

The Success of the Manufacture of Motor Vehicles Sector

Warwickshire and the surrounding catchment area benefit enormously from the existing infrastructure and support that helps facilitate growth in the Manufacturing Sector. As a result we have seen an agglomeration of pioneering and innovative companies in the area. These companies can only thrive in a location that has an abundance of skilled labour.

The **Location Quotient** is a measure of the concentration of employment in a sector in an area. A value of **one** suggests that the amount of employment in a sector is proportional to its size compared to the national average.

We can see that Warwickshire, and the surrounding catchment area have a location quotient far above their proportional value. In the manufacture of motor vehicles, the county employs 1,148% more than its proportional value. The wider catchment area also employs an equally impressive 539% more than its proportional value. The former employs approximately 10,000 people in this sector, and the latter 19,500.

Not only is there a large concentration of workers employed within this sector, the number employed is growing much faster than the national average. Warwickshire's employment is growing 19.1% in this sector and 15.3% when you include Coventry, Birmingham and Leicester. This faster-than-average growth in employment can only exist within a successful sector and in an environment in which there are a large pool of skilled and experience workers to choose from. **Warwickshire and the surrounding catchment area are drivers for growth within this sector.**

The success of the manufacture of motor vehicles sector is undoubtedly helped by the existence of a well-established supply chain. Warwickshire and the surrounding catchment employ 400% more than their proportional number, and employment has grown 20% in Warwickshire in the last year – compared to 9% nationally.

The success of the motor vehicle manufacturing sector is dependent on the skills and experience of the pool of workers available in Warwickshire and the surrounding area.

Warwickshire has a particularly well qualified resident and working population. Of the 277,000 workers, 59.3% have at least A-level qualifications. If we include Coventry, Birmingham and Leicester this proportion becomes 55.4%, higher than the regional average (54.2%)

The resident population is also well qualified. 56.7% of the population have at least an A-level qualification - much higher than across the rest of the West Midlands, where just under half have the same level of qualifications.

What is most important, however, is the availability of workers who have the right skills. Warwickshire have approximately 5,000 engineering professionals, 41% above the national average and growing 10% in the last year. This growth far exceeds the 1.7% national average growth.

Science, Technology, Engineering and Mathematics (STEM) are subjects for graduates which the Department for Education considers critical to the UK economy. Graduates with certificates in STEM subjects are believed to have the skills to 'generate, exploit and organize the knowledge base' - they

are viewed as pivotal for an area's economic success. This is why successive governments have given much prominence to ensuring that the flow of graduates from STEM degrees into the local economy is consistent and strong.

Graduates with STEM degrees have the skills to work in a wide variety of professions, and there has been a lot of research to understand which pathways they are most likely to take. Research commissioned by the Gatsby Charitable Foundation looked at the percentage of employees in each sector who have STEM degrees. Based on their analysis, the proportion of STEM qualified employees in Warwickshire is far above the West Midlands. Even including Coventry, Birmingham and Leicester, the proportion remains higher than the rest of the West Midlands.

A large part of the STEM qualified cohort graduate with Engineering and Technology degrees, who skills are strongly related to the manufacturing sector. Data from both Coventry and Warwick University suggests that almost half of STEM students graduate with engineering and technology degrees. From their universities alone, 3,710 graduates enter the workforce with every year with these degrees.

Acknowledgments:

This work was undertaken and presented by Sam van de Schootbrugge on 21st June 2017. The data for this piece has been taken from a variety of sources. The author is willing to share all publicly available data used, upon request. The most up-to-date data has been used and is correct up until 31st May 2017.

If you would like to find out more about the research we are currently doing or the work we have been commissioned to do in the past, visit our Warwickshire County Council Economic Assessment Webpage on <http://www.warwickshire.gov.uk/economicassessment> or contact us by email: samvandeschootbrugge@warwickshire.gov.uk or by phone: 01926 412949