level is Computer and related activities; followed by Education (teachers form a high proportion of the workforce, and a university degree is an entry requirement for most teaching roles), while manufacturing sub-sectors such as Textiles and Food, and Agriculture have the lowest proportion. A high proportion of relatively highly qualified staff suggests that a sector requires more skills than average. Skills intensive sectors are more secure in the face of competition from low cost producers based abroad. This may be one of the reasons why employment in the Computer and related activities sector has grown faster than the average over the 1994-2004 time period (see Figure 1.3). The UK needs to encourage the growth of sectors with high qualification and skills requirements, and to raise the skills profile of sectors which currently have a relatively poorly qualified workforce, in order to ensure future economic growth.

Figure 1.11: Qualification profile (NVQ equivalent), 2005 (% of total)



Source: LFS (2005)

Research indicates that qualifications have a close positive correlation with wages and therefore productivity. Evidence suggests that there is only a small wage premium attributed to possession of an NVQ at level 1 or equivalent, and in some sectors it appears that there is a negative correlation between NVQ level 1 qualifications and earnings (Table 1.16). However, qualifications equivalent to NVQs at level 2 and 3 appear to be associated with a wage premium of 12-15 per cent, and qualifications equivalent to NVQs at level 4 and 5 are associated with premiums of approximately 20 per cent. [28]

Table 1.16: Returns to qualifications gained

	% Return to NVQ level				
Sector	**NVQ 1**	**NVQ 2**	**NVQ 3**	**NVQ 4**	**NVQ 5**
Agriculture, hunting, forestry, fishing	7	5	16	12	4
Mining and quarrying	-1	11	13	49	29
Food, drink and tobacco	3	15	28	39	33
Textiles and textile products	10	17	23	34	36
Wood, pulp and paper products	1	14	14	25	41
Publishing, printing and reproduction of recorded media	0	15	14	11	13
Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement	-3	15	18	35	30
Basic metals and fabricated metal products	3	7	13	29	46
Machinery, electrical and optical equipment	1	14	15	41	29
Transport equipment	1	12	10	37	27
Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	4	9	13	25	-1
Electricity, gas, water supply	-5	12	13	26	26
Construction	-2	8	13	30	26
Sale, maintenance and repair of motor vehicles; fuel retail	0	10	14	24	24
Wholesale trade	0	17	17	31	29
Retail trade	3	16	17	21	41
Hotels, restaurants	8	15	12	14	39
Transport	2	19	14	20	40
Post and telecommunications	0	20	19	31	34
Financial services	-14	11	11	16	26
Real estate, renting and research and development	-5	10	15	21	27
Computer and related activities	-10	4	8	15	17
Law, accounting, architecture and other business activities nec	-5	23	18	25	24
Public admin and defence; compulsory social security	-4	11	9	17	24
Education	-7	12	11	57	8
Health and social work	-1	11	10	42	40
Community, social, personal service activities	-2	13	17	17	13

Source: Dickerson (2005)
For more details on the methodology used to calculate the rate of return please see Appendix D

[28] *Dickerson, A. (2005) A study on the rates of return to investment in Level 3 and Higher Qualifications. London: DTI.* **http://www.dti.gov.uk/files/file19870.pdf**

Managerial qualifications

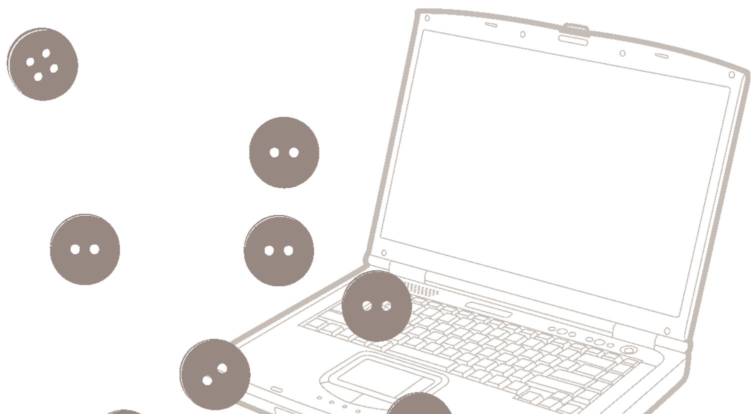
Table 1.17 shows the proportion of the managerial workforce possessing higher qualifications. Transport equipment and Health and social work possess the most highly qualified managerial workforce, followed by Computer and related activities and Electricity, gas and water supply. The sectors with the most highly qualified workforce tend to have the highest qualified managerial workforce. Managers in the Sale, maintenance and repair of motor vehicles; fuel retail sector are the least highly qualified of any sector.

Table 1.17: Proportion of managerial workforce educated to level 4 or above (% of total)

Sector	% of total managerial workforce**	Rank
Agriculture, hunting, forestry, fishing	28	(21)
Mining and quarrying	*	*
Food, drink and tobacco	47	(10)
Textiles and textile products	41	(16)
Wood, pulp and paper products	*	*
Publishing, printing and reproduction of recorded media	41	(14)
Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement	54	(9)
Basic metals and fabricated metal products	44	(13)
Machinery, electrical and optical equipment	54	(8)
Transport equipment	63	(1)
Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	*	*
Electricity, gas, water supply	62	(4)
Construction	36	(18)
Sale, maintenance and repair of motor vehicles; fuel retail	14	(24)
Wholesale trade	30	(20)
Retail trade	23	(23)
Hotels, restaurants	23	(22)
Transport	32	(19)
Post and telecommunications	41	(15)
Financial services	44	(12)
Real estate, renting and research and development	46	(11)
Computer and related activities	62	(3)
Law, accounting, architecture and other business activities nec	55	(7)
Public admin and defence; compulsory social security	62	(5)
Education	56	(6)
Health and social work	63	(2)
Community, social, personal service activities	36	(17)
Whole economy	42	

*** Percentages have been rounded, but rankings reflect accurate values*

Source: LFS (2005)



1.3.4 International comparisons of workforce composition and educational attainment

Occupational profile

There is a positive correlation between the occupational make-up of the workforce and levels of wealth creation. Countries with large numbers of lower skilled workers (such as those in elementary occupations) tend to be poorer than countries with a workforce that includes a greater number of managers and professionals, EU15 nations with higher than average levels of GDP per capita (e.g. The Netherlands, Sweden and Luxembourg) also tend to have higher than average percentages of managers in the workforce.

The number of people working in Science, Engineering and Technology (SET) occupations is also a key part of economic competitiveness, as activity in these sectors creates the intellectual property necessary for technological advance and hence improvements in productivity, competitiveness and the standard of living. As with the proportion of managers in the workforce, the number of SET personnel is only a rough proxy for productivity growth: even if there is a direct correlation between the number of personnel and the quantity and quality of research produced, there is still a necessity for efficient organisational structures to transfer intellectual property into improved products and processes.

In a similar manner to SET occupations, Information and Communications Technology (ICT) occupations are seen as a key element of productivity growth and economic success. The importance attached to the ICT sector by policy makers has been accentuated by the widespread belief that it is world-leading application of ICT technologies that have resulted in a rise in the rate of US productivity growth from the mid-1990s onwards. It is notable that the least developed EU15 economies have the lowest proportion of ICT workers, however all the caveats expressed above about the relationship between SET employment and economic growth can also be made with regard to ICT employment.

New entrants to the EU have lower proportions of managerial, SET and ICT occupations among the workforce than EU15 members, a fact correlated with their relatively low levels of productivity.

Agriculture, hunting, forestry and fishing employs very few SET and ICT workers in any European country. Numbers of Legislators; senior officials and managers; professionals; and technicians and associate professionals employed are also lower than for other economic sectors. Two exceptions to this are Ireland (where 82 per cent of the workforce in this sector falls in to these occupational groups), and the Netherlands (48.3 per cent).

The number of SET workers employed in Mining and quarrying activities varies by country. Of the UK workforce in this sector, 7.9 per cent falls under this classification compared with an EU average of 5.1 per cent. In the Netherlands 20 per cent of those employed in the mining sector are SET workers. The Netherlands also has a greater proportion of ICT workers and Legislators; senior officials and managers; professionals; and technicians and associate professionals working in the mining sector than any other EU 15 country.

The manufacturing sector has a greater proportion of SET staff than the average for the whole European economy (3.9 per cent compared to 3.6 per cent). However, it has a below average proportion of ICT workers (3.1 per cent compared to 3.2 per cent), and a below average number of Legislators; senior officials and managers; professionals; and technicians and associate professionals (27.2 per cent compared with 39.6 per cent). Finland is notable for having the highest number of Legislators; senior officials and managers; professionals; and technicians and associate professionals across a range of manufacturing sectors.

In general service sector activities require considerably more Legislators; senior officials and managers; professionals; and technicians and associate professionals than other sectors of economic activity.

Table 1.20 shows that the economic sectors with the highest average proportion of ICT workers across the EU15 states are: Electricity, gas and water supply; Post and telecommunications; and Computer and related activities.

The sectors with the highest average proportion of SET workers across the EU15 member states are: Financial services (10.2 per cent), Real estate, renting, research and development (10.8 per cent), Computer and related activities (39.9 per cent), and Law, accounting, architecture and other business activities (10.8 per cent), as shown in Table 1.19.

Across Europe, as shown in Table 1.18, the economic sectors with the highest average proportion of Legislators; senior officials and managers; professionals; and technicians and associate professionals are Computer and related activities (87 per cent), Education (79.8 per cent), and Law, accounting, architecture and other business activities (58.1 per cent).

Table 1.18: Legislators; senior officials and managers; professionals; and technicians and associate professionals employment (% of total)

Sector	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Ireland	Italy	Luxembourg	Netherlands	Portugal	Spain	Sweden	UK
Agriculture, hunting, forestry, fishing	4.6	4.9	9.4	8.5	2.7	9.7	0.5	81.8	12.7	9.0	48.3	1.8	6.5	7.2	18.4
Mining and quarrying	39.7	29.1	22.3	10.9	23.9	20.2	9.1	16.5	27.7	*	55.6	11.0	17.0	19.4	40.8
Food, drink and tobacco	20.0	28.2	18.2	26.7	15.4	12.7	13.3	26.0	21.2	13.1	21.5	13.2	18.4	25.3	26.5
Textiles and textile products	26.9	18.4	16.9	29.6	19.9	22.2	14.5	22.7	16.3	*	20.9	11.7	11.6	26.1	30.7
Wood, pulp and paper products	18.9	17.9	22.0	27.1	22.9	17.5	5.9	18.3	13.9	*	25.1	12.7	14.0	19.0	29.1
Publishing, printing and reproduction of recorded media	49.3	53.4	53.8	59.0	49.0	39.4	41.3	44.4	37.3	*	37.8	33.1	44.3	49.5	51.0
Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement	37.6	41.6	49.1	40.5	38.3	35.1	24.2	38.3	27.7	29.3	39.8	23.4	29.1	34.4	41.6
Basic metals and fabricated metal products	21.7	30.3	22.5	29.2	18.5	19.7	12.4	19.8	16.5	19.5	24.0	13.2	15.7	20.3	29.1
Machinery, electrical and optical equipment	40.6	39.5	36.5	54.0	46.9	38.6	24.7	37.7	32.9	21.7	43.5	27.3	27.3	43.7	46.9
Transport equipment	29.1	28.5	15.9	26.5	39.6	32.3	13.3	15.6	20.9	*	34.2	14.1	22.5	30.7	33.3
Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	15.7	20.0	21.4	31.6	17.9	17.2	12.9	20.5	20.5	*	28.3	16.9	15.7	17.0	24.0
Electricity, gas, water supply	41.5	46.8	47.7	39.1	47.7	42.6	19.3	34.6	40.8	*	43.4	23.5	43.6	48.1	46.9
Construction	27.5	25.8	16.1	23.8	13.2	18.2	7.0	12.1	14.0	12.5	25.2	16.1	11.1	18.9	22.5
Sale, maintenance and repair of motor vehicles; fuel retail	24.7	19.7	16.5	26.4	22.6	23.0	22.5	21.6	22.4	25.4	19.4	24.5	14.9	20.9	23.0
Wholesale trade	50.8	48.8	55.4	64.4	50.3	46.9	40.9	45.9	58.6	42.1	42.7	40.0	43.1	53.0	45.2
Retail trade	42.4	35.9	23.4	29.6	37.3	35.4	41.1	25.9	43.4	30.8	21.9	33.0	28.0	18.1	25.7
Hotels and restaurants	23.7	36.4	13.7	16.4	29.7	20.5	33.0	21.8	27.5	22.9	18.9	27.1	18.4	13.9	22.5
Transport	22.9	21.1	25.1	26.1	26.8	21.1	16.9	20.0	19.6	17.3	20.3	20.3	15.8	16.6	21.1
Post and telecommunications	36.2	30.5	34.9	35.0	45.3	27.6	23.1	33.4	34.3	36.1	32.0	37.2	35.8	29.9	31.4
Financial services	46.1	40.7	75.3	52.9	66.3	44.7	51.4	47.8	60.0	65.8	67.8	43.7	57.9	85.6	58.3
Real estate, renting and research and development	45.7	58.7	52.2	54.2	53.0	59.1	68.7	41.1	76.2	54.1	61.1	53.8	66.2	55.5	61.7
Computer and related activities	87.3	86.0	90.6	94.3	90.2	86.1	74.9	78.9	86.7	90.7	86.0	90.0	85.0	93.8	85.2
Law, accounting, architecture and other business activities nec	57.2	62.9	71.8	61.5	53.1	52.1	68.3	55.8	57.1	60.9	58.3	50.0	45.3	60.8	56.9
Public admin and defence; compulsory social security	36.1	33.2	49.7	57.1	34.1	59.6	25.5	29.5	32.4	40.4	57.9	36.4	39.0	68.2	38.5
Education	81.2	85.5	79.7	77.8	79.1	83.4	89.6	76.4	81.3	93.4	84.7	65.6	85.1	72.1	61.7
Health and social work	54.4	63.5	49.6	44.7	40.7	60.7	66.0	56.1	69.7	55.1	65.3	37.6	54.3	39.4	48.1
Community, social, personal service activities	46.8	37.2	43.3	51.2	46.5	43.2	32.5	36.2	33.5	49.1	50.2	32.1	35.7	53.5	45.9
Whole economy	39.2	43.9	43.1	43.3	38.8	41.4	32.0	38.9	38.6	45.2	47.2	26.6	30.8	43.7	40.8

Source: Eurostat Labour Force Survey (2005)

Table 1.19: Science, engineering and technology employment (% of total)

Sector	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Ireland	Italy	Luxembourg	Netherlands	Portugal	Spain	Sweden	UK
Agriculture, hunting, forestry, fishing	0.5	0.4	0.7	2.4	0.6	3.0	0.1	0.5	0.2	1.5	0.7	0.4	0.8	0.9	0.8
Mining and quarrying	4.2	4.9	0.0	3.3	9.7	4.8	3.4	3.0	3.6	*	20.0	0.0	3.7	3.2	7.9
Food, drink and tobacco	0.0	1.3	0.5	1.5	2.4	1.3	1.4	2.7	0.8	0.8	3.0	1.3	1.7	2.5	3.8
Textiles and textile products	0.8	0.9	0.0	0.8	2.2	1.4	0.5	1.9	0.0	*	1.9	0.8	0.1	0.0	1.8
Wood, pulp and paper products	1.0	0.0	1.7	2.6	2.3	1.0	0.8	1.4	0.7	*	1.7	1.4	0.2	2.4	1.6
Publishing, printing and reproduction of recorded media	3.2	7.6	1.6	2.6	3.2	2.1	0.0	2.8	1.8	*	1.4	3.1	1.1	1.4	2.0
Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement	4.1	7.0	11.9	6.8	11.2	6.4	5.0	10.2	3.9	10.5	6.8	3.6	4.6	9.4	8.0
Basic metals and fabricated metal products	2.1	3.9	3.4	4.6	2.9	2.8	2.1	7.4	0.5	6.1	3.2	0.3	2.1	2.5	6.6
Machinery, electrical and optical equipment	4.1	9.0	13.0	24.6	15.3	12.2	5.7	13.7	2.0	6.0	13.2	6.2	6.4	9.9	12.4
Transport equipment	3.2	2.5	3.1	8.0	12.8	12.9	1.0	6.8	2.5	*	6.2	1.3	7.8	9.3	12.7
Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	1.4	3.2	5.2	1.9	3.0	1.5	0.5	1.3	0.3	*	3.8	0.0	0.6	0.3	1.7
Electricity, gas, water supply	2.3	10.9	5.1	9.9	16.0	13.1	4.4	9.3	3.0	*	9.3	8.5	11.4	9.5	10.6
Construction	2.5	2.3	2.6	3.3	3.5	6.0	0.4	4.7	0.7	1.9	3.2	1.7	2.3	1.9	5.6
Sale, maintenance and repair of motor vehicles; fuel retail	0.4	0.4	0.1	1.3	0.6	1.0	0.2	0.7	0.0	0.5	0.3	1.1	0.0	0.5	0.4
Wholesale trade	1.2	1.1	3.2	5.2	5.3	3.2	0.3	1.2	1.6	2.9	3.5	2.1	0.7	4.1	0.9
Retail trade	0.5	0.3	0.9	0.2	0.4	0.9	0.2	0.4	0.2	0.3	0.4	0.1	0.3	0.6	0.4
Hotels and restaurants	0.3	0.0	0.0	0.0	0.2	0.1	0.0	0.1	0.0	0.0	0.4	0.1	0.0	0.0	0.2
Transport	0.7	1.2	1.1	1.0	2.1	1.8	0.8	1.1	0.4	1.3	1.5	0.7	0.6	0.6	1.6
Post and telecommunications	4.3	7.0	5.3	6.8	6.6	6.9	9.3	7.3	2.3	10.0	4.2	6.7	9.2	4.9	6.4
Financial services	2.4	6.7	4.8	5.2	4.2	3.6	2.1	4.7	0.5	5.3	6.8	1.1	2.6	5.9	4.6
Real estate, renting and research and development	3.3	7.3	12.6	12.7	6.4	15.0	22.3	8.2	9.3	11.6	7.5	10.1	8.1	16.2	11.2
Computer and related activities	33.1	61.3	47.4	55.2	54.9	34.8	29.9	41.6	13.9	33.0	40.6	27.6	34.1	54.6	37.2
Law, accounting, architecture and other business activities nec	6.1	12.0	12.4	14.6	10.6	8.7	19.2	8.6	9.6	13.6	11.2	6.8	8.8	10.9	8.7
Public admin and defence; compulsory social security	1.4	2.3	6.7	3.6	0.4	3.5	6.1	3.2	1.6	4.7	5.1	4.2	4.3	4.8	3.0
Education	0.7	1.2	1.5	4.6	0.2	3.7	0.2	1.6	0.4	0.3	1.7	0.8	2.1	1.3	1.2
Health and social work	0.2	0.6	0.3	0.7	0.2	0.5	0.2	1.4	1.7	1.1	1.1	0.1	0.6	0.3	1.1
Community, social, personal service activities	1.3	1.1	2.1	1.5	1.0	2.4	0.1	1.0	0.5	2.0	1.2	1.1	0.7	1.1	1.3
Whole economy	2.0	3.6	4.5	5.7	4.0	4.6	2.4	4.0	1.9	4.2	4.3	1.7	2.7	4.8	4.1

Source: Eurostat Labour Force Survey (2005)

Table 1.20: Information, communication and technology employment (% of total)

Sector	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Ireland	Italy	Luxembourg	Netherlands	Portugal	Spain	Sweden	UK
Agriculture, hunting, forestry, fishing	0.0	0.0	0.9	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.2	0.1	0.0
Mining and quarrying	0.9	0.0	0.0	0.0	6.9	3.9	8.4	0.6	1.2	*	11.4	0.9	0.2	9.9	4.2
Food, drink and tobacco	1.1	1.1	0.2	0.9	1.3	1.0	1.4	1.9	1.6	3.4	2.1	0.5	1.2	4.5	2.6
Textiles and textile products	1.5	2.1	0.0	0.0	1.0	1.2	1.1	1.3	1.0	*	0.0	0.4	0.5	2.9	1.5
Wood, pulp and paper products	1.8	0.0	2.1	2.5	0.7	1.7	0.7	0.4	0.8	*	0.9	1.3	0.3	5.2	0.9
Publishing, printing and reproduction of recorded media	3.3	5.8	2.4	4.4	1.5	3.7	0.6	4.0	3.4	*	3.5	5.5	1.6	2.7	3.2
Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement	2.9	2.7	4.0	3.9	2.3	3.2	3.1	2.3	1.6	4.0	2.1	1.6	1.6	8.0	1.8
Basic metals and fabricated metal products	3.6	1.4	5.8	3.6	1.0	2.4	1.4	1.8	1.4	6.1	2.2	1.3	1.8	2.7	1.6
Machinery, electrical and optical equipment	9.9	7.0	5.8	12.8	6.4	8.7	14.4	8.8	9.3	7.4	13.6	8.7	14.3	9.9	8.8
Transport equipment	4.6	0.6	0.0	11.2	2.9	4.8	4.7	1.7	3.2	*	3.9	4.7	4.0	5.3	2.1
Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	1.3	0.0	5.2	1.8	0.0	1.5	1.5	0.6	1.3	*	3.5	0.5	0.3	1.0	0.8
Electricity, gas, water supply	9.5	6.1	1.0	16.0	20.5	12.2	27.0	24.8	13.2	*	6.5	32.5	10.4	15.4	6.3
Construction	3.5	1.7	1.9	6.2	5.1	1.4	0.7	0.5	2.2	1.0	2.2	3.0	1.2	3.6	1.8
Sale, maintenance and repair of motor vehicles; fuel retail	2.3	0.7	0.7	0.6	1.1	3.3	5.3	0.7	4.4	0.5	0.8	3.2	2.9	0.9	1.7
Wholesale trade	2.0	0.9	5.1	4.2	2.1	2.7	2.6	1.4	1.6	5.4	4.9	1.5	0.8	5.5	1.5
Retail trade	2.1	0.4	1.8	1.6	0.6	1.7	2.3	0.7	1.6	1.3	0.8	1.8	1.9	1.6	1.2
Hotels and restaurants	0.3	0.0	0.0	0.2	0.3	0.1	0.3	0.2	0.2	0.0	0.4	0.2	0.5	0.1	0.2
Transport	1.4	1.2	0.4	1.2	2.4	1.5	1.5	1.9	1.5	4.1	1.8	1.9	1.5	0.9	1.3
Post and telecommunications	8.8	6.9	6.0	14.0	6.4	10.9	17.8	15.3	14.1	13.6	13.8	8.4	17.1	16.5	12.6
Financial services	3.2	5.6	4.6	4.5	4.7	3.5	1.7	3.4	1.8	6.3	9.0	5.6	3.5	6.1	5.6
Real estate, renting and research and development	1.3	2.6	5.4	1.8	1.9	2.1	5.2	1.0	3.0	2.3	3.0	1.3	1.7	5.8	2.0
Computer and related activities	52.0	59.2	52.7	55.3	63.0	50.9	53.9	43.9	63.2	43.0	60.4	59.7	63.0	63.5	51.6
Law, accounting, architecture and other business activities nec	3.2	5.1	3.3	4.2	4.8	2.3	2.6	2.6	2.0	1.8	4.1	2.7	2.1	6.6	3.2
Public admin and defence; compulsory social security	1.7	1.5	3.4	3.5	0.8	1.4	1.4	1.4	1.2	2.4	4.2	1.9	2.0	4.6	2.5
Education	1.2	0.4	1.0	3.0	0.6	0.7	0.3	0.6	0.5	0.6	1.6	0.3	1.0	1.0	1.5
Health and social work	2.0	0.5	0.9	0.7	0.3	1.0	1.7	1.0	1.4	1.6	2.2	1.6	1.0	0.7	0.9
Community, social, personal service activities	2.8	2.3	3.6	3.0	3.8	3.1	3.2	1.5	1.7	4.0	2.8	3.3	3.5	3.6	1.9
Whole economy	3.0	2.5	3.5	4.3	3.0	3.2	2.2	2.6	2.9	3.6	4.2	2.2	2.6	4.9	3.2

Source: Eurostat Labour Force Survey (2005)

Educational attainment

The European Labour Force Survey classifies qualifications as high, medium, or low. 'High' is approximately equivalent to tertiary education. Some countries perform markedly better on this measure than others. Belgium, Finland, Denmark, and perhaps more surprisingly Spain, are among the best performers on a sector-by-sector basis.[29] On the same measure Portugal, Italy, Greece and Austria are the worst performers. The UK workforce's qualifications appear to be on an approximate par with those of the other large European economies of France, Germany and the Netherlands.

Table 1.21 sets out the qualification levels by sector across the EU15 nations.

The Agriculture, hunting, forestry, fishing sector has a relatively poorly qualified workforce across the EU15 nations. The German agricultural sector is the best qualified with 20.2 per cent of the workforce holding 'high' qualifications.

The highest qualified national workforce in the Mining and quarrying sector is in the Netherlands where 45.4 per cent of the workforce hold 'high' qualifications.

The proportion of the workforce in the broad Manufacturing sector across Europe that has 'high' qualifications is just 17.8 per cent, compared with 27.4 per cent for the workforce as a whole. The Publishing, printing and reproduction of recorded media sector is highly qualified compared with other manufacturing sectors with 28.3 per cent of the workforce holding 'high' qualifications. Firms engaged in the manufacture of Machinery, electrical and optical equipment also have a workforce highly qualified by the standards of the European manufacturing workforce, with 26.5 per cent of the workforce holding 'high' qualifications. However, national differences in the qualification levels of workers in the Machinery, electrical and optical equipment sector are large: the proportion with 'high' qualifications varies from 43.5 per cent in Finland to just 6.7 per cent in Italy.

In the Electricity, gas and water supply sector there is significant national variation in the proportion of workers who have 'high' qualifications: from 48.4 per cent in Spain, to just 12.3 per cent in Italy.

Across Europe, workers in the Construction sector tend to be less qualified than the average for the economy as a whole. The most highly qualified workforce is in Germany (21.9 per cent of the workforce hold 'high' qualifications). Portugal's construction workforce is among the least qualified, with just 3.8 per cent of workers holding 'high' qualifications.

The Sale, maintenance and repair of motor vehicles; fuel retail is another sector where higher-level qualifications are relatively rare. Spain has a relatively high proportion of highly qualified workers in this sector (22.6 per cent), while just 1.4 per cent of Italian workers in the sector are similarly qualified.

The level of 'high' qualifications in the Wholesale trade ranges from 39.8 per cent in Finland to 8.4 per cent in Italy. Workers in the retail trade across Europe tend to be less qualified than workers in the Wholesale trade with a high of 22.4 per cent of Finnish workers holding 'high' qualifications and a low of 4.9 per cent of Portugese workers similarly qualified.

The Hotel and restaurant sector employs a workforce with a level of formal qualifications that is typically less than nearly all other sectors of the national workforce. Spain and Ireland have the best qualified workforces in the sector (16 and 20.7 per cent holding 'high' qualifications respectively). In Portugal only 3.5 per cent of the Hotel and restaurant sector workforce are similarly qualified.

In the Transport sector a Europe-leading 22.6 per cent of Spanish workers hold 'high' qualifications, while Italy lags competitor countries with just 4.9 per cent of the workforce similarly qualified. In the Post and telecommunications sector Spain again leads the pack with 45.8 per cent of workers qualified to a high level, and Austria lags the group with just 11.9 per cent of the workforce similarly qualified.

The level of 'high' qualifications in the Financial Services sector ranges from 62.2 per cent in Belgium to 16.9 per cent in Austria.

The Real estate, renting and research and development sector workforce tends to be better qualified across Europe than the workforce as a whole. However, there is significant national variation from 50.6 per cent of workers in Belgium who hold 'high' qualifications, to just 22.7 per cent in Portugal.

The Computer and related activities sector is highly qualified across Europe. France and Ireland have a relatively high proportion of highly qualified workers in this sector (71.8 and 71.6 per cent respectively), while just 35.1 per cent of Austrian workers in the sector are similarly qualified.

Law, accounting, architecture and other business activities not elsewhere classified is another sector where the workforce is relatively highly qualified. However, national differences in the qualification levels of workers in the sector are large: the proportion with 'high' qualifications varies from 58.6 per cent in Greece to just 29.3 per cent in Austria.

The highest qualified national workforce in the Public administration and defence; compulsory social security sector is in Finland, where 58.6 per cent of the workforce hold 'high' qualifications, the lowest qualified nation is Austria, where just 17.6 per cent of workers in the sector are similarly qualified.

Education is the most highly qualified sector in Europe. The proportion of the workforce highly qualified varies from 83 per cent in Greece to just 45.9 per cent in Italy.

There is significant national variation in the qualification levels of national workforces in the Health and social work sector: from 60.5 per cent of workers in Spain who hold 'high' qualifications, to just 24.3 per cent in Austria.

The level of 'high' qualifications in the Community, social, personal service activities sector varies from 34.1 per cent in the Netherlands to just 11.4 per cent in Portugal.

[29] *Countries which have the largest number of top-ranked sectors in education terms are not necessarily the countries with the best educated workforce overall. This is because some sectors are much larger than others. Therefore, a middling ranking in the Retail sector, which is large in most countries, represents a much higher number of qualified workers than a high ranking in the comparatively small Mining and quarrying sector.*

Table 1.21: Workforce with high qualifications (% of total)

Sector	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Ireland	Italy	Luxembourg	Netherlands	Portugal	Spain	Sweden	UK
Agriculture, hunting, forestry, fishing	10.6	6.9	9.2	17.2	11.1	20.2	1.5	8.8	3.0	4.3	9.3	0.9	8.9	12.0	11.0
Mining and quarrying	19.8	21.0	11.2	8.0	19.5	16.4	11.4	11.1	10.4	*	45.4	5.8	23.2	12.9	34.2
Food, drink and tobacco	11.3	24.6	14.6	17.1	10.8	13.4	11.7	20.3	4.1	11.6	16.5	4.2	18.2	9.8	18.7
Textiles and textile products	12.7	15.2	15.3	22.6	11.6	14.8	8.7	18.1	2.6	*	7.3	1.4	11.1	3.3	15.5
Wood, pulp and paper products	14.2	15.7	18.3	21.4	16.1	13.3	5.7	9.9	4.3	*	11.5	3.0	16.3	6.8	14.6
Publishing, printing and reproduction of recorded media	20.0	57.3	31.2	29.2	32.3	20.9	18.8	33.3	15.8	*	22.7	20.9	38.8	26.3	29.2
Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement	16.1	36.8	41.1	25.2	27.4	22.0	19.1	34.4	9.5	24.0	25.3	12.9	29.8	20.7	27.4
Basic metals and fabricated metal products	12.5	17.3	10.8	18.6	10.3	15.5	11.4	18.4	2.9	13.7	12.9	1.5	21.8	6.6	19.3
Machinery, electrical and optical equipment	18.9	25.8	31.1	43.5	28.1	27.9	20.9	38.2	6.7	18.4	34.4	12.6	40.1	21.2	30.5
Transport equipment	14.4	15.3	15.6	18.4	25.8	24.3	9.6	19.5	5.8	*	21.9	4.5	34.1	16.1	27.2
Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	16.5	12.4	15.9	19.2	13.1	16.4	7.3	17.6	3.1	*	17.1	1.6	15.8	7.6	11.2
Electricity, gas, water supply	21.7	32.5	36.5	34.2	26.4	33.7	16.5	28.1	12.3	*	31.0	14.3	48.4	27.6	38.1
Construction	14.3	14.2	13.0	17.6	9.9	21.9	4.7	13.1	1.6	3.4	11.0	3.8	14.8	7.3	14.0
Sale, maintenance and repair of motor vehicles; fuel retail	11.8	12.3	6.0	14.0	8.0	16.1	4.9	13.3	1.4	7.9	8.0	4.6	22.6	5.4	9.5
Wholesale trade	10.7	37.3	21.9	39.8	28.8	18.5	22.1	23.6	8.4	23.7	22.5	10.3	26.9	18.9	18.5
Retail trade	9.1	18.3	9.2	22.4	18.6	11.8	12.4	15.4	6.0	10.5	9.2	4.9	21.1	12.8	13.1
Hotels and restaurants	8.3	9.7	8.5	13.8	11.9	7.2	6.8	20.7	3.4	7.2	8.7	3.5	16.0	9.5	11.9
Transport	9.1	17.7	15.9	18.8	17.9	13.1	10.7	15.7	4.9	9.6	16.3	10.6	22.6	13.0	13.6
Post and telecommunications	11.9	29.4	21.7	26.7	21.4	17.6	23.1	31.8	13.0	20.3	19.8	18.6	45.8	18.5	20.8
Financial services	16.9	62.2	29.4	61.0	53.0	25.6	42.4	54.2	22.8	48.8	45.5	34.0	61.0	34.9	33.3
Real estate, renting and research and development	23.5	50.6	36.8	37.7	37.8	39.8	41.0	40.5	31.4	28.6	41.9	22.7	48.1	38.4	39.4
Computer and related activities	35.1	75.9	56.9	53.5	71.8	50.5	56.8	71.6	27.0	68.2	56.3	57.1	69.5	48.7	57.2
Law, accounting, architecture and other business activities nec	29.3	57.2	48.5	45.2	42.4	32.9	58.6	52.5	30.8	51.9	40.9	30.2	48.6	35.7	41.8
Public admin and defence; compulsory social security	17.6	33.8	42.8	58.6	25.9	33.0	42.6	37.1	18.4	21.4	43.5	20.3	45.5	50.0	38.7
Education	64.6	78.5	71.1	67.7	66.8	64.5	83.0	73.8	45.9	79.0	74.5	60.7	82.4	63.5	61.1
Health and social work	24.3	51.3	46.2	42.3	34.0	32.5	54.0	49.5	37.2	25.3	37.9	33.5	60.5	37.4	43.6
Community, social, personal service activities	23.3	31.7	27.8	31.4	31.5	28.9	16.8	27.7	12.4	29.2	34.1	11.4	34.0	26.6	30.6
Whole economy	18.9	36.7	31.8	34.6	28.1	26.0	23.6	31.3	14.4	29.9	30.4	13.4	32.1	29.4	30.3

Source: Eurostat Labour Force Survey (2005). "High qualifications" is approximately equivalent to tertiary education

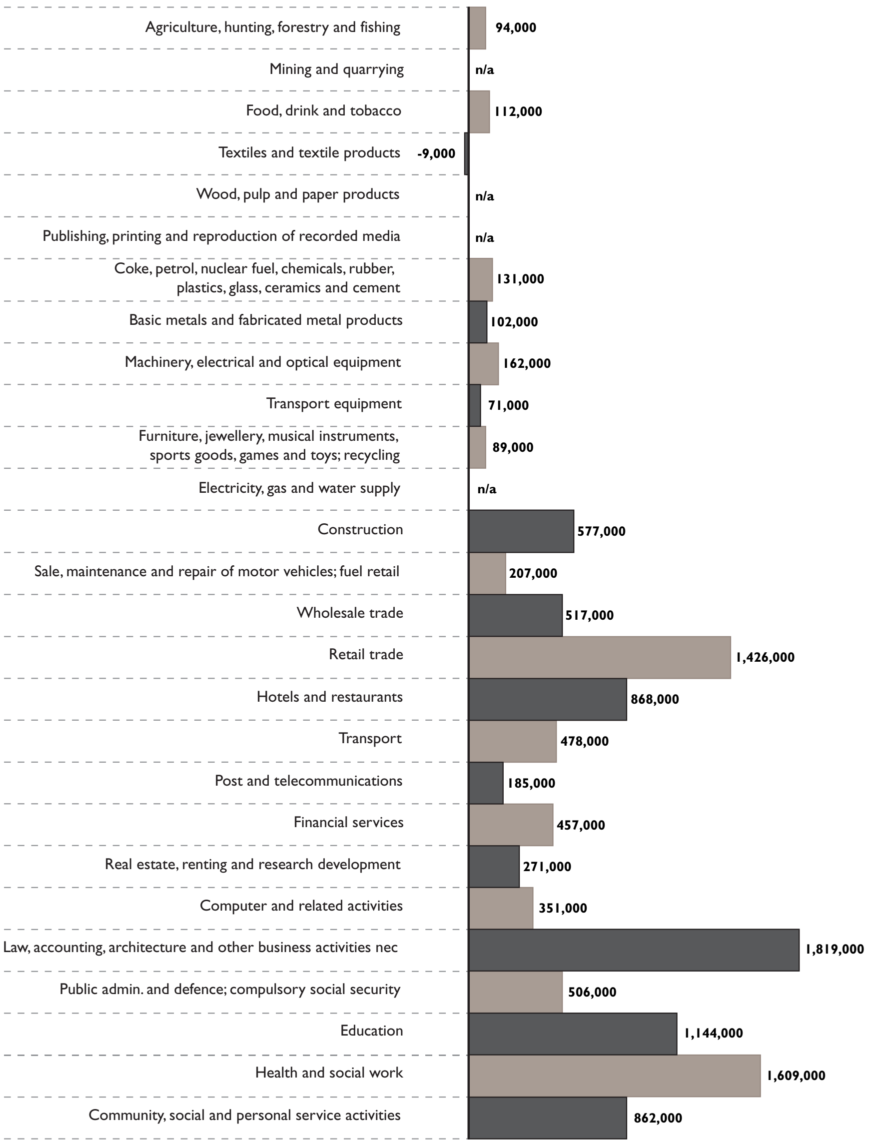
1.4 SKILL DEMAND

1.4.1 Employment growth and total requirement

Sectors which are forecast to grow fast in employment terms, such as Law, accounting, architecture, and other business activities nec (forecast employment growth of 1.6 per cent per annum between 2004 and 2014 (see figure 1.3)) have among the largest employment requirements over the 2004 to 2014 period.

Even sectors with falling total employment may need to recruit large numbers of new workers to replace those who have left through retirement or moved to work in other sectors. Thus total employment in the Basic metals and fabricated metal products sector is forecast to fall by 1.2 per cent per annum between 2004 and 2014 (see Figure 1.3), yet during that ten year period the sector will still require 102,000 new workers (see Figure 1.12 below). A similar situation of a workforce declining in size while simultaneously requiring a substantial number of new workers to meet replacement demand is also forecast to occur in the Food, drink and tobacco sector over the 2004 to 2014 period.

Figure 1.12: Total employment requirement, 2004–2014



Source: IER (2006)

1.4.2 Training

Measuring the quantity of training undertaken by companies is not simple. The most commonly used measure of training undertaken is the proportion of staff trained in the past 13 weeks (a question asked by the Labour Force Survey). However, it is also important to determine what kind of training has taken place (for example high-level, job-specific training is more likely to have an impact on productivity and business outcomes than induction training). More detailed data on the type of training undergone is available from the National Skills Surveys (i.e. The National Employer Skills Survey 2005 in England, Future Skills Wales 2005 survey, Northern Ireland Skills Monitoring Survey 2005, Future Skills Scotland 2006). The National Skills Surveys also ask companies whether they formally plan their training needs and intentions as a proxy for measuring the importance of skills and training within the company culture.

Formal planning

It is notable that public sector dominated sectors (Public administration and defence, compulsory social security; Education; and Health and social work) are most likely to have a training budget, as illustrated by Table 1.22. This suggests organisational culture as well as operational need is an important variable in determining the attitude towards training. The Agriculture, hunting, forestry, fishing sector is the least likely to have a formal training budget, which is associated with the relative dearth of larger companies in the sector.

Table 1.22: Proportion of establishments with training budget, England (% of total)

Sector	% of total establishments**	Rank
Agriculture, hunting, forestry, fishing	15	(27)
Mining and quarrying	48	(6)
Food, drink and tobacco	33	(9)
Textiles and textile products	17	(26)
Wood, pulp and paper products	19	(25)
Publishing, printing and reproduction of recorded media	22	(22)
Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement	32	(13)
Basic metals and fabricated metal products	22	(21)
Machinery, electrical and optical equipment	27	(18)
Transport equipment	27	(16)
Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	19	(24)
Electricity, gas, water supply	55	(4)
Construction	20	(23)
Sale, maintenance and repair of motor vehicles; fuel retail	27	(17)
Wholesale trade	28	(15)
Retail trade	24	(20)
Hotels, restaurants	26	(19)
Transport	31	(14)
Post and telecommunications	33	(10)
Financial services	51	(5)
Real estate, renting and research and development	39	(7)
Computer and related activities	32	(11)
Law, accounting, architecture and other business activities nec	36	(8)
Public admin and defence; compulsory social security	79	(1)
Education	75	(2)
Health and social work	60	(3)
Community, social, personal service activities	32	(12)
Whole economy	33	

*** Percentages have been rounded, but rankings reflect accurate values*
Source: NESS (2005)

Incidence

As shown in Table 1.23, sectors with a high proportion of organisations that have a formal training budget are more likely to have trained their workers in the last 13 weeks: public sector dominated sectors (Public administration and defence, compulsory social security; Education; and Health and social work) are again the highest ranked in terms of the proportion of workers trained. Similarly, sectors such as Agriculture, hunting, forestry, fishing and Textiles and textile products, that have a small proportion of organisations with a training budget, are the least likely to have trained their workers in the last 13 weeks.

Table 1.23: Proportion of workers trained in the last 13 weeks, UK (% of total)

Sector	% of total workers	Rank
Agriculture, hunting, forestry, fishing	10.5	(26)
Mining and quarrying	29.2	(6)
Food, drink and tobacco	20.3	(16)
Textiles and textile products	8.1	(27)
Wood, pulp and paper products	16.1	(22)
Publishing, printing and reproduction of recorded media	15.6	(23)
Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement	22.6	(13)
Basic metals and fabricated metal products	17.0	(21)
Machinery, electrical and optical equipment	21.8	(14)
Transport equipment	22.9	(11)
Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	13.3	(25)
Electricity, gas, water supply	34.1	(5)
Construction	18.3	(20)
Sale, maintenance and repair of motor vehicles; fuel retail	19.0	(18)
Wholesale trade	15.5	(24)
Retail trade	20.7	(15)
Hotels, restaurants	20.1	(17)
Transport	18.7	(19)
Post and telecommunications	22.9	(12)
Financial services	35.3	(4)
Real estate, renting and research and development	27.2	(7)
Computer and related activities	23.1	(10)
Law, accounting, architecture and other business activities nec	26.3	(8)
Public admin and defence; compulsory social security	41.0	(3)
Education	41.6	(2)
Health and social work	46.4	(1)
Community, social, personal service activities	23.9	(9)
Whole economy	28.0	

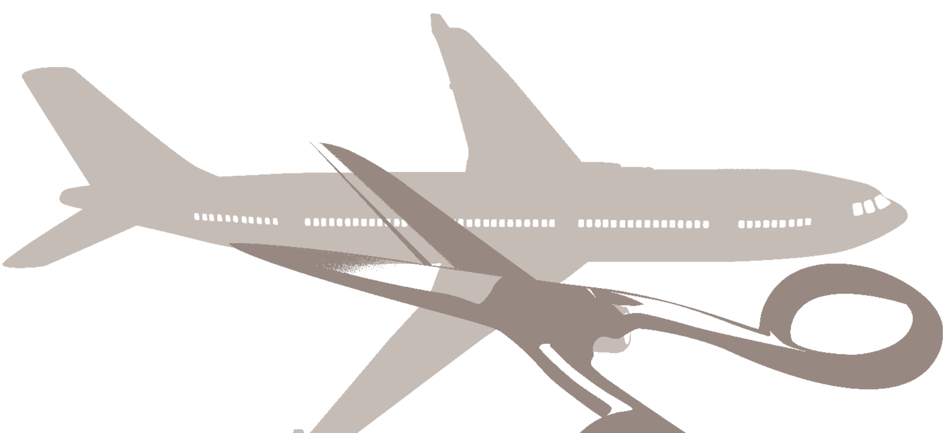
Source: Labour Force Survey (2005)

Managerial training and skill levels are a vital component of productivity, but the need for training for managers varies widely by sector. For example, research indicates that managers in the Food, drink, and tobacco sector are likely to have higher levels of training than their counterparts in the textile manufacturing sector.[30] As Table 1.24 shows, the public sector dominated sectors (Public administration and defence, compulsory social security; Education; and Health and social work) are again the highest ranked, whilst managers in the Construction; Agriculture, hunting, forestry and fishing; and Wood, pulp and paper products sectors are least likely to receive training.

[30] *For more detailed analysis of training needs broken down by the 27 industrial categories used in this report see Bosworth, D. and Wilson, R. (2005)* Sectoral Management Priorities: Management Skills and Capacity. *Warwick: Institute of Employment Research (IER), Warwick University.*
http://www.ssda.org.uk/ssda/pdf/Research%20report%208.pdf

Table 1.24: Proportion of establishments training managers, England (% of total)		
Sector	**% of total establishments****	**Rank**
Agriculture, hunting, forestry, fishing	16	(26)
Mining and quarrying	45	(6)
Food, drink and tobacco	43	(7)
Textiles and textile products	20	(22)
Wood, pulp and paper products	16	(25)
Publishing, printing and reproduction of recorded media	18	(24)
Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement	37	(8)
Basic metals and fabricated metal products	21	(20)
Machinery, electrical and optical equipment	34	(10)
Transport equipment	26	(14)
Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	22	(19)
Electricity, gas, water supply	45	(5)
Construction	15	(27)
Sale, maintenance and repair of motor vehicles; fuel retail	19	(23)
Wholesale trade	24	(18)
Retail trade	27	(13)
Hotels, restaurants	31	(11)
Transport	26	(15)
Post and telecommunications	36	(9)
Financial services	49	(4)
Real estate, renting and research and development	28	(12)
Computer and related activities	21	(21)
Law, accounting, architecture and other business activities nec	24	(16)
Public admin and defence; compulsory social security	76	(1)
Education	71	(2)
Health and social work	62	(3)
Community, social, personal service activities	24	(17)
Whole economy	28	

*** Percentages have been rounded, but rankings reflect accurate values*
Source: Bosworth and Wilson (2005) based on NESS (2003)



1.5 SKILL IMBALANCE

1.5.1 Earnings

Wages vary widely by sector as shown by Table 1.25, with workers in the Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement sector having the highest median weekly wage, and workers in the Hotels and restaurants sector the lowest. Wages bear a close relationship to productivity particularly in sectors where production is in private sector hands and companies operate in competitive product markets. The sectors with the highest wage increases between 2004 and 2005 are Electricity, gas, water supply; Food, drink and tobacco; and Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement, whilst the Hotel and restaurant; Wholesale trade; and Real estate, renting and research and development sectors have experienced a decrease in median earnings.

Table 1.25: Weekly earnings (% of total)

Sector	Median earnings	% increase 2004 to 2005	Rank
Agriculture, hunting, forestry, fishing	254.9	3.3	(25)
Mining and quarrying	447.5	5.8	(6)
Food, drink and tobacco	333.5	7.9	(17)
Textiles and textile products	277.9	5.5	(24)
Wood, pulp and paper products	316.6	3.1	(21)
Publishing, printing and reproduction of recorded media	386.3	0.6	(10)
Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement	631.2	6.6	(1)
Basic metals and fabricated metal products	361.7	2.2	(15)
Machinery, electrical and optical equipment	385.0	0.5	(11)
Transport equipment	462.0	4.1	(5)
Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	319.0	3.3	(20)
Electricity, gas, water supply	483.3	8.4	(4)
Construction	409.9	3.4	(9)
Sale, maintenance and repair of motor vehicles; fuel retail	325.8	0.2	(19)
Wholesale trade	354.6	-0.2	(16)
Retail trade	177.5	2.4	(26)
Hotels, restaurants	169.8	-4.2	(27)
Transport	374.0	0.9	(14)
Post and telecommunications	384.0	1.2	(12)
Financial services	434.1	3.0	(7)
Real estate, renting and research and development	383.3	-0.2	(13)
Computer and related activities	611.3	2.7	(2)
Law, accounting, architecture and other business activities nec	562.1	5.5	(3)
Public admin and defence; compulsory social security	423.7	2.9	(8)
Education	331.5	4.2	(18)
Health and social work	293.3	2.9	(22)
Community, social, personal service activities	287.3	0.9	(23)
Whole economy	334.8	2.6	

Source: ASHE (2005)

1.5.2 Vacancies

Vacancies are used as a proxy for the demand for labour. However, the measure also includes those moving within the sector as well as replacement demand. Therefore, a high number of vacancies does not necessarily suggest high employment growth. Indeed, a high level of vacancies can be associated with declining employment.

While vacancies represent the normal workings of the labour market, hard-to-fill vacancies are indicative of problems in the labour market. Hard-to-fill vacancies occur when an employer experiences difficulties in recruiting, which could be due to a number of reasons such as a low number of applicants, poor pay or low numbers of applicants with appropriate skills.

Hard-to-fill vacancies that are a problem because of skills related reasons are termed skills shortage vacancies. There may be a low number of applicants with the required skills, or the applicants may lack work experience or qualifications.

As illustrated in Table 1.26, in England the Public administration and defence; compulsory social security; Health and social work; and Education sectors saw the largest number of establishments report vacancies, while in Wales Hotels and restaurants; Education; and Community, social, personal service activities were the sectors where the highest proportion of establishments reported vacancies. In both countries, establishments in the Agriculture, hunting, forestry and fishing; Construction; and Wholesale trade sectors were the least likely to report vacancies.

It appears that, on average, Welsh establishments are more likely to report vacancies than their English counterparts.

Table 1.26: Percentage of establishments reporting vacancies, England and Wales (% of total)

Sector	England	Rank	Wales	Rank
Agriculture, hunting, forestry, fishing	7.2	(27)	3.6	(20)
Mining and quarrying	15.1	(21)	*	*
Food, drink and tobacco	19.8	(6)	*	*
Textiles and textile products	17.5	(13)	*	*
Wood, pulp and paper products	15.3	(20)	*	*
Publishing, printing and reproduction of recorded media	15.9	(17)	26.3	(4)
Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement	17.0	(15)	15.2	(17)
Basic metals and fabricated metal products	17.1	(14)	21.1	(10)
Machinery, electrical and optical equipment	18.2	(10)	21.7	(8)
Transport equipment	14.9	(22)	*	*
Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	16.5	(16)	17.6	(13)
Electricity, gas, water supply	25.4	(4)	*	*
Construction	12.6	(26)	13.0	(18)
Sale, maintenance and repair of motor vehicles; fuel retail	14.7	(23)	17.1	(15)
Wholesale trade	13.0	(25)	11.9	(19)
Retail trade	14.3	(24)	17.2	(14)
Hotels, restaurants	20.3	(5)	31.5	(1)
Transport	19.4	(7)	21.7	(9)
Post and telecommunications	18.3	(9)	18.5	(11)
Financial services	19.3	(8)	15.4	(16)
Real estate, renting and research and development	15.5	(18)	21.8	(7)
Computer and related activities	15.3	(19)	17.9	(12)
Law, accounting, architecture and other business activities nec	17.7	(11)	22.9	(6)
Public admin and defence; compulsory social security	32.8	(1)	*	*
Education	27.4	(2)	29.3	(2)
Health and social work	26.9	(3)	24.2	(5)
Community, social, personal service activities	17.7	(12)	27.6	(3)
Whole economy	17.3		21.5	

Sources: NESS (2005), FSW (2005). Data for Scotland and Northern Ireland either unavailable or suppressed for reasons of confidentiality

As Table 1.27 shows, in England the proportion of hard-to-fill vacancies as a percentage of all vacancies was largest in the sectors of: Agriculture, hunting, forestry and fishing; Basic metals and fabricated metal products; and Wood, pulp and paper products, which all reported levels of hard-to-fill vacancies above 50 per cent. The lowest proportion of hard-to-fill vacancies is found in the Electricity, gas, water supply; Mining and quarrying; and Computer and related activities sectors. Construction is the sector with the highest proportion of hard-to-fill vacancies in both Northern Ireland and Wales (80.7% and 71.6% respectively).

In Wales the Computer and related activities sectors also reports a high proportion of hard-to-fill vacancies. The sectors with the lowest proportion of hard-to-fill vacancies in Wales are: Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement; Law, accounting, architecture and other business activities; and Education. In Northern Ireland, hard-to-fill vacancies account for a high proportion of all vacancies in the Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement; and Law, accounting, architecture and other business activities sectors. Sectors with a low proportion of hard-to-fill vacancies in Northern Ireland are: Community, social, personal service activities; Machinery, electrical and optical equipment; and Education.

Table 1.27: Hard to fill vacancies as a % of all vacancies, England, Wales, and Northern Ireland

Sector	England	Rank	Wales**	Rank	Northern Ireland	Rank
Agriculture, hunting, forestry, fishing	56.1	(1)	33.3	(14)	*	*
Mining and quarrying	20.0	(26)	*	*	*	*
Food, drink and tobacco	23.8	(24)	*	*	*	*
Textiles and textile products	43.8	(6)	*	*	*	*
Wood, pulp and paper products	52.2	(3)	*	*	*	*
Publishing, printing and reproduction of recorded media	26.8	(19)	24.2	(17)	*	*
Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement	30.4	(18)	18.4	(20)	68.6	(3)
Basic metals and fabricated metal products	54.5	(2)	50.0	(4)	*	*
Machinery, electrical and optical equipment	36.0	(14)	32.0	(15)	30.6	(13)
Transport equipment	24.1	(23)	*	*	*	*
Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	40.0	(7)	40.0	(9)	*	*
Electricity, gas, water supply	14.3	(27)	*	*	*	*
Construction	49.2	(4)	71.6	(1)	80.7	(1)
Sale, maintenance and repair of motor vehicles; fuel retail	44.3	(5)	49.4	(7)	54.4	(6)
Wholesale trade	37.3	(10)	50.0	(4)	54.6	(5)
Retail trade	31.7	(16)	28.5	(16)	49.1	(9)
Hotels, restaurants	36.8	(13)	46.6	(8)	53.2	(7)
Transport	35.0	(15)	58.8	(2)	42.8	(11)
Post and telecommunications	25.0	(22)	50.0	(4)	*	*
Financial services	26.5	(21)	36.7	(11)	58.6	(4)
Real estate, renting and research and development	31.1	(17)	35.6	(12)	46.1	(10)
Computer and related activities	23.1	(25)	56.7	(3)	*	*
Law, accounting, architecture and other business activities nec	38.0	(9)	19.7	(19)	68.7	(2)
Public admin and defence; compulsory social security	37.2	(11)	*	*	*	*
Education	26.7	(20)	23.0	(18)	34.8	(12)
Health and social work	37.1	(12)	34.9	(13)	50.5	(8)
Community, social, personal service activities	38.1	(8)	38.4	(10)	26.8	(14)
Whole economy	35.5		35.0		51.8	

Sources: NESS (2005), FSW (2005), NISMS (2005).
***Data unavailable beyond 0 decimal places therefore some sectors are displayed as having the same rank.*
Data for Scotland and Northern Ireland either unavailable or suppressed for reasons of confidentiality

As illustrated by Table 1.28, of the vacancies reported in England, skills shortage vacancies are most reported by employers in the Basic metals and fabricated metal products; Wood, pulp and paper products; and Construction sectors; whilst the sectors least likely to report such vacancies are the Electricity, gas and water supply; Food, drink and tobacco; and Retail trade sectors. In Wales, as in England, the Construction; and Basic metals and fabricated metal products sectors report a large number of skills-shortage vacancies, as does Computer and related activities. The sectors least likely to have skills-shortage vacancies in Wales are: Publishing, printing and reproduction of recorded media; Health and social work; Hotels and restaurants; and Education.

Table 1.28: Skills-shortage vacancies as a % of all vacancies, England and Wales

Sector	England	Rank	Wales	Rank
Agriculture, hunting, forestry and fishing	34.0	(5)	13.9	(12)
Mining and quarrying	20.4	(18)	*	*
Food, drink and tobacco	16.7	(26)	*	*
Textiles and textile products	31.5	(7)	*	*
Wood, pulp and paper products	42.8	(2)	*	*
Publishing, printing and reproduction of recorded media	23.1	(15)	6.4	(19)
Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement	24.6	(13)	15.0	(11)
Basic metals and fabricated metal products	46.2	(1)	37.9	(3)
Machinery, electrical and optical equipment	29.4	(10)	17.1	(9)
Transport equipment	20.0	(20)	*	*
Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	27.8	(11)	11.4	(13)
Electricity, gas and water supply	12.8	(27)	*	*
Construction	36.4	(3)	49.1	(1)
Sale, maintenance and repair of motor vehicles; fuel retail	35.0	(4)	25.0	(7)
Wholesale trade	30.0	(9)	33.9	(5)
Retail trade	17.6	(25)	10.5	(14)
Hotels and restaurants	20.6	(17)	9.4	(17)
Transport	23.5	(14)	16.3	(10)
Post and telecommunications	18.2	(23)	36.9	(4)
Financial services	20.3	(19)	25.4	(6)
Real estate, renting and research and development	19.8	(21)	22.9	(8)
Computer and related activities	19.3	(22)	40.9	(2)
Law, accounting, architecture and other business activities nec	30.5	(8)	10.0	(15)
Public admin and defence; compulsory social security	32.9	(6)	*	*
Education	17.8	(24)	9.5	(16)
Health and social work	23.0	(16)	8.0	(18)
Community, social and personal service activities	26.1	(12)	*	*
Whole economy	24.9		*	

Sources: NESS (2005), FSW (2005).
Data for Scotland and Northern Ireland either unavailable or suppressed for reasons of confidentiality

1.5.3 Skill gaps

Employers in the Hotels and restaurants; the Furniture, jewellery, musical instruments, sports goods, games and toys, recycling sector; the Food, drink and tobacco sector; and the Retail trade were among the most likely to believe that one or more members of their staff lacked the skills necessary to perform their job competently, as illustrated in Table 1.29. The sectors in which employers were least likely to report skill gaps were Computer and related activities; Mining and quarrying; and Textiles and textile products.

Table 1.29: Skills gaps as a % of employment, England

Sector	Percentage	Rank
Agriculture, hunting, forestry, fishing	4.7	(21)
Mining and quarrying	4.0	(26)
Food, drink and tobacco	8.4	(2)
Textiles and textile products	4.2	(25)
Wood, pulp and paper products	6.5	(8)
Publishing, printing and reproduction of recorded media	5.6	(11)
Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement	7.4	(5)
Basic metals and fabricated metal products	6.4	(9)
Machinery, electrical and optical equipment	4.5	(22)
Transport equipment	6.8	(7)
Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	8.0	(4)
Electricity, gas, water supply	5.2	(15)
Construction	5.4	(12)
Sale, maintenance and repair of motor vehicles; fuel retail	6.2	(10)
Wholesale trade	5.2	(17)
Retail trade	8.1	(3)
Hotels, restaurants	9.6	(1)
Transport	5.2	(16)
Post and telecommunications	4.2	(24)
Financial services	6.9	(6)
Real estate, renting and research and development	4.7	(20)
Computer and related activities	3.6	(27)
Law, accounting, architecture and other business activities nec	5.2	(13)
Public admin and defence; compulsory social security	4.8	(19)
Education	4.4	(23)
Health and social work	5.2	(14)
Community, social, personal service activities	5.1	(18)
Whole Economy	5.9	

Source: NESS (2005)
Data for Scotland, Wales, Northern Ireland either unavailable or suppressed for reasons of confidentiality

2 SECTOR PROFILES

This section is organised by sector. For each of the 27 sectors information is presented on its size, economic performance, workforce composition, skill demand and skill imbalance.[31]

[31] *To see data displayed by indicator see Appendix A.*

2.1 AGRICULTURE, HUNTING, FORESTRY AND FISHING

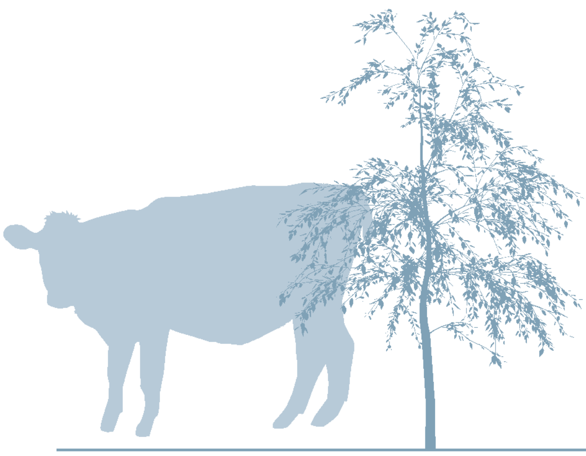
Sector definition

- Standard Industrial Classification 01, 02 and 05.[32]
- Includes growing of crops, farming of animals, agricultural and animal husbandry services, hunting, trapping and game propagation, forestry, logging and related services, and fishing.

Sector issues

- Relatively small sector in terms of output and employment, past and anticipated growth slower than the whole economy.
- Productivity below that of the whole economy in the UK, but competitive when compared to the EU. However, future growth per annum is forecast to be above the rate for the UK as a whole.
- Relatively little new business creation although this sector does have one of the highest proportions of small businesses.
- Sector with one of the oldest age profiles and lowest qualification profiles, and the least ethnically diverse.
- Very few employees receive training (according to LFS measures), but NESS measures indicate training in line with whole economy.
- Weekly earnings in the sector are very low.
- Hard-to-fill and skill shortage vacancies are a concern for the sector, but skill gaps less so.

		Whole economy	Sector	Rank
Indicators of sector size – ranking in bracket (out of 27 sectors)				
Output and output growth				
Output (% of whole economy, 2004)	IER, 2006	100	1.1	(23)
Past growth (% per annum, 1994-2004)		3.0	0.3	(20)
Future growth (% per annum, 2004-2014)		2.4	1.2	(21)
Workforce size				
Total (000s)	LFS, 2005	28,025	386	(20)
Total (% of whole economy)		100	1.4	(20)
Indicators of economic performance – ranking in bracket (out of 27 sectors)				
Productivity				
Output per capita per hour (£, 2004)	Experian, 2005	19.0	11.4	(27)
Future growth (% per annum, 2004-2014)	IER, 2006	2.0	2.8	(7)
International productivity				
Index of UK to US (2003)	Experian, 2006	79	86	(11)
Index of UK to EU (2003)		92	159	(3)
Business creation				
VAT registrations (% of stock)	IDBR, 2004	10	3	(26)
VAT deregistrations (% of stock)		10	6	(25)
Stock		1,819,860	140,900	(5)



[32] *Represented by Lantra (the Sector Skills Council for the environmental and land-based sector). For information on proportion of SSC coverage of this sector, see Appendix B.*

		Whole economy	Sector	Rank
Indicators of workforce composition – ranking in bracket (out of 27 sectors)				
Size of firms				
% of small businesses (1 to 49 employees)	ABI, 2004	96	98	(4)
Profile of the workforce				
% male	LFS, 2005	54	75	(10)
% Black and Minority Ethnic		8	1	(27)
% aged over 45		38	50	(1)
% managers aged over 45		42	55	(5)
% part-time		25	19	(8)
% self-employed		13	50	(1)
Occupational structure				
% of managers in workforce	LFS, 2005	15	12	(12)
Workforce qualifications				
% qualified to level 3 or above	LFS, 2005	53	33	(26)
% of managers qualified to level 4 or above		42	28	(24)
Indicators of skill demand – ranking in bracket (out of 27 sectors)				
Employment growth				
Past growth (% per annum, 1994-2004)	IER, 2006	1.2	-3.0	(25)
Future growth (% per annum, 2004-2014)		0.4	-1.6	(24)
Total employment requirement (000s, 2004-2014)		12,194	94	(24)
Training				
IIP achievements (% of establishments)	SfBn, 2005	28	8	(25)
Participation in last 13 weeks (% of workforce)	LFS, 2005	28	10	(26)
Training budget (% of establishments)	NESS, 2005	33	15	(27)
Training days in last 12 months (per employee)		9	8	(13)
Training spend in last 12 months (per employee)		185	173	(14)
Training staff in last 12 months (% of employees)		70.3	65.7	(11)
Managerial training (% of establishments)	Bosworth and Wilson (2005)	28	16	(26)
Indicators of skills imbalance – ranking in bracket (out of 27 sectors)				
Earnings				
Gross weekly earnings (£)	ASHE, 2005	334.8	254.9	(25)
Vacancies				
Notified to Jobcentre Plus (% of total)	JCP, May 2006	100.0	0.6	(10)
Hard-to-fill vacancies (% of all vacancies)	NESS, 2005	35.5	56.1	(1)
Skill shortage vacancies (% of all vacancies)		24.9	34.0	(5)
Skills gaps				
Skills gaps (% of employment)	NESS, 2005	5.9	4.7	(21)

2.2 MINING AND QUARRYING

Sector definition

- Standard Industrial Classification 10,11,12,13 and 14.[33]
- Includes the mining of coal, extraction of crude petroleum and natural gas, mining of uranium, thorium and metal ores and quarrying.

Sector issues

- Mining and quarrying is the smallest of the sectors in terms of output and employment, with employment of just 106,000, which has been declining.
- Productivity is very high, both compared to the UK average and against the equivalent sector in the US and EU. However, future productivity is forecast to weaken.
- There is a relatively high risk of business deregistrations in the sector, with a business base that is already one of the smallest in the economy.
- The workforce is predominantly male, white and over 45 compared to the whole economy.
- Elements of workforce training outperform other sectors including the proportion of establishments with a training budget and average training spend. However, average days spent training is among the lowest.
- Vacancies (all, hard-to-fill and skill shortage) are not a significant issue in the sector, nor are skill gaps.

		Whole economy	Sector	Rank
Indicators of sector size – ranking in bracket (out of 27 sectors)				
Output and output growth				
Output (% of whole economy, 2004)	IER, 2006	100.0	0.4	(27)
Past growth (% per annum, 1994-2004)		3.0	-2.6	(26)
Future growth (% per annum, 2004-2014)		2.4	-2.3	(26)
Workforce size				
Total (000s)	LFS, 2005	28,025	106	(27)
Total (% of whole economy)		100.0	0.4	(27)
Indicators of economic performance – ranking in bracket (out of 27 sectors)				
Productivity				
Output per capita per hour (£, 2004)	Experian, 2005	19	174	(1)
Future growth (% per annum, 2004-2014)	IER, 2006	2.0	-0.4	(27)
International productivity				
Index of UK to US (2003)	Experian, 2006	79	333	(1)
Index of UK to EU (2003)		92	196	(2)
Business creation				
VAT registrations (% of stock)	IDBR, 2004	10	7	(19)
VAT deregistrations (% of stock)		10	12	(5)
Stock		1,819,860	1,290	(25)

[33] *Represented by Cogent (the Sector Skills Council for chemicals, nuclear, oil and gas, petroleum and polymers) and ProSkills (the Sector Skills Council for the process and manufacturing sector). For information on proportion of SSC coverage of this sector, see Appendix B.*

		Whole economy	Sector	Rank
Indicators of workforce composition – ranking in bracket (out of 27 sectors)				
Size of firms				
% of small businesses (1 to 49 employees)	ABI, 2004	96	92	(20)
Profile of the workforce				
% male	LFS, 2005	54	86	(3)
% Black and Minority Ethnic		8	3	(25)
% aged over 45		38	48	(3)
% managers aged over 45		42	n/a	n/a
% part-time		25	5	(26)
% self-employed		13	5	(19)
Occupational structure				
% of managers in workforce	LFS, 2005	15	17	(13)
Workforce qualifications				
% qualified to level 3 or above	LFS, 2005	53	58	(9)
% of managers qualified to level 4 or above		42	n/a	n/a
Indicators of skill demand – ranking in bracket (out of 27 sectors)				
Employment growth				
Past growth (% per annum, 1994-2004)	IER, 2006	1.2	-1.8	(21)
Future growth (% per annum, 2004-2014)		0.4	-1.9	(26)
Total employment requirement (000s, 2004-2014)		12,194	n/a	n/a
Training				
IIP achievements (% of establishments)	SfBn, 2005	28	24	(6)
Participation in last 13 weeks (% of workforce)	LFS, 2005	28	29	(6)
Training budget (% of establishments)	NESS, 2005	33	48	(6)
Training days in last 12 months (per employee)		9	6	(22)
Training spend in last 12 months (per employee)		185	254	(5)
Training staff in last 12 months (% of employees)		70.3	76.5	(5)
Managerial training (% of establishments)	Bosworth and Wilson (2005)	28	45	(6)
Indicators of skills imbalance – ranking in bracket (out of 27 sectors)				
Earnings				
Gross weekly earnings (£)	ASHE, 2005	334.8	447.5	(6)
Vacancies				
Notified to Jobcentre Plus (% of total)	JCP, May 2006	100.0	0.1	(27)
Hard-to-fill vacancies (% of all vacancies)	NESS, 2005	35.5	20.0	(26)
Skill shortage vacancies (% of all vacancies)		24.9	20.4	(18)
Skills gaps				
Skills gaps (% of employment)	NESS, 2005	5.9	4.0	(26)

2.3 FOOD, DRINK AND TOBACCO

Sector definition

- Standard Industrial Classification 15 and 16.[34]
- Includes the production, processing and preserving of meat, fish, fruits, vegetables; manufacturing of oils, fats, dairy products, grainmill products, animal feeds, beverages and tobacco.

Sector issues

- Food, drink and tobacco is one of the smallest sectors in terms of output.
- Productivity is high in comparison to the UK average and against the equivalent sector in the US and EU. Future productivity growth is forecast to be similar to that of the whole economy.
- There is a relatively low level of new business creation in the sector.
- There is a below average proportion of businesses that are small in the sector, ranked the fourth lowest in the economy.
- The workforce profile is generally in line with the whole economy in respect of age and gender. Ethnic minorities form a slightly greater proportion of the workforce than average.
- There are fewer part time and self-employed workers than the all sector average.
- The qualification level of the workforce is the fourth lowest of all sectors.
- Vacancies, particularly hard-to-fill and skill shortages are not an issue in the sector as they are ranked fourth and second lowest respectively, but skills gaps are an issue, ranking second of all sectors.

		Whole economy	Sector	Rank
Indicators of sector size – ranking in bracket (out of 27 sectors)				
Output and output growth				
Output (% of whole economy, 2004)	IER, 2006	100.0	2.4	(18)
Past growth (% per annum, 1994-2004)		3.0	0.1	(21)
Future growth (% per annum, 2004-2014)		2.4	0.8	(24)
Workforce size				
Total (000s)	LFS, 2005	28,025	378	(21)
Total (% of whole economy)		100.0	1.3	(21)
Indicators of economic performance – ranking in bracket (out of 27 sectors)				
Productivity				
Output per capita per hour (£, 2004)	Experian, 2005	19	27	(7)
Future growth (% per annum, 2004-2014)	IER, 2006	2.0	1.9	(15)
International productivity				
Index of UK to US (2003)	Experian, 2006	79	104	(6)
Index of UK to EU (2003)		92	110	(7)
Business creation				
VAT registrations (% of stock)	IDBR, 2004	10	7	(20)
VAT deregistrations (% of stock)		10	9	(19)
Stock		1,819,860	6,945	(23)

[34] *Represented by Improve Ltd (the Sector Skills Council for food and drink). For information on proportion of SSC coverage of this sector, see Appendix B.*

		Whole economy	Sector	Rank
Indicators of workforce composition – ranking in bracket (out of 27 sectors)				
Size of firms				
% of small businesses (1 to 49 employees)	ABI, 2004	96	84	(24)
Profile of the workforce				
% male	LFS, 2005	54	68	(15)
% Black and Minority Ethnic		8	9	(8)
% aged over 45		38	37	(20)
% managers aged over 45		42	39	(19)
% part-time		25	10	(18)
% self-employed		13	3	(24)
Occupational structure				
% of managers in workforce	LFS, 2005	15	17	(16)
Workforce qualifications				
% qualified to level 3 or above	LFS, 2005	53	37	(24)
% of managers qualified to level 4 or above		42	47	(13)
Indicators of skill demand – ranking in bracket (out of 27 sectors)				
Employment growth				
Past growth (% per annum, 1994-2004)	IER, 2006	1.2	-0.6	(18)
Future growth (% per annum, 2004-2014)		0.4	-1.1	(19)
Total employment requirement (000s, 2004-2014)		12,194	112	(22)
Training				
IIP achievements (% of establishments)	SfBn, 2005	28	23	(8)
Participation in last 13 weeks (% of workforce)	LFS, 2005	28	20	(16)
Training budget (% of establishments)	NESS, 2005	33	33	(9)
Training days in last 12 months (per employee)		9	7	(16)
Training spend in last 12 months (per employee)		185	146	(22)
Training staff in last 12 months (% of employees)		70.3	57.4	(19)
Managerial training (% of establishments)	Bosworth and Wilson (2005)	28	43	(7)
Indicators of skills imbalance – ranking in bracket (out of 27 sectors)				
Earnings				
Gross weekly earnings (£)	ASHE, 2005	334.8	333.5	(17)
Vacancies				
Notified to Jobcentre Plus (% of total)	JCP, May 2006	100.0	0.7	(15)
Hard-to-fill vacancies (% of all vacancies)	NESS, 2005	35.5	23.8	(24)
Skill shortage vacancies (% of all vacancies)		24.9	16.7	(26)
Skills gaps				
Skills gaps (% of employment)	NESS, 2005	5.9	8.4	(2)

2.4 TEXTILES AND TEXTILE PRODUCTS

Sector definition

- Standard Industrial Classification 17, 18 and 19.[35]
- Includes the manufacture of textiles, manufacture of wearing apparel, dressing and dyeing of fur, and manufacture of leather and leather products.

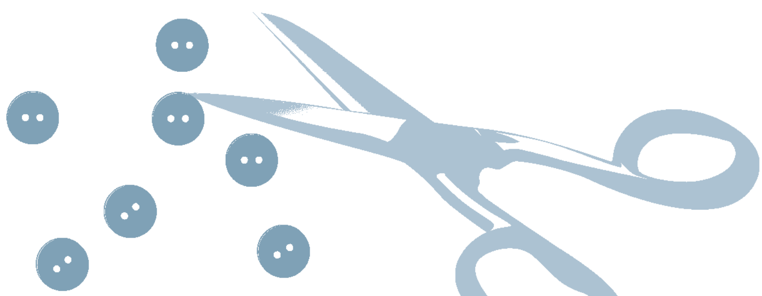
Sector issues

- Textiles and textile products is one of the smallest sectors of the economy, in terms of both output and employment. Output growth has previously declined, and is forecast to decline at a significant rate and the business base is contracting (greater deregistrations than registrations).
- Productivity is below average, compared to the UK whole economy and the equivalent sector in the US and EU.
- Textile and textile products is one of the most ethnically diverse sectors of the economy, and has an above-average representation of females, yet below average part time employment.
- However, the workforce is relatively old and has the lowest proportion of workers qualified to NVQ level 3 and above of any sector.
- Employment is contracting, in terms of both absolute and net new labour requirement.
- There is relatively little training undertaken in the sector, in terms of average spend, days and proportion of staff.
- Earnings are below the whole economy average, while hard-to-fill and skill shortage vacancies are of concern; however, few skills gaps are reported in the sector.

		Whole economy	Sector	Rank
Indicators of sector size – ranking in bracket (out of 27 sectors)				
Output and output growth				
Output (% of whole economy, 2004)	IER, 2006	100.0	0.6	(26)
Past growth (% per annum, 1994-2004)		3.0	-5.6	(27)
Future growth (% per annum, 2004-2014)		2.4	-4.4	(27)
Workforce size				
Total (000s)	LFS, 2005	28,025	164	(26)
Total (% of whole economy)		100.0	0.6	(26)
Indicators of economic performance – ranking in bracket (out of 27 sectors)				
Productivity				
Output per capita per hour (£, 2004)	Experian, 2005	19	14	(22)
Future growth (% per annum, 2004-2014)	IER, 2006	2.0	0.7	(25)
International productivity				
Index of UK to US (2003)	Experian, 2006	79	64	(22)
Index of UK to EU (2003)		92	76	(19)
Business creation				
VAT registrations (% of stock)	IDBR, 2004	10	8	(14)
VAT deregistrations (% of stock)		10	12	(6)
Stock		1,819,860	10,280	(22)

[35] *Represented by Skillfast-UK (the Sector Skills Council for apparel, footwear, textiles and related businesses). For information on proportion of SSC coverage of this sector, see Appendix B.*

		Whole economy	Sector	Rank
Indicators of workforce composition – ranking in bracket (out of 27 sectors)				
Size of firms				
% of small businesses (1 to 49 employees)	ABI, 2004	96	94	(15)
Profile of the workforce				
% male	LFS, 2005	54	48	(23)
% Black and Minority Ethnic		8	14	(2)
% aged over 45		38	44	(5)
% managers aged over 45		42	41	(15)
% part-time		25	18	(10)
% self-employed		13	15	(9)
Occupational structure				
% of managers in workforce	LFS, 2005	15	16	(17)
Workforce qualifications				
% qualified to level 3 or above	LFS, 2005	53	32	(27)
% of managers qualified level 4 or above		42	41	(19)
Indicators of skill demand – ranking in bracket (out of 27 sectors)				
Employment growth				
Past growth (% per annum, 1994-2004)	IER, 2006	1.2	-8.8	(27)
Future growth (% per annum, 2004-2014)		0.4	-5.0	(27)
Total employment requirement (000s, 2004-2014)		12,194	-9	(27)
Training				
IIP achievements (% of establishments)	SfBn, 2005	28	12	(20)
Participation in last 13 weeks (% of workforce)	LFS, 2005	28	8	(27)
Training budget (% of establishments)	NESS, 2005	33	17	(26)
Training days in last 12 months (per employee)		9	4	(27)
Training spend in last 12 months (per employee)		185	151	(20)
Training staff in last 12 months (% of employees)		70.3	44.6	(27)
Managerial training (% of establishments)	Bosworth and Wilson (2005)	28	20	(22)
Indicators of skills imbalance – ranking in bracket (out of 27 sectors)				
Earnings				
Gross weekly earnings (£)	ASHE, 2005	334.8	277.9	(24)
Vacancies				
Notified to Jobcentre Plus (% of total)	JCP, May 2006	100.0	0.2	(26)
Hard-to-fill vacancies (% of all vacancies)	NESS, 2005	35.5	43.8	(6)
Skill shortage vacancies (% of all vacancies)		24.9	31.5	(7)
Skills gaps				
Skills gaps (% of employment)	NESS, 2005	5.9	4.2	(25)



2.5 WOOD, PULP AND PAPER PRODUCTS

Sector definition

- Standard Industrial Classification 20 and 21.[36]
- Includes the manufacture of wood and wood products; pulp, paper and paper products.

Sector issues

- The Wood, pulp and paper products sector is one of the smallest sectors of the economy, in terms of both output and employment. Output growth has previously declined, but is forecast to grow slightly in the 2004-2014 period.
- The productivity level is average compared to the UK whole economy, but compared with the equivalent sector in the US and EU it is below average.
- The workforce is one of the least ethnically diverse in the economy and has a low level of managers over 45, and a significantly below-average representation of females.
- Part time work is also well below average.
- Employment growth has been negative in the past, and although the rate of decline is forecast to moderate it will remain one of the worst performing economic sectors in this respect.
- Median wages are also poor compared with other UK sectors.
- There is relatively little training undertaken in the sector, by all measures.
- Hard-to-fill vacancies and skills shortage vacancies are at levels among the highest of all sectors.

		Whole economy	Sector	Rank
Indicators of sector size – ranking in bracket (out of 27 sectors)				
Output and output growth				
Output (% of whole economy, 2004)	IER, 2006	100.0	0.7	(25)
Past growth (% per annum, 1994-2004)		3.0	-0.4	(25)
Future growth (% per annum, 2004-2014)		2.4	0.2	(25)
Workforce size				
Total (000s)	LFS, 2005	28,025	181	(24)
Total (% of whole economy)		100.0	0.6	(24)
Indicators of economic performance – ranking in bracket (out of 27 sectors)				
Productivity				
Output per capita per hour (£, 2004)	Experian, 2005	19	20	(14)
Future growth (% per annum, 2004-2014)	IER, 2006	2.0	1.7	(18)
International productivity				
Index of UK to US (2003)	Experian, 2006	79	62	(23)
Index of UK to EU (2003)		92	66	(24)
Business creation				
VAT registrations (% of stock)	IDBR, 2004	10	6	(23)
VAT deregistrations (% of stock)		10	7	(23)
Stock		1,819,860	10,415	(21)

[36] *Represented by Lantra (the Sector Skills Council for the environmental and land-based sector) and ProSkills (the Sector Skills Council for the process and manufacturing sector); 94 percent of the sector is not covered by a SSC. For information on proportion of SSC coverage of this sector, see Appendix B.*

		Whole economy	Sector	Rank
Indicators of workforce composition – ranking in bracket (out of 27 sectors)				
Size of firms				
% of small businesses (1 to 49 employees)	ABI, 2004	96	94	(16)
Profile of the workforce				
% male	LFS, 2005	54	82	(5)
% Black and Minority Ethnic		8	2	(26)
% aged over 45		38	39	(13)
% managers aged over 45		42	39	(20)
% part-time		25	9	(20)
% self-employed		13	9	(15)
Occupational structure				
% of managers in workforce	LFS, 2005	15	17	(15)
Workforce qualifications				
% qualified to level 3 or above	LFS, 2005	53	42	(18)
% of managers qualified to level 4 or above		42	n/a	n/a
Indicators of skill demand – ranking in bracket (out of 27 sectors)				
Employment growth				
Past growth (% per annum, 1994-2004)	IER, 2006	1.2	-2.7	(24)
Future growth (% per annum, 2004-2014)		0.4	-1.5	(23)
Total employment requirement (000s, 2004-2014)		12,194	n/a	n/a
Training				
IIP achievements (% of establishments)	SfBn, 2005	28	6	(26)
Participation in last 13 weeks (% of workforce)	LFS, 2005	28	16	(22)
Training budget (% of establishments)	NESS, 2005	33	19	(25)
Training days in last 12 months (per employee)		9	5	(26)
Training spend in last 12 months (per employee)		185	157	(17)
Training staff in last 12 months (% of employees)		70.3	47.6	(26)
Managerial training (% of establishments)	Bosworth and Wilson (2005)	28	16	(25)
Indicators of skills imbalance – ranking in bracket (out of 27 sectors)				
Earnings				
Gross weekly earnings (£)	ASHE, 2005	334.8	316.6	(21)
Vacancies				
Notified to Jobcentre Plus (% of total)	JCP, May 2006	100.0	0.2	(25)
Hard-to-fill vacancies (% of all vacancies)	NESS, 2005	35.5	52.2	(3)
Skill shortage vacancies (% of all vacancies)		24.9	42.8	(2)
Skills gaps				
Skills gaps (% of employment)	NESS, 2005	5.9	6.5	(8)

2.6 PUBLISHING, PRINTING AND REPRODUCTION OF RECORDED MEDIA

Sector definition

- Standard Industrial Classification 22.[37]
- Includes publishing, printing and service activities related to printing, and reproduction of recorded media.

Sector issues

- Publishing, printing and reproduction of recorded media is a relatively small part of the economy, in terms of both output and employment. Output growth is forecast to improve, although still to lag below the UK average. The business base is shrinking, with greater deregistrations than registrations recorded.
- Productivity is above the national and EU average, and considerably above the equivalent sector in the US.
- Publishing, printing and reproduction of recorded media's workforce profile is one of the less diverse sectors of the economy, with below-average representation of females and BMEs.
- The occupational structure has a high proportion of managers.
- There is below-average training undertaken in the sector.
- Hard-to-fill vacancies and skill shortage vacancies are below the UK average.

		Whole economy	Sector	Rank
Indicators of sector size – ranking in bracket (out of 27 sectors)				
Output and output growth				
Output (% of whole economy, 2004)	IER, 2006	100.0	1.8	(21)
Past growth (% per annum, 1994-2004)		3.0	0.0	(23)
Future growth (% per annum, 2004-2014)		2.4	1.4	(19)
Workforce size				
Total (000s)	LFS, 2005	28,025	363	(22)
Total (% of whole economy)		100.0	1.3	(22)
Indicators of economic performance – ranking in bracket (out of 27 sectors)				
Productivity				
Output per capita per hour (£, 2004)	Experian, 2005	19	24	(9)
Future growth (% per annum, 2004-2014)	IER, 2006	2.0	1.7	(19)
International productivity				
Index of UK to US (2003)	Experian, 2006	79	157	(2)
Index of UK to EU (2003)		92	110	(8)
Business creation				
VAT registrations (% of stock)	IDBR, 2004	10	8	(15)
VAT deregistrations (% of stock)		10	10	(7)
Stock		1,819,860	28,205	(13)

[37] *Represented by e-skills UK (the Sector Skills Council for information technology, telecommunications and contact centres), Skillset (the Sector Skills Council for the audio-visual industries), Creative and Cultural Skills (the Sector Skills Council for those involved in arts, cultural heritage and craft and design) and ProSkills (the Sector Skills Council for the process and manufacturing sector); 50 per cent of this sector is not covered by a SSC. For information on proportion of SSC coverage of this sector, see Appendix B.*

		Whole economy	Sector	Rank
Indicators of workforce composition – ranking in bracket (out of 27 sectors)				
Size of firms				
% of small businesses (1 to 49 employees)	ABI, 2004	96	96	(12)
Profile of the workforce				
% male	LFS, 2005	54	60	(17)
% Black and Minority Ethnic		8	3	(23)
% aged over 45		38	39	(14)
% managers aged over 45		42	40	(22)
% part-time		25	18	(9)
% self-employed		13	11	(11)
Occupational structure				
% of managers in workforce	LFS, 2005	15	22	(5)
Workforce qualifications				
% qualified to level 3 or above	LFS, 2005	53	54	(13)
% of managers qualified to level 4 or above		42	41	(17)
Indicators of skill demand – ranking in bracket (out of 27 sectors)				
Employment growth				
Past growth (% per annum, 1994-2004)	IER, 2006	1.2	-0.1	(17)
Future growth (% per annum, 2004-2014)		0.4	-0.3	(16)
Total employment requirement (000s, 2004-2014)		12,194	n/a	n/a
Training				
IIP achievements (% of establishments)	SfBn, 2005	28	15	(17)
Participation in last 13 weeks (% of workforce)	LFS, 2005	28	16	(23)
Training budget (% of establishments)	NESS, 2005	33	22	(22)
Training days in last 12 months (per employee)		9	6	(18)
Training spend in last 12 months (per employee)		185	149	(21)
Training staff in last 12 months (% of employees)		70.3	48.8	(24)
Managerial training (% of establishments)	Bosworth and Wilson (2005)	28	18	(24)
Indicators of skills imbalance – ranking in bracket (out of 27 sectors)				
Earnings				
Gross weekly earnings (£)	ASHE, 2005	334.8	386.3	(10)
Vacancies				
Notified to Jobcentre Plus (% of total)	JCP, May 2006	100.0	0.3	(23)
Hard-to-fill vacancies (% of all vacancies)	NESS, 2005	35.5	26.8	(19)
Skill shortage vacancies (% of all vacancies)		24.9	23.1	(15)
Skills gaps				
Skills gaps (% of employment)	NESS, 2005	5.9	5.6	(11)

2.7 COKE, PETROL, NUCLEAR FUEL, CHEMICALS, RUBBER, PLASTICS, GLASS, CERAMICS AND CEMENT

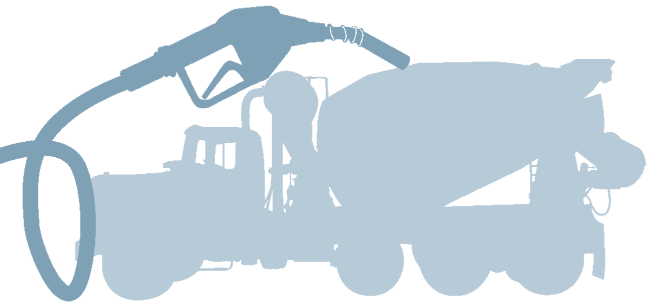
Sector definition

- Standard Industrial Classification 23,24,25 and 26.[38]
- Includes manufacture of coke, refined petroleum products and nuclear fuel; chemicals and chemical products; rubber and plastic products; non-metallic mineral products.

Sector issues

- The sector is typical of the UK economy with similar output and future growth levels to that of the national average.
- Productivity is very high, compared to the UK average. However, it is less competitive against the equivalent sector in the US and EU.
- In the 2004-2014 period productivity growth in the sector is forecast to be well above average.
- The proportion of self-employed and part time workers is much lower than average.
- The proportion of BME workers is lower than the average in the UK as a whole.
- Elements of workforce training fall short of other sectors, including the IiP achievements and the proportion of staff trained in the last 12 months.
- Gross weekly earnings for the sector are the highest of all the sectors in the economy.
- Skills gaps are a particular problem in this sector.

		Whole economy	Sector	Rank
Indicators of sector size – ranking in bracket (out of 27 sectors)				
Output and output growth				
Output (% of whole economy, 2004)	IER, 2006	100.0	3.9	(12)
Past growth (% per annum, 1994-2004)		3.0	1.2	(16)
Future growth (% per annum, 2004-2014)		2.4	2.5	(7)
Workforce size				
Total (000s)	LFS, 2005	28,025	641	(15)
Total (% of whole economy)		100.0	2.3	(15)
Indicators of economic performance – ranking in bracket (out of 27 sectors)				
Productivity				
Output per capita per hour (£, 2004)	Experian, 2005	19	29	(5)
Future growth (% per annum, 2004-2014)	IER, 2006	2.0	3.8	(2)
International productivity				
Index of UK to US (2003)	Experian, 2006	79	79	(17)
Index of UK to EU (2003)		92	78	(15)
Business creation				
VAT registrations (% of stock)	IDBR, 2004	10	6	(21)
VAT deregistrations (% of stock)		10	8	(20)
Stock		1,819,860	15,730	(18)



[38] Represented by SEMTA (the Sector Skills Council for science, engineering and manufacturing technologies), Cogent (the Sector Skills Council for chemicals, nuclear, oil and gas, petroleum and polymers), Skillfast-UK (the Sector Skills Council for apparel, footwear, textiles and related businesses), Skillset (the Sector Skills Council for the audio-visual industries) and ProSkills (the Sector Skills Council for the process and manufacturing sector). For information on proportion of SSC coverage of this sector, see Appendix B.

		Whole economy	Sector	Rank
Indicators of workforce composition – ranking in bracket (out of 27 sectors)				
Size of firms				
% of small businesses (1 to 49 employees)	ABI, 2004	96	88	(22)
Profile of the workforce				
% male	LFS, 2005	54	73	(14)
% Black and Minority Ethnic		8	5	(20)
% aged over 45		38	38	(16)
% managers aged over 45		42	42	(13)
% part-time		25	7	(25)
% self-employed		13	4	(23)
Occupational structure				
% of managers in workforce	LFS, 2005	15	20	(7)
Workforce qualifications				
% qualified to level 3 or above	LFS, 2005	53	48	(14)
% of managers qualified to level 4 or above		42	54	(12)
Indicators of skill demand – ranking in bracket (out of 27 sectors)				
Employment growth				
Past growth (% per annum, 1994-2004)	IER, 2006	1.2	-1.2	(20)
Future growth (% per annum, 2004-2014)		0.4	-1.3	(21)
Total employment requirement (000s, 2004-2014)		12,194	131	(21)
Training				
IIP achievements (% of establishments)	SfBn, 2005	28	12	(19)
Participation in last 13 weeks (% of workforce)	LFS, 2005	28	23	(13)
Training budget (% of establishments)	NESS, 2005	33	32	(13)
Training days in last 12 months (per employee)		9	9	(9)
Training spend in last 12 months (per employee)		185	167	(15)
Training staff in last 12 months (% of employees)		70.3	60.3	(17)
Managerial training (% of establishments)	Bosworth and Wilson (2005)	28	37	(8)
Indicators of skills imbalance – ranking in bracket (out of 27 sectors)				
Earnings				
Gross weekly earnings (£)	ASHE, 2005	334.8	631.2	(1)
Vacancies				
Notified to Jobcentre Plus (% of total)	JCP, May 2006	100.0	0.5	(21)
Hard-to-fill vacancies (% of all vacancies)	NESS, 2005	35.5	30.4	(18)
Skill shortage vacancies (% of all vacancies)		24.9	24.6	(13)
Skills gaps				
Skills gaps (% of employment)	NESS, 2005	5.9	7.4	(5)

2.8 BASIC METALS AND FABRICATED METAL PRODUCTS

Sector definition

- Standard Industrial Classification 27 and 28.[39]
- Includes the manufacture of basic metals and fabricated metal products, except machinery and equipment.

Sector issues

- Basic metals and fabricated metal products is one of the smallest of the 27 sectors, in terms of both output and employment. Output growth in the 2004-2014 period is forecast to improve compared with growth in the 1994-2004 period.
- Productivity is marginally below the national average and weak in comparison to EU and US levels.
- The workforce profile is more diverse than the whole economy, with a well below-average representation of females and BME employees, but a high proportion of over 45s as a whole and in management positions.
- The proportion of part time workers is very low.
- Past and future employment growth are both negative, on this measure the sector is ranked as one of the worst performing in the economy.
- The sector is the worst performing for IIP achievements and below average in all other indicators of training.
- Hard-to-fill and skill shortage vacancies are a significant issue in the sector, with the second highest and highest levels of any sector respectively.

		Whole economy	Sector	Rank
Indicators of sector size – ranking in bracket (out of 27 sectors)				
Output and output growth				
Output (% of whole economy, 2004)	IER, 2006	100.0	1.7	(22)
Past growth (% per annum, 1994-2004)		3.0	-0.3	(24)
Future growth (% per annum, 2004-2014)		2.4	0.8	(23)
Workforce size				
Total (000s)	LFS, 2005	28,025	450	(19)
Total (% of whole economy)		100.0	1.6	(19)
Indicators of economic performance – ranking in bracket (out of 27 sectors)				
Productivity				
Output per capita per hour (£, 2004)	Experian, 2005	19	16	(21)
Future growth (% per annum, 2004-2014)	IER, 2006	2.0	2.0	(13)
International productivity				
Index of UK to US (2003)	Experian, 2006	79	80	(14)
Index of UK to EU (2003)		92	66	(23)
Business creation				
VAT registrations (% of stock)	IDBR, 2004	10	6	(22)
VAT deregistrations (% of stock)		10	7	(22)
Stock		1,819,860	29,600	(12)

[39] *Represented by SEMTA (the Sector Skills Council for science, engineering and manufacturing technologies). For information on proportion of SSC coverage of this sector, see Appendix B.*

		Whole economy	Sector	Rank
Indicators of workforce composition – ranking in bracket (out of 27 sectors)				
Size of firms				
% of small businesses (1 to 49 employees)	ABI, 2004	96	95	(14)
Profile of the workforce				
% male	LFS, 2005	54	86	(4)
% Black and Minority Ethnic		8	4	(22)
% aged over 45		38	46	(4)
% managers aged over 45		42	56	(2)
% part-time		25	8	(23)
% self-employed		13	7	(16)
Occupational structure				
% of managers in workforce	LFS, 2005	15	15	(19)
Workforce qualifications				
% qualified to level 3 or above	LFS, 2005	53	46	(16)
% of managers qualified to level 4 or above		42	44	(16)
Indicators of skill demand – ranking in bracket (out of 27 sectors)				
Employment growth				
Past growth (% per annum, 1994-2004)	IER, 2006	1.2	-1.2	(20)
Future growth (% per annum, 2004-2014)		0.4	-1.3	(21)
Total employment requirement (000s, 2004-2014)		12,194	102	(23)
Training				
IIP achievements (% of establishments)	SfBn, 2005	28	4	(27)
Participation in last 13 weeks (% of workforce)	LFS, 2005	28	17	(21)
Training budget (% of establishments)	NESS, 2005	33	22	(21)
Training days in last 12 months (per employee)		9	5	(24)
Training spend in last 12 months (per employee)		185	153	(19)
Training staff in last 12 months (% of employees)		70.3	48.3	(25)
Managerial training (% of establishments)	Bosworth and Wilson (2005)	28	21	(20)
Indicators of skills imbalance – ranking in bracket (out of 27 sectors)				
Earnings				
Gross weekly earnings (£)	ASHE, 2005	334.8	361.7	(15)
Vacancies				
Notified to Jobcentre Plus (% of total)	JCP, May 2006	100.0	0.6	(17)
Hard-to-fill vacancies (% of all vacancies)	NESS, 2005	35.5	54.5	(2)
Skill shortage vacancies (% of all vacancies)		24.9	46.2	(1)
Skills gaps				
Skills gaps (% of employment)	NESS, 2005	5.9	6.4	(9)

2.9 MACHINERY, ELECTRICAL AND OPTICAL EQUIPMENT

Sector definition

- Standard Industrial Classification 29,30,31,32 and 33.[40]
- Includes the manufacture of electrical and optical equipment; radio, television and communication equipment; medical, precision and optical instruments, watches and clocks.

Sector issues

- The machinery, electrical and optical equipment sector is average in terms of output and employment.
- Past output growth has been among the lowest in the economy, however future growth is forecast to climb sharply in the 2004 to 2014 period.
- Productivity is on a par with the national average. It is marginally weaker in comparison to the US but the most competitive sector in comparison to the EU.
- Although the sector's business stock is average, the business base is contracting with greater deregistrations than registrations (the latter indicator is among the lowest of all sectors).
- The sector has a high proportion of managers.
- Although forecast to improve, past and future employment growth are both negative.

		Whole economy	Sector	Rank
Indicators of sector size – ranking in bracket (out of 27 sectors)				
Output and output growth				
Output (% of whole economy, 2004)	IER, 2006	100.0	3.2	(16)
Past growth (% per annum, 1994-2004)		3.0	0.0	(22)
Future growth (% per annum, 2004-2014)		2.4	2.3	(9)
Workforce size				
Total (000s)	LFS, 2005	28,025	846	(11)
Total (% of whole economy)		100.0	3.0	(11)
Indicators of economic performance – ranking in bracket (out of 27 sectors)				
Productivity				
Output per capita per hour (£, 2004)	Experian, 2005	19	21	(11)
Future growth (% per annum, 2004-2014)	IER, 2006	2.0	3.3	(4)
International productivity				
Index of UK to US (2003)	Experian, 2006	79	80	(15)
Index of UK to EU (2003)		92	196	(1)
Business creation				
VAT registrations (% of stock)	IDBR, 2004	10	5	(24)
VAT deregistrations (% of stock)		10	10	(10)
Stock		1,819,860	26,735	(14)

[40] *Represented by SEMTA (the Sector Skills Council for science, engineering and manufacturing technologies), and SummitSkills (the Sector Skills Council for the electrotechnical, heating, ventilating, air conditioning, refrigeration and plumbing industries). For information on proportion of SSC coverage of this sector, see Appendix B.*

		Whole economy	Sector	Rank
Indicators of workforce composition – ranking in bracket (out of 27 sectors)				
Size of firms				
% of small businesses (1 to 49 employees)	ABI, 2004	96	92	(19)
Profile of the workforce				
% male	LFS, 2005	54	75	(11)
% Black and Minority Ethnic		8	6	(13)
% aged over 45		38	42	(9)
% managers aged over 45		42	49	(8)
% part-time		25	8	(21)
% self-employed		13	5	(20)
Occupational structure				
% of managers in workforce	LFS, 2005	15	21	(6)
Workforce qualifications				
% qualified to level 3 or above	LFS, 2005	53	56	(10)
% of managers qualified to level 4 or above		42	54	(11)
Indicators of skill demand – ranking in bracket (out of 27 sectors)				
Employment growth				
Past growth (% per annum, 1994-2004)	IER, 2006	1.2	-2.3	(22)
Future growth (% per annum, 2004-2014)		0.4	-1.0	(18)
Total employment requirement (000s, 2004-2014)		12,194	162	(20)
Training				
IIP achievements (% of establishments)	SfBn, 2005	28	11	(21)
Participation in last 13 weeks (% of workforce)	LFS, 2005	28	22	(14)
Training budget (% of establishments)	NESS, 2005	33	27	(18)
Training days in last 12 months (per employee)		9	6	(20)
Training spend in last 12 months (per employee)		185	187	(12)
Training staff in last 12 months (% of employees)		70.3	56.8	(20)
Managerial training (% of establishments)	Bosworth and Wilson (2005)	28	34	(10)
Indicators of skills imbalance – ranking in bracket (out of 27 sectors)				
Earnings				
Gross weekly earnings (£)	ASHE, 2005	334.8	385.0	(11)
Vacancies				
Notified to Jobcentre Plus (% of total)	JCP, May 2006	100.0	0.6	(16)
Hard-to-fill vacancies (% of all vacancies)	NESS, 2005	35.5	36.0	(14)
Skill shortage vacancies (% of all vacancies)		24.9	29.4	(10)
Skills gaps				
Skills gaps (% of employment)	NESS, 2005	5.9	4.5	(22)

2.10 TRANSPORT EQUIPMENT

Sector definition

- Standard Industrial Classification 34 and 35.[41]
- Includes the manufacture of motor vehicles, trailers and other transport equipment.

Sector issues

- The Transport equipment sector is close to the average in terms of output and employment.
- Future Productivity growth is forecast to be the third highest of all sectors. However, in terms of competitiveness it is the worst performing sector in comparison to the US, and slightly below average in comparison to the EU.
- The workforce profile is slightly weak in terms of diversity, with the second lowest proportion of female staff, and a low level of BME employees.
- There is a very low incidence of self-employment and part time working among the workforce.
- Future total employment required is the second lowest of all sectors.
- Training indicators for the sector vary from average levels in participation to a lower end ranking in terms of average training spend.
- Gross weekly earnings are very high in comparison to other sectors of the economy.
- Skills gaps are an issue for the sector, with only six others experiencing greater gaps. Hard-to-fill vacancies, however, are not an issue.

		Whole economy	Sector	Rank
Indicators of sector size – ranking in bracket (out of 27 sectors)				
Output and output growth				
Output (% of whole economy, 2004)	IER, 2006	100.0	1.9	(19)
Past growth (% per annum, 1994-2004)		3.0	2.1	(14)
Future growth (% per annum, 2004-2014)		2.4	2.0	(14)
Workforce size				
Total (000s)	LFS, 2005	28,025	460	(18)
Total (% of whole economy)		100.0	1.6	(18)
Indicators of economic performance – ranking in bracket (out of 27 sectors)				
Productivity				
Output per capita per hour (£, 2004)	Experian, 2005	19	25	(15)
Future growth (% per annum, 2004-2014)	IER, 2006	2.0	3.4	(3)
International productivity				
Index of UK to US (2003)	Experian, 2006	79	41	(27)
Index of UK to EU (2003)		92	78	(16)
Business creation				
VAT registrations (% of stock)	IDBR, 2004	10	7	(17)
VAT deregistrations (% of stock)		10	9	(16)
Stock		1,819,860	5,100	(24)

[41] *Represented by SEMTA (the Sector Skills Council for science, engineering and manufacturing technologies). For information on proportion of SSC coverage of this sector, see Appendix B.*

		Whole economy	Sector	Rank
Indicators of workforce composition – ranking in bracket (out of 27 sectors)				
Size of firms				
% of small businesses (1 to 49 employees)	ABI, 2004	96	86	(23)
Profile of the workforce				
% male	LFS, 2005	54	88	(2)
% Black and Minority Ethnic		8	5	(21)
% aged over 45		38	40	(11)
% managers aged over 45		42	42	(14)
% part-time		25	3	(27)
% self-employed		13	3	(25)
Occupational structure				
% of managers in workforce	LFS, 2005	15	12	(22)
Workforce qualifications				
% qualified to level 3 or above	LFS, 2005	53	54	(11)
% of managers qualified to level 4 or above		42	63	(4)
Indicators of skill demand – ranking in bracket (out of 27 sectors)				
Employment growth				
Past growth (% per annum, 1994-2004)	IER, 2006	1.2	0.1	(16)
Future growth (% per annum, 2004-2014)		0.4	-1.2	(22)
Total employment requirement (000s, 2004-2014)		12,194	71	(26)
Training				
IIP achievements (% of establishments)	SfBn, 2005	28	15	(16)
Participation in last 13 weeks (% of workforce)	LFS, 2005	28	23	(11)
Training budget (% of establishments)	NESS, 2005	33	27	(16)
Training days in last 12 months (per employee)		9	5	(25)
Training spend in last 12 months (per employee)		185	141	(24)
Training staff in last 12 months (% of employees)		70.3	63.3	(12)
Managerial training (% of establishments)	Bosworth and Wilson (2005)	28	26	(14)
Indicators of skills imbalance – ranking in bracket (out of 27 sectors)				
Earnings				
Gross weekly earnings (£)	ASHE, 2005	334.8	462.0	(5)
Vacancies				
Notified to Jobcentre Plus (% of total)	JCP, May 2006	100.0	0.2	(24)
Hard-to-fill vacancies (% establishments reporting)	NESS, 2005	35.5	24.1	(23)
Skill shortage vacancies (% establishments reporting)		24.9	20.0	(20)
Skills gaps				
Skills gaps (% of employment)	NESS, 2005	5.9	6.8	(7)

2.11 FURNITURE, JEWELLERY, MUSICAL INSTRUMENTS, SPORTS GOODS, GAMES AND TOYS; RECYCLING

Sector definition

- Standard Industrial Classification 36 and 37.[42]
- Includes manufacture of furniture, manufacturing not classified elsewhere, and recycling.

Sector issues

- The sector has one of the lowest levels of output and employment, matched by a low past output growth level, but a future growth level only marginally below the UK average.
- Future productivity growth is the same as the UK average, and the sector is competitive internationally, ranked the fourth and ninth highest performing sector in comparison to the US and EU respectively.
- The number of workers and managers aged over 45 is close to the national average.
- The number of self-employed people is close to the national average but the number of part time workers is lower than the average.
- The proportion of BME workers is close to the national average.
- Future total employment required is the third lowest of all sectors.
- Training levels for the sector are generally below average, ranked in the lowest nine sectors for every indicator.
- The sector has significant skills gaps, with only three other sectors experiencing greater gaps.

		Whole economy	Sector	Rank
Indicators of sector size – ranking in bracket (out of 27 sectors)				
Output and output growth				
Output (% of whole economy, 2004)	IER, 2006	100.0	0.7	(24)
Past growth (% per annum, 1994-2004)		3.0	0.3	(19)
Future growth (% per annum, 2004-2014)		2.4	2.3	(8)
Workforce size				
Total (000s)	LFS, 2005	28,025	209	(23)
Total (% of whole economy)		100.0	0.7	(23)
Indicators of economic performance – ranking in bracket (out of 27 sectors)				
Productivity				
Output per capita per hour (£, 2004)	Experian, 2005	19	17	(20)
Future growth (% per annum, 2004-2014)	IER, 2006	2.0	2.0	(14)
International productivity				
Index of UK to US (2003)	Experian, 2006	79	132	(4)
Index of UK to EU (2003)		92	107	(9)
Business creation				
VAT registrations (% of stock)	IDBR, 2004	10	7	(18)
VAT deregistrations (% of stock)		10	9	(17)
Stock		1,819,860	18,960	(15)

[42] *Represented by Energy and Utility Skills (the Sector Skills Council for electricity and renewables, gas, waste management and water industries) and Creative and Cultural Skills (the Sector Skills Council for those involved in arts, cultural heritage and craft and design); 93 per cent of this sector is not covered by a SSC. For information on proportion of SSC coverage of this sector, see Appendix B.*

		Whole economy	Sector	Rank
Indicators of workforce composition – ranking in bracket (out of 27 sectors)				
Size of firms				
% of small businesses (1 to 49 employees)	ABI, 2004	96	97	(9)
Profile of the workforce				
% male	LFS, 2005	54	76	(9)
% Black and Minority Ethnic		8	6	(14)
% aged over 45		38	37	(19)
% managers aged over 45		42	45	(12)
% part-time		25	11	(17)
% self-employed		13	12	(10)
Occupational structure				
% of managers in workforce	LFS, 2005	15	17	(14)
Workforce qualifications				
% qualified to level 3 or above	LFS, 2005	53	39	(20)
% of managers qualified to level 4 or above		42	n/a	n/a
Indicators of skill demand – ranking in bracket (out of 27 sectors)				
Employment growth				
Past growth (% per annum, 1994-2004)	IER, 2006	1.2	0.9	(12)
Future growth (% per annum, 2004-2014)		0.4	0.3	(9)
Total employment requirement (000s, 2004-2014)		12,194	89	(25)
Training				
IIP achievements (% of establishments)	SfBn, 2005	28	9	(23)
Participation in last 13 weeks (% of workforce)	LFS, 2005	28	13	(25)
Training budget (% of establishments)	NESS, 2005	33	19	(24)
Training days in last 12 months (per employee)		9	6	(19)
Training spend in last 12 months (per employee)		185	122	(25)
Training staff in last 12 months (% of employees)		70.3	56.3	(21)
Managerial training (% of establishments)	Bosworth and Wilson (2005)	28	22	(19)
Indicators of skills imbalance – ranking in bracket (out of 27 sectors)				
Earnings				
Gross weekly earnings (£)	ASHE, 2005	334.8	319.0	(20)
Vacancies				
Notified to Jobcentre Plus (% of total)	JCP, May 2006	100.0	0.3	(22)
Hard-to-fill vacancies (% of all vacancies)	NESS, 2005	35.5	40.0	(7)
Skill shortage vacancies (% of all vacancies)		24.9	27.8	(11)
Skills gaps				
Skills gaps (% of employment)	NESS, 2005	5.9	8.0	(4)

2.12 ELECTRICITY, GAS AND WATER SUPPLY

Sector definition

- Standard Industrial Classification 40 and 41.[43]
- Includes electricity, gas, steam and hot water supply; collection, purification and distribution of water.

Sector issues

- The electricity, gas and water supply sector is relatively small in terms of output and is also one of the smallest in terms of employment.
- Productivity in terms of output per hour is one of the highest in the economy, whilst future growth is forecast to be within the top six of all sectors. International productivity figures are also competitive.
- The sector has the smallest stock of businesses when compared to other sectors. It also has a low percentage of small businesses.
- Only a low proportion of individuals are self-employed or part time.
- Employees within this sector are relatively highly skilled, with one of the highest proportions of employees qualified to level 3 or above.
- The sector has the lowest percentage of both hard-to-fill and skill shortage vacancies in the economy, but a larger proportion of skills gaps, although lower than the whole economy.

		Whole economy	Sector	Rank
Indicators of sector size – ranking in bracket (out of 27 sectors)				
Output and output growth				
Output (% of whole economy, 2004)	IER, 2006	100.0	1.8	(20)
Past growth (% per annum, 1994-2004)		3.0	1.7	(15)
Future growth (% per annum, 2004-2014)		2.4	1.1	(22)
Workforce size				
Total (000s)	LFS, 2005	28,025	169	(25)
Total (% of whole economy)		100.0	0.6	(25)
Indicators of economic performance – ranking in bracket (out of 27 sectors)				
Productivity				
Output per capita per hour (£, 2004)	Experian, 2005	19	72	(2)
Future growth (% per annum, 2004-2014)	IER, 2006	2.0	3.0	(6)
International productivity				
Index of UK to US (2003)	Experian, 2006	79	95	(9)
Index of UK to EU (2003)		92	122	(5)
Business creation				
VAT registrations (% of stock)	IDBR, 2004	10	20	(2)
VAT deregistrations (% of stock)		10	17	(1)
Stock		1,819,860	495	(27)

[43] *Represented by Energy and Utility Skills (the Sector Skills Council for electricity and renewables, gas, waste management and water industries) and ProSkills (the Sector Skills Council for the process and manufacturing sector). For information on proportion of SSC coverage of this sector, see Appendix B.*

		Whole economy	Sector	Rank
Indicators of workforce composition – ranking in bracket (out of 27 sectors)				
Size of firms				
% of small businesses (1 to 49 employees)	ABI, 2004	96	81	(26)
Profile of the workforce				
% male	LFS, 2005	54	74	(12)
% Black and Minority Ethnic		8	5	(19)
% aged over 45		38	34	(23)
% managers aged over 45		42	36	(24)
% part-time		25	7	(24)
% self-employed		13	2	(26)
Occupational structure				
% of managers in workforce	LFS, 2005	15	20	(8)
Workforce qualifications				
% qualified to level 3 or above	LFS, 2005	53	64	(3)
% of managers qualified to level 4 or above		42	62	(7)
Indicators of skill demand – ranking in bracket (out of 27 sectors)				
Employment growth				
Past growth (% per annum, 1994-2004)	IER, 2006	1.2	-4.2	(26)
Future growth (% per annum, 2004-2014)		0.4	-1.8	(25)
Total employment requirement (000s, 2004-2014)		12,194	n/a	n/a
Training				
IIP achievements (% of establishments)	SfBn, 2005	28	23	(7)
Participation in last 13 weeks (% of workforce)	LFS, 2005	28	34	(5)
Training budget (% of establishments)	NESS, 2005	33	55	(4)
Training days in last 12 months (per employee)		9	7	(17)
Training spend in last 12 months (per employee)		185	378	(1)
Training staff in last 12 months (% of employees)		70.3	50	(23)
Managerial training (% of establishments)	Bosworth and Wilson (2005)	28	45	(5)
Indicators of skills imbalance – ranking in bracket (out of 27 sectors)				
Earnings				
Gross weekly earnings (£)	ASHE, 2005	334.8	483.3	(4)
Vacancies				
Notified to Jobcentre Plus (% of total)	JCP, May 2006	100.0	0.6	(19)
Hard-to-fill vacancies (% of all vacancies)	NESS, 2005	35.5	14.3	(27)
Skill shortage vacancies (% of all vacancies)		24.9	12.8	(27)
Skills gaps				
Skills gaps (% of employment)	NESS, 2005	5.9	5.2	(15)

2.13 CONSTRUCTION

Sector definition

- Standard Industrial Classification 45.[44]
- Includes site preparation, building of complete constructions or parts, civil engineering, building installation, building completion and renting of construction or demolition equipment.

Sector issues

- The construction sector is important in output terms but has a history of slightly below average growth between 1994 and 2004, and the sector is forecast to maintain slower average annual growth in the period between 2004 and 2014.
- Productivity levels fall below the average for the economy, and are also weak in comparison to the EU. The sector is also slightly weaker than in the US.
- The sector is expanding, as there are slightly larger numbers of VAT registrations than deregistrations. This sector has the second highest stock of businesses in the economy.
- The construction workforce is overwhelmingly male and has a low representation of BME workers, but is average in its employment of older workers.
- The sector has very high levels of small businesses and self-employed workers.
- Past high employment growth is not forecast to continue.
- Participation in training and average training spend are both well below average, as is the number of establishments offering managerial training. However, training spend per employee is relatively high.
- The sector experiences substantial recruitment difficulties; hard-to-fill, skill shortage and total vacancy figures are all high. Nevertheless, skills gaps remain around average.

		Whole economy	Sector	Rank
Indicators of sector size – ranking in bracket (out of 27 sectors)				
Output and output growth				
Output (% of whole economy, 2004)	IER, 2006	100.0	6.3	(5)
Past growth (% per annum, 1994-2004)		3.0	2.2	(13)
Future growth (% per annum, 2004-2014)		2.4	1.4	(20)
Workforce size				
Total (000s)	LFS, 2005	28,025	2,226	(4)
Total (% of whole economy)		100.0	7.9	(5)
Indicators of economic performance – ranking in bracket (out of 27 sectors)				
Productivity				
Output per capita per hour (£, 2004)	Experian, 2005	19	14	(24)
Future growth (% per annum, 2004-2014)	IER, 2006	2.0	1.8	(16)
International productivity				
Index of UK to US (2003)	Experian, 2006	79	93	(10)
Index of UK to EU (2003)		92	67	(22)
Business creation				
VAT registrations (% of stock)	IDBR, 2004	10	11	(8)
VAT deregistrations (% of stock)		10	9	(18)
Stock		1,819,860	205,930	(2)

[44] *Represented by ConstructionSkills (the Sector Skills Council for the construction sector) and SummitSkills (the Sector Skills Council for the electrotechnical, heating, ventilating, air conditioning, refrigeration and plumbing industries). For information on proportion of SSC coverage of this sector, see Appendix B.*

		Whole economy	Sector	Rank
Indicators of workforce composition – ranking in bracket (out of 27 sectors)				
Size of firms				
% of small businesses (1 to 49 employees)	ABI, 2004	96	98	(3)
Profile of the workforce				
% male	LFS, 2005	54	90	(1)
% Black and Minority Ethnic		8	3	(24)
% aged over 45		38	37	(18)
% managers aged over 45		42	46	(10)
% part-time		25	8	(22)
% self-employed		13	37	(2)
Occupational structure				
% of managers	LFS, 2005	15	12	(23)
Workforce qualifications				
% qualified to level 3 or above	LFS, 2005	53	47	(15)
% of managers qualified to level 4 or above		42	36	(21)
Indicators of skill demand – ranking in bracket (out of 27 sectors)				
Employment growth				
Past growth (% per annum, 1994-2004)	IER, 2006	1.2	1.6	(7)
Future growth (% per annum, 2004-2014)		0.4	-0.4	(17)
Total employment requirement (000s, 2004-2014)		12,194	577	(11)
Training				
IIP achievements (% of establishments)	SfBn, 2005	28	15	(15)
Participation in last 13 weeks (% of workforce)	LFS, 2005	28	18	(20)
Training budget (% of establishments)	NESS, 2005	33	20	(23)
Training days in last 12 months (per employee)		9	7	(14)
Training spend in last 12 months (per employee)		185	233	(6)
Training staff in last 12 months (% of employees)		70.3	61.9	(13)
Managerial training (% of establishments)	Bosworth and Wilson (2005)	28	15	(27)
Indicators of skills imbalance – ranking in bracket (out of 27 sectors)				
Earnings				
Gross weekly earnings (£)	ASHE, 2005	334.8	409.9	(9)
Vacancies				
Notified to Jobcentre Plus (% of total)	JCP, May 2006	100.0	2.7	(7)
Hard-to-fill vacancies (% of all vacancies)	NESS, 2005	35.5	49.2	(4)
Skill shortage vacancies (% of all vacancies)		24.9	36.4	(3)
Skills gaps				
Skills gaps (% of employment)	NESS, 2005	5.9	5.4	(12)

2.14 SALE, MAINTENANCE AND REPAIR OF MOTOR VEHICLES; FUEL RETAIL

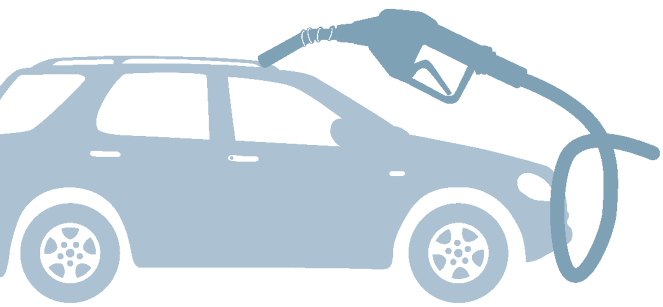
Sector definition

- Standard Industrial Classification 50.[45]
- Includes the sale, maintenance and repair of motor vehicles and motorcycles, and retail sale of automotive fuel.

Sector issues

- Output is low and output growth has historically been below the whole economy average, this situation is forecast to continue.
- Although productivity falls marginally below the UK national average, the sector is highly competitive compared with the US and the EU.
- There is an above average proportion of businesses with less than 49 employees.
- The workforce profile is fairly homogenous, with a large proportion of male employees and limited ethnic diversity.
- Educational attainment within the sector is also limited in comparison to other sectors, with less than half of employees obtaining NVQ level 3 qualifications or above. The proportion of managers who are qualified to level 4 or above is the lowest in the economy.
- The percentage of establishments offering managerial training is one of the lowest of all sectors.
- Although training spend per employee is relatively high, and well above the average for the economy, other forms of training investment in the sector are low.

		Whole economy	Sector	Rank
Indicators of sector size – ranking in bracket (out of 27 sectors)				
Output and output growth				
Output (% of whole economy, 2004)	IER, 2006	100.0	2.4	(17)
Past growth (% per annum, 1994-2004)		3.0	2.5	(12)
Future growth (% per annum, 2004-2014)		2.4	1.6	(18)
Workforce size				
Total (000s)	LFS, 2005	28,025	551	(16)
Total (% of whole economy)		100.0	2.0	(16)
Indicators of economic performance – ranking in bracket (out of 27 sectors)				
Productivity				
Output per capita per hour (£, 2004)	Experian, 2005	19	18	(16)
Future growth (% per annum, 2004-2014)	IER, 2006	2.0	1.6	(20)
International productivity				
Index of UK to US (2003)	Experian, 2006	79	119	(5)
Index of UK to EU (2003)		92	131	(4)
Business creation				
VAT registrations (% of stock)	IDBR, 2004	10	9	(13)
VAT deregistrations (% of stock)		10	8	(21)
Stock		1,819,860	70,995	(10)



[45] *Represented by Cogent (the Sector Skills Council for chemicals, nuclear, oil and gas, petroleum and polymers) and Automotive Skills (the Sector Skills Council for all businesses and people involved in the sale, maintenance and repair, daily rental and operating leasing of new and used vehicles and associated parts and accessories). For information on proportion of SSC coverage of this sector, see Appendix B.*

		Whole economy	Sector	Rank
Indicators of workforce composition – ranking in bracket (out of 27 sectors)				
Size of firms				
% of small businesses (1 to 49 employees)	ABI, 2004	96	98	(6)
Profile of the workforce				
% male	LFS, 2005	54	80	(6)
% Black and Minority Ethnic		8	5	(18)
% aged over 45		38	35	(22)
% managers aged over 45		42	46	(11)
% part-time		25	14	(15)
% self-employed		13	15	(8)
Occupational structure				
% of managers in workforce	LFS, 2005	15	18	(11)
Workforce qualifications				
% qualified to level 3 or above	LFS, 2005	53	42	(19)
% of managers qualified to level 4 or above		42	14	(27)
Indicators of skill demand – ranking in bracket (out of 27 sectors)				
Employment growth				
Past growth (% per annum, 1994-2004)	IER, 2006	1.2	-0.7	(19)
Future growth (% per annum, 2004-2014)		0.4	0.0	(14)
Total employment requirement (000s, 2004-2014)		12,194	207	(18)
Training				
IIP achievements (% of establishments)	SfBn, 2005	28	10	(22)
Participation in last 13 weeks (% of workforce)	LFS, 2005	28	19	(18)
Training budget (% of establishments)	NESS, 2005	33	27	(17)
Training days in last 12 months (per employee)		9	8	(11)
Training spend in last 12 months (per employee)		185	231	(7)
Training staff in last 12 months (% of employees)		70.3	61.8	(15)
Managerial training (% of establishments)	Bosworth and Wilson (2005)	28	19	(23)
Indicators of skills imbalance – ranking in bracket (out of 27 sectors)				
Earnings				
Gross weekly earnings (£)	ASHE, 2005	334.8	325.8	(19)
Vacancies				
Notified to Jobcentre Plus (% of total)	JCP, May 2006	100.0	1.0	(13)
Hard-to-fill vacancies (% of all vacancies)	NESS, 2005	35.5	44.3	(5)
Skill shortage vacancies (% of all vacancies)		24.9	35.0	(4)
Skills gaps				
Skills gaps (% of employment)	NESS, 2005	5.9	6.2	(10)

2.15 WHOLESALE TRADE

Sector definition

- Standard Industrial Classification 51.[46]
- Includes wholesale trade and commission trade, except of motor vehicles and motorcycles.

Sector issues

- Output for the wholesale trade sector places it in the upper half of ranked sectors.
- Although past growth between 1994 and 2004 has been marginally below average, future growth is forecast to exceed the national average rate over the period 2004-2014.
- The sector performs well internationally, particularly against the EU average.
- The sector has a greater than average number of managers over the age of 45.
- Wholesale trade occupations have the highest proportion of managers within their organisational hierarchy; almost double that of the whole economy average.
- The proportion of employees who have participated in training activities within the last 13 weeks in the sector is ranked one of the lowest in the economy.
- Incidence of hard-to-fill and skills shortage vacancies are above average, but skills gaps in wholesale trade occupations account for a below average percentage of total employment.

		Whole economy	Sector	Rank
Indicators of sector size – ranking in bracket (out of 27 sectors)				
Output and output growth				
Output (% of whole economy, 2004)	IER, 2006	100.0	5.1	(10)
Past growth (% per annum, 1994-2004)		3.0	2.9	(10)
Future growth (% per annum, 2004-2014)		2.4	2.8	(5)
Workforce size				
Total (000s)	LFS, 2005	28,025	671	(12)
Total (% of whole economy)		100.0	2.4	(12)
Indicators of economic performance – ranking in bracket (out of 27 sectors)				
Productivity				
Output per capita per hour (£, 2004)	Experian, 2005	19	20	(13)
Future growth (% per annum, 2004-2014)	IER, 2006	2.0	2.1	(12)
International productivity				
Index of UK to US (2003)	Experian, 2006	79	81	(13)
Index of UK to EU (2003)		92	119	(6)
Business creation				
VAT registrations (% of stock)	IDBR, 2004	10	9	(12)
VAT deregistrations (% of stock)		10	10	(12)
Stock		1,819,860	114,945	(7)

[46] *Represented by SEMTA (the Sector Skills Council for science, engineering and manufacturing technologies), Skillfast-UK (the Sector Skills Council for apparel, footwear, textiles and related businesses), Energy and Utility Skills (the Sector Skills Council for electricity and renewables, gas, waste management and water industries), Lantra (the Sector Skills Council for the environmental and land-based sector) and Improve (the Sector Skills Council for food and drink); 85 per cent of this sector is not covered by a SSC. For information on proportion of SSC coverage of this sector, see Appendix B.*

		Whole economy	Sector	Rank
Indicators of workforce composition – ranking in bracket (out of 27 sectors)				
Size of firms				
% of small businesses (1 to 49 employees)	ABI, 2004	96	97	(8)
Profile of the workforce				
% male	LFS, 2005	54	67	(16)
% Black and Minority Ethnic		8	6	(17)
% aged over 45		38	41	(10)
% managers aged over 45		42	49	(7)
% part-time		25	15	(13)
% self-employed		13	10	(12)
Occupational structure				
% of managers in workforce	LFS, 2005	15	29	(1)
Workforce qualifications				
% qualified to level 3 or above	LFS, 2005	53	39	(21)
% of managers qualified to level 4 or above		42	30	(23)
Indicators of skill demand – ranking in bracket (out of 27 sectors)				
Employment growth				
Past growth (% per annum, 1994-2004)	IER, 2006	1.2	0.7	(14)
Future growth (% per annum, 2004-2014)		0.4	0.7	(6)
Total employment requirement (000s, 2004-2014)		12,194	517	(12)
Training				
IIP achievements (% of establishments)	SfBn, 2005	28	15	(14)
Participation in last 13 weeks (% of workforce)	LFS, 2005	28	15	(24)
Training budget (% of establishments)	NESS, 2005	33	28	(15)
Training days in last 12 months (per employee)		9	5	(23)
Training spend in last 12 months (per employee)		185	179	(13)
Training staff in last 12 months (% of employees)		70.3	57.6	(18)
Managerial training (% of establishments)	Bosworth and Wilson (2005)	28	24	(18)
Indicators of skills imbalance – ranking in bracket (out of 27 sectors)				
Earnings				
Gross weekly earnings (£)	ASHE, 2005	334.8	354.6	(16)
Vacancies				
Notified to Jobcentre Plus (% of total)	JCP, May 2006	100.0	1.6	(10)
Hard-to-fill vacancies (% establishments reporting)	NESS, 2005	35.5	37.3	(10)
Skill shortage vacancies (% establishments reporting)		24.9	30.0	(9)
Skills gaps				
Skills gaps (% of employment)	NESS, 2005	5.9	5.2	(17)

2.16 RETAIL TRADE

Sector definition

- Standard Industrial Classification 52.[47]
- Includes retail trade, except of motor vehicles and motorcycles, and repair of personal and household goods.

Sector issues

- The retail trade sector provides a relatively large contribution to the whole economy output; it is ranked fourth out of the 27 sectors.
- Despite exhibiting substantial average annual output growth in the past, the sector's output growth per annum is forecast to fall below that of the whole economy average during the period 2004-2014.
- Retail employs the second largest workforce in the UK, accounting for over a tenth of the economy, and above average employment growth is forecast to continue.
- However, productivity for the sector is weak compared to both the US and the EU.
- The retail workforce has more women and BME workers than most other sectors. The sector is ranked in first place for employing individuals on a part-time basis.
- Educational attainment is low, with less than one quarter of managers qualified to level 4 or above. This places the sector almost bottom compared to others in the economy.
- The sector has one of the lowest training spend per employee figures in the economy, almost half that of the whole economy average.
- The proportion of skills-shortage vacancies is very low in this sector, but incidence of skills gaps is ranked third highest in the economy.

		Whole economy	Sector	Rank
Indicators of sector size – ranking in bracket (out of 27 sectors)				
Output and output growth				
Output (% of whole economy, 2004)	IER, 2006	100.0	6.3	(4)
Past growth (% per annum, 1994-2004)		3.0	4.3	(3)
Future growth (% per annum, 2004-2014)		2.4	2.1	(12)
Workforce size				
Total (000s)	LFS, 2005	28,025	3,050	(2)
Total (% of whole economy)		100.0	10.9	(2)
Indicators of economic performance – ranking in bracket (out of 27 sectors)				
Productivity				
Output per capita per hour (£, 2004)	Experian, 2005	19	14	(26)
Future growth (% per annum, 2004-2014)	IER, 2006	2.0	1.3	(24)
International productivity				
Index of UK to US (2003)	Experian, 2006	79	54	(25)
Index of UK to EU (2003)		92	77	(17)
Business creation				
VAT registrations (% of stock)	IDBR, 2004	10	10	(9)
VAT deregistrations (% of stock)		10	10	(8)
Stock		1,819,860	201,800	(3)

[47] *Represented by Skillsmart Retail (the Sector Skills Council for the retail sector), Skillfast-UK (the Sector Skills Council for apparel, footwear, textiles and related businesses) and SummitSkills (the Sector Skills Council for the electrotechnical, heating, ventilating, air conditioning, refrigeration and plumbing industries). For information on proportion of SSC coverage of this sector, see Appendix B.*

		Whole economy	Sector	Rank
Indicators of workforce composition – ranking in bracket (out of 27 sectors)				
Size of firms				
% of small businesses (1 to 49 employees)	ABI, 2004	96	97	(10)
Profile of the workforce				
% male	LFS, 2005	54	41	(25)
% Black and Minority Ethnic		8	9	(7)
% aged over 45		38	31	(24)
% managers aged over 45		42	37	(22)
% part-time		25	49	(1)
% self-employed		13	9	(13)
Occupational structure				
% of managers in workforce	LFS, 2005	15	18	(10)
Workforce qualifications				
% qualified to level 3 or above	LFS, 2005	53	37	(23)
% of managers qualified to level 4 or above		42	23	(26)
Indicators of skill demand – ranking in bracket (out of 27 sectors)				
Employment growth				
Past growth (% per annum, 1994-2004)	IER, 2006	1.2	1.4	(10)
Future growth (% per annum, 2004-2014)		0.4	0.8	(5)
Total employment requirement (000s, 2004-2014)		12,194	1,426	(7)
Training				
IIP achievements (% of establishments)	SfBn, 2005	28	21	(9)
Participation in last 13 weeks (% of workforce)	LFS, 2005	28	21	(15)
Training budget (% of establishments)	NESS, 2005	33	24	(20)
Training days in last 12 months (per employee)		9	11	(2)
Training spend in last 12 months (per employee)		185	96	(26)
Training staff in last 12 months (% of employees)		70.3	77.1	(4)
Managerial training (% of establishments)	Bosworth and Wilson (2005)	28	27	(13)
Indicators of skills imbalance – ranking in bracket (out of 27 sectors)				
Earnings				
Gross weekly earnings (£)	ASHE, 2005	334.8	177.5	(26)
Vacancies				
Notified to Jobcentre Plus (% of total)	JCP, May 2006	100.0	8.8	(2)
Hard-to-fill vacancies (% establishments reporting)	NESS, 2005	35.5	31.7	(16)
Skill shortage vacancies (% establishments reporting)		24.9	17.6	(25)
Skills gaps				
Skills gaps (% of employment)	NESS, 2005	5.9	8.1	(3)

2.17 HOTELS AND RESTAURANTS

Sector definition

- Standard Industrial Classification 55.[48]
- Includes hotels, camping sites, restaurants, bars, canteens and catering.

Sector issues

- Output and past output growth for the sector are both marginally below the average for the economy, and future growth is forecast to be slower than the national annual average rate.
- Productivity is low in comparison to other sectors, with output per hour ranked as one of the lowest in the economy, and an equally weak looking forecast for the period 2004-2014.
- The sector has one of the largest stocks of businesses in the economy, and is also expanding, with VAT registrations outnumbering deregistrations.
- The sector has the most ethnically diverse profile in the economy, and a workforce that is mostly younger employees.
- Despite organisations in the sector providing the most training days per employee in the economy, training spend per employee is ranked among the lowest.
- Gross weekly earnings are ranked bottom, equating to just over half that of the economy average.
- Recruitment issues exist within the sector; as it contributes a significant amount to the total number of vacancies notified to Jobcentre Plus and has the largest proportion of skills gaps of all sectors.

		Whole economy	Sector	Rank
Indicators of sector size – ranking in bracket (out of 27 sectors)				
Output and output growth				
Output (% of whole economy, 2004)	IER, 2006	100.0	3.8	(13)
Past growth (% per annum, 1994-2004)		3.0	2.6	(11)
Future growth (% per annum, 2004-2014)		2.4	1.9	(15)
Workforce size				
Total (000s)	LFS, 2005	28,025	1,190	(10)
Total (% of whole economy)		100.0	4.2	(10)
Indicators of economic performance – ranking in bracket (out of 27 sectors)				
Productivity				
Output per capita per hour (£, 2004)	Experian, 2005	19	14	(25)
Future growth (% per annum, 2004-2014)	IER, 2006	2.0	1.4	(23)
International productivity				
Index of UK to US (2003)	Experian, 2006	79	97	(8)
Index of UK to EU (2003)		92	82	(12)
Business creation				
VAT registrations (% of stock)	IDBR, 2004	10	15	(3)
VAT deregistrations (% of stock)		10	13	(4)
Stock		1,819,860	129,895	(6)

[48] *Represented by People 1st (the Sector Skills Council for the hospitality, leisure, travel and tourism sector) and SkillsActive (the Sector Skills Council for active leisure and learning). For information on proportion of SSC coverage of this sector, see Appendix B.*

		Whole economy	Sector	Rank
Indicators of workforce composition – ranking in bracket (out of 27 sectors)				
Size of firms				
% of small businesses (1 to 49 employees)	ABI, 2004	96	97	(11)
Profile of the workforce				
% male	LFS, 2005	54	44	(24)
% Black and Minority Ethnic		8	15	(1)
% aged over 45		38	24	(27)
% managers aged over 45		42	36	(23)
% part-time		25	48	(2)
% self-employed		13	9	(14)
Occupational structure				
% of managers in workforce	LFS, 2005	15	19	(9)
Workforce qualifications				
% qualified to level 3 or above	LFS, 2005	53	37	(22)
% of managers qualified to level 4 or above		42	23	(25)
Indicators of skill demand – ranking in bracket (out of 27 sectors)				
Employment growth				
Past growth (% per annum, 1994-2004)	IER, 2006	1.2	2.2	(5)
Future growth (% per annum, 2004-2014)		0.4	0.6	(7)
Total employment requirement (000s, 2004-2014)		12,194	868	(9)
Training				
IIP achievements (% of establishments)	SfBn, 2005	28	19	(11)
Participation in last 13 weeks (% of workforce)	LFS, 2005	28	20	(17)
Training budget (% of establishments)	NESS, 2005	33	26	(19)
Training days in last 12 months (per employee)		9	15	(1)
Training spend in last 12 months (per employee)		185	89	(27)
Training staff in last 12 months (% of employees)		70.3	80.9	(2)
Managerial training (% of establishments)	Bosworth and Wilson (2005)	28	31	(11)
Indicators of skills imbalance – ranking in bracket (out of 27 sectors)				
Earnings				
Gross weekly earnings (£)	ASHE, 2005	334.8	169.8	(27)
Vacancies				
Notified to Jobcentre Plus (% of total)	JCP, May 2006	100.0	8.4	(3)
Hard-to-fill vacancies (% establishments reporting)	NESS, 2005	35.5	36.8	(13)
Skill shortage vacancies (% establishments reporting)		24.9	20.6	(17)
Skills gaps				
Skills gaps (% of employment)	NESS, 2005	5.9	9.6	(1)

2.18 TRANSPORT

Sector definition

- Standard Industrial Classification 60, 61, 62 and 63.[49]
- Includes land transport, water transport, air transport, storage and activities of travel agencies and tour operators.

Sector issues

- Output for the sector is ranked ninth in the economy, but both past and future growth is calculated to be below the national average.
- Productivity in the transport sector is equal to the US, but below that of the EU.
- Although new business creation is slightly less than that seen nationally, the amount of VAT registrations approximately equals the number of deregistrations.
- The proportion of male employees within the sector is relatively high, but the rest of the workforce profile is diverse, particularly with regard to ethnicity.
- The proportion of the workforce that is educated to level 3 or above is one of lowest in the economy, ranked almost bottom, whilst the amount of managers who have attained level 4 or above is also relatively low.
- The number of employees attending training days in the last 12 months is ranked third in the economy, however, training spend is relatively low.
- Vacancies, including hard-to-fill and skills shortages and are in line with the average, as are skills gaps.

		Whole economy	Sector	Rank
Indicators of sector size – ranking in bracket (out of 27 sectors)				
Output and output growth				
Output (% of whole economy, 2004)	IER, 2006	100.0	5.1	(9)
Past growth (% per annum, 1994-2004)		3.0	2.9	(9)
Future growth (% per annum, 2004-2014)		2.4	1.7	(16)
Workforce size				
Total (000s)	LFS, 2005	28,025	1,332	(8)
Total (% of whole economy)		100.0	4.8	(8)
Indicators of economic performance – ranking in bracket (out of 27 sectors)				
Productivity				
Output per capita per hour (£, 2004)	Experian, 2005	19	20	(15)
Future growth (% per annum, 2004-2014)	IER, 2006	2.0	1.4	(22)
International productivity				
Index of UK to US (2003)	Experian, 2006	79	79	(16)
Index of UK to EU (2003)		92	77	(18)
Business creation				
VAT registrations (% of stock)	IDBR, 2004	10	9	(11)
VAT deregistrations (% of stock)		10	9	(15)
Stock		1,819,860	63,820	(11)

[49] *Represented by People 1st (the Sector Skills Council for the hospitality, leisure, travel and tourism sector), Skills for Logistics (the Sector Skills Council for the logistics sector), Energy and Utility Skills (the Sector Skills Council for electricity and renewables, gas, waste management and water industries) and GoSkills (the Sector Skills Council for passenger transport). For information on proportion of SSC coverage of this sector, see Appendix B.*

		Whole economy	Sector	Rank
Indicators of workforce composition – ranking in bracket (out of 27 sectors)				
Size of firms				
% of small businesses (1 to 49 employees)	ABI, 2004	96	96	(13)
Profile of the workforce				
% male	LFS, 2005	54	76	(8)
% Black and Minority Ethnic		8	10	(5)
% aged over 45		38	44	(7)
% managers aged over 45		42	41	(16)
% part-time		25	13	(16)
% self-employed		13	16	(6)
Occupational structure				
% of managers in workforce	LFS, 2005	15	13	(21)
Workforce qualifications				
% qualified to level 3 or above	LFS, 2005	53	36	(25)
% of managers qualified to level 4 or above		42	32	(22)
Indicators of skill demand – ranking in bracket (out of 27 sectors)				
Employment growth				
Past growth (% per annum, 1994-2004)	IER, 2006	1.2	1.4	(11)
Future growth (% per annum, 2004-2014)		0.4	0.3	(10)
Total employment requirement (000s, 2004-2014)		12,194	478	(14)
Training				
IIP achievements (% of establishments)	SfBn, 2005	28	15	(13)
Participation in last 13 weeks (% of workforce)	LFS, 2005	28	19	(19)
Training budget (% of establishments)	NESS, 2005	33	31	(14)
Training days in last 12 months (per employee)		9	11	(3)
Training spend in last 12 months (per employee)		185	142	(23)
Training staff in last 12 months (% of employees)		70.3	61.8	(14)
Managerial training (% of establishments)	Bosworth and Wilson (2005)	28	26	(15)
Indicators of skills imbalance – ranking in bracket (out of 27 sectors)				
Earnings				
Gross weekly earnings (£)	ASHE, 2005	334.8	374.0	(14)
Vacancies				
Notified to Jobcentre Plus (% of total)	JCP, May 2006	100.0	1.8	(9)
Hard-to-fill vacancies (% of all vacancies)	NESS, 2005	35.5	35.0	(15)
Skill shortage vacancies (% of all vacancies)		24.9	23.5	(14)
Skills gaps				
Skills gaps (% of employment)	NESS, 2005	5.9	5.2	(16)

2.19 POST AND TELECOMMUNICATIONS

Sector definition

- Standard Industrial Classification 64.[50]
- Includes post and telecommunications.

Sector issues

- The level of output contributed to the economy by the postal and telecommunication sector ranks fifteenth when compared against other sectors. Past output growth was marginally above the whole economy average.
- Future growth in output in the 2004-2014 period is forecast to be the fastest of all sectors.
- The greater number of VAT registrations as opposed to deregistrations is indicative of new business creation in the sector; the sector is experiencing the greatest expansion of the business base in the economy.
- The workforce profile is varied with regard to the ethnicity of employees and has an average number of older workers.
- The average cost of training in the sector is roughly in line with figures for the whole economy, although the proportion of staff who participated in training activities in the last 12 months is considerably lower than the average.
- The incidence of hard-to-fill vacancies, skills shortage vacancies and skills gaps is relatively low.

		Whole economy	Sector	Rank
Indicators of sector size – ranking in bracket (out of 27 sectors)				
Output and output growth				
Output (% of whole economy, 2004)	IER, 2006	100.0	3.3	(15)
Past growth (% per annum, 1994-2004)		3.0	3.1	(8)
Future growth (% per annum, 2004-2014)		2.4	5.6	(2)
Workforce size				
Total (000s)	LFS, 2005	28,025	600	(13)
Total (% of whole economy)		100.0	2.1	(13)
Indicators of economic performance – ranking in bracket (out of 27 sectors)				
Productivity				
Output per capita per hour (£, 2004)	Experian, 2005	19	30	(4)
Future growth (% per annum, 2004-2014)	IER, 2006	2.0	5.5	(1)
International productivity				
Index of UK to US (2003)	Experian, 2006	79	77	(19)
Index of UK to EU (2003)		92	71	(21)
Business creation				
VAT registrations (% of stock)	IDBR, 2004	10	23	(1)
VAT deregistrations (% of stock)		10	15	(3)
Stock		1,819,860	15,940	(17)

[50] *Represented by e-skills UK (the Sector Skills Council for information technology, telecommunications and contact centres) and Skills for Logistics (the Sector Skills Council for the logistics sector). For information on proportion of SSC coverage of this sector, see Appendix B.*

		Whole economy	Sector	Rank
Indicators of workforce composition – ranking in bracket (out of 27 sectors)				
Size of firms				
% of small businesses (1 to 49 employees)	ABI, 2004	96	90	(21)
Profile of the workforce				
% male	LFS, 2005	54	73	(13)
% Black and Minority Ethnic		8	10	(4)
% aged over 45		38	38	(17)
% managers aged over 45		42	35	(25)
% part-time		25	15	(14)
% self-employed		13	6	(18)
Occupational structure				
% of managers in workforce	LFS, 2005	15	17	(12)
Workforce qualifications				
% qualified to level 3 or above	LFS, 2005	53	43	(17)
% of managers qualified to level 4 or above		42	41	(18)
Indicators of skill demand – ranking in bracket (out of 27 sectors)				
Employment growth				
Past growth (% per annum, 1994-2004)	IER, 2006	1.2	1.6	(9)
Future growth (% per annum, 2004-2014)		0.4	0.2	(12)
Total employment requirement (000s, 2004-2014)		12,194	185	(19)
Training				
IIP achievements (% of establishments)	SfBn, 2005	28	20	(10)
Participation in last 13 weeks (% of workforce)	LFS, 2005	28	23	(12)
Training budget (% of establishments)	NESS, 2005	33	33	(10)
Training days in last 12 months (per employee)		9	6	(21)
Training spend in last 12 months (per employee)		185	154	(18)
Training staff in last 12 months (% of employees)		70.3	52.1	(22)
Managerial training (% of establishments)	Bosworth and Wilson (2005)	28	36	(9)
Indicators of skills imbalance – ranking in bracket (out of 27 sectors)				
Earnings				
Gross weekly earnings (£)	ASHE, 2005	334.8	384.0	(12)
Vacancies				
Notified to Jobcentre Plus (% of total)	JCP, May 2006	100.0	0.9	(14)
Hard-to-fill vacancies (% of all vacancies)	NESS, 2005	35.5	25.0	(22)
Skill shortage vacancies (% of all vacancies)		24.9	18.2	(23)
Skills gaps				
Skills gaps (% of employment)	NESS, 2005	5.9	4.2	(24)

2.20 FINANCIAL SERVICES

Sector definition

- Standard Industrial Classification 65, 66 and 67.[51]
- Includes banks and building societies, pension and insurance funding and activities auxiliary to financial intermediation.

Sector issues

- The level of output attributable to the financial services sector ranks eleventh out of the 27 sectors. Future growth is expected to be less substantial than that seen previously, but still above the figure for the whole economy.
- The financial services sector performs weakly relative to both EU and US comparators.
- The sector is relatively diverse in terms of ethnicity and gender, however, the sector has a considerably smaller proportion of older workers than the other sectors in the economy.
- The proportion of managers within the sector ranks it fourth in the whole UK economy.
- The workforce is relatively highly qualified and performs well on all indicators of training.
- A high proportion of vacancies are notified to Jobcentre Plus, and the sector ranks eighth.
- The percentage of vacancies reported as hard-to-fill and as skills shortages are below the economy average. However, there is a relatively large skills gap within the sector.

		Whole economy	Sector	Rank
Indicators of sector size – ranking in bracket (out of 27 sectors)				
Output and output growth				
Output (% of whole economy, 2004)	IER, 2006	100.0	5.0	(11)
Past growth (% per annum, 1994-2004)		3.0	3.5	(6)
Future growth (% per annum, 2004-2014)		2.4	2.5	(6)
Workforce size				
Total (000s)	LFS, 2005	28,025	1,217	(9)
Total (% of whole economy)		100.0	4.3	(9)
Indicators of economic performance – ranking in bracket (out of 27 sectors)				
Productivity				
Output per capita per hour (£, 2004)	Experian, 2005	19	23	(10)
Future growth (% per annum, 2004-2014)	IER, 2006	2.0	2.2	(10)
International productivity				
Index of UK to US (2003)	Experian, 2006	79	47	(26)
Index of UK to EU (2003)		92	58	(26)
Business creation				
VAT registrations (% of stock)	IDBR, 2004	10	9	(10)
VAT deregistrations (% of stock)		10	9	(13)
Stock		1,819,860	18,785	(16)

[51] *Represented by Financial Services Skills Council (the Sector Skills Council for the financial services sector). For information on proportion of SSC coverage of this sector, see Appendix B.*

		Whole economy	Sector	Rank
Indicators of workforce composition – ranking in bracket (out of 27 sectors)				
Size of firms				
% of small businesses (1 to 49 employees)	ABI, 2004	96	94	(17)
Profile of the workforce				
% male	LFS, 2005	54	49	(21)
% Black and Minority Ethnic		8	8	(10)
% aged over 45		38	25	(26)
% managers aged over 45		42	27	(27)
% part-time		25	16	(12)
% self-employed		13	4	(21)
Occupational structure				
% of managers in workforce	LFS, 2005	15	26	(4)
Workforce qualifications				
% qualified to level 3 or above	LFS, 2005	53	60	(6)
% of managers qualified to level 4 or above		42	44	(15)
Indicators of skill demand – ranking in bracket (out of 27 sectors)				
Employment growth				
Past growth (% per annum, 1994-2004)	IER, 2006	1.2	0.8	(13)
Future growth (% per annum, 2004-2014)		0.4	0.3	(11)
Total employment requirement (000s, 2004-2014)		12,194	457	(15)
Training				
IIP achievements (% of establishments)	SfBn, 2005	28	44	(3)
Participation in last 13 weeks (% of workforce)	LFS, 2005	28	35	(4)
Training budget (% of establishments)	NESS, 2005	33	51	(5)
Training days in last 12 months (per employee)		9	10	(5)
Training spend in last 12 months (per employee)		185	215	(9)
Training staff in last 12 months (% of employees)		70.3	73.3	(7)
Managerial training (% of establishments)	Bosworth and Wilson (2005)	28	49	(4)
Indicators of skills imbalance – ranking in bracket (out of 27 sectors)				
Earnings				
Gross weekly earnings (£)	ASHE, 2005	334.8	434.1	(7)
Vacancies				
Notified to Jobcentre Plus (% of total)	JCP, May 2006	100.0	1.9	(8)
Hard-to-fill vacancies (% of all vacancies)	NESS, 2005	35.5	26.5	(21)
Skill shortage vacancies (% of all vacancies)		24.9	20.3	(19)
Skills gaps				
Skills gaps (% of employment)	NESS, 2005	5.9	6.9	(6)

2.21 REAL ESTATE, RENTING AND RESEARCH AND DEVELOPMENT

Sector definition

- Standard Industrial Classification 70, 71 and 73.[52]
- Includes real estate activities, renting of machinery and equipment without operator and of personal and household goods, and research and development.

Sector issues

- The real estate, renting and research and development sector is one of the largest sectors of the economy in terms of output. Output growth, however, is forecast to slow in comparison to past growth.
- The business base is expanding with more registrations than deregistrations.
- The productivity level is high, compared to the UK whole economy, but against the equivalent sector in the US it is weaker, and the least competitive of all sectors in comparison to the EU.
- The sector has the second highest proportion of small businesses.
- The workforce is highly skilled, with the third highest proportion of managers, and the eighth highest level of employees qualified to level 3 or above.
- Training within the sector is towards the higher end, with a training spend ranked fourth highest in the economy.
- Skills shortage vacancies and skills gaps are reported by employers to be below the national average.

		Whole economy	Sector	Rank
Indicators of sector size – ranking in bracket (out of 27 sectors)				
Output and output growth				
Output (% of whole economy, 2004)	IER, 2006	100.0	7.7	(2)
Past growth (% per annum, 1994-2004)		3.0	4.0	(4)
Future growth (% per annum, 2004-2014)		2.4	2.3	(10)
Workforce size				
Total (000s)	LFS, 2005	28,025	643	(14)
Total (% of whole economy)		100.0	2.3	(14)
Indicators of economic performance – ranking in bracket (out of 27 sectors)				
Productivity				
Output per capita per hour (£, 2004)	Experian, 2005	19	34	(3)
Future growth (% per annum, 2004-2014)	IER, 2006	2.0	2.3	(9)
International productivity				
Index of UK to US (2003)	Experian, 2006	79	65	(21)
Index of UK to EU (2003)		92	46	(27)
Business creation				
VAT registrations (% of stock)	IDBR, 2004	10	14	(4)
VAT deregistrations (% of stock)		10	9	(14)
Stock		1,819,860	97,460	(9)

[52] Represented by Automotive Skills (the Sector Skills Council for all businesses and people involved in the sale, maintenance and repair, daily rental and operating leasing of new and used vehicles and associated parts and accessories) and Asset Skills (the Sector Skills Council for property, housing, cleaning and facilities management); 16 per cent of this sector is not covered by a SSC. For information on proportion of SSC coverage of this sector, see Appendix B.

		Whole economy	Sector	Rank
Indicators of workforce composition – ranking in bracket (out of 27 sectors)				
Size of firms				
% of small businesses (1 to 49 employees)	ABI, 2004	96	99	(2)
Profile of the workforce				
% male	LFS, 2005	54	55	(18)
% Black and Minority Ethnic		8	8	(11)
% aged over 45		38	43	(8)
% managers aged over 45		42	56	(3)
% part-time		25	21	(7)
% self-employed		13	15	(7)
Occupational structure				
% of managers in workforce	LFS, 2005	15	26	(3)
Workforce qualifications				
% qualified to level 3 or above	LFS, 2005	53	58	(8)
% of managers qualified to level 4 or above		42	46	(14)
Indicators of skill demand – ranking in bracket (out of 27 sectors)				
Employment growth				
Past growth (% per annum, 1994-2004)	IER, 2006	1.2	2.6	(3)
Future growth (% per annum, 2004-2014)		0.4	0.0	(13)
Total employment requirement (000s, 2004-2014)		12,194	271	(17)
Training				
IIP achievements (% of establishments)	SfBn, 2005	28	17	(12)
Participation in last 13 weeks (% of workforce)	LFS, 2005	28	27	(7)
Training budget (% of establishments)	NESS, 2005	33	39	(7)
Training days in last 12 months (per employee)		9	9	(10)
Training spend in last 12 months (per employee)		185	261	(4)
Training staff in last 12 months (% of employees)		70.3	74.5	(6)
Managerial training (% of establishments)	Bosworth and Wilson (2005)	28	28	(12)
Indicators of skills imbalance – ranking in bracket (out of 27 sectors)				
Earnings				
Gross weekly earnings (£)	ASHE, 2005	334.8	383.3	(13)
Vacancies				
Notified to Jobcentre Plus (% of total)	JCP, May 2006	100.0	1.5	(11)
Hard-to-fill vacancies (% of all vacancies)	NESS, 2005	35.5	31.1	(17)
Skill shortage vacancies (% of all vacancies)		24.9	19.8	(21)
Skills gaps				
Skills gaps (% of employment)	NESS, 2005	5.9	4.7	(20)

2.22 COMPUTER AND RELATED ACTIVITIES

Sector definition

- Standard Industrial Classification 72.[53]
- Includes hardware and software consultancy, data processing, maintenance and repair of office, accounting and computing machinery.

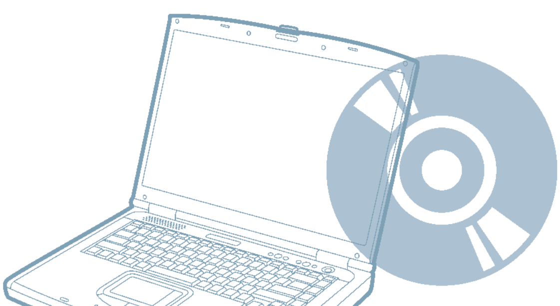
Sector issues

- Computer and related activities has demonstrated the highest level of past output growth per annum, and although output is forecast to slow in the future its growth is expected to remain above the UK average.
- Productivity in the sector is relatively high, ranked sixth in the UK. Similarly productivity is set to rise at the fifth highest rate of all sectors.
- There is a high level of business activity, with VAT registrations and deregistrations ranked fifth and second respectively, indicating low barriers to entry and exit the sector.
- The sector contains the highest proportion of small businesses.
- In terms of workforce diversity the sector had a high proportion of BME, self employed and male employees. However it has a low representation of over 45s as a whole and managers over 45.
- The workforce is highly skilled, with the second highest proportion of managers, and the highest level of employees qualified to level 3 or above.
- Total employment requirement is roughly average for all sectors (based on ranking). Future growth is forecast to decrease in line with the whole economy but the sector is expected to be the fastest growing sector in the UK.
- The sector demonstrates the second highest earnings level.

		Whole economy	Sector	Rank
Indicators of sector size – ranking in bracket (out of 27 sectors)				
Output and output growth				
Output (% of whole economy, 2004)	IER, 2006	100.0	3.3	(14)
Past growth (% per annum, 1994-2004)		3.0	11.6	(1)
Future growth (% per annum, 2004-2014)		2.4	5.8	(1)
Workforce size				
Total (000s)	LFS, 2005	28,025	505	(17)
Total (% of whole economy)		100.0	1.8	(17)
Indicators of economic performance – ranking in bracket (out of 27 sectors)				
Productivity				
Output per capita per hour (£, 2004)	Experian, 2005	19	29	(6)
Future growth (% per annum, 2004-2014)	IER, 2006	2.0	3.1	(5)
International productivity				
Index of UK to US (2003)	Experian, 2006	79	78	(18)
Index of UK to EU (2003)		92	92	(10)
Business creation				
VAT registrations (% of stock)	IDBR, 2004	10	12	(5)
VAT deregistrations (% of stock)		10	15	(2)
Stock		1,819,860	102,240	(8)

[53] Represented by e-skills UK (the Sector Skills Council for information technology, telecommunications and contact centres). For information on proportion of SSC coverage of this sector, see Appendix B.

		Whole economy	Sector	Rank
Indicators of workforce composition – ranking in bracket (out of 27 sectors)				
Size of firms				
% of small businesses (1 to 49 employees)	ABI, 2004	96	99	(1)
Profile of the workforce				
% male	LFS, 2005	54	79	(7)
% Black and Minority Ethnic		8	11	(3)
% aged over 45		38	25	(25)
% managers aged over 45		42	28	(26)
% part-time		25	10	(19)
% self-employed		13	16	(5)
Occupational structure				
% of managers in workforce	LFS, 2005	15	28	(2)
Workforce qualifications				
% qualified to level 3 or above	LFS, 2005	53	78	(1)
% of managers qualified to level 4 or above		42	62	(6)
Indicators of skill demand – ranking in bracket (out of 27 sectors)				
Employment growth				
PPast growth (% per annum, 1994-2004)	IER, 2006	1.2	8.3	(1)
Future growth (% per annum, 2004-2014)		0.4	2.6	(1)
Total employment requirement (000s, 2004-2014)		12,194	351	(16)
Training				
IIP achievements (% of establishments)	SfBn, 2005	28	8	(24)
Participation in last 13 weeks (% of workforce)	LFS, 2005	28	23	(10)
Training budget (% of establishments)	NESS, 2005	33	32	(11)
Training days in last 12 months (per employee)		9	8	(12)
Training spend in last 12 months (per employee)		185	347	(2)
Training staff in last 12 months (% of employees)		70.3	61.2	(16)
Managerial training (% of establishments)	Bosworth and Wilson (2005)	28	21	(21)
Indicators of skills imbalance – ranking in bracket (out of 27 sectors)				
Earnings				
Gross weekly earnings (£)	ASHE, 2005	334.8	611.3	(2)
Vacancies				
Notified to Jobcentre Plus (% of total)	JCP, May 2006	100.0	0.5	(20)
Hard-to-fill vacancies (% of all vacancies)	NESS, 2005	35.5	23.1	(25)
Skill shortage vacancies (% of all vacancies)		24.9	19.3	(22)
Skills gaps				
Skills gaps (% of employment)	NESS, 2005	5.9	3.6	(27)



2.23 LAW, ACCOUNTING, ARCHITECTURE AND OTHER BUSINESS ACTIVITIES NEC

Sector definition

- Standard Industrial Classification 74.[54]
- Includes hardware and software consultancy, data processing, maintenance and repair of office, accounting and computing machinery.

Sector issues

- Law, accounting, architecture and other business activities boasts the highest level of output in the economy, and is predicted to have a high level of future output growth.
- Productivity, domestically and internationally, is average for the economy.
- Business activity is relatively high, with VAT registrations exceeding deregistrations, indicating a marginal expansion of total stock. The stock of businesses is the largest in the economy.
- In terms of workforce diversity the sector is very similar to UK average, however, the proportion of self-employed workers is relatively high.
- The proportion of employees qualified to NVQ level 3 or above is high; similarly the proportion of managers qualified to level 4 or above is higher than average.
- Future employment growth for the sector is forecast to be the second highest in the economy, matched by a high total employment requirement.
- The sector shows signs of skills imbalances, with the highest notifications of job vacancies, and the ninth and eight highest levels of hard-to-fill and skills shortage vacancies respectively.

		Whole economy	Sector	Rank
Indicators of sector size – ranking in bracket (out of 27 sectors)				
Output and output growth				
Output (% of whole economy, 2004)	IER, 2006	100.0	7.9	(1)
Past growth (% per annum, 1994-2004)		3.0	6.1	(2)
Future growth (% per annum, 2004-2014)		2.4	3.4	(2)
Workforce size				
Total (000s)	LFS, 2005	28,025	2,079	(5)
Total (% of whole economy)		100.0	7.4	(5)
Indicators of economic performance – ranking in bracket (out of 27 sectors)				
Productivity				
Output per capita per hour (£, 2004)	Experian, 2005	19	17	(19)
Future growth (% per annum, 2004-2014)	IER, 2006	2.0	1.8	(17)
International productivity				
Index of UK to US (2003)	Experian, 2006	79	83	(12)
Index of UK to EU (2003)		92	80	(14)
Business creation				
VAT registrations (% of stock)	IDBR, 2004	10	12	(7)
VAT deregistrations (% of stock)		10	10	(9)
Stock		1,819,860	332,220	(1)

[54] *Represented by e-skills UK (the Sector Skills Council for information technology, telecommunications and contact centres), Skills for Logistics (the Sector Skills Council for the logistics sector), Energy and Utility Skills (the Sector Skills Council for electricity and renewables, gas, waste management and water industries) and GoSkills (the Sector Skills Council for passenger transport); 67 per cent of this sector is not covered by a SSC. For information on proportion of SSC coverage of this sector, see Appendix B.*

		Whole economy	Sector	Rank
Indicators of workforce composition – ranking in bracket (out of 27 sectors)				
Size of firms				
% of small businesses (1 to 49 employees)	ABI, 2004	96	98	(7)
Profile of the workforce				
% male	LFS, 2005	54	55	(19)
% Black and Minority Ethnic		8	9	(9)
% aged over 45		38	39	(12)
% managers aged over 45		42	40	(18)
% part-time		25	23	(6)
% self-employed		13	24	(4)
Occupational structure				
% of managers in workforce	LFS, 2005	15	15	(18)
Workforce qualifications				
% qualified to level 3 or above	LFS, 2005	53	61	(5)
% of managers qualified to level 4 or above		42	55	(10)
Indicators of skill demand – ranking in bracket (out of 27 sectors)				
Employment growth				
Past growth (% per annum, 1994-2004)	IER, 2006	1.2	3.3	(2)
Future growth (% per annum, 2004-2014)		0.4	1.6	(2)
Total employment requirement (000s, 2004-2014)		12,194	1,819	(5)
Training				
IIP achievements (% of establishments)	SfBn, 2005	28	13	(18)
Participation in last 13 weeks (% of workforce)	LFS, 2005	28	26	(8)
Training budget (% of establishments)	NESS, 2005	33	36	(8)
Training days in last 12 months (per employee)		9	9	(8)
Training spend in last 12 months (per employee)		185	267	(3)
Training staff in last 12 months (% of employees)		70.3	69.4	(10)
Managerial training (% of establishments)	Bosworth and Wilson (2005)	28	24	(16)
Indicators of skills imbalance – ranking in bracket (out of 27 sectors)				
Earnings				
Gross weekly earnings (£)	ASHE, 2005	334.8	562.1	(3)
Vacancies				
Notified to Jobcentre Plus (% of total)	JCP, May 2006	100.0	53.6	(1)
Hard-to-fill vacancies (% of all vacancies)	NESS, 2005	35.5	38.0	(9)
Skill shortage vacancies (% of all vacancies)		24.9	30.5	(8)
Skills gaps				
Skills gaps (% of employment)	NESS, 2005	5.9	5.2	(13)

2.24 PUBLIC ADMIN AND DEFENCE; COMPULSORY SOCIAL SECURITY

Sector definition

- Standard Industrial Classification 75.[55]
- Includes administration of the State and the economic and social policy of the community.

Sector issues

- Output for the public administration and defence; compulsory social security sector is relatively high, ranked seventh in comparison to other sectors of the UK economy. It also has one of the largest workforces.
- There is little business activity with VAT registrations and deregistrations roughly equal and ranked the lowest in the economy. Moreover the sector has the second lowest business stock.
- The sector has one of the lowest levels of small businesses.
- There is a high representation of over 45s in management positions.
- The proportion of female employees is high compared to the all economy average.
- Qualification levels in the sector are above average for all employees, and especially for managers.
- It shows one of the highest allocations of training, with all measures well above average for the UK. It participates in more managerial training than any other sector.
- The sector is ranked higher than average on incidence of hard-to-fill and skills-shortage vacancies, and below average on skills gaps.

		Whole economy	Sector	Rank
Indicators of sector size – ranking in bracket (out of 27 sectors)				
Output and output growth				
Output (% of whole economy, 2004)	IER, 2006	100.0	5.4	(7)
Past growth (% per annum, 1994-2004)		3.0	0.7	(18)
Future growth (% per annum, 2004-2014)		2.4	2.1	(13)
Workforce size				
Total (000s)	LFS, 2005	28,025	2,002	(6)
Total (% of whole economy)		100.0	7.1	(6)
Indicators of economic performance – ranking in bracket (out of 27 sectors)				
Productivity				
Output per capita per hour (£, 2004)	Experian, 2005	19	21	(12)
Future growth (% per annum, 2004-2014)	IER, 2006	2.0	2.3	(8)
International productivity				
Index of UK to US (2003)	Experian, 2006	79	54	(24)
Index of UK to EU (2003)		92	86	(11)
Business creation				
VAT registrations (% of stock)	IDBR, 2004	10	1	(27)
VAT deregistrations (% of stock)		10	2	(27)
Stock		1,819,860	975	(26)

[55] *Represented by Government Skills (the Sector Skills Council for central government) and Skills for Justice (the Sector Skills Council for custodial care, community justice and police, in public, private and voluntary organisations). For information on proportion of SSC coverage of this sector, see Appendix B.*

		Whole economy	Sector	Rank
Indicators of workforce composition – ranking in bracket (out of 27 sectors)				
Size of firms				
% of small businesses (1 to 49 employees)	ABI, 2004	96	81	(25)
Profile of the workforce				
% male	LFS, 2005	54	50	(20)
% Black and Minority Ethnic		8	7	(12)
% aged over 45		38	39	(15)
% managers aged over 45		42	48	(9)
% part-time		25	18	(11)
% self-employed		13	1	(27)
Occupational structure				
% of managers in workforce	LFS, 2005	15	12	(24)
Workforce qualifications				
% qualified to level 3 or above	LFS, 2005	53	63	(4)
% of managers qualified to level 4 or above		42	62	(8)
Indicators of skill demand – ranking in bracket (out of 27 sectors)				
Employment growth				
Past growth (% per annum, 1994-2004)	IER, 2006	1.2	0.5	(15)
Future growth (% per annum, 2004-2014)		0.4	-0.2	(15)
Total employment requirement (000s, 2004-2014)		12,194	506	(13)
Training				
IIP achievements (% of establishments)	SfBn, 2005	28	63	(1)
Participation in last 13 weeks (% of workforce)	LFS, 2005	28	41	(3)
Training budget (% of establishments)	NESS, 2005	33	79	(1)
Training days in last 12 months (per employee)		9	10	(4)
Training spend in last 12 months (per employee)		185	221	(8)
Training staff in last 12 months (% of employees)		70.3	69.9	(9)
Managerial training (% of establishments)	Bosworth and Wilson (2005)	28	76	(1)
Indicators of skills imbalance – ranking in bracket (out of 27 sectors)				
Earnings				
Gross weekly earnings (£)	ASHE, 2005	334.8	423.7	(8)
Vacancies				
Notified to Jobcentre Plus (% of total)	JCP, May 2006	100.0	3.4	(5)
Hard-to-fill vacancies (% of all vacancies)	NESS, 2005	35.5	37.2	(11)
Skill shortage vacancies (% of all vacancies)		24.9	32.9	(6)
Skills gaps				
Skills gaps (% of employment)	NESS, 2005	5.9	4.8	(19)

2.25 EDUCATION

Sector definition

- Standard Industrial Classification 80.[56]
- Includes primary, secondary, higher and adult education.

Sector issues

- Output for the education sector is relatively high in comparison to the UK average, corresponding with a well above average workforce size.
- The sector is very competitive against the same sector in the US, but very weak against its counterparts in the EU.
- The higher level of VAT registrations relative to deregistrations indicates an expanding business stock.
- The sector has the lowest proportion of small businesses.
- The majority of the workforce is female and there are also above average numbers of part time staff and older workers.
- Although it has a very highly qualified workforce, it has the lowest proportion of managers in the whole economy.
- Training levels are very high within the sector, with five of the seven indicators ranked in the top three sectors.
- There is relatively little evidence of skills imbalances or gaps within the sector, although gross weekly earnings are slightly below average.

		Whole economy	**Sector**	**Rank**
Indicators of sector size – ranking in bracket (out of 27 sectors)				
Output and output growth				
Output (% of whole economy, 2004)	IER, 2006	100.0	5.9	(6)
Past growth (% per annum, 1994-2004)		3.0	1.1	(17)
Future growth (% per annum, 2004-2014)		2.4	2.1	(11)
Workforce size				
Total (000s)	LFS, 2005	28,025	2,544	(3)
Total (% of whole economy)		100.0	9.1	(3)
Indicators of economic performance – ranking in bracket (out of 27 sectors)				
Productivity				
Output per capita per hour (£, 2004)	Experian, 2005	19	17	(18)
Future growth (% per annum, 2004-2014)	IER, 2006	2.0	1.5	(21)
International productivity				
Index of UK to US (2003)	Experian, 2006	79	137	(3)
Index of UK to EU (2003)		92	59	(25)
Business creation				
VAT registrations (% of stock)	IDBR, 2004	10	12	(6)
VAT deregistrations (% of stock)		10	7	(24)
Stock		1,819,860	12,985	(20)

[56] Represented by Lifelong Learning UK (the Sector Skills Council for community based learning and development, further education, higher education, library and information services and work-based learning) and GoSkills (the Sector Skills Council for passenger transport); 69 per cent of this sector is not covered by a SSC. For information on proportion of SSC coverage of this sector, see Appendix B.

		Whole economy	Sector	Rank
Indicators of workforce composition – ranking in bracket (out of 27 sectors)				
Size of firms				
% of small businesses (1 to 49 employees)	ABI, 2004	96	80	(27)
Profile of the workforce				
% male	LFS, 2005	54	27	(26)
% Black and Minority Ethnic		8	6	(16)
% aged over 45		38	49	(2)
% managers aged over 45		42	52	(6)
% part-time		25	38	(3)
% self-employed		13	4	(22)
Occupational structure				
% of managers in workforce	LFS, 2005	15	3	(27)
Workforce qualifications				
% qualified to level 3 or above	LFS, 2005	53	73	(2)
% of managers qualified to level 4 or above		42	56	(9)
Indicators of skill demand – ranking in bracket (out of 27 sectors)				
Employment growth				
Past growth (% per annum, 1994-2004)	IER, 2006	1.2	1.9	(6)
Future growth (% per annum, 2004-2014)		0.4	0.6	(8)
Total employment requirement (000s, 2004-2014)		12,194	1,144	(8)
Training				
IIP achievements (% of establishments)	SfBn, 2005	28	47	(2)
Participation in last 13 weeks (% of workforce)	LFS, 2005	28	42	(2)
Training budget (% of establishments)	NESS, 2005	33	75	(2)
Training days in last 12 months (per employee)		9	7	(15)
Training spend in last 12 months (per employee)		185	199	(11)
Training staff in last 12 months (% of employees)		70.3	77.9	(3)
Managerial training (% of establishments)	Bosworth and Wilson (2005)	28	71	(2)
Indicators of skills imbalance – ranking in bracket (out of 27 sectors)				
Earnings				
Gross weekly earnings (£)	ASHE, 2005	334.8	331.5	(18)
Vacancies				
Notified to Jobcentre Plus (% of total)	JCP, May 2006	100.0	1.1	(12)
Hard-to-fill vacancies (% of all vacancies)	NESS, 2005	35.5	26.7	(20)
Skill shortage vacancies (% of all vacancies)		24.9	17.8	(24)
Skills gaps				
Skills gaps (% of employment)	NESS, 2005	5.9	4.4	(23)

2.26 HEALTH AND SOCIAL WORK

Sector definition

- Standard Industrial Classification 85.[57]
- Includes human health activities, veterinary activities and social work activities.

Sector issues

- The health and social work sector has the third highest output in the economy. Past growth between 1994 and 2004 exceeded the figure for the whole economy, and this is forecast to continue until 2014.
- The size of the workforce is the largest in the economy.
- Output per hour for the sector is relatively low and sits below the figure for the whole economy.
- Compared to all sectors, women make up the largest share of the workforce. The workforce is also diverse in terms of ethnicity and older workers.
- Educational attainment within the sector is also high, with a high proportion of individuals who have obtained level 3 or above qualifications.
- There is a high level of investment in training activities within the sector. Almost half the workforce had participated in such activities within the last 13 weeks, the highest proportion in the economy. The percentage of firms with an allocated training budget is high, and the extent of managerial training for the sector is also extensive.
- Gross weekly earnings are relatively low.

		Whole economy	Sector	Rank
Indicators of sector size – ranking in bracket (out of 27 sectors)				
Output and output growth				
Output (% of whole economy, 2004)	IER, 2006	100.0	7.2	(3)
Past growth (% per annum, 1994-2004)		3.0	3.6	(5)
Future growth (% per annum, 2004-2014)		2.4	3.1	(4)
Workforce size				
Total (000s)	LFS, 2005	28,025	3,505	(1)
Total (% of whole economy)		100.0	12.5	(1)
Indicators of economic performance – ranking in bracket (out of 27 sectors)				
Productivity				
Output per capita per hour (£, 2004)	Experian, 2005	19	14	(23)
Future growth (% per annum, 2004-2014)	IER, 2006	2.0	2.1	(11)
International productivity				
Index of UK to US (2003)	Experian, 2006	79	74	(20)
Index of UK to EU (2003)		92	71	(20)
Business creation				
VAT registrations (% of stock)	IDBR, 2004	10	5	(25)
VAT deregistrations (% of stock)		10	5	(26)
Stock		1,819,860	14,310	(19)

[57] *Represented by Lantra (the Sector Skills Council for the environmental and land-based sector), Skills for Health (the Sector Skills Council that represents the four UK health departments, all key stakeholders within the health sector, and has close-working relationships with similar bodies working in related sectors) and Skills for Care (the Sector Skills Council for social care, children and young people). For information on proportion of SSC coverage of this sector, see Appendix B.*

		Whole economy	Sector	Rank
Indicators of workforce composition – ranking in bracket (out of 27 sectors)				
Size of firms				
% of small businesses (1 to 49 employees)	ABI, 2004	96	92	(18)
Profile of the workforce				
% male	LFS, 2005	54	21	(27)
% Black and Minority Ethnic		8	10	(6)
% aged over 45		38	44	(6)
% managers aged over 45		42	55	(4)
% part-time		25	37	(4)
% self-employed		13	7	(17)
Occupational structure				
% of managers in workforce	LFS, 2005	15	9	(26)
Workforce qualifications				
% qualified to level 3 or above	LFS, 2005	53	60	(7)
% of managers qualified to level 4 or above		42	63	(5)
Indicators of skill demand – ranking in bracket (out of 27 sectors)				
Employment growth				
Past growth (% per annum, 1994-2004)	IER, 2006	1.2	1.6	(8)
Future growth (% per annum, 2004-2014)		0.4	0.9	(3)
Total employment requirement (000s, 2004-2014)		12,194	1,609	(6)
Training				
IIP achievements (% of establishments)	SfBn, 2005	28	25	(5)
Participation in last 13 weeks (% of workforce)	LFS, 2005	28	46	(1)
Training budget (% of establishments)	NESS, 2005	33	60	(3)
Training days in last 12 months (per employee)		9	9	(7)
Training spend in last 12 months (per employee)		185	162	(16)
Training staff in last 12 months (% of employees)		70.3	82.6	(1)
Managerial training (% of establishments)	Bosworth and Wilson (2005)	28	62	(3)
Indicators of skills imbalance – ranking in bracket (out of 27 sectors)				
Earnings				
Gross weekly earnings (£)	ASHE, 2005	334.8	293.3	(22)
Vacancies				
Notified to Jobcentre Plus (% of total)	JCP, May 2006	100.0	5.1	(4)
Hard-to-fill vacancies (% of all vacancies)	NESS, 2005	35.5	37.1	(12)
Skill shortage vacancies (% of all vacancies)		24.9	23.0	(16)
Skills gaps				
Skills gaps (% of employment)	NESS, 2005	5.9	5.2	(14)

2.27 COMMUNITY, SOCIAL AND PERSONAL SERVICE ACTIVITIES

Sector definition

- Standard Industrial Classification 90, 91, 92 and 93.[58]
- Includes sewage and refuse disposal, sanitation and similar activities, activities of membership organisations, recreational, cultural and sporting activities and other activities.

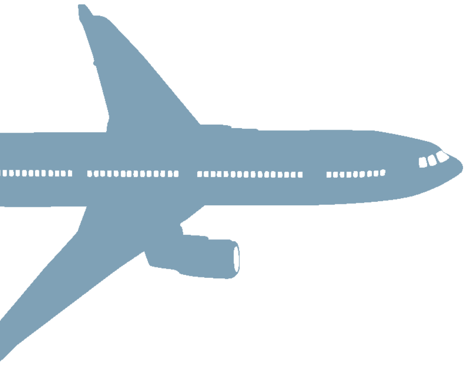
Sector issues

- Output for community, social and personal service activities ranks the sector as eighth, within the top third of the economy.
- Past growth in output was faster than for the whole economy but forecast growth between 2004 and 2014 is expected to fall below the whole economy average.
- The stock of businesses in the sector is contracting, with the proportion of VAT deregistrations greater than VAT registrations.
- More than half the workforce is female and the proportion of older workers is generally representative of the whole economy. The sector employs less BME workers than the average for the economy.
- The sector has one of the highest proportions of part time and self employed workers.
- Hard-to-fill vacancies and skills shortage vacancies in the sector are above the whole economy average.
- Gross weekly earnings are comparatively low, ranked twenty third.

		Whole economy	Sector	Rank
Indicators of sector size – ranking in bracket (out of 27 sectors)				
Output and output growth				
Output (% of whole economy, 2004)	IER, 2006	100.0	5.3	(8)
Past growth (% per annum, 1994-2004)		3.0	3.2	(7)
Future growth (% per annum, 2004-2014)		2.4	1.6	(17)
Workforce size				
Total (000s)	LFS, 2005	28,025	1,558	(7)
Total (% of whole economy)		100.0	5.6	(7)
Indicators of economic performance – ranking in bracket (out of 27 sectors)				
Productivity				
Output per capita per hour (£, 2004)	Experian, 2005	19	17	(17)
Future growth (% per annum, 2004-2014)	IER, 2006	2.0	0.7	(26)
International productivity				
Index of UK to US (2003)	Experian, 2006	79	101	(7)
Index of UK to EU (2003)		92	81	(13)
Business creation				
VAT registrations (% of stock)	IDBR, 2004	10	7	(16)
VAT deregistrations (% of stock)		10	10	(11)
Stock		1,819,860	142,905	(4)

[58] Represented by People 1st (the Sector Skills Council for the hospitality, leisure, travel and tourism sector), SkillsActive (the Sector Skills Council for active leisure and learning), Skillfast-UK (the Sector Skills Council for apparel, footwear, textiles and related businesses), Energy and Utility Skills (the Sector Skills Council for electricity and renewables, gas, waste management and water industries), Lantra (the Sector Skills Council for the environmental and land-based sector), Skillset (the Sector Skills Council for the audio-visual industries), Lifelong Learning UK (the Sector Skills Council for community based learning and development, further education, higher education, library and information services and work-based learning) and Creative and Cultural Skills (the Sector Skills Council for those involved in arts, cultural heritage and craft and design); 36 per cent of this sector is not covered by a SSC. For information on proportion of SSC coverage of this sector, see Appendix B.

		Whole economy	Sector	Rank
Indicators of workforce composition – ranking in bracket (out of 27 sectors)				
Size of firms				
% of small businesses (1 to 49 employees)	ABI, 2004	96	98	(5)
Profile of the workforce				
% male	LFS, 2005	54	48	(22)
% Black and Minority Ethnic		8	6	(15)
% aged over 45		38	37	(21)
% managers aged over 45		42	38	(21)
% part-time		25	35	(5)
% self-employed		13	24	(3)
Occupational structure				
% of managers in workforce	LFS, 2005	15	13	(20)
Workforce qualifications				
% qualified to level 3 or above	LFS, 2005	53	54	(12)
% of managers qualified to level 4 or above		42	36	(20)
Indicators of skill demand – ranking in bracket (out of 27 sectors)				
Employment growth				
Past growth (% per annum, 1994-2004)	IER, 2006	1.2	2.3	(4)
Future growth (% per annum, 2004-2014)		0.4	0.9	(4)
Total employment requirement (000s, 2004-2014)		12,194	862	(10)
Training				
IIP achievements (% of establishments)	SfBn, 2005	28	25	(4)
Participation in last 13 weeks (% of workforce)	LFS, 2005	28	24	(9)
Training budget (% of establishments)	NESS, 2005	33	32	(12)
Training days in last 12 months (per employee)		9	10	(6)
Training spend in last 12 months (per employee)		185	201	(10)
Training staff in last 12 months (% of employees)		70.3	72.8	(8)
Managerial training (% of establishments)	Bosworth and Wilson (2005).	28	24	(17)
Indicators of skills imbalance – ranking in bracket (out of 27 sectors)				
Earnings				
Gross weekly earnings (£)	ASHE, 2005	334.8	287.3	(23)
Vacancies				
Notified to Jobcentre Plus (% of total)	JCP, May 2006	100.0	2.9	(6)
Hard-to-fill vacancies (% of all vacancies)	NESS, 2005	35.5	38.1	(8)
Skill shortage vacancies (% of all vacancies)		24.9	26.1	(12)
Skills gaps				
Skills gaps (% of employment)	NESS, 2005	5.9	5.1	(18)



APPENDICES

APPENDIX A – DATA TABLES

	Output as a percentage of whole economy output	Past growth – GDP 1994-2004 (average annual rate, %)	Future growth – GDP 2004-2014 (average annual rate, %)	Workforce size *
Agriculture, hunting, forestry and fishing	1.1%	0.3%	1.2%	385,815
Mining and quarrying	0.4%	-2.6%	-2.3%	106,208
Food, drink and tobacco	2.4%	0.1%	0.8%	378,074
Textiles and textile products	0.6%	-5.6%	-4.4%	163,750
Wood, pulp and paper products	0.7%	-0.4%	0.2%	180,725
Publishing, printing and reproduction of recorded media	1.8%	0.0%	1.4%	363,249
Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement	3.9%	1.2%	2.5%	640,841
Basic metals and fabricated metal products	1.7%	-0.3%	0.8%	450,277
Machinery, electrical and optical equipment	3.2%	0.0%	2.3%	845,996
Transport equipment	1.9%	2.1%	2.0%	460,364
Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	0.7%	0.3%	2.3%	208,840
Electricity, gas and water supply	1.8%	1.7%	1.1%	169,231
Construction	6.3%	2.2%	1.4%	2,225,931
Sale, maintenance and repair of motor vehicles; fuel retail	2.4%	2.5%	1.6%	550,609
Wholesale trade	5.1%	2.9%	2.8%	671,065
Retail trade	6.3%	4.3%	2.1%	3,049,572
Hotels and restaurants	3.8%	2.6%	1.9%	1,189,700
Transport	5.1%	2.9%	1.7%	1,331,835
Post and telecommunications	3.3%	3.1%	5.6%	600,106
Financial services	5.0%	3.5%	2.5%	1,217,169
Real estate, renting and research and development	7.7%	4.0%	2.3%	643,115
Computer and related activities	3.3%	11.6%	5.8%	504,619
Law, accounting, architecture and other business activities nec	7.9%	6.1%	3.4%	2,078,901
Public admin and defence; compulsory social security	5.4%	0.7%	2.1%	2,002,116
Education	5.9%	1.1%	2.1%	2,543,552
Health and social work	7.2%	3.6%	3.1%	3,505,128
Community, social and personal service activities	5.3%	3.2%	1.6%	1,557,740
Whole economy	100%	3.0%	2.4%	28,024,525
	IER (2006)	IER (2006)	IER (2006)	LFS (2005)

**(Estimate of all persons in employment other than those on college based schemes)*

	Productivity – Output (£) per hour	Future growth – 2004-2014 (average annual rate, %)	Index of UK to US productivity	Index of UK to EU productivity	VAT registrations as a percentage of stock	VAT de-registrations as a percentage of stock	Stock of VAT registered businesses
Agriculture, hunting, forestry and fishing	£13.70	2.8%	93	67	10.6%	9.0%	205,930
Mining and quarrying	£18.00	-0.4%	119	131	8.5%	7.6%	70,995
Food, drink and tobacco	£20.40	1.9%	81	119	8.7%	9.5%	114,945
Textiles and textile products	£13.50	0.7%	54	77	10.2%	10.4%	201,800
Wood, pulp and paper products	£13.60	1.7%	97	82	15.3%	13.2%	129,895
Publishing, printing and reproduction of recorded media	£19.80	1.7%	79	77	8.8%	9.2%	63,820
Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement	£29.90	3.8%	77	71	22.9%	14.5%	15,940
Basic metals and fabricated metal products	£23.40	2.0%	47	58	8.8%	9.4%	18,785
Machinery, electrical and optical equipment	£33.80	3.3%	65	46	14.4%	9.3%	97,460
Transport equipment	£29.00	3.4%	78	92	12.1%	14.6%	102,240
Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	£16.80	2.0%	83	80	11.8%	10.3%	332,220
Electricity, gas and water supply	£20.60	3.0%	54	86	0.5%	1.5%	975
Construction	£16.90	1.8%	137	59	11.9%	7.3%	12,985
Sale, maintenance and repair of motor vehicles; fuel retail	£13.80	1.6%	74	71	4.5%	5.2%	14,310
Wholesale trade	£17.20	2.1%	101	81	7.3%	9.7%	142,905
Retail trade	£19.00	1.3%	79	92	10.0%	9.9%	1,819,860
Hotels and restaurants	£13.70	1.4%	93	67	10.6%	9.0%	205,930
Transport	£18.00	1.4%	119	131	8.5%	7.6%	70,995
Post and telecommunications	£20.40	5.5%	81	119	8.7%	9.5%	114,945
Financial services	£13.50	2.2%	54	77	10.2%	10.4%	201,800
Real estate, renting and research and development	£13.60	2.3%	97	82	15.3%	13.2%	129,895
Computer and related activities	£19.80	3.1%	79	77	8.8%	9.2%	63,820
Law, accounting, architecture and other business activities nec	£29.90	1.8%	77	71	22.9%	14.5%	15,940
Public admin and defence; compulsory social security	£23.40	2.3%	47	58	8.8%	9.4%	18,785
Education	£33.80	1.5%	65	46	14.4%	9.3%	97,460
Health and social work	£29.00	2.1%	78	92	12.1%	14.6%	102,240
Community, social and personal service activities	£16.80	0.7%	83	80	11.8%	10.3%	332,220
Whole economy	£20.60	2.0%	54	86	0.5%	1.5%	975
	Experian, (2003/2004)	IER (2006)	Experian, (2003/2004)	Experian, (2003/2004)	IDBR (2004)	IDBR (2004)	IDBR (2004)

	Small businesses as a percentage of all (1 to 49 employees)	Percentage of the workforce Male	Percentage of the workforce BME	Percentage of the workforce over 45	Percentage of managers over 45	Percentage of workforce who are managers	Percentage of workforce qualified to NVQ level 3 or above	Percentage of managers qualified to NVQ level 4 or above
Agriculture, hunting, forestry and fishing	98.4	75.4	0.7	50.3	54.9	11.7	33.0	28.1
Mining and quarrying	91.7	85.9	2.9	47.8	49.3	16.9	57.7	53.1
Food, drink and tobacco	84.0	67.9	8.8	36.8	38.9	16.8	36.5	47.4
Textiles and textile products	94.4	47.5	13.7	44.0	40.8	16.2	32.4	40.7
Wood, pulp and paper products	94.2	81.7	2.4	39.1	38.6	16.8	42.1	32.0
Publishing, printing and reproduction of recorded media	96.4	60.4	3.5	38.7	40.3	22.1	54.2	41.5
Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement	87.8	73.0	5.0	38.0	41.9	20.2	47.8	53.6
Basic metals and fabricated metal products	95.1	85.8	4.0	45.8	55.9	15.1	46.3	44.0
Machinery, electrical and optical equipment	91.9	74.9	6.1	42.3	48.6	21.1	55.8	54.0
Transport equipment	86.2	87.9	5.0	40.2	41.7	12.3	54.3	62.6
Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	97.0	76.4	5.9	36.9	44.8	16.9	39.3	23.9
Electricity, gas and water supply	80.6	74.1	5.1	34.1	35.6	19.7	64.1	62.5
Construction	98.4	89.7	3.0	37.3	45.9	12.2	47.4	36.2
Sale, maintenance and repair of motor vehicles; fuel retail	98.0	79.6	5.1	35.1	45.8	17.7	41.7	13.9
Wholesale trade	97.3	66.7	5.6	41.2	49.1	29.2	39.2	30.1
Retail trade	97.0	40.6	9.4	30.5	36.7	18.4	37.3	22.7
Hotels and restaurants	96.8	43.9	14.6	23.5	36.0	19.1	37.3	23.1
Transport	95.6	76.5	10.1	43.5	40.5	12.7	36.2	31.8
Post and telecommunications	90.3	73.4	10.2	37.9	35.2	17.1	43.4	41.3
Financial services	94.0	48.6	7.9	24.7	27.1	25.9	60.4	44.4
Real estate, renting and research and development	98.8	54.8	7.6	43.0	55.6	26.4	58.1	46.3
Computer and related activities	98.8	79.0	10.9	25.3	28.2	28.0	78.0	62.5
Law, accounting, architecture and other business activities nec	97.7	54.5	8.6	39.4	39.8	15.3	60.7	54.6
Public admin and defence; compulsory social security	80.8	49.7	6.9	38.6	48.4	12.0	62.7	62.1
Education	80.3	27.4	5.7	48.5	51.7	3.4	73.0	56.2
Health and social work	91.9	20.6	9.9	43.6	55.2	9.1	60.2	62.5
Community, social and personal service activities	98.0	48.2	5.7	36.6	37.6	13.3	54.2	36.3
Whole economy	96.0	53.5	7.5	38.3	42.1	15.0	52.8	42.2
	ABI (2004)	LFS (2005)	LFS (2005)	LFS (2005)	LFS (2005)	LFS (2005)	LFS (2005)	LFS (2005)

	Past employment growth – 1994-2004 (average annual rate, %)	Future employment growth – 2004-2014 (average annual rate, %)	Total employment requirement (% of whole economy)	Percentage of employers having achieved IIP Status	Proportion of the workforce having received job-related training in the last 13 weeks	Percentage of establish-ments with a training Budget	Average number of training days per employee in last 12 months	Average training spend (£) per employee in last 12 months	Average proportion of staff trained in last 12 months
Agriculture, hunting, forestry and fishing	-3.0%	-1.6%	0.8%	8%	10.5%	15.3%	7.7	£173.07	65.7%
Mining and quarrying	-1.8%	-1.9%	n/a	24%	29.2%	48.3%	5.7	£254.46	76.5%
Food, drink and tobacco	-0.6%	-1.1%	0.9%	23%	20.3%	33.2%	6.9	£145.52	57.4%
Textiles and textile products	-8.8%	-5.0%	-0.1%	12%	8.1%	17.1%	3.9	£150.56	44.6%
Wood, pulp and paper products	-2.7%	-1.5%	n/a	6%	16.1%	19.0%	4.6	£156.50	47.6%
Publishing, printing and reproduction of recorded media	-0.1%	-0.3%	n/a	15%	15.6%	22.1%	6.5	£149.27	48.8%
Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement	-1.2%	-1.3%	1.1%	12%	22.6%	31.7%	8.9	£167.19	60.3%
Basic metals and fabricated metal products	-2.4%	-1.2%	0.8%	4%	17.0%	22.4%	5.2	£153.40	48.3%
Machinery, electrical and optical equipment	-2.3%	-1.0%	1.3%	11%	21.8%	26.5%	6.3	£187.06	56.8%
Transport equipment	0.1%	-1.3%	0.6%	15%	22.9%	27.4%	5.2	£140.87	63.3%
Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	0.9%	0.3%	0.7%	9%	13.3%	19.2%	6.4	£122.38	56.3%
Electricity, gas and water supply	-4.2%	-1.8%	n/a	23%	34.1%	54.6%	6.5	£377.90	50.0%
Construction	1.6%	-0.4%	4.7%	15%	18.3%	19.7%	7.5	£232.93	61.9%
Sale, maintenance and repair of motor vehicles; fuel retail	-0.7%	0.0%	1.7%	10%	19.0%	26.7%	8.5	£230.62	61.8%
Wholesale trade	0.7%	0.7%	4.2%	15%	15.5%	28.0%	5.4	£178.92	57.6%
Retail trade	1.4%	0.8%	11.7%	21%	20.7%	24.2%	11.2	£95.98	77.1%
Hotels and restaurants	2.2%	0.6%	7.1%	19%	20.1%	26.4%	15.5	£88.57	80.9%
Transport	1.4%	0.3%	3.9%	15%	18.7%	31.2%	10.5	£141.68	61.8%
Post and telecommunications	1.6%	0.2%	1.5%	20%	22.9%	32.9%	6.2	£154.08	52.1%
Financial services	0.8%	0.3%	3.7%	44%	35.3%	51.3%	10.1	£214.86	73.3%
Real estate, renting and research and development	2.6%	0.0%	2.2%	17%	27.2%	38.6%	8.7	£261.13	74.5%
Computer and related activities	8.3%	2.6%	2.9%	8%	23.1%	31.9%	8.0	£347.26	61.2%
Law, accounting, architecture and other business activities nec	3.3%	1.6%	14.9%	13%	26.3%	35.9%	8.9	£266.64	69.4%
Public admin and defence; compulsory social security	0.5%	-0.2%	4.1%	63%	41.0%	78.8%	10.3	£221.46	69.9%
Education	1.9%	0.6%	9.4%	47%	41.6%	74.9%	7.2	£199.49	77.9%
Health and social work	1.6%	0.9%	13.2%	25%	46.4%	59.6%	9.1	£162.19	82.6%
Community, social and personal service activities	2.3%	0.9%	7.1%	25%	23.9%	31.7%	9.6	£201.40	72.8%
Whole economy	1.2%	0.4%	100%	28%	28.0%	33.3%	9.0	£185.19	70.3%
	IER (2006)	IER (2006)	IER (2006)	SfBn (2005)	LFS (2005)	NESS (2005)	NESS (2005)	NESS (2005)	NESS (2005)

	Average gross weekly earnings (£)	Vacancies notified to employment service job centres as a share of all vacancies	HTF vacancies as a proportion of all vacancies	Skills shortage vacancies as a proportion of all vacancies	Skill gaps as a proportion of employment
Agriculture, hunting, forestry and fishing	£254.9	0.6%	56.1%	34.0%	4.7%
Mining and quarrying	£447.5	0.1%	20.0%	20.4%	4.0%
Food, drink and tobacco	£333.5	0.7%	23.8%	16.7%	8.4%
Textiles and textile products	£277.9	0.2%	43.8%	31.5%	4.2%
Wood, pulp and paper products	£316.6	0.2%	52.2%	42.8%	6.5%
Publishing, printing and reproduction of recorded media	£386.3	0.3%	26.8%	23.1%	5.6%
Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass, ceramics and cement	£631.2	0.5%	30.4%	24.6%	7.4%
Basic metals and fabricated metal products	£361.7	0.6%	54.5%	46.2%	6.4%
Machinery, electrical and optical equipment	£385.0	0.6%	36.0%	29.4%	4.5%
Transport equipment	£462.0	0.2%	24.1%	20.0%	6.8%
Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	£319.0	0.3%	40.0%	27.8%	8.0%
Electricity, gas and water supply	£483.3	0.6%	14.3%	12.8%	5.2%
Construction	£409.9	2.7%	49.2%	36.4%	5.4%
Sale, maintenance and repair of motor vehicles; fuel retail	£325.8	1.0%	44.3%	35.0%	6.2%
Wholesale trade	£354.6	1.6%	37.3%	30.0%	5.2%
Retail trade	£177.5	8.8%	31.7%	17.6%	8.1%
Hotels and restaurants	£169.8	8.4%	36.8%	20.6%	9.6%
Transport	£374.0	1.8%	35.0%	23.5%	5.2%
Post and telecommunications	£384.0	0.9%	25.0%	18.2%	4.2%
Financial services	£434.1	1.9%	26.5%	20.3%	6.9%
Real estate, renting and research and development	£383.3	1.5%	31.1%	19.8%	4.7%
Computer and related activities	£611.3	0.5%	23.1%	19.3%	3.6%
Law, accounting, architecture and other business activities nec	£562.1	53.6%	38.0%	30.5%	5.2%
Public admin and defence; compulsory social security	£423.7	3.4%	37.2%	32.9%	4.8%
Education	£331.5	1.1%	26.7%	17.8%	4.4%
Health and social work	£293.3	5.1%	37.1%	23.0%	5.2%
Community, social and personal service activities	£287.3	2.9%	38.1%	26.1%	5.1%
Whole economy	£334.8	100%	35.5%	24.9%	5.9%
	ASHE (2005)	JCP (2006)	NESS (2005)	NESS (2005)	NESS (2005)

APPENDIX B – MAPPING OF SECTORS TO SECTOR SKILLS COUNCILS

	27 industries	2 digit SIC code	Major SSC[59]	% employment coverage (LFS)	Minor SSC	% coverage
1	Agriculture, hunting, forestry and fishing	01 : Agriculture, hunting, etc 02 : Forestry, logging, etc 05 : Fishing, operation fish hatcheries/farms	LANTRA	99	ConstructionSkills	overlap only
2	Mining and quarrying	10 : Mining coal/lignite; extraction of peat 11 : Extraction crude petroleum/natural gas 12 : Mining of uranium and thorium ores 13 : Mining of metal ores 14 : Other mining and quarrying	Cogent Proskills UK	60 40	Energy and Utility (EU) Skills ConstructionSkills	overlap only
3	Food, drink and tobacco	15 : Manuf food products and beverages 16 : Manuf tobacco products	Improve Ltd	98	Skillfast-UK Skillsmart Retail	<1 overlap only
4	Textiles and textile products	17 : Manuf textiles 18 : Manuf apparel;dressing/dyeing fur 19 : Tanning/dressing of leather, etc	Skillfast-UK	100		
5	Wood, pulp and paper products	20 : Manuf wood/products/cork, etc 21 : Manuf pulp, paper and paper products	Gap Lantra (20.1 only)	94 4	Proskills UK (21.24 only) Skillset ConstructionSkills	2 overlap only
6	Publishing, printing and reproduction of recorded media	22 : Publishing,printing repro recorded media	Gap Proskills UK	50 50	Skillset e-skills UK Creative and Cultural Skills	<1
7	Coke, petrol, nuclear fuel, chemicals, rubber, plastics, glass ceramics and cement	23 : Manuf coke, refined petroleum products 24 : Manuf chemicals and chemical products 25 : Manuf rubber and plastic goods 26 : Manuf other non-metallic products	Cogent Proskills UK	73 10	Gap SEMTA Skillset ConstructionSkills	5 2 <1 overlap only
8	Basic metals and fabricated metal products	27 : Manuf basic metals 28 : Manuf fabricated metal products, etc	SEMTA	100	Proskills UK ConstructionSkills	overlap only
9	Machinery, electrical and optical equipment	29 : Manuf machinery and equipment nec 30 : Manuf office machinery and computers 31 : Manuf electrical machinery/apparatus nec 32 : Manuf radio, tv/communications equipment 33 : Manuf medical,precision instruments, etc	SEMTA	100	SummitSkills Proskills UK Skillsfast-UK EU Skills Lantra ConstructionSkills Skillset	overlaps only
10	Transport equipment	34 : Manuf motor vehicles,trailers,etc 35 : Manuf other transport equipment	SEMTA	100	SkillsActive Proskills UK	overlap only
11	Furniture, jewellery, musical instruments, sports goods, games and toys; recycling	36 : Manuf furniture; manufacturing nec 37 : Recycling	Gap	93	Creative and Cultural Skills (man musical instruments) EU Skills (Recycling) Proskills UK ConstructionSkills	4 3 overlap only

[59] *For SIC footprints of each SSC see Appendix C.*

27 industries	2 digit SIC code	Major SSC[59]	% employment coverage (LFS)	Minor SSC	% coverage
12 Electricity, gas and water supply	40 : Electricity,gas,steam/hot water supply 41 : Collection,purification/distrib. of water	Energy and Utility Skills (EU Skills)	98	Gap ConstructionSkills	2 overlap only
13 Construction	45 : Construction	ConstructionSkills SummitSkills	80 20 footnote 1	Skillfast-UK Improve Ltd Energy and Utility	overlap only
14 Sale, maintenance and repair of motor vehicles; fuel retail	50 : Sale,maintenance/repair motor vehicles	Automotive Skills Cogent (50.5 only)	footnote 1	GoSkills Skillsmart Retail Proskills UK Financial Services Skills Council ConstructionSkills	overlap only
15 Wholesale trade	51 : Wholesale trade/commission trade, etc	Gap	85	Skillfast-UK Improve Ltd Lantra ConstructionSkills Skillsmart Retail EU Skills SEMTA	5 2 overlap only
16 Retail trade	52 : Retail trade, except of motor vehicles	Skillsmart Retail	98	Gap SummitSkills Skillfast-UK Improve Ltd EU Skills Financial Services Skills Council People 1st Skillset Lantra ConstructionSkills	1 1 overlap only
17 Hotels, restaurants	55 : Hotels and restaurants	People 1st	99	SkillsActive Skillsmart Retail	<1 overlap only
18 Transport	60 : Land transport; transport via pipelines 61 : Water transport 62 : Air transport 63 : Supporting/auxilliary transport, etc	GoSkills Skills for Logistics	50 40	People 1st EU Skills Skillsmart Cogent Gap	8 1 overlap only
19 Post and telecommunications	64 : Post 64 : Telecommunications	Skills for Logistics (post) e-skills UK (telecommunications)	58 42		

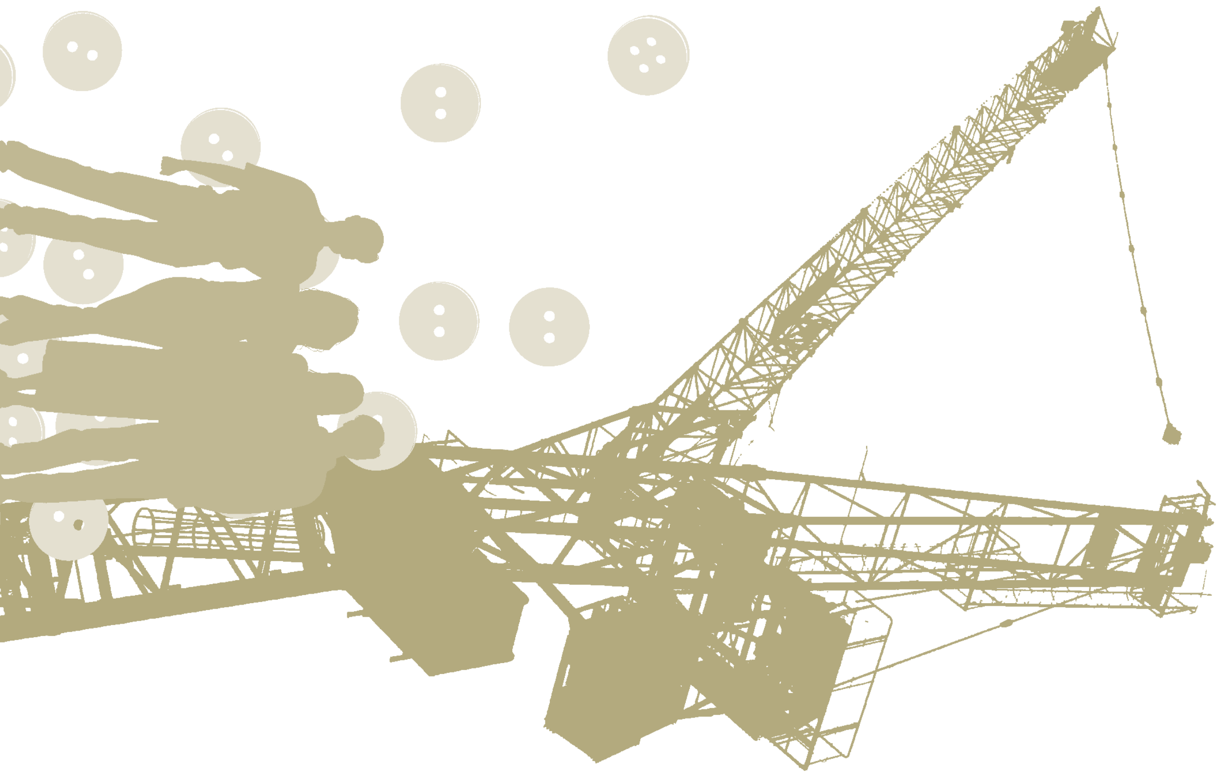
	27 industries	2 digit SIC code	Major SSC[59]	% employment coverage (LFS)	Minor SSC	% coverage
20	Financial services	65 : Financial intermediation, etc 66 : Insurance and pension funding, etc 67 : Act auxilliary financial intermediation	Financial Services Skills Council	100		
21	Real estate, renting and research and development	70 : Real estate activities 71 : Renting machinery/equipment 73 : Research and development	Asset Skills (real estate) SEMTA Gap (73; rentals)	62 17 16	Automotive Skills (Renting cars) ConstructionSkills (Renting of construction equipment) People 1st Financial Services Skills Council	6 4 overlap only
22	Computer and related services	72 : Computing and related activities	e-skills UK	100	Skillset	overlap only
23	Law, accounting, architecture and other business activities nec	74 : Other business activities	Gap (inc legal, accountancy)	67	ConstructionSkills (Architecture) Asset Skills (Cleaning) Creative and Cultural Skills Skillset Skillfast-UK Financial Services Skills Council People 1st SEMTA e-skills UK	16 10 4 2 overlap only
24	Public administration and defence; compulsory social security	75 : Public admin/defence; compulsory SS	Government Skills Skills for Justice	71 21	Gap ConstructionSkills Asset Skills	3 overlap only
25	Education	80.1 and 80.2 : Primary and secondary 80.3 and 80.4 : Adult and Higher	Gap (schools) Lifelong Learning UK	69 30	GoSkills (driving schools) People 1st SEMTA Government Skills ConstructionSkills	1 overlap only
26	Health and social work	85 : Health 85 : Social work	Skills for Health Skills for Care and Development	60 39	Lantra (veterinarians) People 1st Asset Skills	1 overlap only

[59] *For SIC footprints of each SSC see Appendix C.*

	27 industries	2 digit SIC code	Major SSC[59]	% employment coverage (LFS)	Minor SSC	% coverage
27	Community, social and personal service activities	90 : Sewage/refuse disposal, sanitation, etc 92 : Recreational, cultural and sporting 91 : Activities membership organisations 93 : Other service activities	SkillsActive Creative and Cultural Skills Skillset EU Skills Gap (91; hairdressing)	19 15 10 7 (footnote 2) 36	People 1st (gambling) Lifelong Learning UK (libraries) Skillsfast-UK (dry cleaning) Lantra (zoos) Asset Skills Proskills UK ConstructionSkills Government Skills	5 4 3 <1 overlap only

Notes:
1 – This is difficult to ascertain because, again, LFS does not disaggregate to assess the coverage of each SSC. However, probable that bulk of employment and types of skill needs will be dominated by Automotive in sector 50 and by Gap in sector 51 (numbers are only assumptions in these sectors).
2 – EU concerns only 90.01 and 90.02 but not 90.03 (which is a gap) but share presented is as EU skills covers the sector 90 as a whole.

[59] *For SIC footprints of each SSC see Appendix C.*



APPENDIX C – SECTOR SKILLS COUNCILS – DEFINITIONS

Sector Skills Councils (SSCs) are independent, UK wide organisations developed by groups of influential employers in business sectors of economic or strategic significance. SSCs are employer-led and actively involve trade unions, professional bodies and other stakeholders in the sector. SSCs are licensed by the Secretary of State for Education and Skills, in consultation with Ministers in Scotland, Wales and Northern Ireland, to tackle the skills and productivity needs of their sector throughout the UK. By the end of 2005 there was a network of 25 SSCs covering up to 85 per cent of the workforce.

SSCs give responsibility to employers to provide leadership for strategic action to meet their sector's skills and business needs. In return they receive substantial public investment and greater dialogue with government departments across the UK. This will enable sector employers to have a far greater impact on policies affecting skills and productivity, and increased influence with education and training partners.

Each SSC agrees sector priorities and targets with its employers and partners to address four key goals:

- Reducing skills gaps and shortages
- Improving productivity, business and public service performance
- Increasing opportunities to boost the skills and productivity of everyone in the sector's workforce, including action on equal opportunities
- Improving learning supply, including apprenticeships, higher education and national occupational standards

Good quality sectoral labour market data and, crucially, interpretation and analysis of data (i.e. adding intelligence to the information) is vital to the success of each SSC. This is in terms of being able to articulate specific employer skills needs to key stakeholders and providers; making provision more responsive, relevant and tailored; furthering the understanding of sector skill needs to employers and other partners; and developing the influence of the SSC itself.

SSC definitions use SIC codes that most closely match each SSC's employer coverage. These definitions are a 'best fit' of each SSCs core business sectors. These specify the core SIC codes that are undisputed and do not overlap with any other SSC. The extent to which the SIC codes used are an exact fit with each SSC's employer coverage varies between SSCs. In some cases the use of core SIC codes excludes elements of the SSC footprint because they are included in other areas.

ASSET SKILLS

Asset Skills is the Sector Skills Council for property, housing, cleaning and facilities management. The sector includes:

- property managers;
- residential estate agents;
- caretakers;
- facilities management professionals;
- cleaners;
- town planners; and
- letting agents and housing managers.

Asset Skills covers the Standard Industrial Classification (SIC) Codes 70 and 74.7.

www.assetskills.org

AUTOMOTIVE SKILLS

Automotive Skills is the Sector Skills Council for all businesses and people involved in the sale, maintenance and repair, daily rental and operating leasing of new and used vehicles and associated parts and accessories.

The sector comprises:

- providers of servicing, maintenance, repair and valeting services;
- bodyshops (repairers, rebuilders and refinishers);
- vehicle inspection and MOT testing;
- specialist sellers and fitters of parts;
- accessories, and motor fuels;
- vehicle rental, leasing and fleet management and insurance; and
- roadside assistance and recovery.

Automotive Skills covers SIC codes 50 (excluding 50.5) and 71.1.

www.automotiveskills.org.uk

COGENT

Cogent is the Sector Skills Council for chemicals, nuclear, oil and gas, petroleum and polymers. The SSC covers five sub-sector groupings, which share a common foundation – science and technology. The groupings are:

- oil and gas extraction;
- nuclear and radiological technology;
- chemicals manufacturing;
- petroleum sector; and
- polymers.

Cogent covers SIC codes 11, 23 to 25 (excluding 24.3, 24.64, 24.7, 25.11 and 25.12) and 50.5.

www.cogent-ssc.com

CONSTRUCTIONSKILLS

ConstructionSkills is the Sector Skills Council for the construction sector and covers a wide range of sectors in the development and maintenance of the built environment, including:

- house building (public and private);
- infrastructure (roads, railways and utilities);
- non-residential building in the private sector (schools and colleges, hospitals, offices);
- industrial building by the private sector (factories, warehouses); and
- commercial building by the private sector (offices, shops, entertainment, health and education).

Additionally, the sector covers maintenance and repair work in all sectors. The sector also covers the renting of construction machinery and professional and design work in consultancies (engineering, architecture and surveying).

ConstructionSkills covers SIC codes 45 (excluding 45.31 and 45.33) and 74.2.

www.constructionskills.net

CREATIVE AND CULTURAL SKILLS

Creative and Cultural Skills is the Sector Skills Council for those involved in arts, cultural heritage and craft and design. The sub-sectors covered are:

- the arts – music, performing arts, visual arts and literary arts;
- cultural heritage – museums, galleries and heritage organisations;
- craft – including designer makers of contemporary crafts, covering over 50 specialist trades and occupations; and
- design – specialist consultancies covering graphic, spatial and domestic products.

Creative and Cultural Skills covers SIC codes 22.14, 22.31, 36.22, 36.3, 74.4, 92.31, 92.32, 92.34, 92.4 and 92.52.

www.ccskills.org.uk

E-SKILLS UK

e-skills UK is the Sector Skills Council for information technology, telecommunications and contact centres and is responsible for developing the quality and quantity of professional skills of:

- the IT sector
- IT professionals working in all industries and Telecommunications; and
- contact centres dedicated to outsourced services and contact centres operating within all industries.

e-skills covers SIC codes 22.33, 64.2, 72 and 74.86, which cover:

- reproduction of recorded media;
- telecommunications;
- computer consultancy, data processing, data base activities and maintenance; and
- call centre activities.

These codes do not cover IT and Telecoms manufacturing.

www.e-skills.com

ENERGY AND UTILITY SKILLS

Energy and Utility Skills is the Sector Skills Council for electricity and renewables, gas, waste management and water industries. It represents:

- generation, transmission and distribution of electricity, combined heat and power;
- production and distribution of gas and water; and
- removal of waste water and treatment of waste products.

These industries cover a range of fundamental services that are vital to a successful UK economy and are key to the attainment of environmental targets on water quality, fuel utilisation and waste management.

Energy and Utility Skills cover SIC codes 37, 40.1, 40.2, 41, 60.3, 90.01 and 90.02.

www.euskills.co.uk

FINANCIAL SERVICES SKILLS COUNCIL

Financial Services Skills Council is the Sector Skills Council for the financial services sector. It includes:

- banks, building societies and central banking;
- leasing;
- credit unions, factoring and other credit granting organisations;
- investment, unit trusts and venture capital;
- life insurance, non-life insurance (general insurance) and insurance brokers;
- administration of financial markets;
- pension funding;
- independent financial advisers and tied financial advisors;
- unit trust and investment trust companies;
- fund managers, asset managers and pension management; and
- securities and derivatives traders.

Financial Services Skills Council covers SIC codes 65, 66 and 67.

www.fssc.org.uk

GOSKILLS

GoSkills is the Sector Skills Council for passenger transport, which includes:

- aviation (airports, operators and ground services);
- chauffeurs and coaches;
- community bus services;
- driving instructors;
- private hire vehicles;
- scheduled bus services;
- taxis;
- trams; and
- transport planners.

GoSkills covers SIC codes 60.1, 60.21, 60.22, 60.23, 61.1, 61.2, 62.1, 62.2, 63.21, 63.22, 63.23 and 80.41.

www.goskills.org

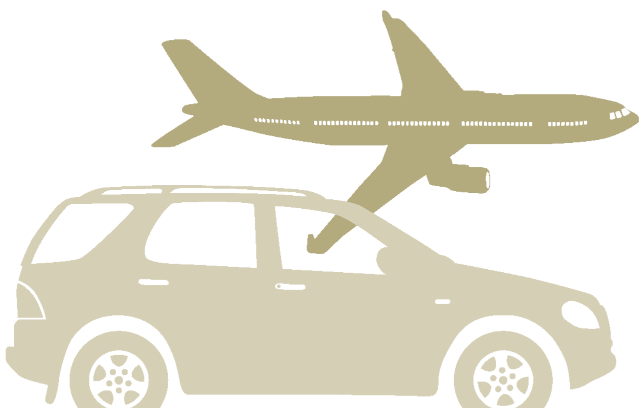
GOVERNMENT SKILLS

Government Skills is the Sector Skills Council for central government. The sector includes:

- government departments;
- executive agencies;
- non-departmental public bodies; and
- armed forces

Government Skills covers SIC codes 75.1, 75.21, 75.22 and 75.3.

www.government-skills.gov.uk



IMPROVE LTD.

Improve Ltd. is the Sector Skills Council for food and drink, which represents employers operating in all sectors of the food and drink manufacturing and processing sector. The sector includes:

- sea fishing;
- craft bakery;
- meat and poultry;
- dairy; and
- general food and drink.

Improve Ltd. covers SIC codes 15 and 51.38.

www.improveltd.co.uk

LANTRA

Lantra is the Sector Skills Council for the environmental and land-based sector. This includes:

- agricultural livestock and crops;
- animal care;
- animal technology;
- aquaculture;
- environmental conservation;
- equine;
- farriery;
- fencing;
- fisheries management;
- floristry;
- trees and timber;
- game conservation;
- land-based engineering;
- landscaping;
- productive horticulture; and
- veterinary nursing.

Lantra covers SIC codes 01, 02.01, 02.02, 05.02, 20.1, 51.88, 85.2 and 92.53.

www.lantra.co.uk

LIFELONG LEARNING UK

Lifelong Learning UK is the Sector Skills Council for community based learning and development, further education, higher education, library and information services and work-based learning.

Lifelong Learning UK covers SIC codes 80.22, 80.3, 80.42 and 92.51.

www.lifelonglearninguk.org

PEOPLE 1ST

People 1st is the Sector Skills Council for the hospitality, leisure, travel and tourism sector, representing employers of all sizes in the following industries:

- hotels;
- pubs, bars and nightclubs;
- membership clubs;
- gambling;
- tourist services;
- youth hostels;
- self-catering accommodation;
- restaurants;
- contract food service providers;
- events;
- travel services;
- visitor attractions;
- holiday parks; and
- hospitality services.

People 1st covers SIC codes 55.1, 55.21, 55.23, 55.3-55.5, 63.3, 92.33 and 92.71.

www.people1st.co.uk

PROSKILLS

Proskills is the Sector Skills Council for the process and manufacturing sector. The sector includes:

- coatings;
- extractives;
- glass;
- building products; and
- printing.

Proskills covers SIC codes 10, 12 to 14, 21.24, 22.2, 24.3, 26.1, 26.26, 26.4-8.

www.proskills.co.uk

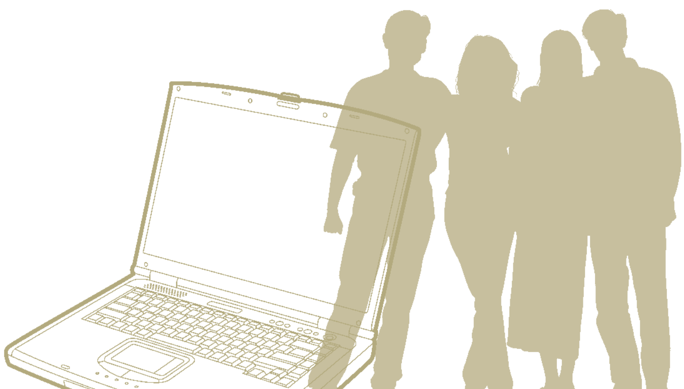
SEMTA

SEMTA is the Sector Skills Council for science, engineering and manufacturing technologies and represents the sectors of:

- aerospace;
- electrical engineering;
- electronics, including semi-conductors;
- mechanical engineering and metal trades;
- motor vehicles;
- shipbuilding;
- biotechnology;
- nanotechnology;
- mathematics; and
- forensic science.

SEMTA covers SIC codes 25.11, 25.12, 27 to 35 inclusive, 51.52, 51.57 and 73.10.

www.semta.org.uk



SKILLFAST-UK

Skillfast-UK is the Sector Skills Council for apparel, footwear, textiles and related businesses. Its remit covers a wide variety of activities, including:

- production of raw materials e.g. leather production;
- manufacture of apparel, footwear, textiles and fibres;
- servicing of apparel, footwear and textile products e.g. dry cleaning and shoe repair;
- design activities related to apparel, footwear and textiles; and
- trading in apparel, footwear and textile products, including specialist wholesale activities and activities of brand-driven holding companies.

Skillfast-UK covers SIC codes 17, 18, 19, 24.7, 51.16, 51.24, 51.41, 51.42, 52.71 and 93.01.

www.skillfast-uk.org

SKILLS FOR CARE AND DEVELOPMENT

Skills for Care and Development is the Sector Skills Council for social care, children and young people. Social care policy is fully devolved to each of the four countries. The scope of the sector is defined by legislation in each of the countries, with some differences for the devolved administrations. The current scope of the sector is:

- children's homes;
- care homes;
- domiciliary care and support agencies;
- day centres and services;
- social work;
- fostering agencies and services, and foster carers;
- nurse agencies; and
- adoption services.

Skills for Care and Development covers SIC code 85.3.

www.skillsforcareanddevelopment.org.uk

SKILLS FOR HEALTH

Skills for Health is the Sector Skills Council that represents the four UK health departments, all key stakeholders within the health sector, and has close-working relationships with similar bodies working in related sectors.

Skills for Health covers SIC code 85.1.

www.skillsforhealth.org.uk

SKILLS FOR JUSTICE

Skills for Justice is the Sector Skills Council for custodial care, community justice and police, in public, private and voluntary organisations.

Skills for Justice covers SIC codes 75.23 and 75.24.

www.skillsforjustice.com

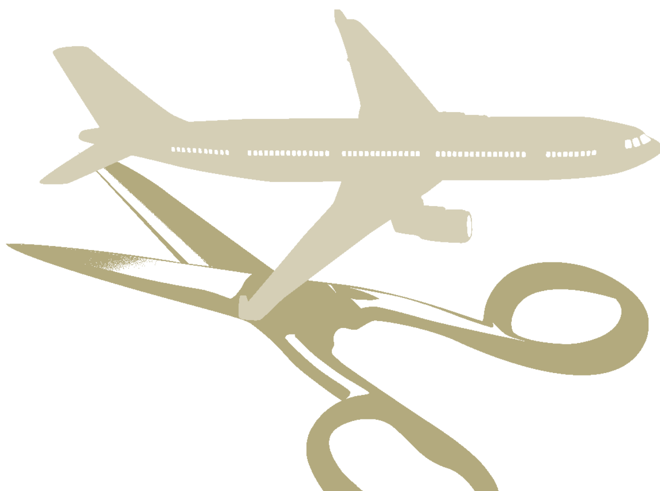
SKILLS FOR LOGISTICS

Skills for Logistics is the Sector Skills Council for the logistics sector. The sector covers:

- freight transport by road;
- storage and warehousing;
- activities of other transport agencies;
- courier services;
- airfreight;
- rail freight;
- freight inland; and
- sea and coastal water transport

Skills for Logistics covers SIC codes 60.24, 63.1, 63.4 and 64.1.

www.skillsforlogistics.org



SKILLSACTIVE

SkillsActive is the Sector Skills Council for active leisure and learning. The sector covers:

- sport;
- recreation;
- children's play;
- health and fitness;
- outdoor education;
- training;
- caravans; and
- adventure

SkillsActive covers SIC codes 55.22, 92.6 and 93.04.

www.skillsactive.com

SKILLSET

Skillset is the Sector Skills Council for the audio-visual industries. The sector covers:

- broadcast;
- film;
- video;
- interactive media; and
- photo imaging.

Skillset covers SIC codes 22.32, 24.64, 74.81, 92.1 and 92.2.

www.skillset.org

SKILLSMART RETAIL

Skillsmart Retail is the Sector Skills Council for the retail sector, established in 2002 and includes:

- supermarkets, department stores and corner shops;
- specialist food, drink and tobacco stores;
- specialist retailers of goods including textiles, clothing, footwear and leather, furniture, electrical, hardware, books and stationary, floor coverings and photographic equipment;
- antique retailers; and
- markets and mail order.

Skillsmart Retail covers SIC codes 52.1 to 52.6.

www.skillsmartretail.com

SUMMITSKILLS

SummitSkills is the Sector Skills Council for the electrotechnical, heating, ventilating, air conditioning, refrigeration and plumbing industries. The sector covers:

- design, installation and maintenance of electrotechnical heating, ventilation, air conditioning, refrigeration and plumbing; and
- oil and gas fitting design, installation and maintenance.

SummitSkills covers SIC codes 31.1, 31.62, 33.3, 45.31, 45.33, and 52.72.

www.summitskills.org.uk

APPENDIX D – CALCULATING RETURNS TO QUALIFICATIONS

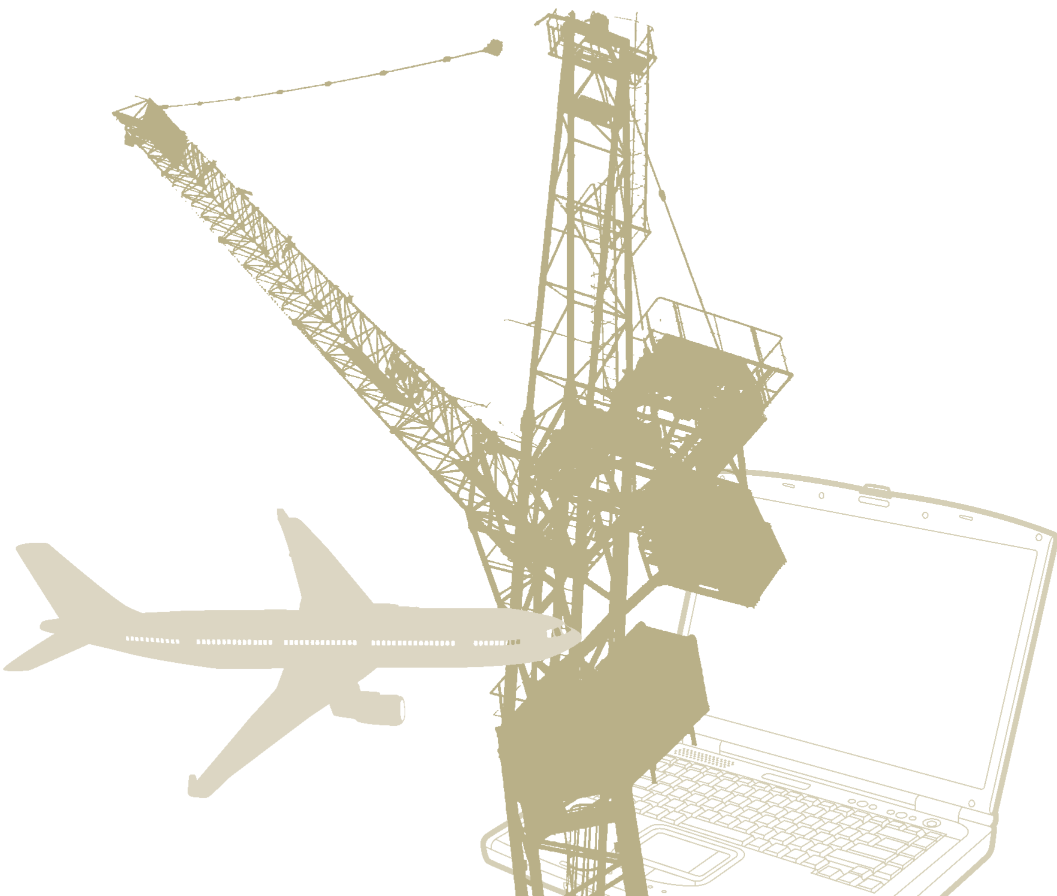
This note presents the rates of returns to qualifications as defined by the five levels of the NQF (National Qualifications Framework) across the SSDA's 27 Sector Matrix Industries (SMIs) (see Annex B for definitions). It extends the analysis in Dickerson (2005, DTI) by presenting estimates for (full-time) men and women pooled together, rather than being considered separately as previously, with gender differences in pay presumed to be captured by a simple gender dummy. As in the earlier work, estimates are provided for the incremental return accruing to successively higher levels of qualifications. The fact that the LFS records all qualifications held rather than just the highest allows us to include indicators for all these qualifications in the earnings functions for each individual. This contrasts with just including an indicator of the highest qualification achieved as in the more conventional approach. By including all qualification levels, the estimated rates of return are the average return across all individuals who have this qualification, rather than being the return to those who have obtained the particular qualification as their highest achievement. If returns are independent of any further qualifications obtained, then these two rates will be the same. But if those who go onto achieve higher qualifications are different from those who do not – as will certainly be the case – then the 'average' returns (i.e. to all who hold the qualification) will differ from the 'marginal' returns (i.e. to those who hold it as their highest qualification).

For many higher level qualifications, lower level qualifications are required in order to be accepted onto programmes of study/training for these higher levels. Thus the true reflection of the return to the qualification across the population takes account of this necessity of having some qualifications in order to obtain others. This is accomplished by including indicators of all qualifications as here. The total return to reaching the higher level qualification can then be obtained by adding the returns to the qualifications required to obtain that level (ignoring any interaction effects), while the incremental return for the additional level can be obtained directly from the estimated coefficient.

The data are derived from the LFS for 2000 to 2004. All men/women of working age in fulltime employment are considered. The rates of return are estimated using a standard Mincerian earnings function with control variables of: age, age squared, ethnicity (6 categories), firm size (6 categories), public sector, region of work (21 categories). The returns are estimated for each SMI jointly, with each sector considered relative to its own base defined as the return to having no qualifications in that particular sector. A full description and details of the classification of academic and vocational level qualifications are presented in Dickerson (2005, DTI). Heteroskedastic-consistent standard errors (SE) are reported. The rates of return are calculated as {exp(,)-1}?100% given the log-linear earnings function specification.

Estimates are provided for aggregated qualifications and disaggregated into academic (A) and vocational (V) qualification levels. In each case, the results are first reported separately by gender, and then for men and women combined. The five graphs reveal for each NQF level the extent to which the returns when estimated separately are reasonably captured by the rates when men and women are combined.

In most cases the estimated rates of return are statistically significantly different from zero. For example, for the aggregated qualifications of the 135 estimated rates of return 114 (=84%) are statistically significant at 5%.



APPENDIX E – SECTOR SKILLS DEVELOPMENT AGENCY SECTOR SKILLS MATRIX – BACKGROUND

The publicly available data used to produced the descriptive reports on the 27 industries has all been sourced from the SSDA Sector Skills Matrix.

The Sector Skills Matrix provides a range of economic, employment and skills data, examined by sector. Using national sources, it provides comparable data for 27 sector categories and 14 more aggregate sector groupings. It also provides the same range of data for Sector Skills Councils (SSCs).

It is the single most comprehensive source of sector data available. Whilst covering the UK as a whole, breaks for England, Wales, Scotland, Northern Ireland and the English regions are also examined. Users can also now access international and time series data through the Dynamic Data Query tool.

The data sources used in the SSDA Matrix are as follows:

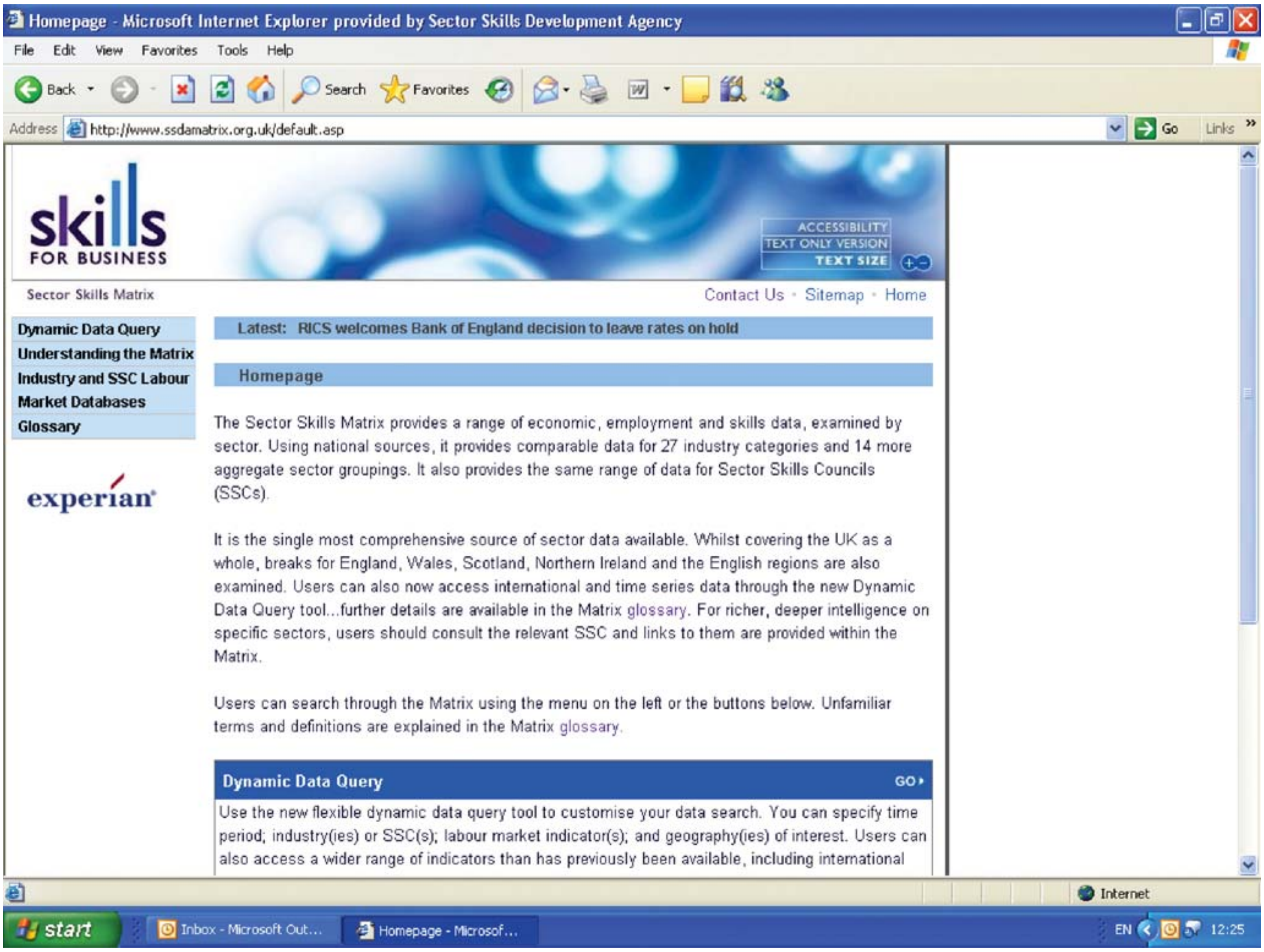
- Labour Force Survey
- Inter-departmental Business Register
- Annual Business Inquiry
- Annual Survey of Hours and Earnings
- Jobcentre Plus
- National Employers Skills Survey (England)
- Future Skills Scotland
- Future Skills Wales
- Northern Ireland Skills Monitoring Survey
- Skills for Business Network
- Eurostat
- Sector Skills Councils
- Experian Business Strategies

For richer, deeper intelligence on specific sectors, users should consult the relevant SSC and links to them are provided within the Matrix.

Users are advised that in the analysis and presentation of different data sources within the Matrix the SIC coverage used to represent each SSC may vary from its core SIC footprint due to the limitations of the data being interrogated.

The matrix is updated on a bi-annual basis with updates scheduled for February and August each year.

A screenshot of the Matrix home page is included on the next page. Registration is required, and a password will be sent to the email address you provide. The Matrix can be accessed online at: **http://www.ssdamatrix.org.uk/**



After logging in, data in the Matrix is presented in two ways.

1. Industry and Labour Market databases containing detailed information on the 27 sectors (and 24 SSCs)[59] are available to be downloaded in Excel spreadsheets.
2. Using the Dynamic Data Query tool users can create a query by specifying the labour market indicator, geography, and time period of interest through a menu system. The Matrix will then retrieve the data and present it in both tabular and graphical formats. Notes on the source and interpretation of the data are presented alongside the data.

Further guidance to the information downloaded from the Matrix is available within the site in the 'Understanding the Matrix' page. A Glossary of terms used in the site is also available.

The SSDA Sector Skills Matrix is hosted and provided by Experian.

[59] *Data for Government Skills SSC is not yet available on the Matrix.*

APPENDIX F – EU15 AND ACCESSION COUNTRIES (A8)

EU15

EU15 refers to the fifteen countries that formed the European Union prior to the accession of ten candidate countries (Malta, Cyprus and the A8) on 1 May 2004.

The EU15 are:
- Austria
- Belgium
- Denmark
- Finland
- France
- Germany
- Greece
- Ireland
- Italy
- Luxembourg
- Netherlands
- Portugal
- Spain
- Sweden
- United Kingdom

ACCESSION COUNTRIES (A8)

A8 refers to eight of the ten countries that acceded to the EU on 1 May 2004. Cyprus and Malta also joined at this time but nationals from these countries are not covered by the exceptions to entitlements applicable to A8 nationals.

The A8 countries are:
- Czech Republic
- Estonia
- Hungary
- Latvia
- Lithuania
- Poland
- Slovakia
- Slovenia

APPENDIX G – SOURCES

ANNUAL BUSINESS INQUIRY (ABI)

The Annual Business Inquiry (ABI) covers all businesses that are registered for Value Added Tax (VAT) and/or Pay As You Earn (PAYE), therefore excluding the self-employed.

The ABI data included in the Matrix is for Great Britain only (Northern Ireland is estimated separately and the data is not included here). The Standard Industrial Classification, revised in 2003 (SIC 2003), is used from 2003.

The ABI is a survey that is sampled from registrations on the Inter-Departmental Business Register (IDBR). As is the case for all surveys, the ABI is subject to sampling variability when it is grossed up to represent the population as a whole.

To protect anonymity data is not shown where individual businesses might be identified, either directly or by deduction.

Links to source information
Annual Business Inquiry
http://www.statistics.gov.uk/abi/

ANNUAL SURVEY OF HOURS AND EARNINGS (ASHE)

The Annual Survey of Hours and Earnings (ASHE) has been developed to replace the New Earnings Survey (NES). ASHE is based on a 1 per cent sample of employees in employment; information on earnings and hours is obtained in confidence from employers. It does not cover the self-employed.

The differences between ASHE and NES are:
- ASHE results are weighted to the number of jobs given by the LFS and item non-response are imputed.
- The coverage of employees for ASHE extends that of NES.
- The median replaces the mean as the headline statistic.

For 2004 two sets of results were released; the headline results that include supplementary information and results that exclude this information. Growth rates between 2004 and 2003 results exclude supplementary information, but future growth rates will include supplementary information.

The 2005 ASHE questionnaire has been updated to better capture bonus payments and pay received for other reasons. As a result, 2005 earnings information is not strictly comparable to past years.

Quality measures in the form of coefficients of variation (CV) are published for all ASHE variables. Where the CV is more than 20 per cent the estimates are suppressed as they are considered to be unreliable (the lower the CV, the more accurate the estimate).

Links to source information
Annual Survey of Hours and Earnings
http://www.statistics.gov.uk/STATBASE/Product.asp?vlnk=13101&More=Y

EUROSTAT LABOUR FORCE SURVEY

The Eurostat LFS provides comparable labour market data for EU Member States. National statistical institutes are responsible for selecting the sample, preparing the questionnaires, conducting the direct interviews among households, and forwarding the results to Eurostat.

The degree of comparability is high between countries due to the recording of the same set of characteristics, close correspondence between the EU and national questionnaires, use of same definitions and classifications, and central processing of the data.

As with any sample survey, the results of the LFS are subject to sampling errors. However, experience shows that at national level the survey information provides sufficiently accurate estimates provided that analyses of this type are confined to levels of a certain size. The Matrix follows Eurostat guidelines for the presentation of data.

Detailed studies of labour market developments in the European Union may be found in the annual Commission report 'Employment in Europe' and, in the wider context of the highly-developed countries, in the OECD's 'Employment Outlook'. Data are supplied from the EU LFS datasets for these publications as well as for a plethora of other studies and reports at national and international level.

Links to source information
Eurostat Labour Force Survey
http://forum.europa.eu.int/irc/dsis/employment/info/data/eu_lfs/

EXPERIAN

Experian is one of the UK's largest providers of economic research, devoted to analysing national, regional and local economies for a range of public and private sector clients. Its statisticians, econometricians, sociologists, geographers, market researchers and economists carry out extensive research into the underlying drivers of social, economic and market change.

Experian productivity indicators draw from a range of source data. This source data includes Experian's own data, data from the Office of National Statistics, and data from the Groningen Growth and Development Centre (GGDC).

Links to source information
www.business-strategies.co.uk
http://www.business-strategies.co.uk/

FUTURE SKILLS WALES (FSW)

The Future Skills Wales Partnership first undertook an Employer Skills Survey in 1998 to provide information on the status of skills in Wales. Future Skills Wales (FSW) has to date consisted of three surveys (in 1998, 2003 and 2005). In the Matrix, data from the 2003 survey is presented from the 1st half of 2004 onwards. Future Skills Wales data was not available within the 2003 snapshot time period.

The sample size for the 2005 Employer Survey is 6,700, using a structured sample to ensure sectoral, geographic and firm size coverage. The survey findings are weighted in line with the IDBR structure for Wales and are therefore representative of the Welsh economy. Where there are less than 100 responses, the data is not reported.

Links to source information
Future Skills Wales
http://www.futureskillswales.com/index.php

INSTITUTE OF EMPLOYMENT RESEARCH (IER)

The Warwick Institute for Employment Research (IER) is a leading centre for labour market and economic research.

IER is one of a handful of organisations in the UK that produce sector and regional economic forecasts. In 2003, IER was commissioned by the SSDA and the LSC to provide a highly detailed set of employment forecasts by sector and region for the UK. These projections were updated in 2005 and form part of the Working Futures 2004-2014 research. Forecasts of employment and productivity are available by sector and region (as appropriate) in the SSDA's Working Futures reports. The 2005 reports can be downloaded from:

IER projections for the SSDA
http://www.ssda.org.uk/ssda/default.aspx?page=28

INTER-DEPARTMENTAL BUSINESS REGISTER (IDBR)

The Inter-Departmental Business Register (IDBR), administered by the Office for National Statistics, contains records of all businesses registered for Value Added Tax (VAT). Sectoral data is based on Standard Industrial Classification 2003.

Coverage is complete for most sectors of the economy with the exception of VAT exempt sectors like Health, Education and Public Administration. Nor does it cover the smaller one-person businesses with annual turnover below the threshold for VAT registrations (currently £60,000 per annum).

Links to source information
Inter-departmental Business Register
http://www.statistics.gov.uk/idbr/idbr.asp

JOBCENTRE PLUS (JCP)

The main source of information on vacancies used by labour market analysts is derived from the administrative records held by the Department for Work and Pensions. These figures relate to vacancies notified by employers to Jobcentres Plus. Information is available on a monthly basis but as yet, this source does not have National Statistics status.

JCP vacancy data should be treated with a caution when analysing skills needs. There is no obligation on employers to report a vacancy to a Jobcentre. Across areas and sectors there are also variations in the coverage of employment agencies. According to the ONS Vacancy Survey May 2002, only 44 per cent of vacancies were notified to Jobcentres.

Despite the shortcomings of ES JCP vacancy statistics, it is a readily available data source with widespread coverage and is the best information available for comparative local analysis.

Links to source information
Jobcentre Plus
http://www.statistics.gov.uk/StatBase/Source.asp?vlnk=850&Pos=&ColRank=1&Rank=480

LABOUR FORCE SURVEY (LFS)

The Labour Force Survey (LFS) is a survey of all households in the UK and is conducted on a quarterly basis. It is undertaken by the Office of National Statistics in Great Britain and by the Department of Finance and Personnel in Northern Ireland on behalf of the Department of Trade and Investment in Northern Ireland.

The Labour Force Survey sample is grossed up to make inferences about the whole population. The grossed up or weighted survey results give the correct population total for the United Kingdom and reflect the distributions by age, sex and region shown by the population figures. Estimates of fewer than 10,000 people after grossing up are not shown in the Matrix. Data in the Matrix shows the average over the previous 4 quarters for which data is available. This average is less volatile than quarterly data and evens out cyclical effects.

Links to source information
Labour Force Survey
http://www.statistics.gov.uk/STATBASE/Source.asp?vlnk=358

NATIONAL EMPLOYER SKILLS SURVEY (NESS)

The Employer Skills Surveys were instigated by the National Skills Task Force to measure the extent, causes and implications of skills deficiencies in England. To date there have been 5 surveys – 1999, and each year between 2001 and 2005.

The sample size for the 2005 survey was 74,835 and interviews were undertaken between May and August 2005. Establishments with at least two people working in them were included and the results weighted, according to the IDBR, to be representative of all business establishments in England.

For the Matrix data based on responses from less than 75 establishments have not been reported. A far higher threshold has been recommended in work for DfES (Mason and Wilson (eds) 2002) and results based on less than 250 employers should be treated with caution.

Links to source information
Employers Skills Survey England
http://research.lsc.gov.uk/LSC+Research/published/ness/ness2005.htm

NORTHERN IRELAND SKILLS MONITORING SURVEY (NISMS)

The Northern Ireland Skills Monitoring Survey 2005 was undertaken by the Central Survey Unit (CSU), Northern Ireland Statistics and Research Agency (NISRA) and reported by the Skills Unit, Research and Evaluation Branch, Department for Employment and Learning in Northern Ireland.

Data based on responses from less than 100 establishments have not been reported. In recent work for the DfES relating to the English Employers Skill Survey, it was recommended that sector level results based on less than 250 responses from employers should be treated with caution, and users of this data are advised to take this approach.

Links to source information
The Northern Ireland Skills Monitoring Survey
http://www.delni.gov.uk/index/publications/pubs-stats/skills-reports/ni-skills-monitoring-survey-2005.htm

SKILLS FOR BUSINESS NETWORK (SFBN) SURVEY OF EMPLOYERS

Following on from the 1st year evaluation of the Skills for Business network (SfBn) conducted in 2003, the Sector Skills Development Agency (SSDA) and its support departments and agencies commissioned further work to enhance and update the common evidence base on the Network's performance to-date. In 2005 a general survey of UK employers was conducted based on 13,000 interviews in total.

Data from the survey is intended to track the performance of the network in the last 12 months and to measure changes in the environment within which the SSCs and the SSDA operate. To this end, data is presented on the extent of awareness of, and contact with, the Network to date and on the extent of planning, skills challenges and workforce development activity among UK businesses. The latter data are intended to feed into the strategic decisions that are made about how best to engage employers (further) with the skills agenda.

Links to source information
Skills for Business network (SfBn) survey of employers
http://www.ssda.org.uk/ssda/default.aspx?page=41

SKILLS IN SCOTLAND (FSS)

The Scottish Employers Skill Survey was undertaken by Futureskills Scotland to provide robust evidence from employers about workforce skills and skill shortages. The 2002 survey involved 8,507 workplaces across Scotland covering all industries and workplaces of all sizes. The 2004 survey involved 7,507 workplaces, the 2006 survey 6,276 workplaces.

For the Matrix, data based on responses from less than 100 establishments have not been reported. In work for the DfES relating to the English Employers Skill Survey, it was recommended that sector level results based on less than 250 responses from employers should be treated with caution, and users of this data are advised to take this approach.

Links to source information
Skills in Scotland
http://www.futureskillsscotland.org.uk/web/site/home/home.asp

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Almanac (ôl'mu-nak"):
A publication, usually an annual, containing useful facts and statistical information.

The Sector Skills Development Agency is part of the Skills for Business network along with 25 employer-led Sector Skills Councils. Through labour market intelligence, the identification of skills needs at all levels, and its influence on the UK's education and learning infrastructure, the network aims to increase productivity in business and public services.

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