

Productivity Boost in Warwickshire

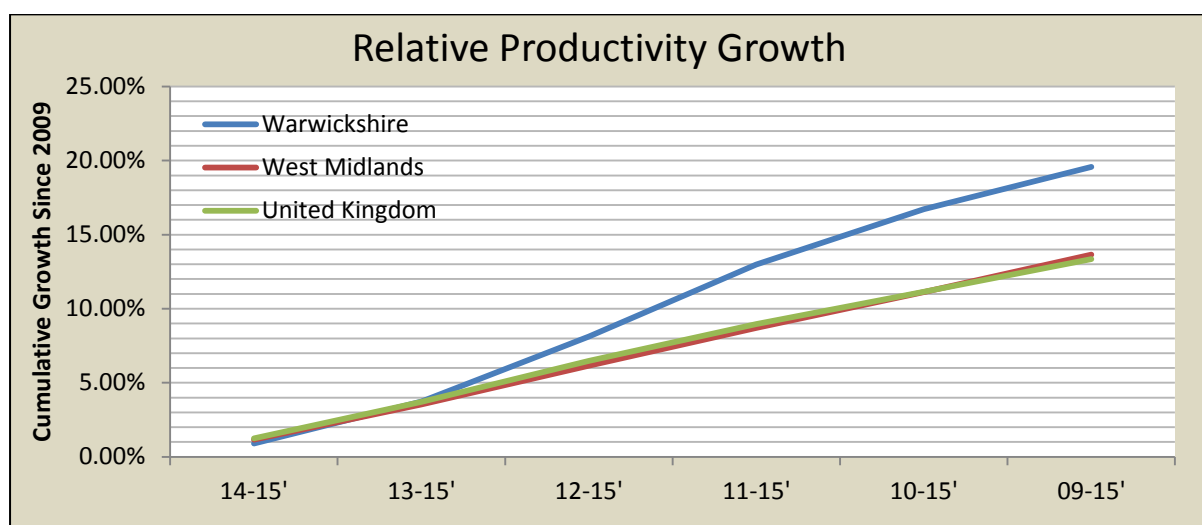
Introduction:

The economic prosperity of a country is often judged by its growth in output. Output, also known as Gross Domestic Product (GDP), is the value of all goods and services produced in an economy within a given time frame. With this in mind, **labour productivity** is defined as the amount of goods and services that a worker produces in that same period of time. If GDP is a measure of today's economic climate, labour productivity is an indicator of a country's expected future growth path. It is regarded as an important factor in determining the productive potential of the economy (Office of National Statistics). A more productive workforce implies each worker is producing more units of goods and services, i.e. more cars per hour or more phone calls per minute. Thus, if productivity increases, a country is able to produce more in the same amount of time, and thus benefit from greater wealth and prosperity.

Labour productivity can be calculated as output per worker, output per job or output per hour; with the latter being the more conventional approach. Productivity can grow as a result of technological advances or a better educated or more specialised workforce. From a policy perspective, if labour productivity is falling, it could be an indicator that more should be done to improve the delivery of education or job specialisation. Indeed, on a national scale, labour productivity changes are a main driver of economic policy. In recent years, the UK government has been determined to reduce the gap between the relatively poor UK labour productivity figures to catch up with other advanced economies. In Philip Hammond's autumn 2016 statement he stated that "it takes a German worker four days to produce what we do in five". Despite a growing economy in total output terms post-recession, it wasn't until October 2016 that UK productivity levels returned to pre-crises levels. This sluggish improvement in productivity despite overall growth has been dubbed the "productivity puzzle".

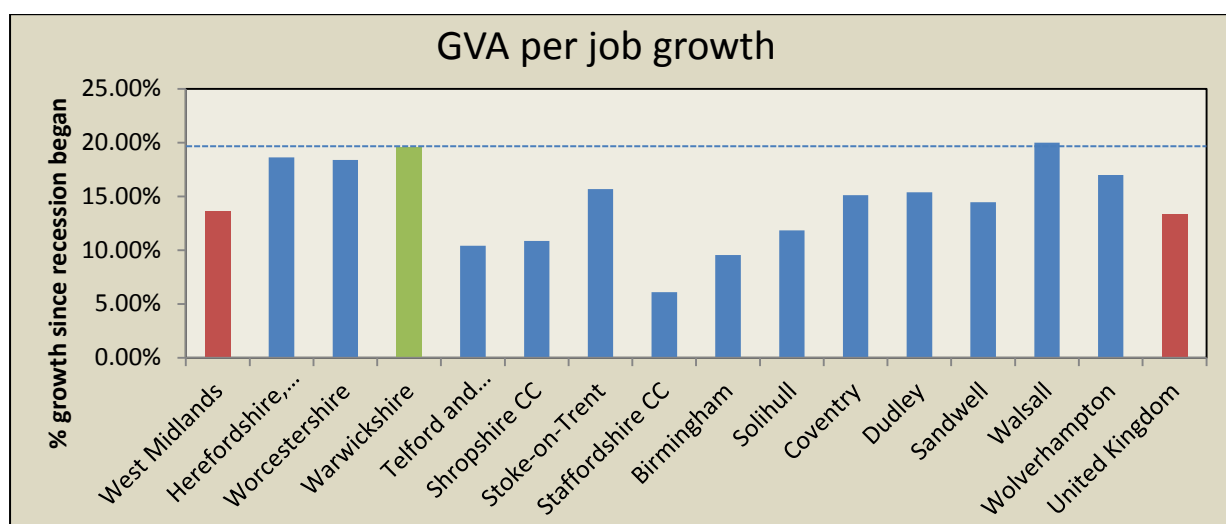
Productivity data - Warwickshire

In new data released by the Office of National Statistics in **January 2017**, however, it shows that Warwickshire is bucking this trend. Since the recession, productivity in terms of output per worker has risen 19.58%, outperforming both national and regional averages, and 9 in 10 local authorities. This growth is driven by the change in productivity hours worked per week in Warwickshire, which has increased 19.4%, placing it in the top ten fastest growing local authorities in the UK and the fastest in the West Midlands. This shows that, not only is the labour force capacity growing within Warwickshire but it is also become significantly more productive. The relative growth in labour productivity hours is given below.



Source: ONS

From the graph it is clear that the cumulative growth in Warwickshire outperforms that of the West Midlands and the average local authority areas. Over the seven year period, Warwickshire's cumulative growth is over 40% higher than the UK and West Midlands's average.



Source: ONS

Productivity growth in Warwickshire has outperformed almost all local authorities in the West Midlands in recent years. Only Walsall has grown faster, but it is only 85% of Warwickshire's productivity size. These results show that, given its size and speed of growth, Warwickshire is firmly establishing itself as workhorse of labour productivity growth in the region and is leading the way in 'reducing the productivity gap' in the region. At its current level (£49,735 per job) there are 47 local authorities in the UK that are more productive than Warwickshire, however, only 5 of these have grown faster since the start of the recession in 2009. Furthermore, only one local authority area (Solihull) in the West Midlands has a higher level of productivity but seen much lower growth – see Table 1 below. As such, Warwickshire's continual pursuit to reduce the productivity gap with the most productive areas in the UK has proven effective.

Table 1: GVA per job and per hour by local authority in the West Midlands

	GVA per job		GVA per hour	
	2015	Growth '09-'15	2015	Growth '09-'15
West Midlands	44,612	13.64%	27.6	11.12%
Herefordshire, County of	42,239	18.63%	26.3	13.78%
Worcestershire	44,819	18.38%	28.2	17.89%
Warwickshire	49,735	19.58%	30.2	14.17%
Telford and Wrekin	41,435	10.42%	26.9	10.30%
Shropshire CC	42,905	10.86%	27.7	7.82%
Stoke-on-Trent	40,597	15.67%	24.6	10.21%
Staffordshire CC	41,192	6.11%	25.5	2.59%
Birmingham	45,303	9.56%	27.2	4.16%
Solihull	56,477	11.84%	35.8	12.53%
Coventry	45,952	15.12%	27.5	10.91%
Dudley	40,884	15.38%	27.5	20.22%

Sandwell	43,177	14.45%	25.8	9.76%
Walsall	43,018	20.00%	29.0	28.17%
Wolverhampton	42,587	16.99%	26.4	25.60%
United Kingdom	50,830	13.35%	31.8	12.08%

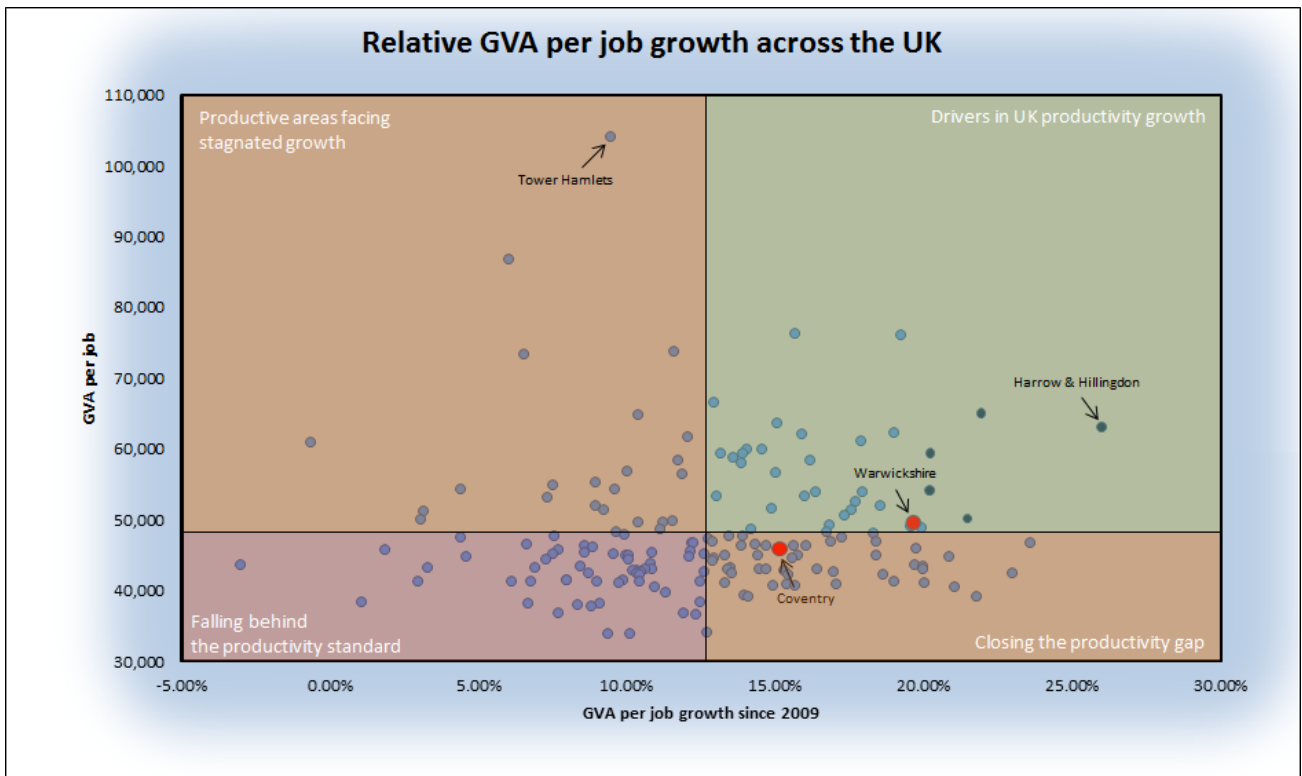
Source: ONS

This is because **only three other local authorities in the UK have outperformed Warwickshire's productivity hour's growth** (see table 2 below). This statistic, seen as the productivity potential of the labour force, is particularly striking given these authorities are only a third of Warwickshire's productivity hours worked per week size and significantly smaller economic areas.

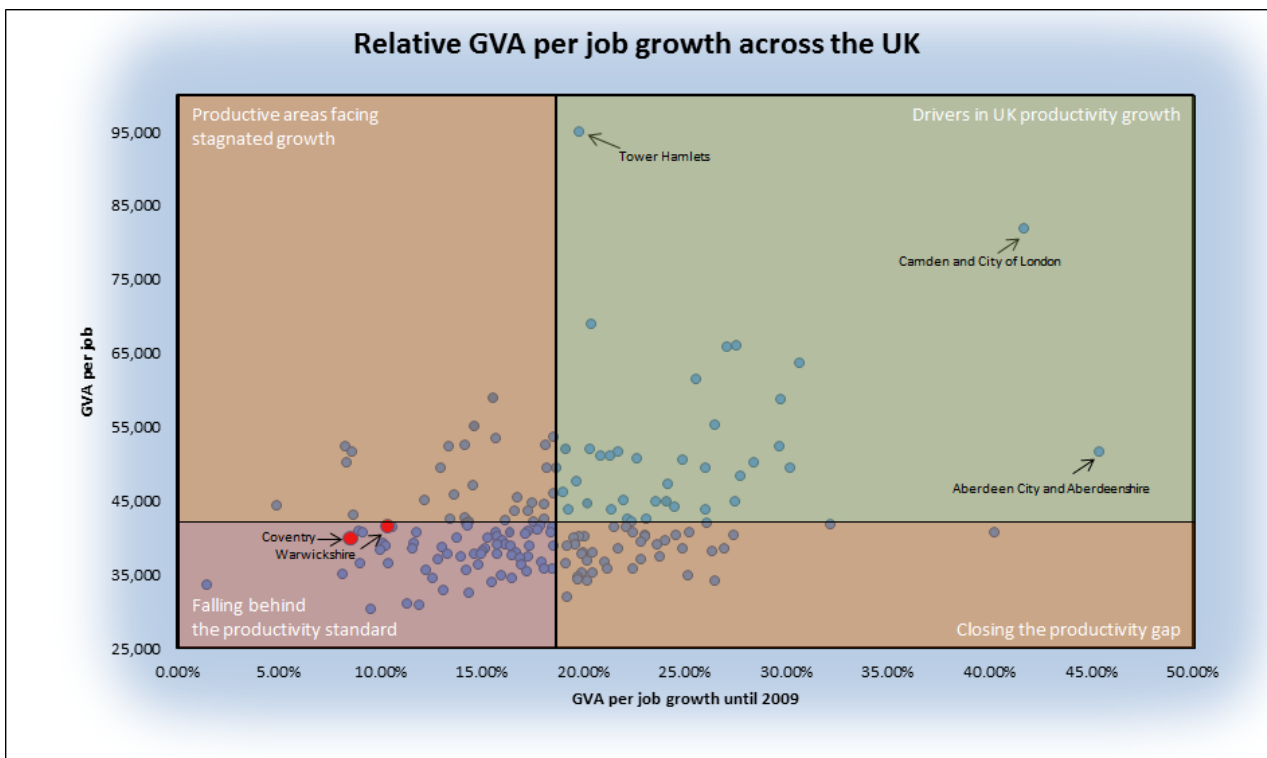
Table 2: Productivity hours per week

Fastest growing	Local Authority	2012	2013	2014	2015	Growth
1	Shetland Islands	383,004	471,714	477,726	502,427	31.2%
2	Orkney Islands	298,902	302,646	302,219	369,670	23.7%
3	Luton	2,503,626	2,930,505	3,123,547	3,030,878	21.1%
4	Warwickshire	8,530,844	8,858,467	9,680,594	10,188,044	19.4%
5	Hackney and Newham	6,253,902	6,584,288	7,387,985	7,397,835	18.3%
6	Swansea	3,068,574	3,256,582	3,366,633	3,604,488	17.5%
7	Haringey and Islington	8,491,629	9,204,894	9,455,443	9,949,521	17.2%
8	Bexley and Greenwich	4,342,713	4,452,484	4,964,630	5,028,905	15.8%
9	Cheshire West and Chester	4,982,672	4,844,015	5,293,143	5,769,009	15.8%
10	Milton Keynes	5,244,618	5,548,597	5,369,142	6,058,372	15.5%
Source: ONS Subregional Productivity: Labour productivity indices by UK NUTS2 and NUTS3						

Warwickshire's performance relative to other local authorities in terms of current levels of productivity and growth rates is shown diagrammatically below. There are only five local authority areas in the country that are both more productive than Warwickshire, and have grown at a faster rate between 2009-2015. The axis on the graph below cross at the average size and rate of growth for all local authority areas, and so those in the right-hand quadrant are those who are exceeding the average on both points of consideration.



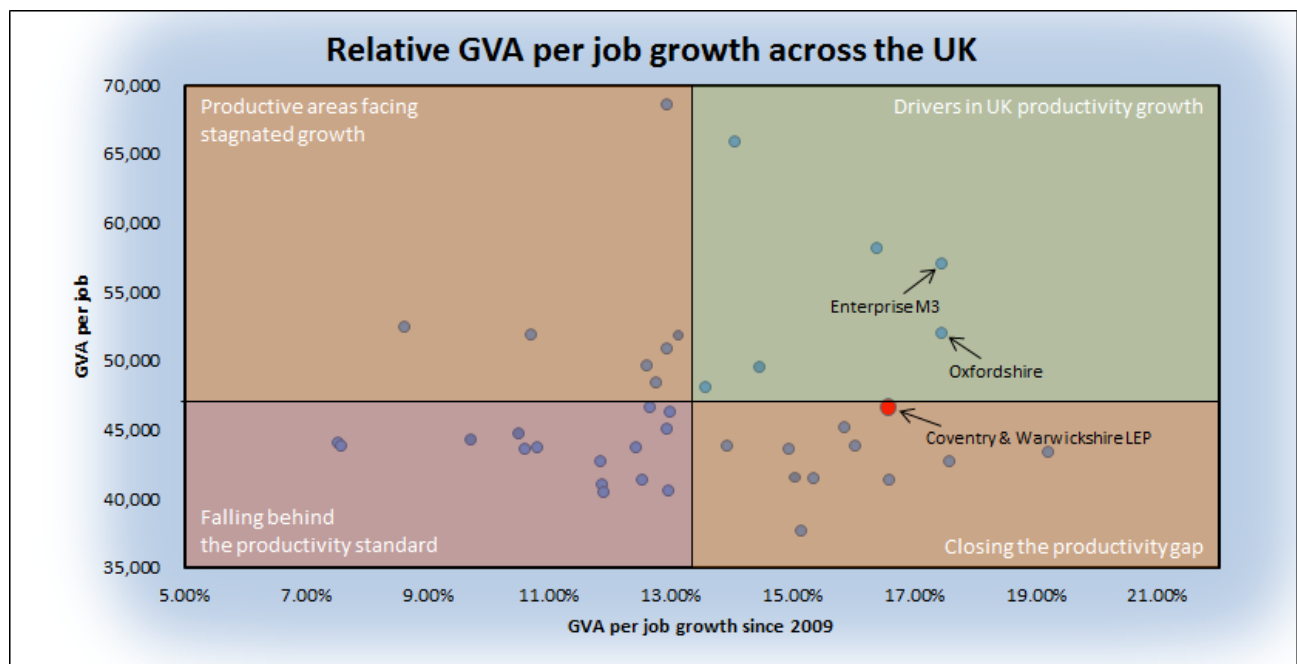
The strong growth in productivity in Warwickshire is particularly highlighted when one looks at a replica graph to the one above, but looking at the period 2003-2009. Warwickshire (and Coventry) were then below the average and falling behind due to lower growth rates.



For comparative reasons, since 2009, Warwickshire's productivity growth has outperformed that of Germany and the US, growing at least double their speed. This indicates Warwickshire's growing significance as a hub for many multinational businesses such as JLR and BMW.

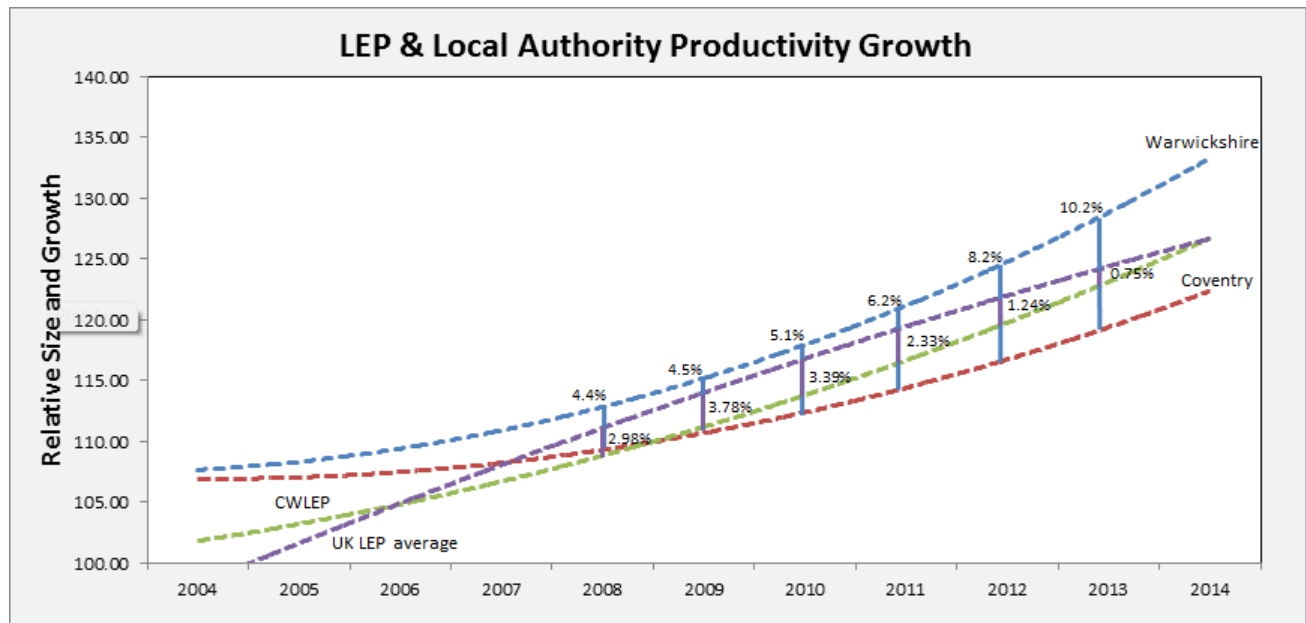
Productivity: Local Enterprise Partnership level

The Coventry & Warwickshire area forms a natural economic geography, and the two areas work closely through the Coventry & Warwickshire Local Enterprise Partnership. The strong growth experienced by both areas has obviously fed through into excellent performance at the Local Enterprise Partnership (LEP) level as shown in the graph below. Only two LEPs in the country (Enterprise M3 LEP and Oxfordshire LEP) have grown faster, and have higher rates of productivity in their economy.



The graph below seeks to explore the composition of this growth at the LEP level, and highlights the key role that Warwickshire has played in driving this change. The CWLEP area as a whole outperformed the average in 2004-05, fell behind from 2007-2010, and has then seen the gap be eradicated by 2014 (latest available data at LEP level). This change has been predominantly driven by the economic performance of Warwickshire, which has seen strong acceleration since 2009 and has helped push CWLEP performance to equity with the UK LEP average. Encouragingly, the Coventry area has

seen faster than average growth in 2014 and 2015, which alongside Warwickshire's performance should see the CWLEP area overtaking the average in future years.



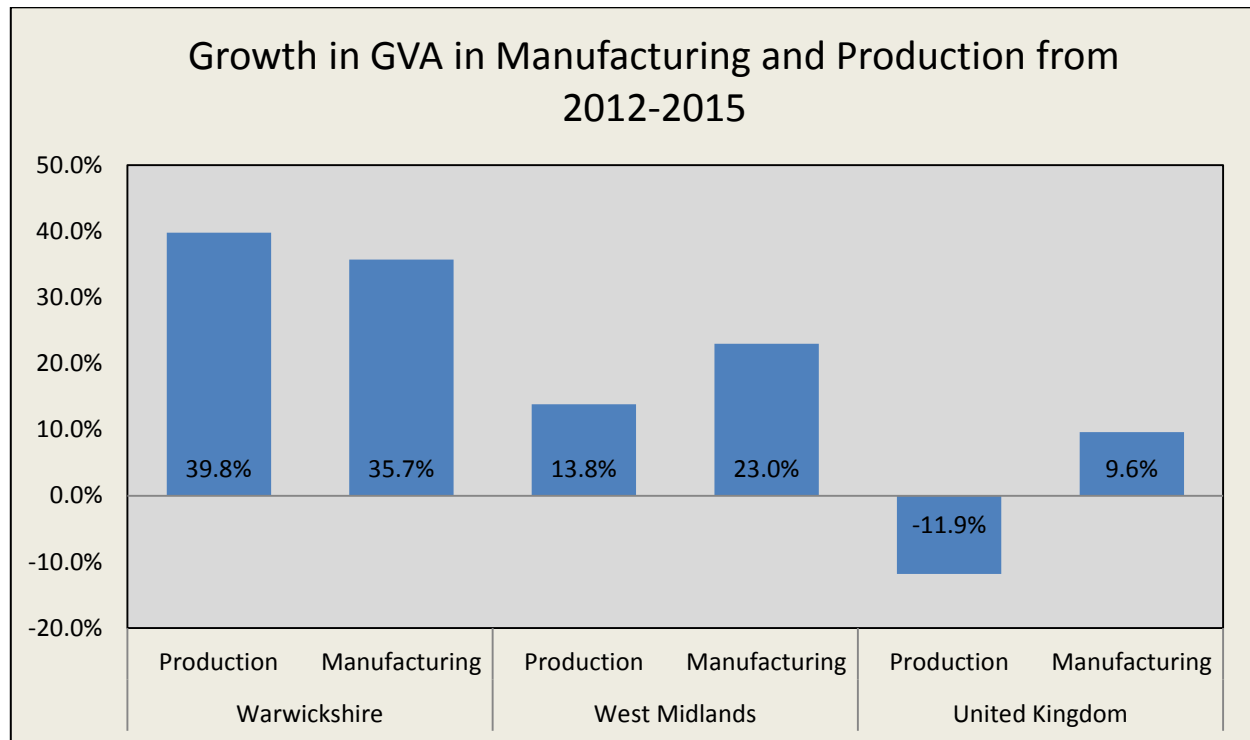
How has Warwickshire done so well relative to local authorities?

There could be a wide variety of factors driving this productivity growth. Education, business innovation, transport links and apprenticeship schemes are recognised contributors to improving labour productivity. The following section discusses the changes these areas have seen in Warwickshire.

The county is fortunate to be at the forefront on innovation in the IT and Computing sectors as well as the Automotive industry. The IT sector in particular, contributes a disproportionate amount to innovation, growth, productivity, exports and entrepreneurship (TechUK). The council has for a number of years targeted these 'high-growth' sectors to generate improvements in Gross Value Added (GVA). At a local level GVA is a better measure of output than GDP, which is used nationally. Higher levels of GVA mean more GVA per worker per hour if the number of workers and hours remains constant, which would increase productivity.

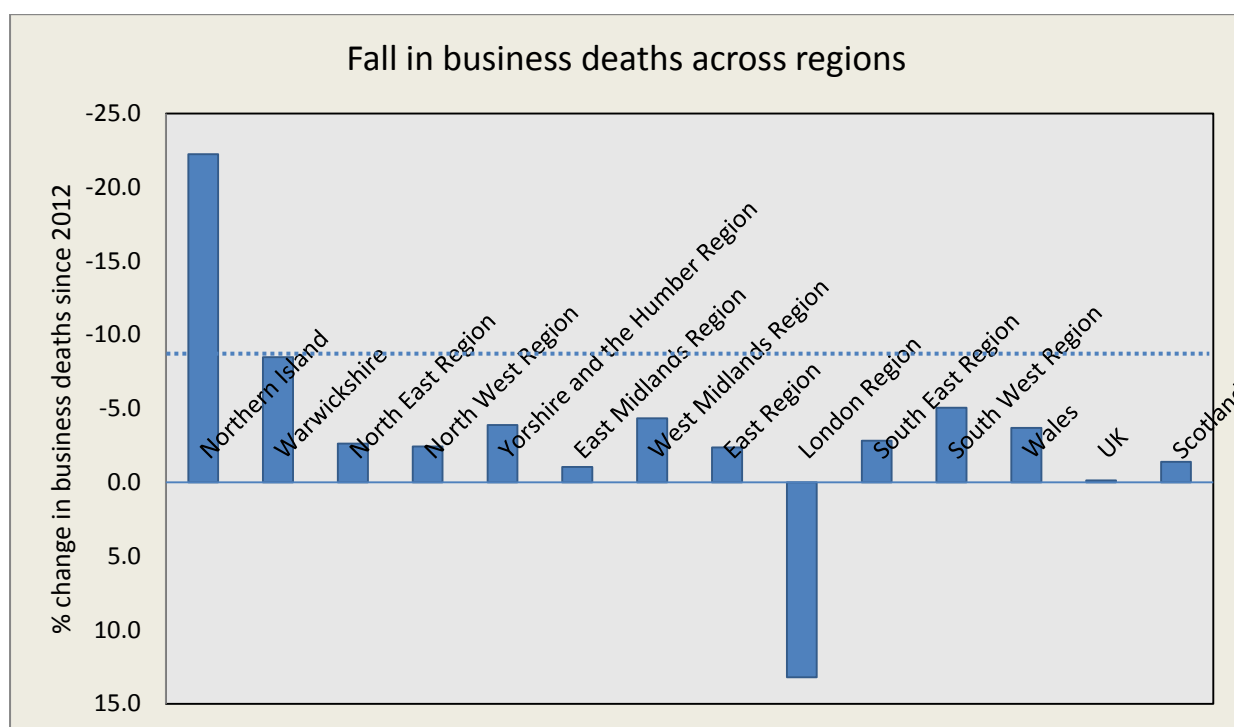
Data released in December 2016 by the ONS presents optimistic evidence in support of targeting these sectors. Since 2012, all industries in Warwickshire have grown. The average growth is 13.8%, higher than the West Midlands (10.9%) and the UK (11.4%). In

particular the manufacturing sector, for which Warwickshire is renowned, has seen a 35.7% increase in output, more than three times the growth rate across the UK.



Source: ONS

Businesses in Warwickshire also have a considerably lower death rate. The ability for firms to grow and innovate is essential for improving productivity in the region. As firms grow they are able to exploit economies of scale, allowing them to become more efficient and productive. Since the spike in productivity in Warwickshire in 2012, the number of deaths of enterprises has fallen 8.5% in the county. This fall is larger than the UK average (0.1%) and the average of every region in the UK except Northern Ireland.



Source: ONS, Business Demography data (2015)

There has been an equally impressive increase in the births of new enterprises. Warwickshire has seen a 50.4% increase which is 8 percentage points higher than the UK average.

The County Council has also placed an emphasis on improving the skills and qualifications of the younger population. The figure below highlights changes in employment and skills for all local authorities from 2012-2015 and is derived from data published in the annual labour force survey. Critically, the number of 16-24 year olds who have no qualifications in Warwickshire has decreased a staggering 40.4%, over six times the national average. Also, the percentage of 16-24 year olds who have obtained an A- or AS-level qualification, a key indicator of skills in the local workforce, has also grown significantly in Warwickshire (11.5%) over and above the national average (2.7%).

Growth rates 2012-2015	Warwickshire Ages 16-24	Average of all local authorities Ages 16-24
with no qualifications	-40.4%	-6.1%
with NVQ3 only	11.5%	2.7%

Source: Annual Population Survey

In a report published by the Confederation of British Industry (CBI), they find a direct correlation between secondary school achievements and local productivity. They also find that firms are increasingly looking to employ high-skilled workers, ensuring that the attainment of such qualifications are key in generating future employment and productivity

growth in Warwickshire. It is reasonable to suggest that the increase in the attainment of important qualifications has led to the increase in employment and economic activity in Warwickshire. Indeed, recent employment figures published by ONS suggest 76.9% of Warwickshire's working population are employed, three percentage points higher than the UK average. This growth in the attainment of better qualifications, along with more business start-ups and fewer enterprise deaths, has ensured a more substantial and better skilled population in Warwickshire, contributing to its increase in productivity.

Finally, there has also been much emphasis placed on improving the connection between schools and businesses. The Warwickshire County Council's Skills for Employment programme helps employers work with schools and colleges in Warwickshire. In the aforementioned CBI report, there is a positive and strong relationship between businesses offering work experience and productivity increases. No doubt this better partnership has had a part to play in the productivity improvement in Warwickshire.

Better connections are also obtained through infrastructure spending. Since 2013, Warwickshire County Council has invested in new capital infrastructure projects worth £74 million in total, including enhancement of the Nuneaton-Coventry-Kenilworth-Leamington (NuCKLE) rail corridor, M40 Junction 14 and Europa Way. Improved connectivity through transport infrastructure helps improve accessibility to markets, and increases the effective density of economic areas leading to agglomeration gains.

What are the implications of higher productivity in Warwickshire?

One of the most important factors determining pay is productivity (Bank of England, Feb 2017) as this will determine, in large part, the amount of revenue companies in aggregate have to pay their employees. Thus, greater output per worker should be transferred into higher wages. We could, therefore, expect Warwickshire's wages to have increased in real terms. Indeed, even with Warwickshire's wages being the second highest in the West Midlands, and in the top 30% in the UK, wages have grown above inflation and the England average since 2013. Those living in Warwickshire earn a significant £1,500 more a year compared to four years ago. Weekly wages have also increased by 5.2%. All in all, higher wages mean higher disposable income and better long term growth.

As companies expand their output they have the capacity to employ more people. Warwickshire's unemployment rate has fallen a third since 2013, and the employment rate

is higher than the UK average. If we break this down into Warwickshire's key sectors we can understand where these changes have come from. Employment growth in the automotive sector has grown in excess of 50% since 2013, beaten only by the City of London and Bedford. This employment growth strength, which is more than 6 times the national average, is matched in the Tourism, Computing and Business & Professional sectors. These sectors have also grown more than 50% faster than the UK average.

Furthermore, an area with high productivity is conducive for innovation and growth. As such, Warwickshire has seen some exciting new inward investment opportunities. High-end furniture maker **Vitsoe** decided to relocate from Camden to Leamington Spa. Their new HQ, showroom and factory will create an exciting, modern Gateway to Leamington Spa, on the former Ford Foundry Site, relocating staff from London and creating additional employment in the town. Also, Argentinian Autonomous Vehicle technology company **BARO Vehicles** chose Nuneaton's MIRA Technology Park for its new UK facility. French Global Triple AAA games studio **Ubisoft** chose Leamington Spa for its new UK studio expansion. Warwickshire's 'Silicon Spa' beat off other UK contenders for this prestigious investment. The company are committed to supporting the local skills supply chain and bringing forth the next generations of coders and games developers. Finally, **TATA Technologies**, the engineering services company, is locating its new European HQ at Tachbrook Park in Warwick, with over 300 new jobs planned.

The investment of multinational businesses in Warwickshire is promising for future productivity growth. Academic research undertaken by Bloom et al (2012), find that multinationals boost productivity in UK establishments through enhanced technologies and management practices. Large global firms are able to locate on a worldwide scale because, by definition, they are more efficient and productive. Their inclusion into local regions often drives up wages, and thus real disposable income in the area. With the recent expansion of JLR, this is most likely one of the main reasons for the strong wage and productivity increases seen in Warwickshire.

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