

Economic Performance of Warwickshire – May 2008

A: Introduction:

Economic performance of areas within the UK is often measured using Gross Value Added statistics. Gross Value Added (GVA) essentially measures the value of the output of an economy (i.e. goods and services), less the value of inputs used in the production of that output – i.e. the value added by the economic process¹. GVA is calculated by the Office for National Statistics (ONS) using a variety of data sources, the most prominent of which are the Annual Business Inquiry (ABI) and the Annual Population Survey (APS). Both these data sources are based on national surveys and, as such, the confidence and reliability of the information reduces the smaller the geographic area that is being looked at (i.e. GVA data at the national and regional level are considered robust, but anything lower than this should be treated with some caution).

GVA data is generally published December/January time, and with a significant time-lag of over two years (i.e. data published in December 2007 gave figures for Warwickshire up to 2005). The latest year in question is always presented as an estimate, and subject to revision in the next year's data release. Normally, these revisions are only minor but the latest set of GVA data saw a significant upwards revision for Warwickshire, which is detailed in Section C below.

B: GVA performance of Warwickshire (2007 data release)

Total GVA for Warwickshire in 2005 (latest available data) is estimated at £9,209 million. This has risen from £5,308 million in 1995, leading to a compound annual growth rate over the ten year period of 5.66%. This compares to annual growth rate of 5.47% for the UK as a whole. Whilst this long term growth rate is very good (27th out of all 91 NUTS 3 areas² in the country), this was largely driven by strong growth in the late 1990's. While this is common for most areas, it would seem that Warwickshire over-performed in times of strong national economic growth and, underperformed in the more sluggish economic conditions of the early half of this decade. This is actually indicative of a strong "market sector"³ (as opposed to the public sector), which is generally regarded as a positive sign. Table 1 below shows the differences between the 10 year and 5 year average growth rates; and Figure 1 shows the change annual growth rates for Warwickshire.

Table 1: Annual Growth Rates of GVA – 1995-2005

	Average Annual Growth Rate	
	1995-2005	Average Annual Growth Rates 1995-2000 2001-2005
Warwickshire	5.66%	6.91% 4.43%
UK	5.47%	5.63% 5.31%
West Midlands	4.72%	4.86% 4.57%
South East	6.20%	6.89% 5.52%

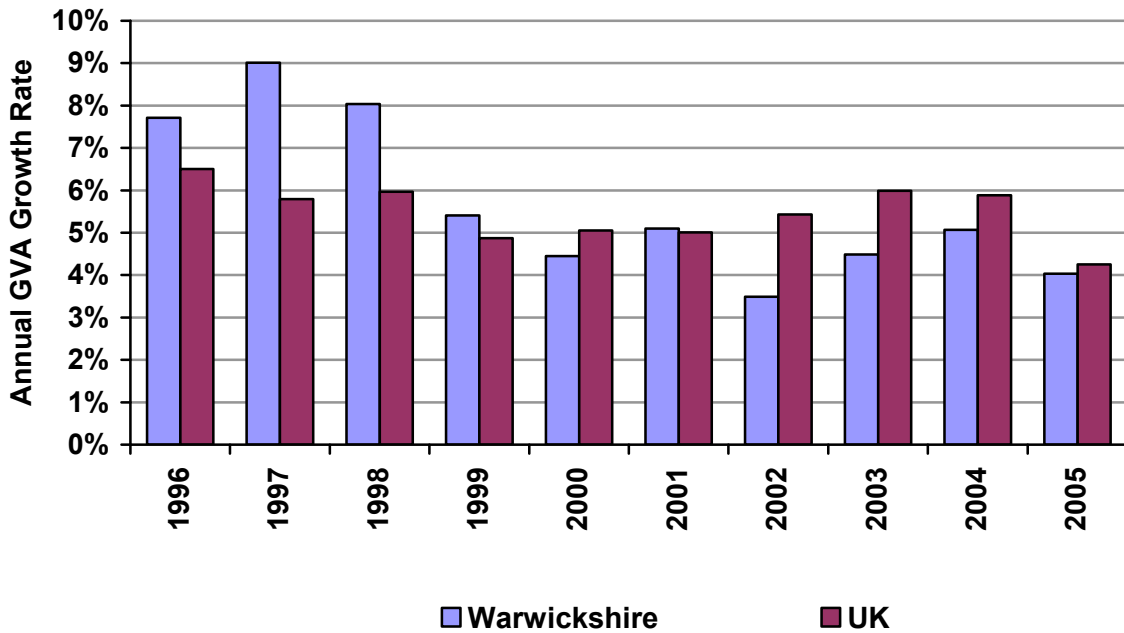
Source: ONS

¹ GVA is slightly different to Gross Domestic Product (GDP) which is more generally used to compare economic performance between countries. GDP is essentially GVA + taxes on products – subsidies on products.

² NUTS (Nomenclature of Units for Territorial Statistics). There are five hierarchical levels of NUTS, built from local government administrative boundaries. NUTS1 = Government Office regions, NUTS 2 = groups of counties; NUTS 3 = County Councils or groups of unitary authorities; NUTS 4 = Districts or unitary authorities; and NUTS 5 = electoral wards.

³ See "Market Sector GVA Productivity Measures"; Economic & Labour Market Review, Vol 1, No. 3, pp 47-53, Office for National Statistics

Figure 1: Annual GVA Growth Rate



Source: ONS

Whilst overall GVA gives a picture of total economic output of an area, it is common to calculate GVA per head of population to aid the comparison between different areas. Figure 2a below shows actual GVA per head for Warwickshire and comparator areas, while Figure 2b presents this data indexed against the UK as a whole. Both these diagrams show that Warwickshire has broadly matched average UK performance over the last 10 years, but with some over-performance in the first half, and relative underperformance in the second. Figure 2a shows that Coventry has historically had a higher level of GVA per head than Warwickshire (see Section D below for further information), but this gap has narrowed in recent years. One can also see the dramatic increase in GVA per head for Solihull, which actually had the fastest rate of growth over the last 10 years for all NUTS 3 areas in the UK. Overall, the West Midlands continues to have relative low, and declining, GVA per head figures, increasing the regional “output gap”⁴.

⁴ Estimated to be in the order of £10bn – i.e. the West Midlands economy would be £10bn better off if it performed in line with average UK performance (WMES 2007)

Figure 2a: GVA per Head (£)

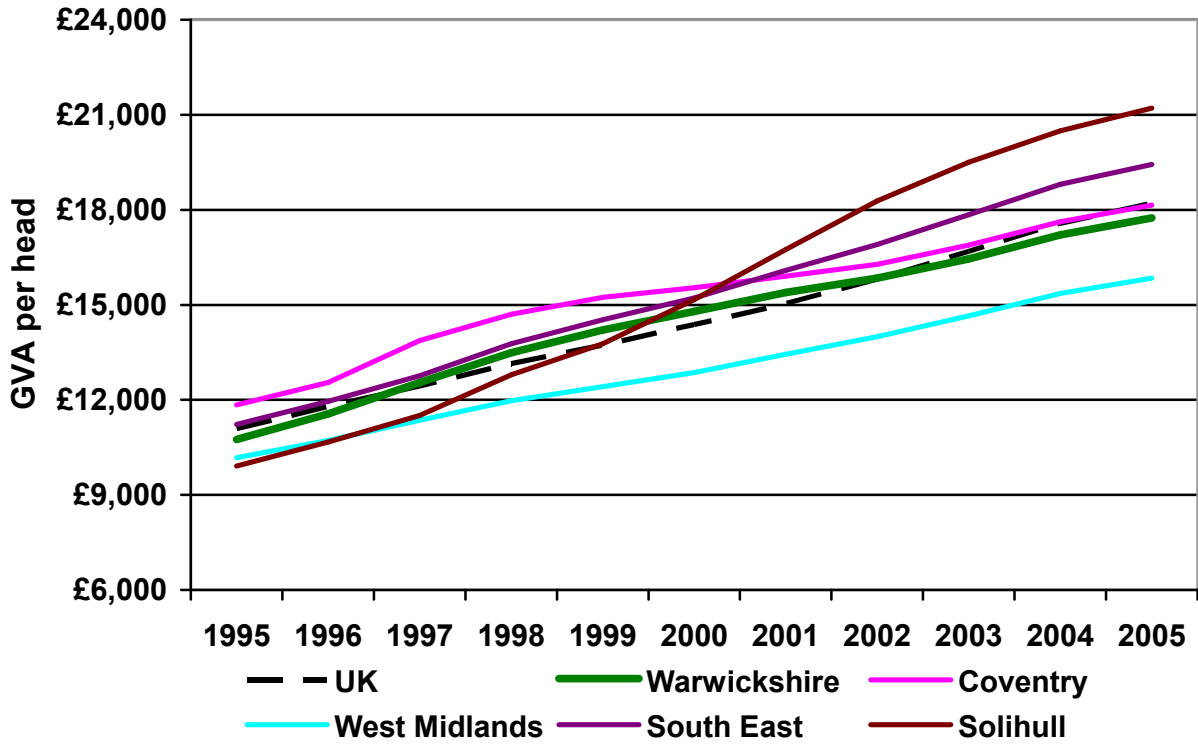
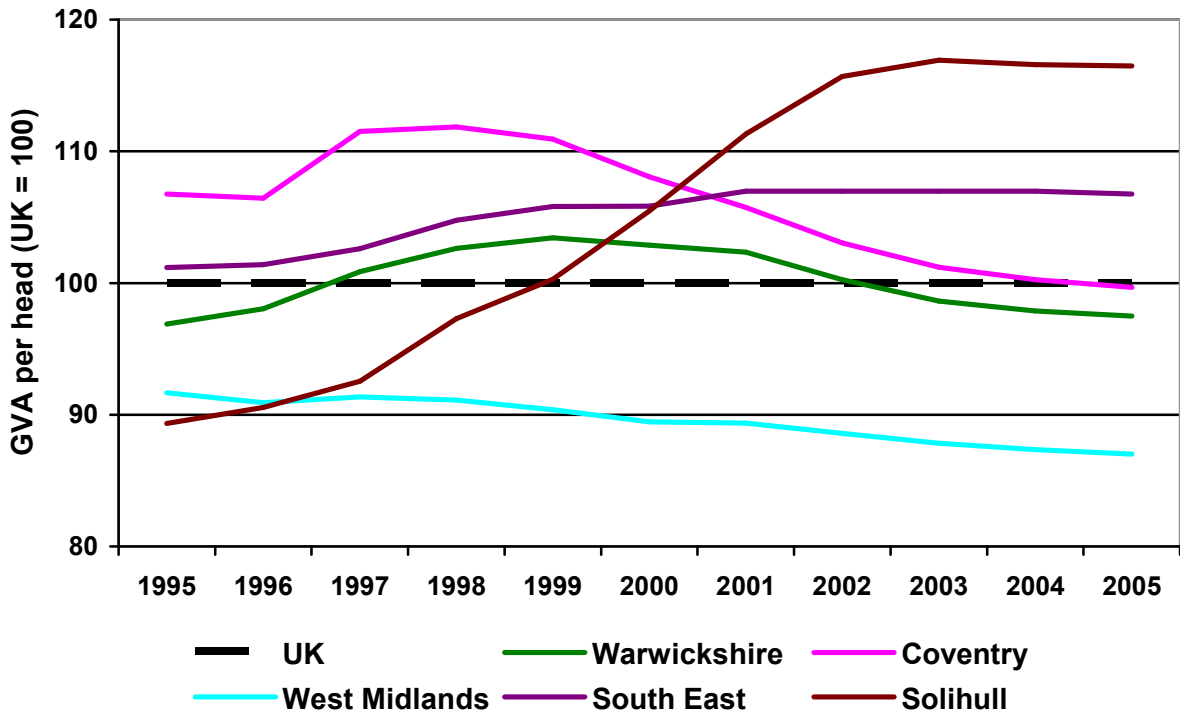


Figure 2b: Indexed GVA per head (UK=100)



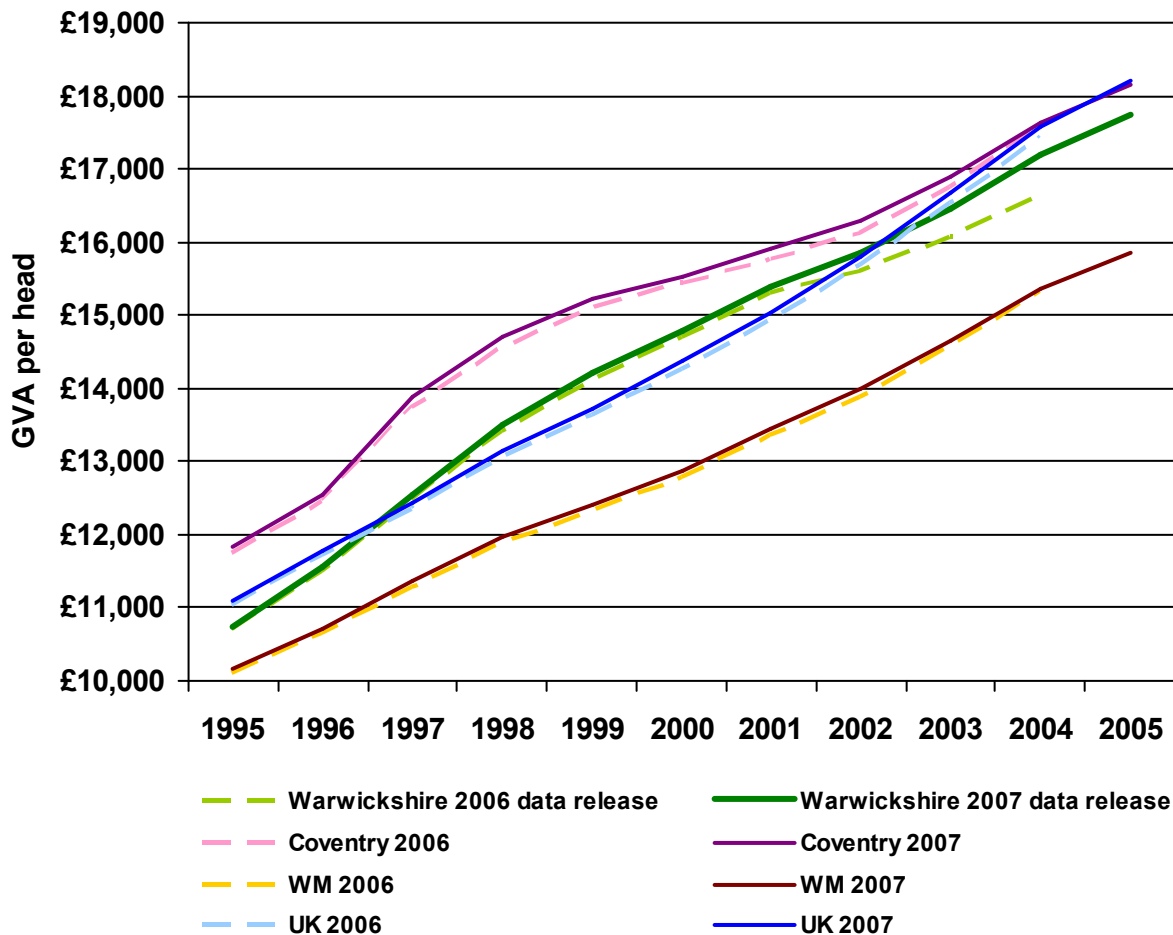
Source: ONS

C: Differences between 2006 and 2007 GVA Data Releases

As highlighted in Section A above, GVA statistics are subject to revision on an annual basis – particularly as estimated figures for the latest year in question are only confirmed in the following year. Normally, these revisions are only minor but in 2007 ONS significantly uplifted the GVA figures for Warwickshire. Based on the pre-2007 release of data, there was increasing concern that Warwickshire’s economic performance was starting to stutter as GVA growth rates and GVA per head statistics had started to consistently fall away from the UK average. This was reported in “Warwickshire’s Economic Update” produced by the Warwickshire Observatory in June 2007, and also in a range of presentations over that period.

The scale of the revision (particularly in comparison to other areas) to the statistics for Warwickshire can be seen in Figure 3 below. One can see a revised improvement in GVA per head figures from 2001 onwards, which has led to the more positive picture of economic performance detailed in Section B.

Figure 3: Differences between GVA per head figures in 2006 and 2007 data releases



Source: ONS

We believe that this revision is largely a result of a significant under-estimate of the size of the business and financial services sector in the 2004 Annual Business Enquiry. In 2005, the estimated numbers employed in this sector rose by 10,000 and, as this sector is a key contributor to wealth creation in the national economy, one can conclude that it was a major cause in the uplift of the GVA figures.

D: Causes in variation of sub-national GVA per head performance

GVA per head performance in different areas can be broken down into four explanatory factors⁵:

- **Productivity** – *a measure of how efficiently and effectively goods and services are produced, usually per unit of labour. The standard calculation for productivity is therefore total GVA divided by the number of jobs filled in a local area.*
- **Employment rate** – *the proportion of people of working age in an area that are in employment. Generally, the more people in employment, the more output is created.*
- **Community rate** – *the ratio between the number of jobs filled in an area and the number of people from that area that are in employment. Therefore, high inward commuting takes place when the workplace based labour force is larger than the residence based labour force. Areas that experience strong levels of in-commuting will naturally have higher levels of GVA per head as more output is being generated compared to a relatively smaller resident population. As a result of in-commuting, most large cities/urban areas generally have higher levels of GVA per head while rural areas generally have lower levels.*
- **Levels of economic activity** – *measures the proportion of the population that is participating in the labour force. Areas that have high levels of worklessness and economic inactivity, and areas that have a relatively older (or indeed younger) population have lower participation rates which, in turn, depresses levels of economic output.*

An equation can be created that identifies the relative contribution of each of these four factors to local GVA per head in comparison to the UK average. The solutions to this equation are shown in Figure 4 below, using data for 2005.

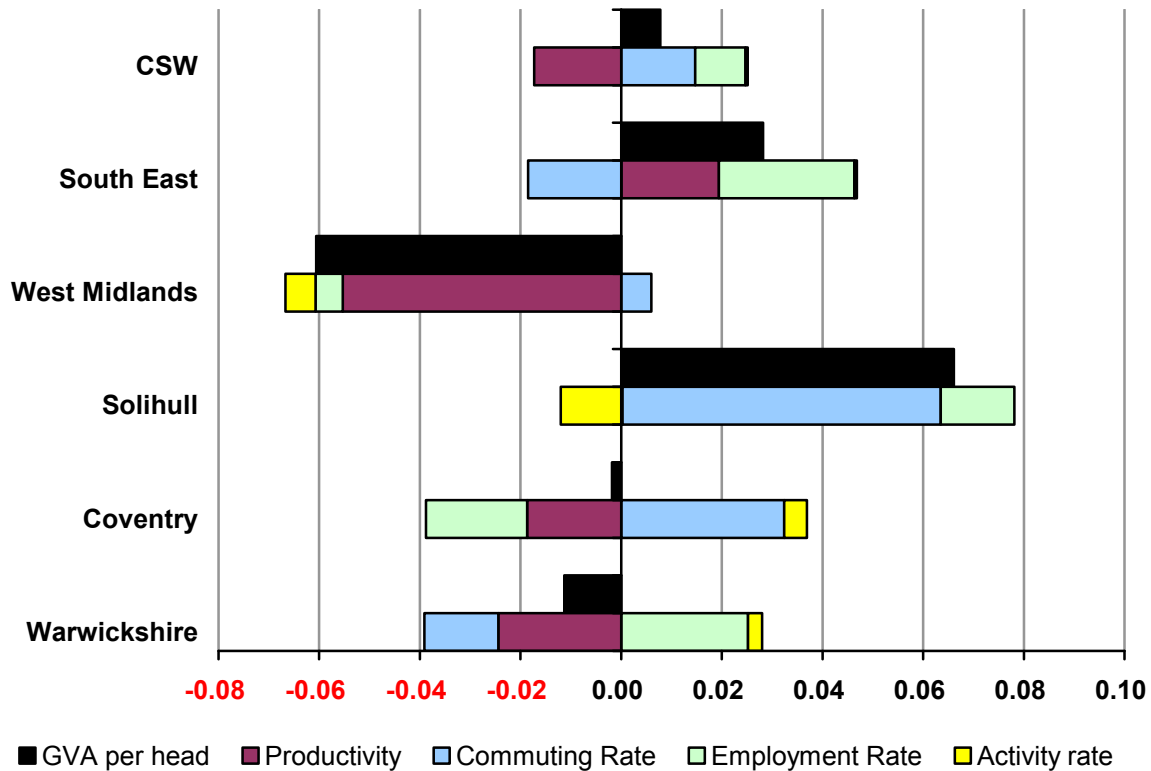
One can see that in Warwickshire, the higher than average employment and activity rates contribute positively to the county's GVA per head figure, but this is more than outweighed by below average levels of productivity and significant out-commuting. Coventry, on the other hand, benefits from in-commuting which helps the city have better GVA per head figures than Warwickshire. However, overall Coventry has slightly lower than UK average GVA per head as a result of lower levels of productivity and a worse employment rate. Solihull's strong performance in GVA per head can be predominantly explained through significant levels of in-commuting. The CSW sub-region as a whole has above average GVA per head, but low productivity (in Coventry and Warwickshire, as identified above) remains a concern and depresses the figures.

Low productivity is a particular feature for the West Midlands region, as well as the sub-region. HM Treasury have identified five key drivers of productivity⁶ – enterprise, skills, innovation, competition and investment. A future paper will explore and analyse these drivers at the local and sub-regional level.

⁵ "Regional Economic Indicators, August 2007"; Economic & Labour Market Review Vol 1, No. 8

⁶ See "Productivity in the UK Series" (2000-2007), HM Treasury

Figure 4: Explaining the differences in GVA per head from the UK average



Source: WCC / ONS

E: Local Variation in GVA

As noted in Section A above, GVA statistics are not available below NUTS3 (i.e. county council) level due to the limitations of the data sources. However, it is possible to construct proxy figures for GVA by looking at average wages and the number of jobs in a local area. This is based on the assumption that employees are paid a sum equal to the value that they add to their employer. Therefore, if you multiply the average wage by the total number of employees in the area, you get an approximate figure of gross value added for that area. Clearly it must be noted that other factors (such as capital investments and productivity gains by businesses) contribute to actual GVA, and hence the figures generated through these calculations are typically around two-thirds of the official statistics. However, this approach does allow us to develop useful trend data across the five districts & boroughs of Warwickshire.

Figure 6a below presents actual growth in proxy GVA across Warwickshire over the period 1998 to 2006. Nuneaton & Bedworth and North Warwickshire and Rugby have seen fairly limited absolute growth over this period, while the south of county (particularly Warwick District) has seen quite strong growth and an increasing share of total proxy GVA for the county. Figure 6b looks at compound annual growth rates over this period. This highlights relatively strong recent growth in North Warwickshire, fairly sluggish growth in Nuneaton & Bedworth, and worryingly poor rates of growth in Rugby Borough.

Figure 6a: Contribution of Districts & Boroughs to Warwickshire's Proxy GVA

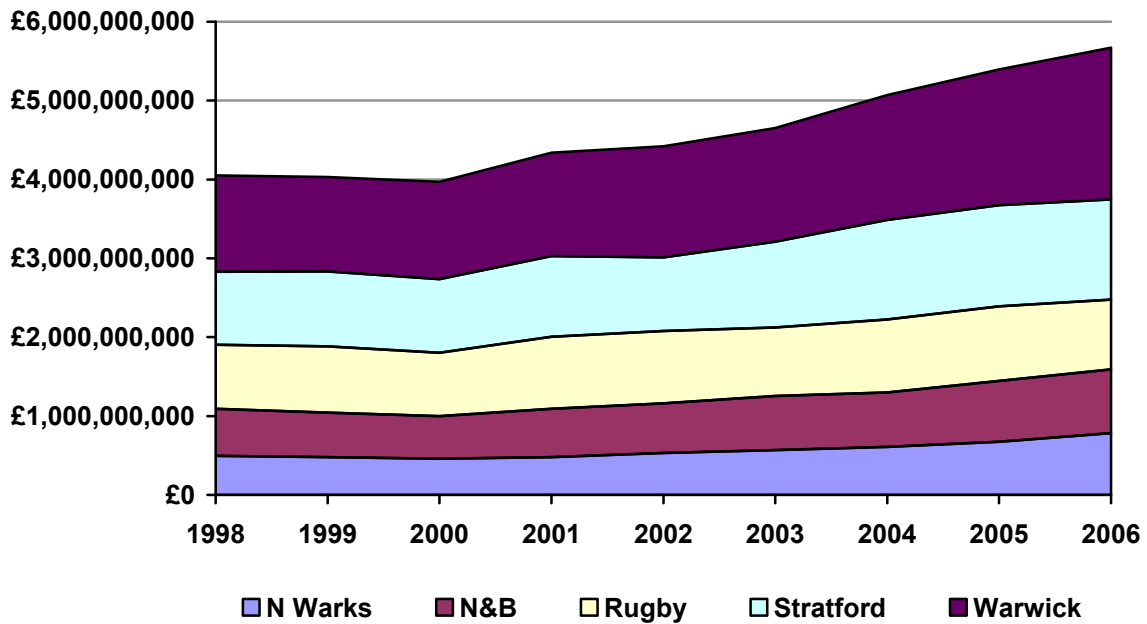
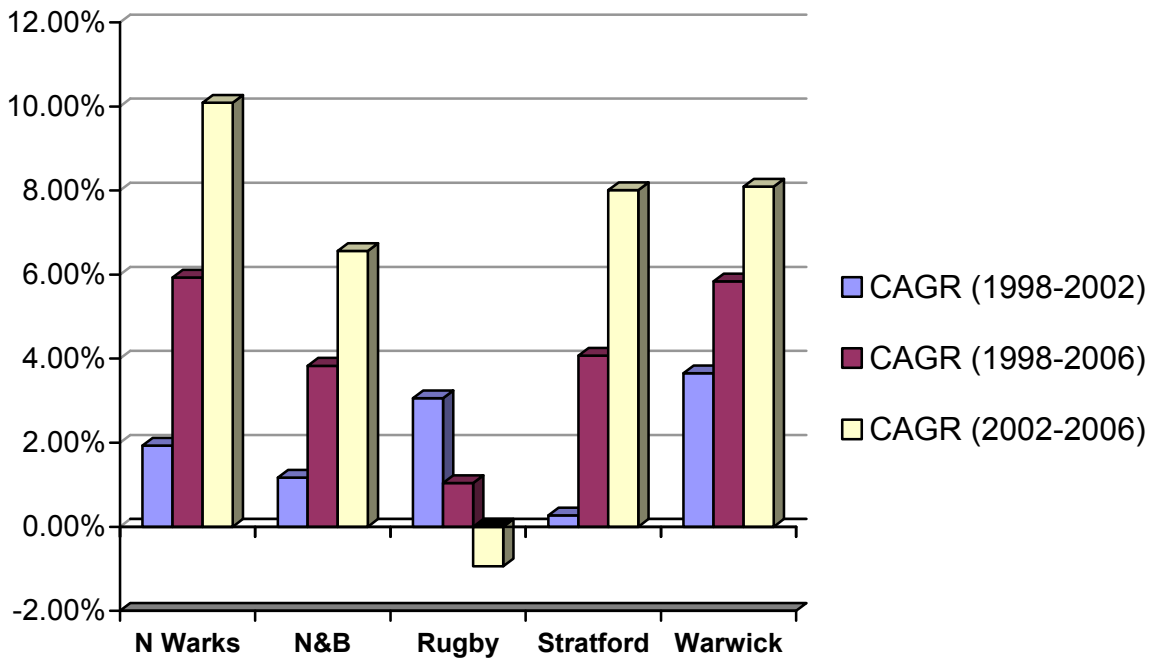


Figure 6b: Average annual growth rates for Proxy GVA by District/Borough



Source: WCC / ABI / ASHE

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