

Growth in the Cambridgeshire and Peterborough economy 2018-24

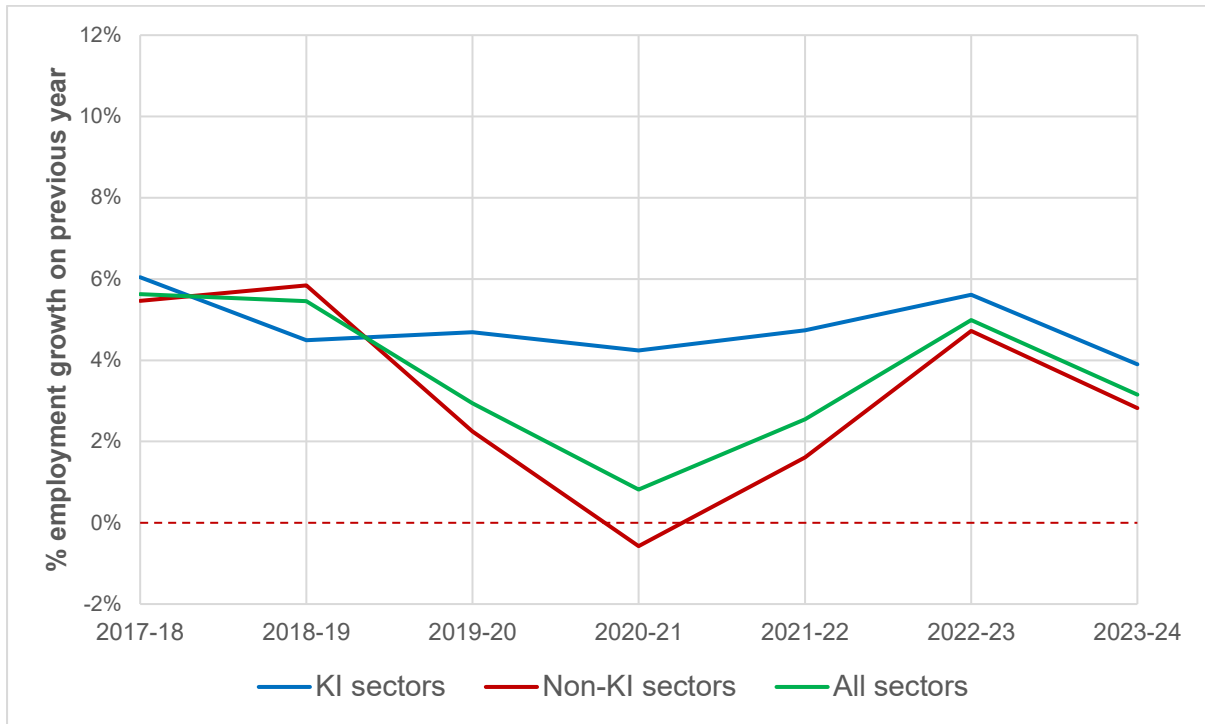
The Cambridgeshire and Peterborough region has an ambitious target of doubling the size of its economy by 2040, with clear benefits for UK plc and beyond. It is therefore of great importance that the region continues to grow at pace despite a weak economic outlook at the national level. This note addresses this question by examining the performance of businesses that are based within Cambridgeshire and Peterborough.

The underlying core corporate database has been established and maintained by Andy Cosh and Giorgio Caselli at Cambridge University with the ongoing support of Cambridge Ahead, and is currently sponsored by Arm, Cambridgeshire and Peterborough Combined Authority, Greater Cambridge Partnership, Marshall of Cambridge and Mills & Reeve. This has allowed the performance of companies based in the Cambridgeshire and Peterborough region to be monitored over the past decade making use of this longitudinal database of companies that is both consistent and location specific.

Recent corporate growth in Cambridgeshire and Peterborough

Recent years have seen profound changes to the business environment, with Covid, the cost-of-living crisis and more recently the economic recession causing severe disruption to supply chains and a marked decline in business confidence. The figure below shows that employment growth in the Cambridgeshire and Peterborough corporate economy has fared well against this turbulent backdrop.

Figure 1 Recent corporate employment growth in Cambridgeshire and Peterborough



Source: Cosh & Caselli, Centre for Business Research (CBR), Cambridge University.

The corporate economy of Cambridgeshire and Peterborough achieved robust growth in the six-year period to 2023-24. KI sectors were a major driver of this growth. Corporate employment in KI sectors grew consistently by about 5% pa. Non-KI sectors had a dip during the Covid years but were quick to recover when the economy opened up. Overall corporate employment growth was strong at 3.3% in the latest year, yet lower than it was in 2022-23 (5.0%).

A tale of different performance across districts

Whilst the region achieved robust growth overall, the table below highlights some important differences in performance across the six districts making up the Cambridgeshire and Peterborough Combined Authority.

Table 1 Corporate employment and turnover growth in Cambridgeshire and Peterborough: six years

Six years District	% KI	Empl change	Employment			Turnover		
	2023-24	2018-24	KI	Non-KI	All	KI	Non-KI	All
Cambridge	47%	11,704	8.3%	3.1%	5.3%	10.3%	6.0%	9.0%
South Cambs	52%	14,348	5.1%	2.9%	4.0%	7.5%	3.6%	6.0%
Greater Cambridge	50%	26,052	6.2%	3.0%	4.5%	8.6%	4.4%	7.1%
East Cambs	18%	2,815	2.7%	2.3%	2.4%	6.5%	5.6%	5.7%
Hunts	15%	3,243	1.5%	1.3%	1.3%	5.9%	4.9%	5.0%
Peterborough	20%	11,581	0.6%	4.5%	3.7%	2.1%	0.4%	1.0%
Fenland	6%	1,642	3.7%	1.4%	1.5%	3.8%	3.3%	3.4%
Combined Authority	31%	45,333	4.6%	2.8%	3.3%	7.2%	3.5%	5.1%

Source: Cosh & Caselli, CBR, Cambridge University.

The Greater Cambridge corporate economy saw exceptional growth over the last six years. Employment grew by 4.5% pa, driven by a buoyant KI economy which now accounts for about half of corporate employment in Greater Cambridge (up from 45% six years ago). Employment growth in KI sectors (6.2% pa) was twice as high as it was in non-KI sectors (3.0% pa). Turnover growth exceeded employment growth as it does usually, but the picture based on turnover data largely mirrors the findings from employment data.

Performance across the districts outside Greater Cambridge is varied. East Cambs experienced robust employment growth (2.4% pa), with KI sectors (2.7% pa) growing slightly faster than non-KI sectors (2.3% pa). Peterborough had a solid 3.7% pa growth, largely from non-KI sectors which dominate corporate employment in the district (80% in 2023-24 compared to 76% in 2017-18). Hunts and Fenland showed much slower growth and a smaller share in KI sectors.

The figures for the latest year reported in the table below suggest that the Cambridgeshire and Peterborough region is not immune to the current slack national picture.

Table 2 Corporate employment and turnover growth in Cambridgeshire and Peterborough: latest year

Latest year District	% KI	Empl change	Employment			Turnover		
	2023-24	2023-24	KI	Non-KI	All	KI	Non-KI	All
Cambridge	47%	2,344	4.5%	6.7%	5.6%	7.4%	10.3%	8.1%
South Cambs	52%	2,527	4.8%	2.8%	3.9%	1.8%	2.5%	2.0%
Greater Cambridge	50%	4,871	4.7%	4.4%	4.6%	4.0%	5.0%	4.3%
East Cambs	18%	596	6.0%	2.2%	2.9%	12.9%	3.8%	5.3%
Hunts	15%	545	1.1%	1.3%	1.3%	3.5%	4.1%	4.0%
Peterborough	20%	1,798	1.1%	3.6%	3.1%	1.4%	8.1%	5.7%
Fenland	6%	4	4.3%	-0.3%	0.0%	-11.8%	2.4%	1.3%
Combined Authority	31%	7,814	3.9%	2.8%	3.2%	3.7%	5.0%	4.4%

Source: Cosh & Caselli, CBR, Cambridge University.

A case in point is the slowdown in KI employment growth in Greater Cambridge (4.7% in the latest year compared with 6.2% pa over the six-year growth period), which was only slightly higher than non-KI employment growth. Hunts continued to experience sluggish growth, while Fenland had virtually no growth. Peterborough had the highest growth rate amongst the districts outside Greater Cambridge, albeit slightly lower than its six-year growth rate.

By contrast, employment growth in East Cambs was faster in 2023-24 than it was over the 2018-24 period, benefiting from a strong performance in KI sectors (6.0%) – although from a low base. We intend to explore where this KI employment growth in East Cambs is taking place geographically in our future work.

Sectoral strengths and weaknesses across Cambridgeshire and Peterborough

The analysis presented so far has uncovered some important differences in KI and non-KI sectors across the Cambridgeshire and Peterborough region. Greater Cambridge has seen exceptional growth in its KI sectors, which dominate the economy of the area. KI sectors are also behind the robust growth achieved by East Cambs. By contrast, growth in Peterborough has benefited from the growth of non-KI sectors. Hunts and Fenland have shown much slower growth in non-KI sectors and a less dominant KI economy.

The table below provides a more disaggregated picture of the sectoral composition across Cambridgeshire and Peterborough. The figures show that the sectoral make-up of the corporate economy varies widely across the region.

Table 3 Sectoral composition across Cambridgeshire and Peterborough

Employment 2023-24 % of district total	Cambridge	South Cams	East Cams	Hunts	Peterborough	Fenland	Combined Authority
Information technology and telecoms	22%	13%	3%	6%	3%	2%	9%
Life science and healthcare	17%	20%	3%	0%	1%	0%	9%
High-tech manufacturing	3%	10%	11%	7%	13%	3%	9%
Knowledge intensive services	5%	8%	1%	2%	2%	1%	4%
TOTAL KI SECTORS	47%	52%	18%	15%	20%	6%	31%
Primary	0%	2%	14%	2%	0%	10%	3%
Manufacturing	1%	5%	5%	15%	5%	16%	7%
Wholesale and retail distribution	3%	6%	14%	15%	13%	12%	10%
Construction and utilities	2%	6%	9%	13%	6%	11%	7%
Transport and travel	1%	2%	7%	4%	3%	8%	3%
Property and finance	6%	4%	4%	5%	17%	3%	7%
Other business services	10%	8%	8%	11%	15%	13%	11%
Other services	11%	8%	8%	10%	9%	8%	9%
Education, arts, charities, social care	18%	8%	14%	12%	13%	11%	12%
TOTAL NON-KI SECTORS	53%	48%	82%	85%	80%	94%	69%
TOTAL ALL SECTORS	100%	100%	100%	100%	100%	100%	100%

Source: Cosh & Caselli, CBR, Cambridge University.

A similar analysis looking at employment growth over the last six years also points to considerable differences in sector performance across the region, as shown in the table below.

A comparison of the sectoral growth rate in a district with the average for the Combined Authority reveals how a district's sector has performed relative to the regional average.

Table 4 Sector performance across Cambridgeshire and Peterborough

Employment growth 2018-24 % pa	Cambridge	South Cambs	East Cambs	Hunts	Peterborough	Fenland	Combined Authority
Information technology and telecoms	6.8%	6.2%	-1.4%	1.5%	2.7%	7.8%	5.3%
Life science and healthcare	13.0%	8.0%	1.1%	-2.0%	5.9%	49.1%	9.0%
High-tech manufacturing	1.8%	-0.1%	4.6%	1.4%	-0.6%	-0.9%	0.4%
Knowledge intensive services	7.0%	5.1%	2.2%	2.7%	3.9%	10.5%	5.2%
TOTAL KI SECTORS	8.3%	5.1%	2.7%	1.5%	0.6%	3.7%	4.6%
Primary	7.1%	1.2%	4.0%	3.0%	4.8%	-4.3%	0.8%
Manufacturing	1.2%	2.0%	-2.7%	0.7%	4.4%	2.2%	1.6%
Wholesale and retail distribution	-1.0%	1.1%	1.7%	1.4%	1.2%	1.6%	1.2%
Construction and utilities	1.0%	0.5%	1.9%	1.6%	3.2%	4.2%	1.9%
Transport and travel	3.8%	3.1%	0.6%	5.6%	-11.2%	2.4%	-1.7%
Property and finance	4.8%	4.8%	2.9%	1.6%	12.4%	1.7%	7.7%
Other business services	4.6%	1.1%	5.1%	1.6%	5.0%	-2.0%	2.7%
Other services	6.4%	5.6%	0.8%	0.3%	5.5%	7.3%	4.3%
Education, arts, charities, social care	1.2%	6.1%	4.2%	0.5%	6.8%	4.3%	3.6%
TOTAL NON-KI SECTORS	3.1%	2.9%	2.3%	1.3%	4.5%	1.4%	2.8%
TOTAL ALL SECTORS	5.3%	4.0%	2.4%	1.3%	3.7%	1.5%	3.3%

Source: Cosh & Caselli, CBR, Cambridge University.

We now delve deeper into the region's sectoral strengths and weaknesses by separating employment growth into impact of sectoral composition and impact of sector performance.

In the figure and table below, we compare three measures of growth for each district:

Own share – own growth

This approximates the actual growth rate achieved by that district.

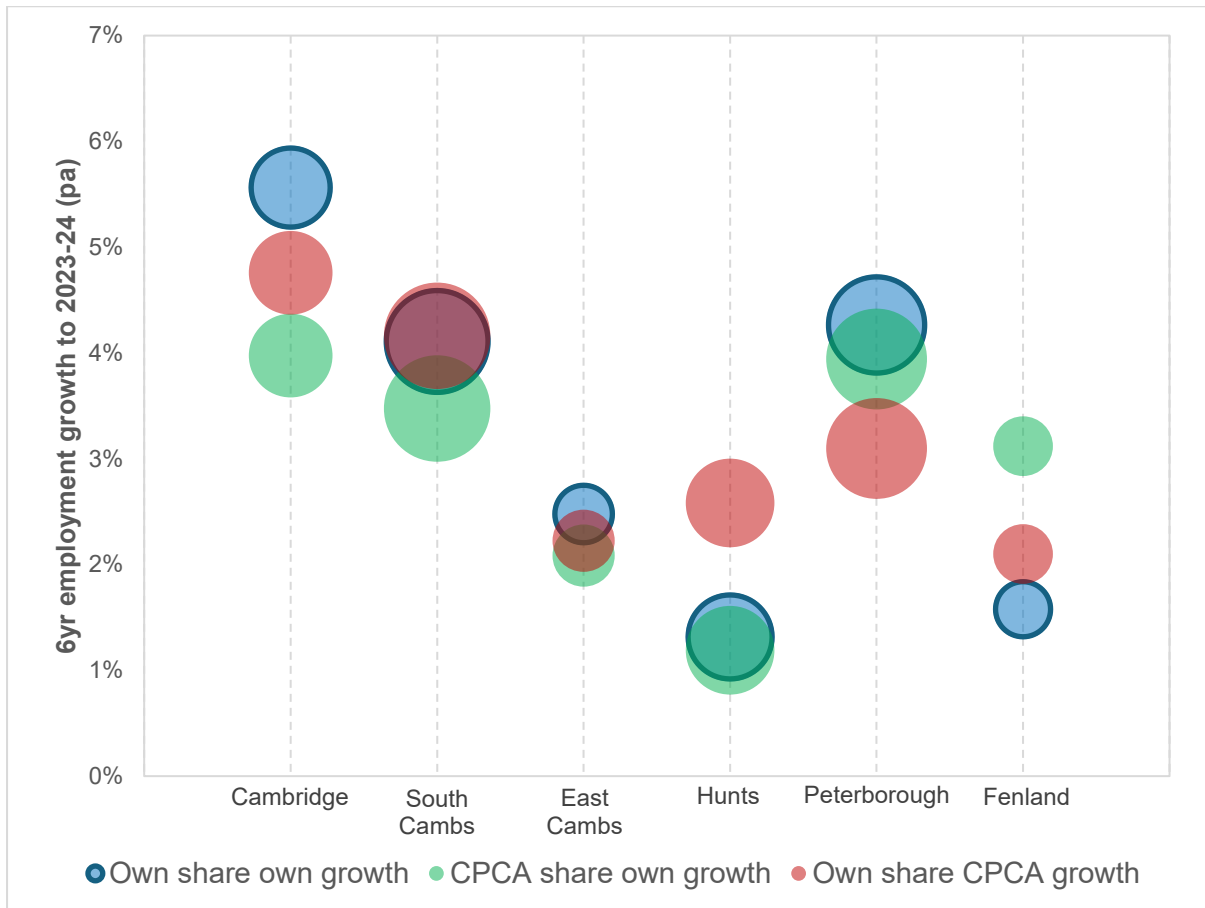
CPCA share – own growth

This takes the average sectoral composition of the whole Cambridgeshire and Peterborough Combined Authority (CPCA) and applies the actual growth achieved by this district in each sector. A comparison of this growth rate with the actual above reveals how a district benefits by or suffers from its sectoral growth rate.

Own share – CPCA growth

Here we take the sectoral composition of the district and apply the average growth achieved by each sector across the whole CPCA. A comparison of this growth rate with the actual above reveals how a district benefits by or suffers from its sectoral composition (particularly the KI / non-KI split).

Figure 2 Sectoral strengths and weaknesses across Cambridgeshire and Peterborough



Note: The share of employment is calculated for 2020-21, the middle year of our analysis period. Similarly, the size of each bubble is proportionate to the number of employees in the district in 2020-21.

Source: Cosh & Caselli, CBR, Cambridge University.

Table 5 Sectoral strengths and weaknesses across Cambridgeshire and Peterborough

Six years 2018-24 %pa District	Employment growth		
	Own share own growth	CPCA share own growth	Own share CPCA growth
Cambridge	5.6%	4.0%	4.8%
South Cambs	4.1%	3.5%	4.2%
Greater Cambridge	4.6%	3.4%	4.4%
East Cambs	2.5%	2.1%	2.2%
Hunts	1.3%	1.2%	2.6%
Peterborough	4.3%	3.9%	3.1%
Fenland	1.6%	3.1%	2.1%
Combined Authority	3.4%	3.4%	3.4%

Note: The share of employment is calculated for 2020-21, the middle year of our analysis period.

Source: Cosh & Caselli, CBR, Cambridge University.

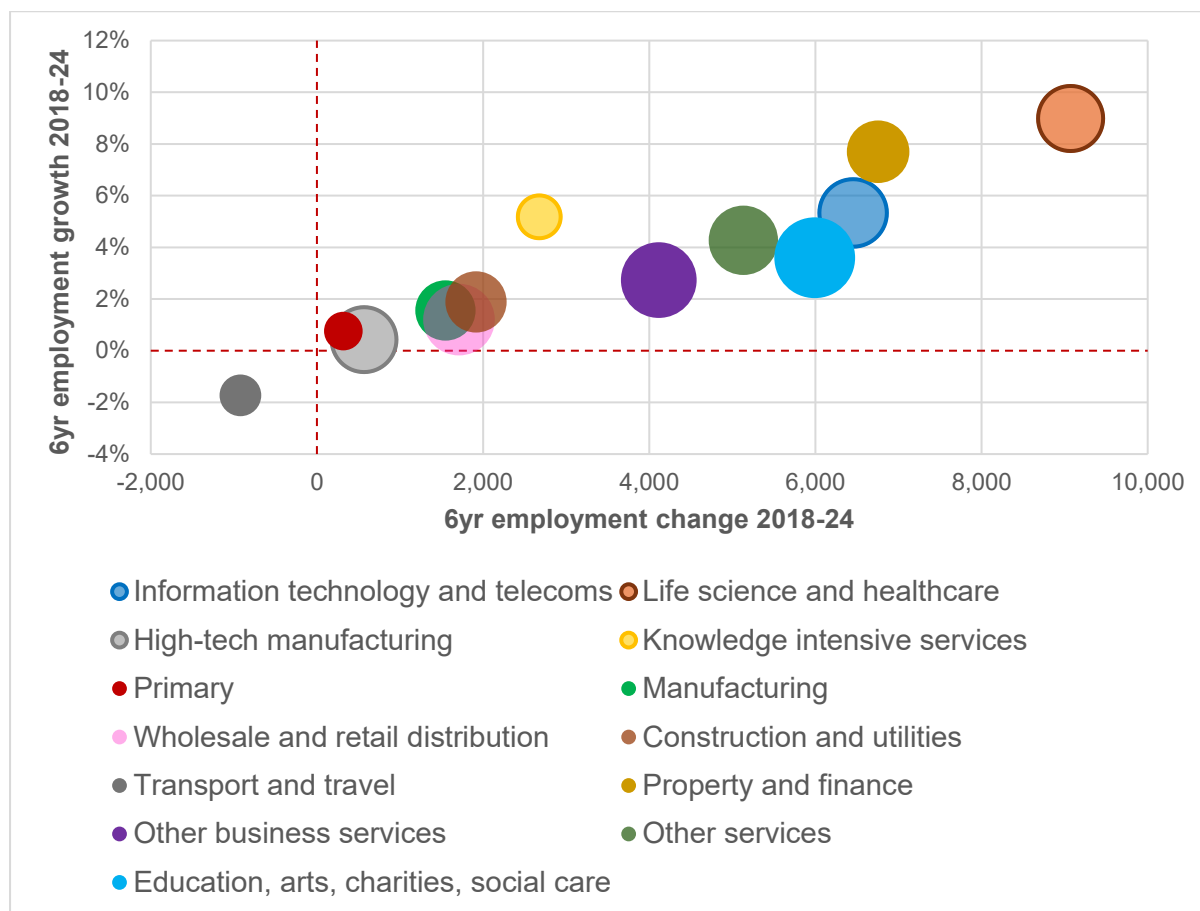
Cambridge is benefiting from its large share of employment in fast-growing, KI sectors. Employment growth in the district would have been lower had either its sectoral composition or sector performance been the same as the wider Cambridgeshire and Peterborough region. The picture is similar for East Cambs and Peterborough.

We find the opposite picture for Fenland. The district's employment growth would have been faster had its sectoral composition been in line with that of the wider region. Similarly, employment growth in Fenland would have been higher had its sectors performed as fast as their equivalents across Cambridgeshire and Peterborough.

In turn, the results for Hunts reveal that its sluggish performance in recent years is associated primarily with a weak performance of its sectors. Employment growth in the district would have been noticeably faster had its sectors grown at the same rates as the wider region.

A question therefore arises as to which sectors have been major contributors to the robust employment growth seen in the Cambridgeshire and Peterborough corporate economy over the last six years. The figure below compares six-year employment growth in the local economy across 13 industry sectors.

Figure 3 Corporate employment growth by sector in Cambridgeshire and Peterborough



Note: The size of each bubble is proportionate to the number of employees in the sector in 2023-24. Bubbles with an outline identify KI sectors.
Source: Cosh & Caselli, CBR, Cambridge University.

Two of the sectors behind the Cambridge Phenomenon, Life science and healthcare and Information technology and telecoms, made a major contribution to corporate employment growth in the region. Growth also benefited from the strong performance of several non-KI sectors, including Property and finance, Education, arts, charities, social care, and Other services.

Some examples of fast-growing sectors and companies over the last six years include:

- KI
 - Software development & publishing
 - Darktrace (+559 employees; +23.1% pa)
 - Frontier Developments (+527 employees; +17.9% pa)
 - Redgate Software (+248 employees; +12.1% pa)
 - IT & computer services
 - Arm, Cambridge estimate (+725 employees; +5.4% pa)
 - Amazon’s EVI Technologies (+422 employees; +18.1% pa)
 - Bango (+196 employees; +23.3% pa)

- Biotech R&D
 - AstraZeneca (+1,948 employees; +10.4% pa)
 - Illumina Cambridge (+395 employees; +11.5% pa)
 - Bicycle Therapeutics (+242 employees; +49.3% pa)
- Non-KI
 - Property & finance
 - Encore Property Management (+187 employees; +12.1% pa)
 - Insignis Asset Management (+95 employees; +60.1% pa)
 - Hospitality
 - Lunchtime Co (+168 employees; +9.6% pa)
 - Meadow Brown Restaurants (+147 employees; +20.4% pa)
 - Hot Numbers Coffee (+67 employees; +23.7% pa)
 - Health
 - Ieso Digital Health (+121 employees; +21.1% pa)
 - Arthur Rank Hospice (+119 employees; +9.2% pa)
 - Bee's Care (+79 employees; +34.6% pa)
 - Education
 - Hampton Gardens Secondary School (+136 employees; +31.8% pa)
 - The College of Animal Welfare (+114 employees; +10.4% pa)
 - Cambourne Village College (+83 employees; +9.2% pa)

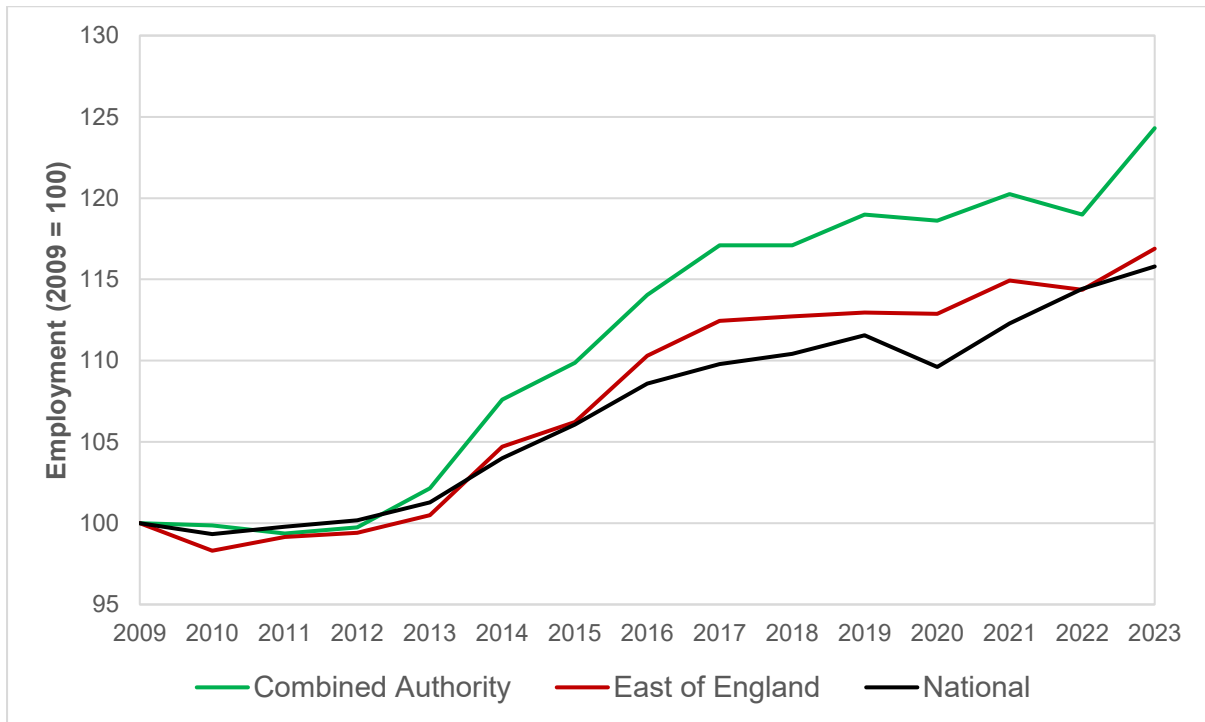
In the latest year, a total of 3,000 employees were added in KI sectors, mainly from Information technology and telecoms (1,100 employees) and Life science and healthcare (800 employees). Non-KI sectors added a total of 4,800 employees, primarily from Education, arts, charities, social care (1,800 employees), Property & finance (1,600 employees), Hospitality (500 employees) and Health (300 employees).

Growth in the Cambridgeshire and Peterborough economy against the nation

These figures portray a thriving corporate economy in Cambridgeshire and Peterborough against an unfavourable economic backdrop nationally. However, a major limitation of the data presented so far is that it does not cover non-corporates. Therefore, we turn to data from the Office for National Statistics (ONS) for those sectors dominated by organisations that are not companies based in the region (e.g. public services, retail and sole proprietors), which are more important in the non-KI sectors. Also, there is no equivalent corporate database available for the whole country. In an attempt to bridge these gaps, we draw upon an analysis of the Business Register and Employment Survey carried out by ONS.

The ONS data presented in the figure below reveals that the Cambridgeshire and Peterborough region has outperformed East of England and the nation by a significant margin. Total employment in Cambridgeshire and Peterborough grew by 1.6% pa since 2009 compared to 1.1% pa for both East of England and the nation. In the latest year, total employment growth was 4.5% in Cambridgeshire and Peterborough, 2.2% in East of England and 1.2% in the nation.

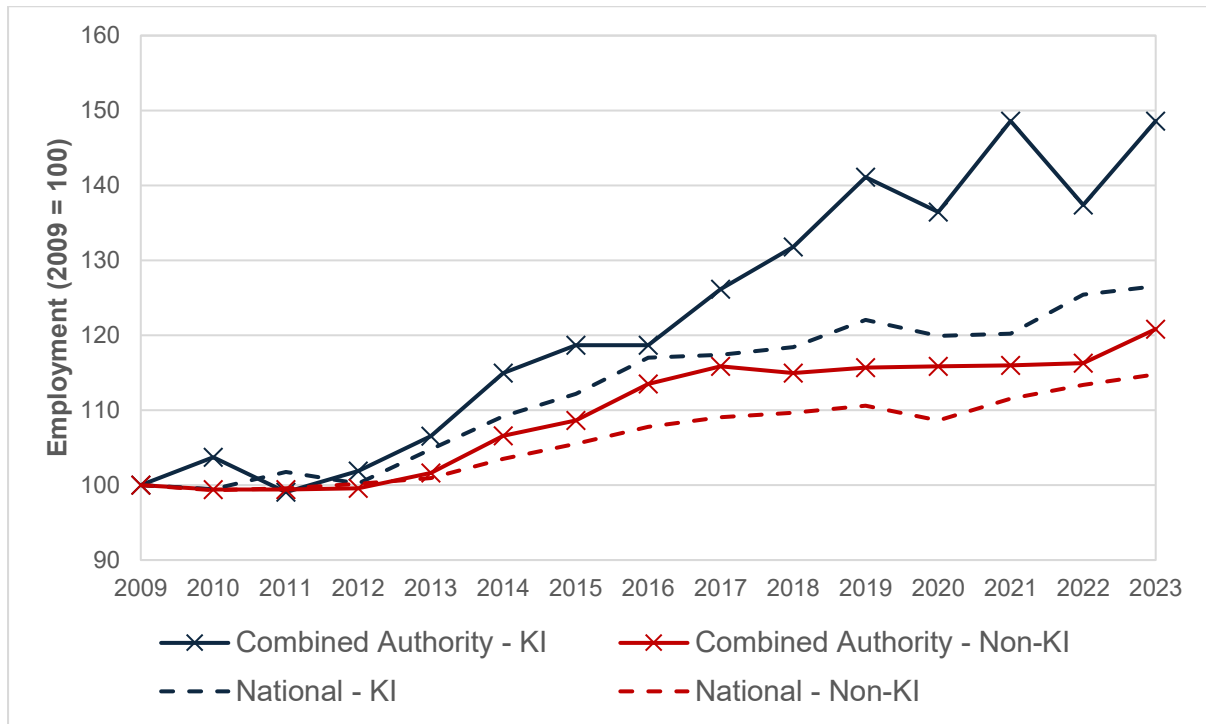
Figure 4 Employment growth in Cambridgeshire and Peterborough vs national: all sectors



Source: CBR's calculations based on data from BRES (Nomis).

The figure below shows that the superior performance of the Cambridgeshire and Peterborough region compared to the nation was driven by a fast-expanding KI economy. At the same time, non-KI sectors in Cambridgeshire and Peterborough also slightly outperformed non-KI sectors nationwide. This evidence suggests that non-KI sectors might have benefited from the increase in demand generated by the successful KI economy in Greater Cambridge and beyond. The relationship between KI and non-KI sectors is a subject of great interest and we will return to this in our future work.

Figure 5 Employment growth in Cambridgeshire and Peterborough vs national: KI and non-KI sectors



Source: CBR's calculations based on data from BRES (Nomis).

Growth in the Cambridgeshire and Peterborough economy: ONS data vs CBR data

The CBR data can be arranged into the sectors used by ONS in its employment analysis. A comparison of the results for the two sources is shown in the following table. For this comparison, the CBR corporate data is augmented by the findings from our annual survey of employment in research organisations (e.g. Addenbrooke's Hospital, MRC Laboratory of Molecular Biology and Sanger Institute).

Table 6 Employment growth by district in Cambridgeshire and Peterborough: ONS data vs CBR data

District	ONS data			CBR data		
	1 year 2022-23	1 year 2023-24	6 years 2018-24	1 year 2022-23	1 year 2023-24	6 years 2018-24
Cambridge	-0.4%	5.4%	1.9%	4.5%	5.2%	4.0%
South Cambs	-2.2%	6.9%	1.1%	6.2%	4.0%	3.9%
Greater Cambridge	-1.2%	6.0%	1.5%	5.3%	4.6%	4.0%
East Cambs	-4.2%	2.9%	1.0%	2.1%	2.9%	2.4%
Hunts	0.6%	3.7%	0.9%	3.5%	1.4%	1.3%
Peterborough	-0.4%	3.4%	0.2%	6.3%	3.1%	3.7%
Fenland	-1.3%	3.9%	1.1%	0.9%	0.0%	1.5%
Combined Authority	-1.1%	4.5%	1.0%	4.7%	3.4%	3.2%

Note: CBR data does not cover non-corporate non-KI organisations, nor does it cover companies that are active but not based in the area.

Source: CBR's calculations based on data from BRES (Nomis) [ONS data]; Cosh & Caselli, CBR, Cambridge University [CBR data].

The ONS data records a slower rate of growth than the CBR data over the last six years and in the latest year. Employment in the Cambridgeshire and Peterborough region grew by about 3% pa according to the CBR data, whereas the ONS data reports a growth of just 1% pa. In some cases (e.g. South Cambs), the differences in growth rates between the two sources are large. A possible reason for these differences could be the limitations associated with the Standard Industrial Classification, which is now a very poor representation of the structure of modern industry.

Perhaps more worrying is the volatility of ONS data, as can be seen by a comparison of the growth rates for 2022-23 with those for 2023-24. The employment growth figures for the ICT, R&D, Knowledge intensive services and Publishing sectors reported in the table below are but a few examples.

Table 7 Employment growth by sector in Cambridgeshire and Peterborough: ONS data vs CBR data

Combined Authority Analysis sector	ONS data			CBR data		
	1 year 2022-23	1 year 2023-24	6 years 2018-24	1 year 2022-23	1 year 2023-24	6 years 2018-24
High-tech manufacturing	3.2%	0.0%	1.1%	3.3%	2.1%	0.7%
Life sciences manufacturing	10.0%	0.0%	6.4%	13.4%	5.0%	9.1%
ICT	-11.5%	6.5%	3.4%	3.0%	6.2%	5.8%
R&D	0.0%	13.5%	4.6%	7.9%	3.2%	6.1%
Knowledge intensive services	-18.9%	13.3%	1.6%	5.8%	3.0%	4.0%
<i>Sub-total - KI sectors</i>	<i>-7.5%</i>	<i>8.2%</i>	<i>2.8%</i>	<i>5.4%</i>	<i>3.7%</i>	<i>4.3%</i>
Primary	0.0%	-6.3%	-2.1%	-0.1%	-2.4%	0.4%
Other manufacturing	6.3%	0.0%	0.7%	3.3%	0.9%	1.5%
Property and construction	9.3%	0.0%	2.5%	2.8%	2.4%	2.6%
Utilities	-9.5%	10.5%	4.6%	3.1%	-2.2%	3.1%
Publishing	41.7%	-41.2%	-5.5%	1.9%	-0.7%	1.2%
Transport and travel	3.5%	3.4%	4.8%	3.4%	2.7%	0.1%
Wholesale distribution	0.0%	8.8%	-0.4%	5.9%	0.0%	0.8%
Retail distribution	-7.6%	-1.4%	-2.1%	6.0%	3.2%	1.2%
Hotels, pubs and restaurants	7.3%	1.7%	1.5%	12.8%	5.5%	7.7%
Other business services	-7.1%	3.8%	-1.5%	6.5%	-3.2%	2.7%
Public services	0.0%	6.9%	3.7%	7.1%	21.1%	-5.3%
Other services	-8.1%	17.6%	-0.8%	6.9%	6.0%	-0.3%
Education	-4.8%	14.0%	2.7%	2.2%	4.6%	2.8%
Finance and professional services	-3.7%	-3.8%	-3.0%	4.6%	12.9%	9.5%
Health services	8.2%	3.4%	1.0%	4.5%	7.3%	4.7%
<i>Sub-total - Other sectors</i>	<i>0.3%</i>	<i>3.9%</i>	<i>0.7%</i>	<i>4.4%</i>	<i>3.3%</i>	<i>2.8%</i>
Total Employment	-1.1%	4.5%	1.0%	4.7%	3.4%	3.2%

Note: CBR data does not cover non-corporate non-KI organisations, nor does it cover companies that are active but not based in the area.

Source: CBR's calculations based on data from BRES (Nomis) [ONS data]; Cosh & Caselli, CBR, Cambridge University [CBR data].

The volatility of ONS data is even more pronounced when one looks at the individual districts making up the Cambridgeshire and Peterborough Combined Authority. This volatility, along with the use of an outdated Standard Industrial Classification, hampers the further use of the ONS data for regional economic analysis and planning. We are keen to continue our dialogue with ONS on how existing measures of local employment growth may be improved.

Summary

Our findings suggest that:

- Corporate employment growth in Cambridgeshire and Peterborough has fared well over the past six years against a turbulent macroeconomic backdrop.
- Indeed, the ONS data shows that the Cambridgeshire and Peterborough region has outperformed the national average.
- Growth was strong in the latest year but lower than it was one year earlier, suggesting that the region is not immune to the current slack national picture.
- The growth of KI sectors has continued to be a driver of overall growth; and both KI and, to a lesser extent, non-KI sectors have seen stronger growth than the nation. The growth of KI sectors does not appear to have come at the expense of non-KI growth.
- There is a disparate performance across districts. Greater Cambridge has seen exceptional growth, driven by a dominant and successful KI economy. KI sectors are also behind the robust growth achieved by East Cambs. By contrast, growth in Peterborough has benefited from the growth of non-KI sectors. Hunts and Fenland have shown much slower growth.
- Sectoral strengths and weaknesses vary widely across the region. Cambridge has benefited from its large share of employment in fast-growing, KI sectors. Fenland would have benefited from a greater proportion of its employment in KI sectors. Hunts is held back by a sluggish growth across many of its sectors.
- It is worth noting that the ONS data records a slower rate of growth than the CBR data over the last six years. Employment in Cambridgeshire and Peterborough grew by about 3% pa according to the CBR data, whilst the ONS data reports a growth of just 1% pa.
- The volatility of the ONS data, along with an outdated Standard Industrial Classification, hampers both the comparison with our data and the use of ONS data for regional economic analysis and planning.

Andy Cosh & Giorgio Caselli

Centre for Business Research, University of Cambridge
March 2025