

Updated Company and Employment Data

1 Introduction

The Office for National Statistics (ONS) has recently published new data from two significant data sources – data on the numbers of companies, and the Business Register & Employment Survey, which contains data on employment by workplace. These data sources are major datasets which can help inform our knowledge of the local economy.

2 Enterprise & Business Unit Statistics

Where as previously ONS has published data on companies registered for VAT, they now publish data on business entities registered for VAT and / or PAYE, thus increasing coverage. ONS distinguish between **Enterprises** and **Business Units**. An Enterprise is “the smallest combination of legal units...which has a certain degree of autonomy within an Enterprise Group”, whilst a Unit is an individual site, eg a factory or shop. In geographic terms, business units are classified by their borough of location. Enterprises are classified by the registered location of the head office. This means, for example, a major supermarket chain will not be recorded as an Enterprise within the Tees Valley, though each shop in the Tees Valley will be a Business Unit. Figures are at 31st March each year.

Enterprises

	2004	2005	2006	2007	2008	2009	2010	2011
Darlington	2,366	2,433	2,468	2,584	2,655	2,660	2,590	2,530
Hartlepool	1,412	1,481	1,566	1,699	1,715	1,760	1,725	1,705
Middlesbrough	2,079	2,079	2,122	2,340	2,385	2,405	2,345	2,265
Redcar & Cleveland	2,195	2,253	2,289	2,481	2,520	2,580	2,475	2,440
Stockton-on-Tees	3,651	3,668	3,728	3,985	4,155	4,240	4,085	4,020
Tees Valley	11,700	11,909	12,170	13,087	13,430	13,645	13,220	12,960
North East	51,273	52,220	53,058	56,003	57,205	57,425	55,865	54,770
GB	1,932,522	1,953,184	1,973,906	2,038,769	2,090,000	2,081,780	2,031,845	2,012,905

Business Units

	2004	2005	2006	2007	2008	2009	2010	2011
Darlington	3,158	3,345	3,443	3,500	3,615	3,630	3,535	3,470
Hartlepool	2,083	2,195	2,272	2,370	2,385	2,420	2,385	2,355
Middlesbrough	3,482	3,548	3,600	3,740	3,690	3,705	3,555	3,435
Redcar & Cleveland	3,035	3,187	3,137	3,251	3,365	3,435	3,310	3,315
Stockton-on-Tees	5,046	5,280	5,381	5,584	5,655	5,785	5,665	5,580
Tees Valley	16,804	17,555	17,832	18,445	18,710	18,975	18,450	18,155
North East	70,558	7,2927	74,712	76,453	77,850	78,075	75,975	74,295
GB	2,336,276	2,41,7027	2,467,781	2,514,733	2,556,250	2,548,450	2,489,960	2,464,265

The tables above show the trends in Enterprises and Business Units. The figures in italics for 2004-7 are TVU estimates, drawing on previous data sources to produce a consistent time series. Note that these figures are a significant undercount of the total number of companies, as there are many more 'micro' companies not employing staff and with small turnovers not included in this data set. The numbers of both Enterprises and Units grew significantly between 2004 and 2009. However, unsurprisingly, the effects of the recession are now evident in these figures. Since 2009, the number of Tees Valley enterprises has declined 5% (compared to 3.3% in GB), whilst the number of business units has declined 4.3% (GB 3.3%).

Enterprise Rates

The Tees Valley (and the NE in general) has historically had a low number of companies compared to the country as a whole. The new figures confirm this

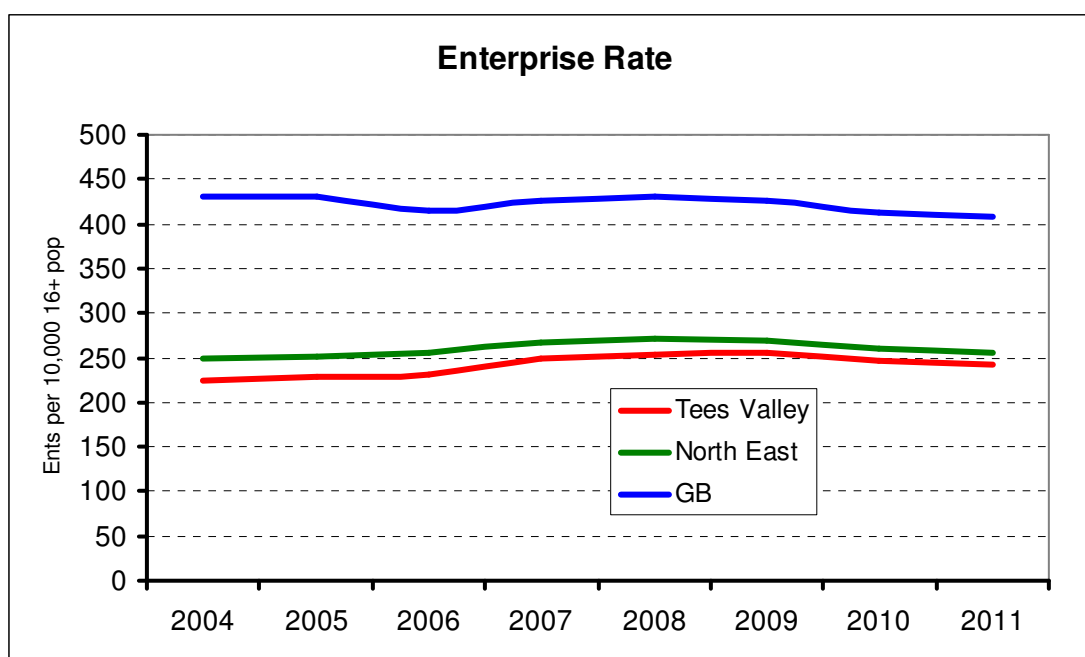
Enterprises/ Units Rates and GB Index (2011 data)

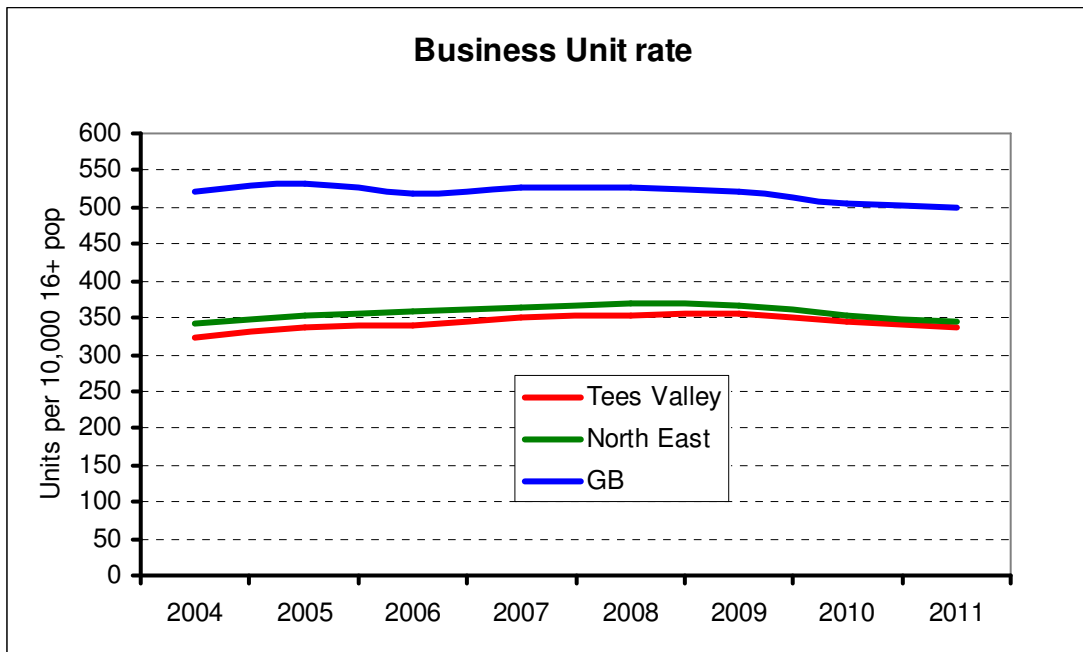
	Enterprises Rate	Units Rate	Enterprises GB Index	Units GB Index
Darlington	311	426	76.0	85.2
Hartlepool	233	321	56.9	64.2
Middlesbrough	198	300	48.3	59.9
Redcar & Cleveland	217	294	53.0	58.8
Stockton-on-Tees	259	360	63.4	71.8
Tees Valley	241	338	59.0	67.5
North East	255	346	62.3	69.1
GB	409	500		

Rate: per 10,000 16+ population

Index: Rate as a % of GB rate

The trends in Enterprise Rates and Business Units rates are graphed below.





The Tees Valley's Enterprise rate had improved from 52% of the GB rate in 2004 to 60% in 2009, though it has slipped slightly since then. Similarly, the Tees Valley's Business Unit rate had improved from 62% of the GB rate in 2004 to over 68% in 2008, but has also slipped slightly since then. Within the Tees Valley, Darlington's rates are notably higher than elsewhere, and exceed the regional average. Conversely, Middlesbrough and Redcar & Cleveland's are the lowest within the Tees Valley.

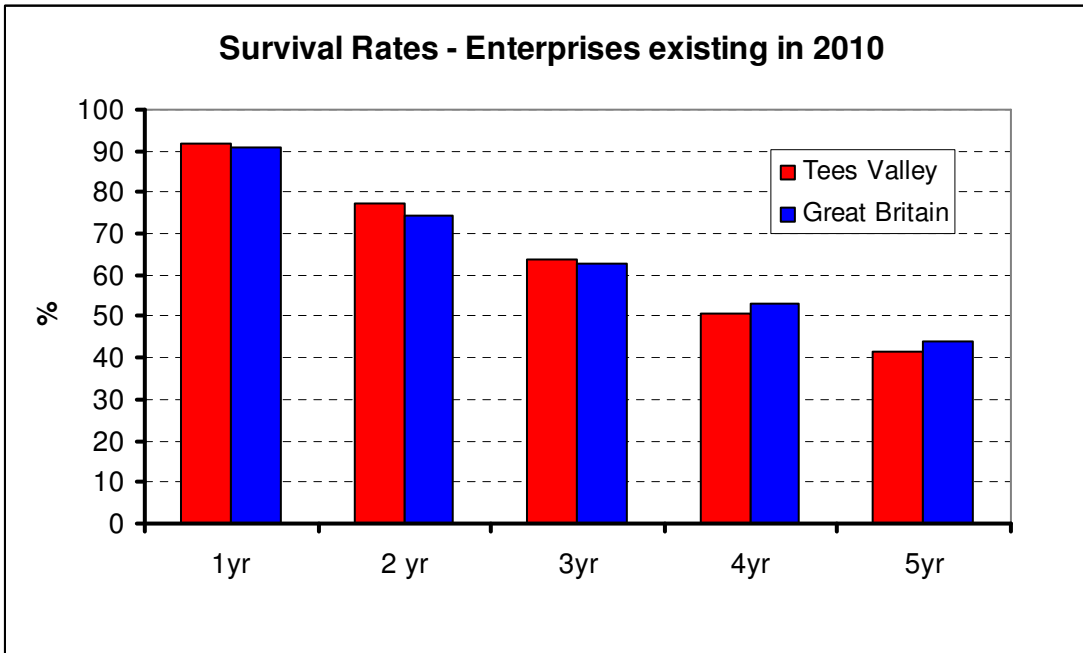
Enterprise Survival Rates

ONS has released data on the survival rate of Enterprises ie the percentage of companies founded in each year which survive 1 year, 2 years and so on. The following tables and graphs show survival rates for up to 5 years for enterprises, and also the trend in 1 year survival rates up to 2010.

Enterprise Survival Rates (%)

Enterprises born in	2009	2008	2007	2006	2005
% surviving	1yr	2yrs	3yrs	4yrs	5yrs
Darlington	91.9	76.9	62.1	51.8	43.4
Hartlepool	88.7	76.8	64.9	47.7	38.5
Middlesbrough	92.2	76.3	60.2	47.8	43.1
Redcar & Cleveland	92.9	77.7	67.3	54.0	39.0
Stockton-on-Tees	93.0	78.3	65.0	50.1	41.5
Tees Valley	91.9	77.4	63.9	50.7	41.5
NORTH EAST	92.2	75.8	62.4	52.1	43.2
GREAT BRITAIN	90.9	74.2	63.0	53.1	44.2

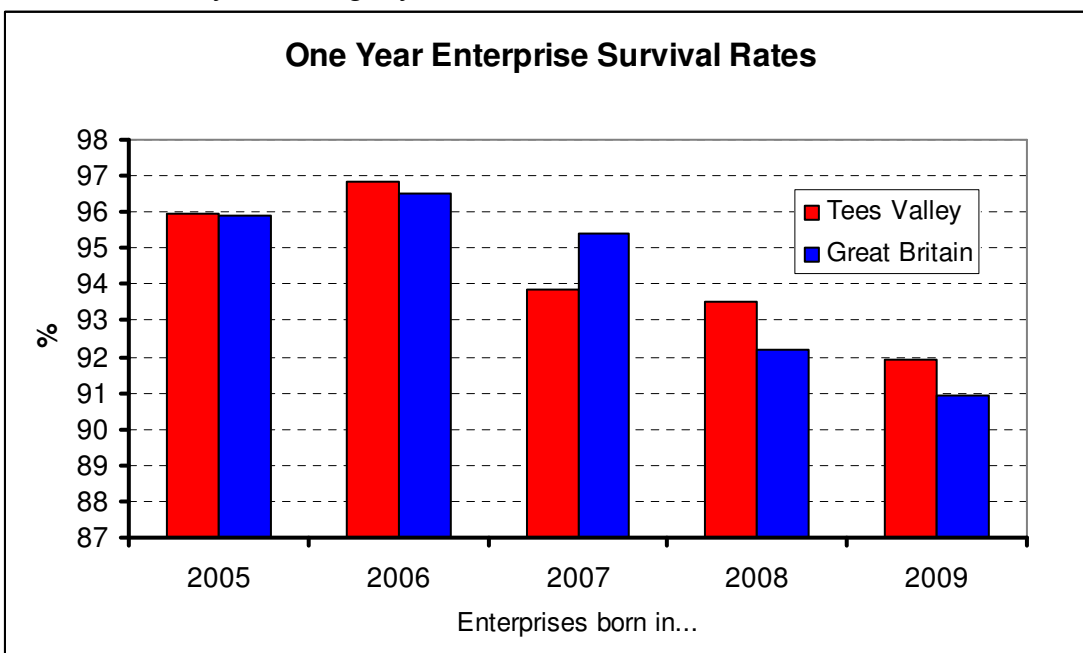
The patterns are generally similar between the boroughs, Tees Valley and Great Britain. The Tees Valley rate exceeds the GB rate for up to 3 years, but then the GB rate exceeds the Tees Valley.



One year Enterprise Survival Rates (%)

Enterprises born in	2005	2006	2007	2008	2009
Darlington	94.1	97.2	94.4	91.8	91.9
Hartlepool	96.5	96.8	93.1	95.0	88.7
Middlesbrough	97.5	96.0	92.4	94.3	92.2
Redcar & Cleveland	94.7	97.4	93.6	95.1	92.9
Stockton-on-Tees	97.6	96.6	95.0	92.4	93.0
Tees Valley	95.9	96.8	93.9	93.5	91.9
NORTH EAST	95.5	96.7	94.5	93.4	92.1
GREAT BRITAIN	95.9	96.5	95.4	92.2	90.9

The key finding from the trend in one year survival rates is that they have declined quite sharply after the onset of the recession. The pattern is similar for the Tees Valley and GB, with Tees Valley rates slightly above GB rates.



Industry

The distribution of Enterprises and Units by industry is shown below.

Enterprises

	Agriculture	Production	Construction	Retail, Motor, Catering	Services	Public Admin, Ed, Health
Darlington	6%	6%	12%	27%	42%	7%
Hartlepool	3%	8%	15%	26%	41%	7%
Middlesbrough	0%	7%	12%	28%	45%	7%
Redcar & Cleveland	5%	7%	13%	26%	41%	8%
Stockton-on-Tees	2%	7%	13%	22%	49%	6%
Tees Valley	3%	7%	13%	25%	44%	7%
North East	7%	7%	12%	27%	40%	6%
GB	6%	6%	12%	23%	46%	6%

Business Units

	Agriculture	Production	Construction	Retail, Motor, Catering	Services	Public Admin, Ed, Health
Darlington	5%	5%	9%	30%	38%	13%
Hartlepool	3%	7%	11%	27%	40%	12%
Middlesbrough	0%	6%	9%	31%	42%	12%
Redcar & Cleveland	4%	7%	10%	28%	38%	13%
Stockton-on-Tees	2%	7%	10%	25%	46%	11%
Tees Valley	2%	6%	10%	28%	41%	12%
North East	5%	6%	10%	29%	38%	12%
GB	5%	6%	11%	25%	44%	9%

The distribution of companies is generally extremely similar to that of the region and country as a whole. Even at borough level, there are few significant variations.

Size Analysis

The data also categorises enterprises and units by employment size band. Apart from summarising the distribution of business entities by size, it also allows us to estimate distribution of employment by company size.

Business Units

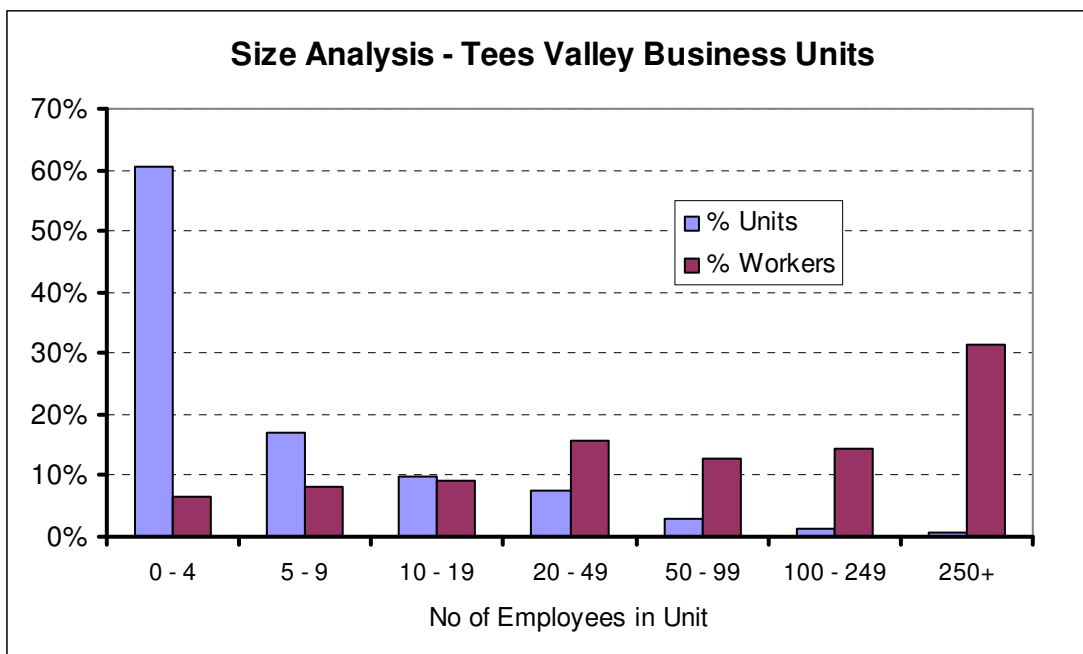
% of Units

	0 - 4	5 - 9	10 - 19	20 - 49	50 - 99	100 - 249	250+
Darlington	61%	18%	10%	7%	2.2%	1.3%	0.9%
Hartlepool	62%	16%	10%	7%	3.0%	1.3%	0.6%
Middlesbrough	56%	20%	11%	8%	2.8%	1.6%	0.7%
Redcar & Cleveland	62%	18%	10%	6%	2.7%	0.9%	0.6%
Stockton-on-Tees	63%	15%	9%	8%	3.2%	1.6%	0.5%
Tees Valley	61%	17%	10%	7%	2.8%	1.4%	0.7%
North East	61%	17%	10%	7%	2.5%	1.3%	0.6%
GB	61%	17%	10%	7%	2.8%	1.4%	0.7%

% of Workers (TVU Estimates)

	0 - 4	5 - 9	10 - 19	20 - 49	50 - 99	100 - 249	250+
Darlington	6%	8%	8%	14%	9%	13%	39%
Hartlepool	7%	8%	9%	15%	14%	14%	31%
Middlesbrough	5%	9%	9%	16%	12%	15%	32%
Redcar & Cleveland	7%	10%	10%	15%	14%	11%	32%
Stockton-on-Tees	7%	7%	8%	17%	15%	17%	26%
Tees Valley	6%	8%	9%	16%	13%	14%	31%
North East	7%	9%	10%	16%	12%	15%	30%
GB	9%	9%	10%	15%	11%	14%	28%

The above tables illustrate that a high proportion of units are small companies, but that a small number of companies employ a large proportion of workers. In the Tees Valley over 11,000 units (61% of the total) employ less than 5 people, but these account for only 6% of total workers. Conversely, only 125 units (0.7% of the total) employ 31% of total workers. This effect is most extreme in Darlington where less than one percent of units employ 39% of the workers. A graph illustrating the very different size distributions of units and workers for the Tees Valley is included below.



3 Employment Statistics

ONS has also released data from the 2010 Business Register and Employment Survey (BRES). This is a sample survey of employers and estimates workplace employment by industry and status. Note that BRES reports **jobs**, rather than **workers**. Surveys along the same lines have been carried out for several years in different forms and names (eg Annual Business Inquiry, Annual Employment Survey). The sample nature of these surveys, together with changes in the methodology, has often revealed issues of inconsistency between results from year to year. This has proved to continue to be the case with the newly published data.

Initial inspection of the data quickly revealed major discrepancies between the 2009 and 2010 datasets, especially in Darlington, and in the Health & Social work sector. The raw figures suggested that manufacturing employment in Darlington had risen 100%, construction employment had fallen 50%, Information & Communication sector employment had risen 44% and Public Administration employment had risen 43%, none of which seemed believable. There were also many questionable figures in the Health sector across the Tees Valley, where in many cases employment had apparently fallen steeply between 2008 and 2009, but recovered all these losses and more between 2009 and 2010. Although ONS are obliged to avoid divulging specific company data, discussions were held with them about the discrepancies. These are recorded in Appendix 1. This report presents, where possible, an amended set of results which are designed to give a consistent time series. It should be noted that the assumptions made to achieve this are to a degree arbitrary, but are intended to provide a better idea of the underlying trends than the raw figures. However, there remain some uncertainties with the accuracy of the data and some results that seem unlikely. In any event, it should be born in mind that all the results are still subject to a variety of factors that affect the data, including sampling errors, reclassifications, company restructures and changes of ownership.

Overall Employment Trends

	2008	2009	2010	2008-2009		2009-2010	
Darlington	54,000	49,300	52,000	-4,600	-8.6%	2600	4.9%
Hartlepool	32,400	31,600	30,400	-800	-2.3%	-1200	-3.8%
Middlesbrough	65,600	66,400	63,200	700	1.1%	-3200	-4.9%
Redcar & Cleveland	41,900	41,000	40,100	-900	-2.2%	-900	-2.1%
Stockton on Tees	84,400	80,900	79,400	-3,500	-4.2%	-1500	-1.8%
Tees Valley	278,200	269,200	265,000	-9,000	-3.2%	-4200	-1.5%
North East	1,103,700	1,053,200	1,045,900	-50,400	-4.6%	-7300	-0.7%
GB	28,624,100	27,977,400	27,814,900	-646,700	-2.3%	-162500	-0.6%

Data: Total Employment. Source: TVU estimates, based on ONS BRES data

The above table clearly shows the effects of recession on employment. For the Tees Valley, total employment fell over 3% between 2008 and 2009. However, the decline between 2009 and 2010 was smaller at 1.5%. Employment fell by more than the country as a whole between 2008 and 2009 and between 2009 and 2010. At borough level, the results are much more varied. Darlington appears to have experienced the largest changes in employment, with a steep fall between 2008 and 2009, but a sharp rise between 2009 and 2010. Middlesbrough had a small rise between 2008 and 2009, but a sharp fall between 2009 and 2010.

Employment Trends – Broad Industry Sectors

In principle, BRES data is available for very detailed industry categories. However, to simplify this report, employment has been grouped into four broad industry groups:

Production: Manufacturing and supply of Energy and Water.

Construction:

Public Administration, Education & Health

Other Services: Primarily private sector services, including retail, catering, transport, finance and business services.

Note that whilst the Public Administration, Health and Education group contains a high proportion of public sector employment, it also contains a proportion of private sector employment (private hospitals, driving schools etc). Separate estimates of public and private sector employment are included later on.

Production

	2008	2009	2010	2008-2009		2009-2010	
Darlington	7,600	6,300	7,300	-1,300	-17%	1,000	16%
Hartlepool	5,200	5,500	4,900	300	6%	-600	-11%
Middlesbrough	4,000	3,400	3,400	-600	-15%	0	0%
Redcar & Cleveland	8,900	8,100	6,400	-800	-9%	-1,700	-21%
Stockton on Tees	11,400	10,500	9,900	-900	-8%	-600	-6%
Tees Valley	37,000	33,800	31,900	-3,200	-9%	-1,900	-6%
North East	137,000	130,300	126,900	-6,700	-5%	-3,400	-3%
GB	2,904,600	2,761,200	2,709,900	-143,400	-5%	-51,300	-2%

Source: TVU Estimates, based on ONS BRES data

Construction

	2008	2009	2010	2008-2009		2009-2010	
Darlington	2,600	2,300	2,100	-300	-12%	-200	-9%
Hartlepool	2,500	2,700	2,300	200	8%	-400	-15%
Middlesbrough	3,400	4,800	3,700	1,400	41%	-1,100	-23%
Redcar & Cleveland	2,900	2,400	2,200	-500	-17%	-200	-8%
Stockton on Tees	6,600	6,800	5,700	200	3%	-1,100	-16%
Tees Valley	18,100	19,000	16,000	900	5%	-3,000	-16%
North East	65,600	65,800	54,100	200	0%	-11,700	-18%
GB	1,567,800	1,477,900	1,352,700	-89,900	-6%	-125,200	-8%

Source: TVU Estimates, based on ONS BRES data

Public Admin Education & Health

	2008	2009	2010	2008-2009		2009-2010	
Darlington	14,700	14,600	14,800	-100	-1%	200	1%
Hartlepool	10,300	10,200	10,500	-100	-1%	300	3%
Middlesbrough	27,100	28,700	28,400	1,600	6%	-300	-1%
Redcar & Cleveland	11,800	12,100	12,800	300	3%	700	6%
Stockton on Tees	21,000	21,700	21,900	700	3%	200	1%
Tees Valley	84,900	87,400	88,400	2,500	3%	1,000	1%
North East	340,700	337,800	345,900	-2,900	-1%	8,100	2%
GB	7,317,500	7,488,400	7,605,400	170,900	2%	117,000	2%

Source: TVU Estimates, based on ONS BRES data

Other Services

	2008	2009	2010	2008-2009		2009-2010	
Darlington	29,100	26,100	27,700	-3,000	-10%	1,600	6%
Hartlepool	14,300	13,200	12,700	-1,100	-8%	-500	-4%
Middlesbrough	31,100	29,500	27,800	-1,600	-5%	-1,700	-6%
Redcar & Cleveland	18,300	18,300	18,700	0	0%	400	2%
Stockton on Tees	45,400	41,800	41,900	-3,600	-8%	100	0%
Tees Valley	138,100	129,000	128,700	-9,100	-7%	-300	0%
North East	548,100	507,600	507,900	-40,500	-7%	300	0%
GB	1,6332,900	1,5765,400	1,5660,800	-567,500	-3%	-104,600	-1%

Source: TVU Estimates, based on ONS BRES data

Production employment fell quite sharply between 2008 and 2009, especially in Middlesbrough and Darlington. Between 2009 and 2010, the overall decline was somewhat less. However, this disguises a variety of different effects at borough level, with a rise in Darlington, and a very sharp fall in Redcar & Cleveland, associated with the closure of the TCP blast furnace at Redcar.

As ever, **Construction** employment has been quite volatile. Between 2008 and 2009, there was an overall rise, though this conceals marked variation at borough level. However, the impact of the recession was very clear between 2009 and 2010, with employment falling in all boroughs by an overall average of 16%.

Employment in **Public Administration, Education and Health** generally showed an increase between 2008 and 2009 and between 2009 and 2010. This is slightly surprising, though it is possible that the most significant spending cuts by public sector organisations only came into effect in 2011. There have been reported increases in employment by various central government agencies such as the Student Loans Company which may account for much of the increases, and there could have been expansion by private sector companies in this sector.

Finally, employment in **Other Services** in all boroughs except Redcar & Cleveland fell sharply by between 5 and 10% at the beginning of the recession between 2008 and 2009, with the Tees Valley as a whole falling 7%. Since 2009 and 2010, overall there has been little change in this sector, although this disguises sharp falls in Middlesbrough and Hartlepool – possibly associated with the closure of Garlands - and a rise in Darlington.

To summarise, we can see that the recession has had a significant impact on employment in the Tees Valley. Generally Manufacturing and Other Services were impacted relatively between 2008 and 2009. However, apart from some specific major closures in 2010, employment has generally not deteriorated much further. In contrast, the sharpest falls in construction jobs were between 2009 and 2010, and there has been little sign of job losses in Public Administration, Health and Education. Whilst some Government agencies have been expanding, we would expect recent job losses in this sector to be reflected in the 2011 data.

Industry Distribution

The table below summarises the industry of employment of workers. The same categories as above are used, except that Retail is separated from other services.

Employment Distribution - 2010

	Production	Construction	Public Admin, Education & Health	Retail	Other Services (excl Retail)
Darlington	14%	4%	29%	15%	38%
Hartlepool	16%	8%	35%	16%	26%
Middlesbrough	5%	6%	45%	15%	29%
Redcar & Cleveland	16%	5%	32%	17%	29%
Stockton on Tees	12%	7%	28%	17%	36%
Tees Valley	12%	6%	33%	16%	33%
North East	12%	5%	33%	16%	33%
GB	10%	5%	27%	16%	40%

The above figures show that Production (primarily Manufacturing) remains important to the Tees Valley economy, employing a higher proportion of workers employed than the country as a whole, especially in Hartlepool and Redcar & Cleveland. However, generally services are less important than in the whole country, though Darlington's proportion is close to the GB proportion, whilst Hartlepool's proportion is smaller even than other Tees Valley boroughs. Employment in Public Administration, Education & Health takes up a greater proportion of employment than the UK, especially in Middlesbrough.

5 Public Sector Employment

Using the BRES data ONS has published data on the proportion of public and private sector jobs in the economy. To add additional context, they have also recently published data on local public and private sector employment rates, using data from the Annual Population Survey (APS).

	Proportion of Jobs in Public Sector (%)	Public Sector Employment Rate (%)	Private Sector Employment Rate (%)
Darlington	25.4	20.9	49.3
Hartlepool	28.4	16.7	43.7
Middlesbrough	37.4	17.0	41.2
Redcar & Cleveland	25.3	17.5	43.9
Stockton on Tees	24.5	18.9	50.1
Tees Valley	28.3	18.2	45.9
UK	23.0	17.7	51.9

Source: ONS

In the table above, the first column is the proportion of all employee jobs classified as being in the public sector, using BRES data. The second and third columns are the percentage of residents aged 16-64 employed in the public and private sector, using APS data. Note that the APS relies on survey respondent's perceptions of whether they are employed in the private or public sector.

From the table, we can see that the Tees Valley has a significantly higher than average proportion of its jobs in the public sector, especially in Middlesbrough. However, the proportion of residents who work in the public sector is generally much closer to the national average – in fact only Darlington and Stockton have public sector employment rates higher than the national average and Hartlepool, Middlesbrough and Redcar & Cleveland have a **lower** proportion of their residents working in the public sector than the UK as a whole. Conversely, private sector employment rates are generally well below the national average, with only Darlington close to the national figure.

The implication of this is that whilst the Tees Valley is relatively dependent on public sector jobs as they form a high proportion of the jobs available, in reality, there are not an especially high number of public sector jobs in the Tees Valley, compared to nationally. The high proportion of public sector jobs is due to the relatively low number of jobs in the private sector as demonstrated by the low private sector employment rate, and the low overall employment rate.

6 Full Time / Part Time Employment

The BRES also has data on full time and part time employment, though this is no longer published by sex. The table below shows the proportion of employees working full time (ie more than 30 hours a week) for 2010.

	Proportion of Full Time Employees (%)
Darlington	69.8
Hartlepool	64.7
Middlesbrough	62.4
Redcar & Cleveland	68.2
Stockton on Tees	66.7
Tees Valley	66.3
North East	66.4
GB	67.7

Source: ONS

The pattern across the Tees Valley is very consistent, with only Darlington have a notably higher proportion of full time workers and Middlesbrough having a lower proportion. The proportions are also similar to that in the country as a whole. In addition, this pattern has been generally consistent over time.

7 Conclusions

These updated sets of data are important sources of data on the local economy. The impact of the recession is evident in this data - since 2008, the Tees Valley has lost approximately 700 enterprises and 13,000 workers, around 5% in both cases. The impact on the Tees Valley has been greater than on the national economy as whole. The Tees Valley lost the majority of these jobs between 2008 and 2009, whilst there were generally fewer losses between 2009 and 2010. The main impact of the recession was on manufacturing and other services initially, though construction saw a significant contraction after 2009. Employment in Public Administration, Education & Health has not yet shown signs of the impact of public spending cuts, though these may be more evident in the 2011 BRES data.

Historically the Enterprise Rate (companies per head of population) in the Tees Valley has been much lower than the national average. Up to the recession, the Tees Valley was slowly closing the gap. However, in the recession, the gap has widened slightly again. Enterprise survival rates have also declined in the recession.

The Tees Valley economy is dominated by a relatively small number of large employers. Whilst 61% of business units employ less than 5 people, these only account for 6% of workers. Conversely 125 units (0.7%) of the total employ 31% of all workers.

The Tees Valley is dependent on the public sector as a relatively it forms a high proportion of the area's total jobs. However, the number of public sector jobs is not in itself particularly high, thus the high proportion is due to a relatively low level of private sector jobs.

ISSUES WITH THE BRES Datasets

When the BRES 2010 Employment results were published, it was immediately clear that there were major discrepancies between the 2010 figures and previous ones, especially in Darlington, and in the Health sector.

Whilst ONS are unable to disclose data on individual companies, discussions regarding the discrepancies were held with them. This note records these, together with the amendments made in presenting the data to work out an approximately consistent time series of data. Note that the size of many of the amendments made is somewhat arbitrary.

Darlington

Manufacturing / Construction

In the raw figures, manufacturing employment had doubled (increased by 3600), whilst construction employment had fallen by 2,000. Both these seemed unreasonable. It appeared that a company employing 3000 in the Machining SIC category had appeared. ONS explained that a company had changed classification from Construction to Manufacturing which was the cause of this. A high profile civil engineering company appears to be the most likely, but only employs 300-500 in Darlington. ONS implied that all the company's workers, anywhere in the world, are likely to be counted as working in Darlington, and that the figures for the company were volatile. I have swapped 2,800 in 2008 and 2,600 in 2009 between construction and manufacturing to come up with a tolerably consistent series.

Information & Communication

This appeared to have grown by 1,400 which seemed too large. Employment in 'Other telecommunication activities' has grown from 2,600 to 4,100. ONS referred to a major company undergoing restructuring, affecting the reporting structure of the company. The most likely candidate is a major Mobile Phone company. The current employment figure known for this company is 2,700 (DBC or 2,350 Northern Echo). It is therefore assumed that this figure is still current, and that the increase in the data does not reflect reality in Darlington. I have decided to cut this industry figure by 1,300 in 2010.

Public Sector

Public Admin had grown by 900. ONS said that part of this was a genuine growth in a company (possibly Student Loans Co have been reported to have gained jobs recently), there were incorrect figures in 2009 for another, and a third company had been reclassified into this sector. Whilst the original sector of the 3rd company was not known, some allowance for this was made by swapping 200 employees in the Admin & Support services sector, which had exhibited a marked fall in 2010.

Health & Social Work

This had exhibited a marked dip in 2009, from 9,500 in 2008, to 7,700 in 2009 but back up to 9,000 in 2010. ONS said that this was because some companies were now more likely to record casual workers than previously, and this was driving the difference. It does not seem possible to make any specific alterations to account for this. However, since figures for most other borough's 2009 health figures seemed suspect, general amendments were made (see below)

Stockton - Manufacturing

A sharp fall in manufacturing in Stockton was noted, especially an apparent 824 fall in Shipbuilding employment between 2009 and 2010. We are not aware of a large shipbuilding company in Stockton. ONS has admitted that the 2009 figure was an over-estimate, though by how much is unknown. It is also possible that the result reflects industry changes. A Stockton company engaged in the shipbuilding sector were bought by an Engineering company based in Middlesbrough, so the employment could now be recorded in Middlesbrough – indeed, the shipbuilding employment number has increased in Middlesbrough by around 250 in 2010, which supports this. To make a consistent series, 250 manufacturing jobs have been reallocated from Middlesbrough to Stockton in 2010 (possibly should reallocate Stockton to Middlesbrough in 2008 / 9 instead, though jobs are in Stockton). 600 jobs have been deleted from Stockton's manufacturing to take account of the erroneous figure in 2009.

Health & Social Work Sector Employment

The data in the Health & Social Work sector looked rather strange in many districts, with sharp falls between 2008 and 2009, followed by an even sharper rise between 2009 and 2010, more than regaining the losses the previous year. Discussions with ONS on this did not prove fruitful. It was decided since the 2010 figures were broadly in line with the 2008 ones, these figures would be used as published. However, the 2009 figures looked inconsistent with the 2008 and 2010 figures. As the great swings in Health sector employment looked most unlikely to be real, and would affect the overall patterns in employment, it was decided to replace the 2009 figures by a figure half way between the 2008 and 2010 figures.

Retail – Redcar & Cleveland

Similar to Health, the Wholesale & Retail sector apparently showed a significant fall between 2008 and 2009, before recovering to the former level in 2010. ONS' only comment was that 'Some industries in particular those with a lot of companies with relatively small numbers of employees are more prone to estimation and the subsequent fluctuations that this ensues.'

The 2009 figure did not look reliable so a figure between the 2008 and 2009 figure was used instead.