**Corporate sectors – South Cambridgeshire**

This report aims at assessing the specialness of the South Cambridgeshire economy by examining the key features characterising the corporate sectors in the area. The first part of the report provides an overview of the size of the corporate sectors in terms of number of companies, total employment and total turnover, while the second part focuses on the analysis of growth in employment and turnover over time. All data refer to Cambridge Ahead data produced by Dr Andy Cosh at the Centre for Business Research unless otherwise indicated.

**1. Size**

Table 1 reports the distribution of employment by sector (in levels as well as in percentage terms with respect to the total for all sectors in the area and to the total for each sector in the Combined Authority) for 2016-17.[[1]](#footnote-1)

Table 1 Distribution of employment by sector in 2016-17

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | South Cambridgeshire | | | Combined Authority | |
|  | Total employment | % of total | % of Combined Authority | Total employment | % of total |
| KNOWLEDGE INTENSIVE SECTORS |  |  |  |  |  |
| Information Technology and Telecoms | 5,503 | 9.6% | 28.3% | 19,419 | 8.2% |
| Life science and healthcare | 10,021 | 17.5% | 71.0% | 14,106 | 6.0% |
| High-tech manufacturing | 6,545 | 11.4% | 30.2% | 21,651 | 9.2% |
| Knowledge intensive services | 3,451 | 6.0% | 48.3% | 7,148 | 3.0% |
| *TOTAL KI SECTORS* | *25,520* | *44.6%* | *40.9%* | *62,324* | *26.4%* |
| OTHER SECTORS |  |  |  |  |  |
| Primary | 1,713 | 3.0% | 14.3% | 12,020 | 5.1% |
| Manufacturing | 3,922 | 6.8% | 20.1% | 19,465 | 8.2% |
| Wholesale and retail distribution | 7,080 | 12.4% | 28.5% | 24,839 | 10.5% |
| Construction and utilities | 3,792 | 6.6% | 20.4% | 18,600 | 7.9% |
| Transport and travel | 942 | 1.6% | 9.1% | 10,305 | 4.4% |
| Property and finance | 3,300 | 5.8% | 12.3% | 26,771 | 11.3% |
| Other business services | 4,100 | 7.2% | 14.9% | 27,502 | 11.6% |
| Other services | 3,224 | 5.6% | 23.6% | 13,677 | 5.8% |
| Education, arts, charities, social care | 3,674 | 6.4% | 17.6% | 20,843 | 8.8% |
| *TOTAL NON-KI SECTORS* | *31,747* | *55.4%* | *18.2%* | *174,022* | *73.6%* |
| *TOTAL ALL SECTORS* | *57,267* | *100.0%* | *24.2%* | *236,346* | *100.0%* |

With a total employment of 57,267, South Cambridgeshire contributes 24.2% of total employment in the Combined Authority. The largest sector is given by Life Science and Healthcare (10,021), which represents 17.5% of employment in the district and 71.0% of total employment in the sector for the Combined Authority. Within this sector, particularly high is employment in Biotechnology R&D (7,044) and in High-Tech Manufacturing – Life Sciences (2,193). Other KI sectors that have large shares of employment are High-Tech Manufacturing (11.4% of the district and 30.2% of the Combined Authority) and Information Technology and Telecoms (9.6% and 28.3%, respectively). One can also notice that the share of employment in each individual KI sector for South Cambridgeshire is larger than the corresponding share for the Combined Authority, suggesting that KI sectors play a major role in the district. Among non-KI sectors, employment is high in the Wholesale and Retail Distribution sector (12.4% and 28.5%, respectively) and in the Other Business Services sector (7.2% and 14.9%, respectively). The smallest sector in terms of employment is Transport and Travel (942), which constitutes 1.6% of total employment in the area.

Table 2 presents the distribution of turnover by sector (in £,000 as well as in percentage terms with respect to the total for all sectors in the area and to the total for each sector in the Combined Authority) for 2016-17.

Table 2 Distribution of turnover by sector in 2016-17

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | South Cambridgeshire | | | Combined Authority | |
|  | Total turnover £,000 | % of total | % of Combined Authority | Total turnover £,000 | % of total |
| KNOWLEDGE INTENSIVE SECTORS |  |  |  |  |  |
| Information Technology and Telecoms | 908,135 | 7.2% | 22.7% | 4,001,051 | 8.8% |
| Life science and healthcare | 2,059,143 | 16.3% | 71.6% | 2,876,583 | 6.4% |
| High-tech manufacturing | 1,375,939 | 10.9% | 23.3% | 5,895,454 | 13.0% |
| Knowledge intensive services | 680,737 | 5.4% | 62.6% | 1,088,008 | 2.4% |
| *TOTAL KI SECTORS* | *5,023,954* | *39.7%* | *36.2%* | *13,861,095* | *30.6%* |
| OTHER SECTORS |  |  |  |  |  |
| Primary | 463,810 | 3.7% | 22.9% | 2,027,805 | 4.5% |
| Manufacturing | 1,178,626 | 9.3% | 25.6% | 4,609,590 | 10.2% |
| Wholesale and retail distribution | 3,543,463 | 28.0% | 41.2% | 8,608,794 | 19.0% |
| Construction and utilities | 754,769 | 6.0% | 17.6% | 4,294,229 | 9.5% |
| Transport and travel | 157,837 | 1.2% | 4.1% | 3,834,353 | 8.5% |
| Property and finance | 445,884 | 3.5% | 14.6% | 3,054,435 | 6.7% |
| Other business services | 597,389 | 4.7% | 21.5% | 2,779,856 | 6.1% |
| Other services | 194,833 | 1.5% | 22.2% | 876,403 | 1.9% |
| Education, arts, charities, social care | 297,244 | 2.3% | 22.6% | 1,315,213 | 2.9% |
| *TOTAL NON-KI SECTORS* | *7,633,854* | *60.3%* | *24.3%* | *31,400,678* | *69.4%* |
| *TOTAL ALL SECTORS* | *12,657,808* | *100.0%* | *28.0%* | *45,261,773* | *100.0%* |

Turnover in the KI sectors represents 39.7% of total turnover in the district, with considerable shares in Life Science and Healthcare (16.3%) and High-Tech Manufacturing (10.9%). Specifically, turnover in the Life Science and Healthcare sector in South Cambridgeshire alone accounts for over 70% of total turnover in the sector for the Combined Authority. The largest sector based on total turnover is Wholesale and Retail Distribution (28.0% of the district and 41.2% of the Combined Authority), particularly the Sale of Motor Vehicles sub-sector (1,974,415).

Table 3 shows employment and turnover location quotients (LQs) with respect to the Combined Authority, the LEP and the UK for 2015-16. A similar analysis based on BRES data instead of Cambridge Ahead data is included in Table A.2.

Table 3 Employment and turnover location quotients in 2015-16 – Cambridge Ahead data

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Employment | | | Turnover | | |
|  | LQ  (Comb. Auth. = 1) | LQ  (LEP = 1) | LQ  (UK = 1) | LQ  (Comb. Auth. = 1) | LQ  (LEP = 1) | LQ  (UK = 1) |
| KNOWLEDGE INTENSIVE SECTORS |  |  |  |  |  |  |
| Information Technology and Telecoms | 1.23 | 2.01 | 2.25 | 0.83 | 0.96 | 1.21 |
| Life science and healthcare | 3.06 | 8.26 | 10.38 | 2.77 | 3.42 | 10.40 |
| High-tech manufacturing | 1.33 | 1.55 | 2.74 | 0.98 | 0.95 | 2.07 |
| Knowledge intensive services | 2.06 | 3.53 | 4.54 | 2.43 | 4.41 | 5.29 |
| *TOTAL KI SECTORS* | *1.76* | *2.73* | *3.84* | *1.47* | *1.64* | *3.05* |
| OTHER SECTORS |  |  |  |  |  |  |
| Primary | 0.64 | 0.68 | 0.75 | 0.81 | 0.79 | 0.30 |
| Manufacturing | 0.73 | 0.59 | 0.63 | 1.21 | 1.01 | 1.49 |
| Wholesale and retail distribution | 0.98 | 1.09 | 0.55 | 1.10 | 1.21 | 1.00 |
| Construction and utilities | 0.93 | 1.15 | 1.74 | 0.69 | 0.52 | 0.52 |
| Transport and travel | 0.41 | 0.35 | 0.24 | 0.14 | 0.20 | 0.25 |
| Property and finance | 0.50 | 0.80 | 0.57 | 0.43 | 0.67 | 0.22 |
| Other business services | 0.58 | 0.36 | 0.47 | 0.78 | 0.62 | 0.67 |
| Other services | 0.97 | 0.43 | 0.41 | 0.72 | 0.32 | 0.30 |
| Education, arts, charities, social care | 0.72 | 0.79 | 1.06 | 0.86 | 0.88 | 1.41 |
| *TOTAL NON-KI SECTORS* | *0.72* | *0.64* | *0.60* | *0.80* | *0.76* | *0.65* |

Employment LQs for the district indicate that there is high concentration in all KI sectors. Among these, employment is found to be particularly concentrated in Life Science and Healthcare (8.26 relative to the LEP and 10.38 relative to the UK) and in Knowledge Intensive Services (3.53 and 4.54, respectively). Non-KI sectors with an LQ relative to the UK greater than 1 are Construction and Utilities (1.74) and Education, Arts, Charities, Social Care (1.06), whilst Transport and Travel appears to be the least concentrated sector (0.24).

Similarly, the highest LQs for turnover are associated with Life Science and Healthcare (3.42 and 10.40, respectively) and Knowledge Intensive Services (4.41 and 5.29, respectively). Among non-KI sectors, there are significant strengths in Manufacturing (1.49), Education, Arts, Charities, Social Care (1.41), and Wholesale and Retail Distribution (1.00). Conversely, a relatively low degree of concentration in terms of turnover is observed for Property and Finance (0.22) and Transport and Travel (0.25).

Table 4 illustrates the distribution of the number of companies that are based in the area (in both absolute and relative terms) by firm size for 2016-17. The groupings used in Table 4 and in the other tables below are defined as follows: (i) micro firms = 1-9 employees; (ii) small and medium-sized firms (SMEs) = 10-249 employees; (iii) large firms > 250 employees. A detailed disaggregation of the number of companies by firm size is included in Table A.4.

Table 4 Distribution of number of companies by firm size in 2016-17 – Broad summary

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | South Cambridgeshire | | Combined Authority | |
|  | No. of companies | % | No. of companies | % |
| Micro firms | 5,434 | 89.9% | 22,214 | 90.4% |
| Small and medium-sized firms | 576 | 9.5% | 2,224 | 9.1% |
| Large firms | 34 | 0.6% | 123 | 0.5% |
| All firms in area | 6,044 | 100.0% | 24,561 | 100.0% |

The distribution of companies by firm size in South Cambridgeshire largely resembles that for the Combined Authority. Approximately nine out of ten companies in the district have between 1 and 9 employees (5,434), while SMEs represent around 10% of the total number of companies (576). There are 34 large firms in the area, corresponding to 0.6% of the total.

Table 5 reports the distribution of employment by firm size for 2016-17. A detailed disaggregation of the figures presented below is included in Table A.5.

Table 5 Distribution of employment by firm size in 2016-17 – Broad summary

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | South Cambridgeshire | | Combined Authority | |
|  | Total employment | % | Total employment | % |
| Micro firms | 11,963 | 20.9% | 46,737 | 19.8% |
| Small and medium-sized firms | 21,355 | 37.3% | 80,499 | 34.1% |
| Large firms | 23,949 | 41.8% | 109,110 | 46.2% |
| All firms in area | 57,267 | 100.0% | 236,346 | 100.0% |

Firms with more than 250 employees account for the largest share of employment in the district (41.8%), although this figure is below the corresponding figure for the Combined Authority as a whole (46.2%). SMEs contribute over one third of total employment in South Cambridgeshire, while 20.9% of employment is at micro firms. These figures suggest that employment for the 34 large firms that are based in the district is about twice that for the 5,434 micro firms.

Table 6 shows the distribution of turnover by firm size for 2016-17. A detailed disaggregation of the figures presented below is included in Table A.6.

Table 6 Distribution of turnover by firm size in 2016-17 – Broad summary

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | South Cambridgeshire | | Combined Authority | |
|  | Total turnover £,000 | % | Total turnover £,000 | % |
| Micro firms | 2,185,282 | 17.3% | 7,706,187 | 17.0% |
| Small and medium-sized firms | 4,266,217 | 33.7% | 13,536,479 | 29.9% |
| Large firms | 6,206,309 | 49.0% | 24,019,107 | 53.1% |
| All firms in area | 12,657,808 | 100.0% | 45,261,773 | 100.0% |

The distribution of turnover by firm size is broadly in line with the results obtained for employment. The largest portion of turnover in the district is generated by firms with more than 250 employees (49.0%), followed by SMEs (33.7%) and micro firms (17.3%). It is also worth noting that the share of turnover originated by SMEs in South Cambridgeshire is greater than the corresponding share for the Combined Authority (33.7% and 29.9%, respectively).

Table 7 lists the largest companies that are based in South Cambridgeshire, among those with more than 100 employees, by their turnover in 2016-17.

Table 7 Largest South Cambridgeshire-based companies (100+ employees) by turnover in 2016-17

|  |  |  |  |
| --- | --- | --- | --- |
| Company name | Sector | Employment  2016-17 | Turnover  2016-17  £,000 |
| Amino Technologies PLC | Information Technology and Telecoms | 190 | 75,178 |
| Netcracker Technology Emea Limited | 146 | 74,994 |
| Quixant PLC | 160 | 73,241 |
| PPD Global Ltd | Life Science and Healthcare | 1,471 | 323,017 |
| Napp Pharmaceutical Holdings Limited | 622 | 288,015 |
| Amgen Limited | 481 | 172,717 |
| Abcam PLC | 882 | 171,673 |
| Medimmune Limited | 584 | 153,972 |
| Genome Research Limited | 1,015 | 125,064 |
| Mundipharma Research Limited | 251 | 119,233 |
| Marshall of Cambridge (Holdings) Limited | High-tech manufacturing | 2,133 | 360,499 |
| Domino UK Limited | 816 | 228,530 |
| DOW Agrosciences Limited | 596 | 219,620 |
| Syngenta UK Limited | 183 | 134,002 |
| Xaar PLC | 626 | 96,178 |
| Sepura PLC | 702 | 94,027 |
| Bayer Cropscience Limited | Knowledge intensive services | 157 | 283,613 |
| Cambridge Consultants Limited | 497 | 74,470 |
| PRO CAM Europe Limited | Primary | 544 | 235,734 |
| Hexcel Composites Limited | Manufacturing | 993 | 497,923 |
| Woodford Holdings Limited | 393 | 212,200 |
| Histon Sweet Spreads Limited | 423 | 150,079 |
| Marshall Motor Holdings PLC | Wholesale and retail distribution | 3,926 | 1,899,405 |
| Spicers Limited | 416 | 153,657 |
| Cambridge Meridian Academies Trust | Education, arts, charities, social care | 706 | 89,357 |

A number of the largest companies that are based in the district belong to the High-Tech Manufacturing sector (e.g. Marshall of Cambridge (Holdings) Limited and Domino UK Limited) and to the Life Science and Healthcare sector (e.g. PPD Global Ltd, Genome Research Limited and Abcam PLC). Other large companies, such as Cambridge Consultants Limited and Bayer Cropscience Limited, are found in the Knowledge Intensive Services sector. Outside of the KI sectors, large companies are observed in Wholesale and Retail Distribution (e.g. Marshall Motor Holdings PLC), Manufacturing (e.g. Hexcel Composites Limited) and Education, Arts, Charities, Social Care (e.g. Cambridge Meridian Academies Trust).

Table 8 provides a list of the largest companies that are active in South Cambridgeshire, among those with more than 100 employees, by their turnover in 2016-17.

Table 8 Largest South Cambridgeshire-active companies (100+ employees) by turnover in 2016-17

|  |  |  |  |
| --- | --- | --- | --- |
| Company name | Sector | Employment  2016-17 | Turnover  2016-17  £,000 |
| Sony Interactive Entertainment Europe Limited | Information Technology and Telecoms | 1,234 | 4,181,068 |
| IBM United Kingdom Limited | 13,212 | 3,899,200 |
| CSC Computer Sciences Limited | 5,283 | 928,445 |
| Gilead Sciences Ltd | Life Science and Healthcare | 131 | 511,646 |
| Spirax-Sarco Engineering PLC | High-tech manufacturing | 4,998 | 757,400 |
| Intertek Group PLC | Knowledge intensive services | 41,571 | 2,567,000 |
| WS Atkins Limited | 17,639 | 2,081,500 |
| Bodycote PLC | 5,367 | 600,600 |
| Shell U.K. Limited | Primary | 2,250 | 4,449,000 |
| BP Oil UK Limited | Manufacturing | 560 | 3,030,000 |
| Premier Foods PLC | 4,132 | 790,400 |
| Dixons Carphone PLC | Wholesale and retail distribution | 41,847 | 9,738,000 |
| Lancaster Public Limited Company | 2,941 | 1,930,307 |
| WH Smith PLC | 13,769 | 1,212,000 |
| Premier Farnell UK Limited | 1,267 | 520,116 |
| Wates Construction Limited | Construction and utilities | 3,660 | 1,431,419 |
| Morgan Sindall Construction & Infrastructure Ltd | 3,151 | 1,261,955 |
| UK Power Networks (Operations) Limited | 4,852 | 955,800 |
| Galliford Try Infrastructure Limited | 1,253 | 451,048 |
| Enterprise Rent-A-Car UK Limited | Transport and travel | 4,845 | 727,235 |
| National Farmers Union Mutual Insurance Society Limited(The) | Property and finance | 3,666 | 1,460,000 |
| Grant Thornton UK LLP | 4,629 | 533,785 |
| Nisa Retail Limited | Other Business Services | 312 | 1,251,657 |
| DHL International (UK) Limited | Other Services | 3,983 | 795,690 |
| EI Group PLC | 789 | 632,000 |

Some of the largest companies that are active in South Cambridgeshire are found among the KI sectors, namely Information Technology and Telecoms (e.g. Sony Interactive Entertainment Europe Limited and IBM United Kingdom Limited), Knowledge Intensive Services (e.g. Intertek Group PLC and WS Atkins Limited) and High-Tech Manufacturing (e.g. Spirax-Sarco Engineering PLC). Other sectors with large active companies are Wholesale and Retail Distribution (e.g. Dixons Carphone PLC), Primary (e.g. Shell U.K. Limited), Manufacturing (e.g. BP Oil UK Limited), Property and Finance (e.g. National Farmers Union Mutual Insurance Society Limited), and Construction and Utilities (e.g. Wates Construction Limited).

**2. Growth**

Table 9 reports the annualised growth rates in employment by sector over the three- and six-year periods to 2016-17.[[2]](#footnote-2)

Table 9 Three-year and six-year employment growth (% pa) by sector

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | South Cambridgeshire | | Combined Authority | |
|  | 3 years  to 2016-17 | 6 years  to 2016-17 | 3 years  to 2016-17 | 6 years  to 2016-17 |
| Information Technology and Telecoms | 9.1% | 8.4% | 6.9% | 7.3% |
| Life science and healthcare | 6.9% | 7.2% | 7.4% | 6.7% |
| High-tech manufacturing | 2.2% | 2.7% | 1.6% | 1.9% |
| Knowledge intensive services | 7.6% | 5.8% | 8.6% | 5.9% |
| *TOTAL KI SECTORS* | *6.1%* | *6.0%* | *5.2%* | *4.9%* |
| OTHER SECTORS |  |  |  |  |
| Primary | 3.8% | 3.3% | 5.9% | 4.9% |
| Manufacturing | 8.9% | 7.3% | 4.7% | 3.2% |
| Wholesale and retail distribution | 13.6% | 6.5% | 6.6% | 4.3% |
| Construction and utilities | 0.8% | 3.6% | 5.4% | 4.6% |
| Transport and travel | 11.0% | 6.3% | 11.7% | 5.6% |
| Property and finance | 17.3% | 10.4% | 8.6% | 9.0% |
| Other business services | 9.9% | 10.3% | 5.3% | 5.9% |
| Other services | 10.5% | 10.2% | 8.4% | 8.7% |
| Education, arts, charities, social care | 13.0% | 29.8% | 8.2% | 13.8% |
| *TOTAL NON-KI SECTORS* | *10.0%* | *8.7%* | *6.9%* | *6.5%* |
| *TOTAL ALL SECTORS* | *8.2%* | *7.4%* | *6.4%* | *6.0%* |

Total employment growth in the district has been higher compared to the Combined Authority (7.4% and 6.0%, respectively, when the six-year growth rates are considered). Employment in the KI sectors taken together has grown by 6.0% over the entire period, as opposed to a 4.9% growth rate for the Combined Authority as a whole. The fastest growing KI sector is Information Technology and Telecoms, while the Knowledge Intensive Services sector has performed slightly below the Combined Authority (5.8% and 5.9%, respectively). High rates of growth in employment can also be observed for Education, Arts, Charities, Social Care (29.8%), Property and Finance (10.4%), and Other Business Services (10.3%). Furthermore, one can notice that employment over either the three years or six years to 2016-17 has increased in all sectors.

Table 10 presents the annualised growth rates in turnover by sector over the three- and six-year periods to 2016-17.

Table 10 Three-year and six-year turnover growth (% pa) by sector

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | South Cambridgeshire | | Combined Authority | |
|  | 3 years  to 2016-17 | 6 years  to 2016-17 | 3 years  to 2016-17 | 6 years  to 2016-17 |
| Information Technology and Telecoms | 14.4% | 10.8% | 10.4% | 9.7% |
| Life science and healthcare | 9.8% | 10.0% | 9.0% | 8.7% |
| High-tech manufacturing | 2.8% | 3.7% | 3.4% | 3.9% |
| Knowledge intensive services | 3.4% | 6.4% | 6.1% | 6.9% |
| *TOTAL KI SECTORS* | *7.5%* | *7.7%* | *6.6%* | *6.6%* |
| OTHER SECTORS |  |  |  |  |
| Primary | 2.2% | 5.5% | 3.2% | 6.6% |
| Manufacturing | 18.1% | 17.5% | 4.8% | 5.1% |
| Wholesale and retail distribution | 26.9% | 15.3% | 11.3% | 8.0% |
| Construction and utilities | 10.5% | 7.8% | 9.3% | 7.2% |
| Transport and travel | 8.9% | 4.4% | -0.2% | 0.3% |
| Property and finance | 21.1% | 11.3% | 9.6% | 11.6% |
| Other business services | 9.9% | 12.4% | 6.9% | 5.5% |
| Other services | 10.7% | 10.5% | 9.5% | 9.3% |
| Education, arts, charities, social care | 23.5% | 39.4% | 5.6% | 14.3% |
| *TOTAL NON-KI SECTORS* | *18.7%* | *13.5%* | *7.0%* | *6.5%* |
| *TOTAL ALL SECTORS* | *13.7%* | *10.9%* | *6.9%* | *6.5%* |

South Cambridgeshire has witnessed a greater rate of growth in total turnover relative to the Combined Authority. Among KI sectors, particularly high growth is exhibited by Information Technology and Telecoms, which has seen considerable growth for a number of its sub-sectors such as TV & Video Production (21.2% during the six-year period), Software Development & Publishing (18.8%) and Telecoms Activities (14.5%). Growth in turnover has also been relatively high in Life Science and Healthcare, primarily because of the fast growth in the Biotechnology R&D sector (11.2%). Other sectors that have been characterised by a significant growth in turnover are Education, Arts, Charities, Social Care (39.4%), Manufacturing (17.5%), and Wholesale and Retail Distribution (15.3%).

Table 11 illustrates the absolute change in employment and turnover LQs (calculated with respect to the Combined Authority) by sector over the three- and six-year periods to 2016-17. A similar analysis for employment based on BRES data instead of Cambridge Ahead data is included in Table A.7.

Table 11 Change in employment and turnover location quotients (Combined Authority = 1) – Cambridge Ahead data

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Employment | | Turnover | |
|  | 3 years  to 2016-17 | 6 years  to 2016-17 | 3 years  to 2016-17 | 6 years  to 2016-17 |
| Information Technology and Telecoms | 0.01 | -0.02 | -0.07 | -0.16 |
| Life science and healthcare | -0.19 | -0.14 | -0.45 | -0.48 |
| High-tech manufacturing | -0.04 | -0.04 | -0.19 | -0.24 |
| Knowledge intensive services | -0.16 | -0.17 | -0.67 | -0.69 |
| *TOTAL KI SECTORS* | *-0.04* | *-0.03* | *-0.23* | *-0.26* |
| OTHER SECTORS |  |  |  |  |
| Primary | -0.07 | -0.11 | -0.19 | -0.29 |
| Manufacturing | 0.06 | 0.12 | 0.15 | 0.32 |
| Wholesale and retail distribution | 0.15 | 0.05 | 0.28 | 0.20 |
| Construction and utilities | -0.17 | -0.12 | -0.10 | -0.14 |
| Transport and travel | -0.03 | -0.01 | 0.01 | 0.00 |
| Property and finance | 0.08 | 0.00 | 0.06 | -0.15 |
| Other business services | 0.05 | 0.09 | -0.08 | 0.10 |
| Other services | 0.01 | 0.00 | -0.13 | -0.15 |
| Education, arts, charities, social care | 0.06 | 0.37 | 0.20 | 0.50 |
| *TOTAL NON-KI SECTORS* | *0.03* | *0.03* | *0.10* | *0.11* |

In terms of employment, concentration in KI sectors has slightly decreased throughout the entire period. Specifically, the largest changes in LQs are observed for Knowledge Intensive Services (-0.17) and Life Science and Healthcare (-0.14). Among other sectors, employment has become more concentrated over time in a number of sectors, including Education, Arts, Charities, Social Care (0.37), Manufacturing (0.12) and Other Business Services (0.09). At the same time, the relative concentration of employment in the district has declined – among others – for the Construction and Utilities (-0.12) and Primary (-0.11) sectors.

The results are largely confirmed if one examines the LQs based on total turnover. There appears to have been an increase in concentration in a number of non-KI sectors, such as Education, Arts, Charities, Social Care (0.50), Manufacturing (0.32), and Wholesale and Retail Distribution (0.20). However, the relative concentration of turnover in the KI sectors has decreased over time, with the largest decline observed for the Knowledge Intensive Services sector (-0.69).

Table 12 shows the annualised growth rates in employment by firm size over the three- and six-year periods to 2016-17. A detailed disaggregation of the figures presented below is included in Table A.9.

Table 12 Three-year and six-year employment growth (% pa) by firm size – Broad summary

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | South Cambridgeshire | | Combined Authority | |
|  | 3 years  to 2016-17 | 6 years  to 2016-17 | 3 years  to 2016-17 | 6 years  to 2016-17 |
| Micro firms | 7.2% | 7.0% | 6.6% | 6.4% |
| Small and medium-sized firms | 5.5% | 7.7% | 5.1% | 5.7% |
| Large firms | 11.4% | 7.4% | 7.4% | 6.2% |
| All firms in area | 8.2% | 7.4% | 6.4% | 6.0% |

Some of the highest employment growth rates in the district are found among large firms, which have been growing between 11.4% (three years to 2016-17) and 7.4% (six years to 2016-17). Fast rates of growth can also be observed for micro firms as well as SMEs, although their three-year growth rates are well below those for large firms. Moreover, it is worth emphasising that employment for all groups of firms based in the district has grown more rapidly compared to the Combined Authority, especially if the three years to 2016-17 are examined.

Table 13 shows the annualised growth rates in turnover by firm size over the three- and six-year periods to 2016-17. A detailed disaggregation of the figures presented below is included in Table A.10.

Table 13 Three-year and six-year turnover growth (% pa) by firm size – Broad summary

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | South Cambridgeshire | | Combined Authority | |
|  | 3 years  to 2016-17 | 6 years  to 2016-17 | 3 years  to 2016-17 | 6 years  to 2016-17 |
| Micro firms | 14.3% | 10.9% | 10.2% | 8.2% |
| Small and medium-sized firms | 12.2% | 11.1% | 6.1% | 4.0% |
| Large firms | 14.6% | 10.8% | 6.4% | 7.6% |
| All firms in area | 13.7% | 10.9% | 6.9% | 6.5% |

A similar picture can be obtained if one considers the three- and six-year growth rates in total turnover. Firms with more than 250 employees have seen the largest increase in turnover throughout the three-year window (14.6%), substantially higher than that for the Combined Authority (6.4%). In terms of turnover, micro firms and SMEs appear to have been growing at a similar rate over the six years to 2016-17, although growth has somewhat accelerated for micro firms during the most recent period (14.3% for micro firms compared to 12.2% for SMEs). Growth rates in turnover for the three groups of firms in South Cambridgeshire have been well above the corresponding figures for the Combined Authority.

Centre for Business Research

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**Appendix A**

Table A.1 Distribution of number of companies by sector in 2016-17

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | South Cambridgeshire | | | Combined Authority | |
|  | No. of companies | % of total | % of Combined Authority | No. of companies | % of total |
| KNOWLEDGE INTENSIVE SECTORS |  |  |  |  |  |
| Information Technology and Telecoms | 842 | 13.9% | 30.0% | 2,805 | 11.4% |
| Life science and healthcare | 197 | 3.3% | 51.3% | 384 | 1.6% |
| High-tech manufacturing | 134 | 2.2% | 25.5% | 526 | 2.1% |
| Knowledge intensive services | 226 | 3.7% | 31.7% | 712 | 2.9% |
| *TOTAL KI SECTORS* | *1,399* | *23.1%* | *31.6%* | *4,427* | *18.0%* |
| OTHER SECTORS |  |  |  |  |  |
| Primary | 172 | 2.8% | 26.2% | 657 | 2.7% |
| Manufacturing | 269 | 4.5% | 22.9% | 1,174 | 4.8% |
| Wholesale and retail distribution | 498 | 8.2% | 20.2% | 2,468 | 10.0% |
| Construction and utilities | 704 | 11.6% | 23.8% | 2,952 | 12.0% |
| Transport and travel | 131 | 2.2% | 14.6% | 895 | 3.6% |
| Property and finance | 640 | 10.6% | 21.4% | 2,991 | 12.2% |
| Other business services | 1,238 | 20.5% | 26.2% | 4,720 | 19.2% |
| Other services | 685 | 11.3% | 22.5% | 3,039 | 12.4% |
| Education, arts, charities, social care | 308 | 5.1% | 24.9% | 1,238 | 5.0% |
| *TOTAL NON-KI SECTORS* | *4,645* | *76.9%* | *23.1%* | *20,134* | *82.0%* |
| *TOTAL ALL SECTORS* | *6,044* | *100.0%* | *24.6%* | *24,561* | *100.0%* |

Table A.2 Employment location quotients in 2016 – BRES data

|  |  |  |  |
| --- | --- | --- | --- |
|  | LQ  (Comb. Auth. = 1) | LQ  (LEP = 1) | LQ  (GB = 1) |
| High-tech manufacturing | 1.90 | 1.92 | 2.49 |
| Life sciences manufacturing | 3.89 | 3.60 | 4.10 |
| ICT | 1.62 | 2.15 | 1.93 |
| R&D | 3.62 | 5.91 | 24.67 |
| Knowledge intensive services | 1.61 | 1.94 | 2.25 |
| *Sub-total - KI sectors* | *2.15* | *2.69* | *3.32* |
| Primary | 0.68 | 0.56 | 0.10 |
| Other manufacturing | 1.06 | 0.80 | 1.08 |
| Property and construction | 1.32 | 1.11 | 1.11 |
| Utilities | 0.53 | 0.54 | 0.53 |
| Publishing | 0.76 | 1.07 | 1.89 |
| Transport and travel | 0.77 | 0.66 | 0.75 |
| Wholesale distribution | 0.97 | 0.83 | 0.99 |
| Retail distribution | 0.61 | 0.59 | 0.61 |
| Hotels, pubs and restaurants | 0.80 | 0.68 | 0.60 |
| Other business services | 0.76 | 0.81 | 0.78 |
| Public services | 0.43 | 0.45 | 0.34 |
| Other Services | 0.72 | 0.72 | 0.70 |
| Education | 0.75 | 0.85 | 0.92 |
| Finance and professional services | 0.66 | 0.71 | 0.45 |
| Health services | 0.92 | 0.95 | 0.84 |
| *Sub-total - Other sectors* | *0.81* | *0.78* | *0.76* |

Table A.3 Comparison of employment by sector in 2016 – Cambridge Ahead vs. BRES data

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Total employment | | % of total | |
|  | Cambridge Ahead data | BRES data | Cambridge Ahead data | BRES data |
| High-tech manufacturing | 7,713 | 4,765 | 13.5% | 5.9% |
| Life sciences manufacturing | 1,641 | 765 | 2.9% | 0.9% |
| ICT | 4,864 | 5,905 | 8.5% | 7.3% |
| R&D | 8,795 | 9,005 | 15.4% | 11.2% |
| Knowledge intensive services | 2,915 | 4,380 | 5.1% | 5.4% |
| *Sub-total - KI sectors* | *25,928* | *24,820* | *45.3%* | *30.7%* |
| Primary | 1,542 | 145 | 2.7% | 0.2% |
| Other manufacturing | 3,772 | 4,655 | 6.6% | 5.8% |
| Property and construction | 4,928 | 5,810 | 8.6% | 7.2% |
| Utilities | 107 | 785 | 0.2% | 1.0% |
| Publishing | 247 | 600 | 0.4% | 0.7% |
| Transport and travel | 5,041 | 3,630 | 8.8% | 4.5% |
| Wholesale distribution | 1,339 | 3,100 | 2.3% | 3.8% |
| Retail distribution | 1,441 | 4,860 | 2.5% | 6.0% |
| Hotels, pubs and restaurants | 740 | 3,615 | 1.3% | 4.5% |
| Other business services | 4,890 | 8,005 | 8.5% | 9.9% |
| Public services | 7 | 1,150 | 0.0% | 1.4% |
| Other Services | 1,637 | 2,655 | 2.9% | 3.3% |
| Education | 2,843 | 6,380 | 5.0% | 7.9% |
| Finance and professional services | 1,260 | 1,720 | 2.2% | 2.1% |
| Health services | 1,545 | 8,800 | 2.7% | 10.9% |
| *Sub-total - Other sectors* | *31,339* | *55,910* | *54.7%* | *69.3%* |
| *Total Employment* | *57,267* | *80,730* | *100.0%* | *100.0%* |

*Note:* For a detailed comparison of employment estimates between Cambridge Ahead data and BRES data, please see the report titled “Comparison of the employment growth from the corporate database with BRES data”.

Table A.4 Distribution of number of companies by firm size in 2016-17 – Detailed summary

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | South Cambridgeshire | | Combined Authority | |
|  | No. of companies | % | No. of companies | % |
| *Micro firms* |  |  |  |  |
| 1 employee | 2,659 | 44.0% | 11,662 | 47.5% |
| 2-4 employees | 2,213 | 36.6% | 8,369 | 34.1% |
| 5-9 employees | 562 | 9.3% | 2,183 | 8.9% |
| *Small firms* |  |  |  |  |
| 10-49 employees | 469 | 7.8% | 1,848 | 7.5% |
| *Medium-sized firms* |  |  |  |  |
| 50-99 employees | 58 | 1.0% | 189 | 0.8% |
| 100-249 employees | 49 | 0.8% | 187 | 0.8% |
| *Large firms* |  |  |  |  |
| > 250 employees | 34 | 0.6% | 123 | 0.5% |
| *All firms in area* | *6,044* | *100.0%* | *24,561* | *100.0%* |

Table A.5 Distribution of employment by firm size in 2016-17 – Detailed summary

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | South Cambridgeshire | | Combined Authority | |
|  | Total employment | % | Total employment | % |
| *Micro firms* |  |  |  |  |
| 1 employee | 2,659 | 4.6% | 11,662 | 4.9% |
| 2-4 employees | 5,742 | 10.0% | 21,260 | 9.0% |
| 5-9 employees | 3,562 | 6.2% | 13,815 | 5.8% |
| *Small firms* |  |  |  |  |
| 10-49 employees | 9,686 | 16.9% | 37,818 | 16.0% |
| *Medium-sized firms* |  |  |  |  |
| 50-99 employees | 4,077 | 7.1% | 13,451 | 5.7% |
| 100-249 employees | 7,592 | 13.3% | 29,230 | 12.4% |
| *Large firms* |  |  |  |  |
| > 250 employees | 23,949 | 41.8% | 109,110 | 46.2% |
| *All firms in area* | *57,267* | *100.0%* | *236,346* | *100.0%* |

Table A.6 Distribution of turnover by firm size in 2016-17 – Detailed summary

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | South Cambridgeshire | | Combined Authority | |
|  | Total turnover £,000 | % | Total turnover £,000 | % |
| *Micro firms* |  |  |  |  |
| 1 employee | 365,182 | 2.9% | 1,642,977 | 3.6% |
| 2-4 employees | 896,485 | 7.1% | 3,442,876 | 7.6% |
| 5-9 employees | 923,616 | 7.3% | 2,620,334 | 5.8% |
| *Small firms* |  |  |  |  |
| 10-49 employees | 2,163,233 | 17.1% | 6,854,090 | 15.1% |
| *Medium-sized firms* |  |  |  |  |
| 50-99 employees | 638,610 | 5.0% | 2,100,819 | 4.6% |
| 100-249 employees | 1,464,374 | 11.6% | 4,581,570 | 10.1% |
| *Large firms* |  |  |  |  |
| > 250 employees | 6,206,309 | 49.0% | 24,019,107 | 53.1% |
| *All firms in area* | *12,657,808* | *100.0%* | *45,261,773* | *100.0%* |

Table A.7 Change in employment location quotients – BRES data

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 3yrs 2013-2016 | | | 6yrs 2010-2016 | | |
|  | Comb. Auth. = 1 | LEP = 1 | GB = 1 | Comb. Auth. = 1 | LEP = 1 | GB = 1 |
| High-tech manufacturing | 0.12 | -0.01 | -0.40 | 0.44 | 0.36 | -0.07 |
| Life sciences manufacturing | -1.17 | -1.28 | -1.29 | 0.24 | -1.52 | -1.76 |
| ICT | -0.01 | -0.01 | -0.04 | 0.11 | 0.18 | 0.43 |
| R&D | -0.21 | -0.34 | -1.23 | 0.23 | 0.24 | 2.67 |
| Knowledge intensive services | 0.13 | 0.08 | 0.16 | 0.07 | 0.01 | -0.31 |
| *Sub-total - KI sectors* | *0.02* | *0.00* | *-0.14* | *0.19* | *0.21* | *0.03* |
| Primary | -0.30 | -0.34 | -0.05 | -0.02 | -0.15 | 0.00 |
| Other manufacturing | 0.06 | 0.03 | 0.04 | 0.09 | 0.07 | 0.15 |
| Property and construction | -0.05 | -0.09 | -0.05 | 0.17 | 0.08 | 0.01 |
| Utilities | -0.10 | -0.09 | -0.16 | -1.47 | -1.93 | -2.69 |
| Publishing | 0.03 | 0.08 | 0.56 | 0.09 | 0.10 | 0.65 |
| Transport and travel | -0.03 | -0.02 | 0.04 | -0.03 | 0.01 | 0.08 |
| Wholesale distribution | -0.30 | -0.24 | -0.29 | -0.36 | -0.38 | -0.60 |
| Retail distribution | -0.02 | -0.01 | -0.01 | 0.06 | 0.07 | 0.10 |
| Hotels, pubs and restaurants | -0.05 | -0.06 | -0.07 | -0.12 | -0.09 | -0.06 |
| Other business services | -0.01 | -0.01 | -0.05 | -0.02 | -0.01 | 0.03 |
| Public services | 0.01 | 0.01 | 0.01 | -0.21 | -0.20 | -0.18 |
| Other Services | -0.07 | -0.03 | 0.09 | -0.05 | -0.02 | -0.02 |
| Education | 0.08 | 0.10 | 0.05 | 0.12 | 0.17 | 0.17 |
| Finance and professional services | 0.18 | 0.20 | 0.14 | 0.04 | 0.00 | 0.04 |
| Health services | 0.07 | 0.08 | 0.06 | 0.19 | 0.21 | 0.16 |
| *Sub-total - Other sectors* | *0.00* | *0.00* | *0.00* | *-0.03* | *-0.03* | *-0.02* |

Table A.8 Comparison of employment growth by sector – Cambridge Ahead vs. BRES data

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 3yrs 2013-2016 | | 6yrs 2010-2016 | |
|  | Cambridge Ahead data | BRES data | Cambridge Ahead data | BRES data |
| High-tech manufacturing | 3.5% | -1.9% | 4.5% | 0.5% |
| Life sciences manufacturing | 0.6% | -7.3% | 1.5% | -8.0% |
| ICT | 9.2% | 8.1% | 8.5% | 8.8% |
| R&D | 8.5% | 8.7% | 6.8% | 4.2% |
| Knowledge intensive services | 5.1% | 15.2% | 7.3% | 3.8% |
| *Sub-total - KI sectors* | *6.1%* | *6.5%* | *6.0%* | *3.7%* |
| Primary | 2.9% | -7.8% | 2.7% | 0.0% |
| Other manufacturing | 10.3% | 7.2% | 9.6% | 3.7% |
| Property and construction | 3.3% | 5.2% | 4.5% | 2.5% |
| Utilities | -5.6% | -3.6% | 0.6% | -25.5% |
| Publishing | -5.1% | 14.5% | -9.0% | 4.9% |
| Transport and travel | 20.4% | 11.1% | 12.8% | 5.7% |
| Wholesale distribution | -0.1% | -3.3% | -6.5% | -6.4% |
| Retail distribution | 8.1% | 4.0% | 9.2% | 3.8% |
| Hotels, pubs and restaurants | 8.0% | 4.5% | 7.4% | 2.5% |
| Other business services | 15.1% | 7.1% | 12.7% | 5.7% |
| Public services | -4.4% | 3.9% | 0.0% | -8.8% |
| Other Services | 6.2% | 11.5% | 5.4% | 1.6% |
| Education | 14.4% | 6.6% | 48.9% | 4.7% |
| Finance and professional services | 9.1% | 19.2% | 7.6% | 3.2% |
| Health services | 15.5% | 8.4% | 13.5% | 5.9% |
| *Sub-total - Other sectors* | *10.0%* | *6.4%* | *8.7%* | *1.6%* |
| *Total Employment* | *8.2%* | *6.4%* | *7.4%* | *2.2%* |

*Note:* For a detailed comparison of employment growth rates between Cambridge Ahead data and BRES data, please see the report titled “Comparison of the employment growth from the corporate database with BRES data”.

Table A.9 Three-year and six-year employment growth (% pa) by firm size – Detailed summary

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | South Cambridgeshire | | Combined Authority | |
|  | 3 years  to 2016-17 | 6 years  to 2016-17 | 3 years  to 2016-17 | 6 years  to 2016-17 |
| *Micro firms* |  |  |  |  |
| 1 employee | -5.1% | 0.0% | -2.2% | 1.8% |
| 2-4 employees | 11.9% | 12.3% | 10.1% | 9.9% |
| 5-9 employees | 12.4% | 6.5% | 10.7% | 6.1% |
| *Small firms* |  |  |  |  |
| 10-49 employees | 8.3% | 7.7% | 9.6% | 6.7% |
| *Medium-sized firms* |  |  |  |  |
| 50-99 employees | -2.2% | 0.7% | -2.2% | 1.4% |
| 100-249 employees | 7.0% | 13.4% | 3.7% | 6.6% |
| *Large firms* |  |  |  |  |
| > 250 employees | 11.4% | 7.4% | 7.4% | 6.2% |
| *All firms in area* | *8.2%* | *7.4%* | *6.4%* | *6.0%* |

Table A.10 Three-year and six-year turnover growth (% pa) by firm size – Detailed summary

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | South Cambridgeshire | | Combined Authority | |
|  | 3 years  to 2016-17 | 6 years  to 2016-17 | 3 years  to 2016-17 | 6 years  to 2016-17 |
| *Micro firms* |  |  |  |  |
| 1 employee | -5.4% | -0.5% | -1.7% | 1.3% |
| 2-4 employees | 11.4% | 12.9% | 12.3% | 11.1% |
| 5-9 employees | 33.8% | 16.7% | 17.9% | 10.3% |
| *Small firms* |  |  |  |  |
| 10-49 employees | 21.1% | 14.5% | 12.1% | 8.3% |
| *Medium-sized firms* |  |  |  |  |
| 50-99 employees | 0.7% | -0.5% | -6.6% | -7.2% |
| 100-249 employees | 7.6% | 14.5% | 5.7% | 6.3% |
| *Large firms* |  |  |  |  |
| > 250 employees | 14.6% | 10.8% | 6.4% | 7.6% |
| *All firms in area* | *13.7%* | *10.9%* | *6.9%* | *6.5%* |

1. The distribution of the number of companies by sector for 2016-17 is included in Table A.1. A comparison of employment estimates by sector between Cambridge Ahead data and BRES data is presented in Table A.3. [↑](#footnote-ref-1)
2. A comparison of employment growth rates by sector between Cambridge Ahead data and BRES data is presented in Table A.8. [↑](#footnote-ref-2)