Kirklees Creative Economic Impact study

Final Report – May 2015

1. Executive Summary

The creative industries contribute over £100m per annum to Kirklees' economy. It is a sector identified with regeneration and creation of new jobs, and this is borne out by the fact that 900 new jobs were created between 2011 and 2013. However, it is a diverse sector and not all parts of it have performed uniformly, or well. This report seeks to highlight the strengths of Kirklees creative economy, to pinpoint the opportunities for growth; and to reflect honestly on areas of weakness and whether there is any reasonable course of action that can address them.

It follows on from a series of four annual updates between 2006 and 2009 of a study originally carried out in 2005 by BOP Consulting and the University of Leeds into the performance of the creative sector in Kirklees. The last report was unable to take account of the effects of the banking crisis and financial crash that decimated the UK economy between 2008 and 2010. However, even then it indicated a slow overall decline in employment in Kirklees and the wider Yorkshire and Humber region, both creative industries and more generally. It also highlighted the difficulty of defining effective interventions to encourage new business creation, then a local strategic objective.

Kirklees suffered job losses in its creative industries between 2009 and 2013, both in absolute terms and relative to neighbouring districts and to the UK creative economy as a whole. Creative industries employment in Kirklees stood at 3,392 at the end of 2013 – a 34.9% decrease from the number in 2009. This decline gives a misleading impression of overall performance, as the variance seems to have come about in large part about through the reclassification of a large online retail business from its previous categorisation as a publishing company to one that more closely reflected its real commercial focus. This made a difference of around 2,500 jobs, 2,000 of which were part time. Stripping those jobs out from the 2009 and 2010 estimates reflects a different picture: of a sector that was relatively resilient through the recession, losing fewer than 10% of its workforce, and has rebounded since then to show an overall increase in employment to a level 25% above its 2009 base.

The 2013 employment figure is in turn 34.5% higher than its low point of 2,522 in 2011. Jobs growth in creative industries is higher than overall employment in the borough. This has been driven by two factors: new business creation, and companies of between 5 and 9 employees adding to their payrolls. Nevertheless, creative industries employment in Kirklees has grown more slowly than in Leeds City Region (LCR) and the UK as a whole. This relative underperformance may be attributed in part to structural factors: the average creative business in Kirklees is smaller – at 2.4 employees – than in either LCR or the UK, where the average is 4.1 people per firm. However, we do not have any intelligence to confirm any causality or correlation between company size and productivity.

There were 860 creative businesses in the borough in 2014 of 860, as opposed to 745 in 2011 – again, this marks a resurgence after the slump of 2010.[1]

So what are the areas of new growth? Comparison of Kirklees' design sub-sectors shows them to be much larger, both as a proportion of creative industries and in terms of GVA and overall employment in the borough, than was shown in previous reports. The 'location quotient'[2] for design – of 218 – indicates a significant concentration of those businesses in relation both to LCR and that found across the UK. Design now looks to be the driver of growth in Kirklees' creative economy;

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[1] The business count is drawn from different ONS statistics (the Annual Business Inquiry, or ABI) and has a different time series from the BRES results.

[2] The location quotient is defined in this study as the weight of a given industry divided by the national weight of that same industry (x100). A result of 100 indicates that the industry has the same weight in the region than it has nationally.

although further primary research would be needed to establish in exactly which companies and which sub-sectors this was taking place, and whether it relates to a single or multiple supply chains.

The digital economy[3] contributes more than 35% of all creative employment (1790 jobs) and 63% of all creative industries GVA in Kirklees. We carried out some further analysis to establish how this sub-sector has grown, whether this growth is in line with, higher or lower than in surrounding areas, and then to understand whether it has taken up some of the 'slack' of jobs being lost in 'analogue' parts of the creative industries - in other words, if Kirklees's creative and digital sectors together have been undergoing a process of 'creative destruction' of jobs in traditional sectors such as publishing, and their translation into digital services or products, in an attempt to innovate their way out of recession as a precursor to new growth. The findings here were inconclusive; but it is clear that the digital sector, including 292 people employed in the development of computer games, is the largest and most productive part of Kirklees' creative industries.

Previous studies identified the publishing sector as a significant strength. However, we have reason to question whether these were ever 'creative' jobs at all! The reclassification of one company, as detailed above, has distorted the sector employment estimates when compared with previous years. The cessation of manufacturing at UK Greetings Ltd (formerly Carlton Cards) will undoubtedly have a further effect on figures for 2014 and 2015, when published; but this effect has already been excluded from our data for 2011-13. Although the job losses are sadly real, this change highlights the volatility and risk associated to a greater or lesser degree with all non-specialist print businesses.

Finally, some caveats about the data and the reliability of any conclusions that can be drawn from them. It should be stressed that the figures published by ONS are drawn from sampled data rather than a census of businesses. Our estimates therefore reflect the limitations of the published data, and the fact that we have not been given resource to carry out any primary research as part of the study. We had hoped to address some of the anomalies within the published data by referring to restricted data held by Office of National Statistics in the Virtual Microdata Lab, made up of actual company returns; but for reasons of disclosure (the sample size at local authority level is thought by the Office of National Statistics to be too small, and therefore too easy to trace returns back to individual employers), we were not given permission to do this. Instead, we have introduced a range of innovative approaches, informed by our wider experience of mapping the creative economy, to try to triangulate answers to key questions from comparison of a number of different datasets.

Iain Bennett
BOP Consulting
29 April 2015

[3] Software and IT, including computer games, applications development, programming and software development

2. Introduction

In November 2014, BOP Consulting was commissioned to undertake a study of the creative industries and creative economy employment in Kirklees for Kirklees Metropolitan Council (KMC). The main objectives of the study were to identify:

- The number of registered Kirklees based: creative businesses; creative social enterprises; creative sole traders/freelances under the VAT threshold
- How many jobs there are in the Kirklees creative sector: including operational staff, business development, marketing, admin, etc
- The net annual contribution of creative industries to the local economy

This report follows on from a series of four annual updates between 2006 and 2009 of a study originally carried out in 2005 by BOP Consulting and the University of Leeds into the performance of the creative sector in Kirklees.

The last report, in 2009, was unable to take account of the effects of the banking crisis and financial crash that decimated the UK economy between 2008 and 2010. However, even then it was highlighting on a slow overall decline in employment in Kirklees and the wider Yorkshire and Humber region, both creative industries and more generally. It also highlighted the difficulty of defining effective interventions to encourage new business creation, then a local strategic objective.

This report picks up the story from 2009 and measures the economic performance of the creative industries in Kirklees and the newly constituted Leeds City Region Local Enterprise Partnership ('LCR'). During that period, there have been changes both in the way that DCMS measures the creative industries, and in the economic geography of which Kirklees MC forms a part, with the creation of LCR. This is important in setting in context the changes to creative industries domains, and creative employment as a whole, over the period 2009-13.

To address those changes, and as a result of continuous improvement of BOP's own practices in the mapping of creative economies over the period, the final report on this study will incorporate some methodological innovations that are set out at 3.1, below.

3. Methodology

Our initial approach uses sampled data from business returns published in the Office of National Statistics' (ONS) Business Register and Employment Survey (BRES) as a proxy for the economic performance of the creative industries in Kirklees and the newly constituted Leeds City Region Local Enterprise Partnership ('LCR'). This gives an indication of the scale and output of Kirklees' creative economy comparable to figures available for all other parts of the UK. However, it does not by itself provide an absolutely accurate measure of either employment or output, owing to the effect of sampling. We address these inaccuracies in a number of ways described below.

Kirklees wishes to have statistical evidence that is comparable on a local, city region and national basis for the purposes of informing strategic investment decisions and underpinning cost-benefit analysis of any intervention to underpin skills, cluster development and business growth. The detailed nature of Kirklees' requirement means that not all of the answers can be derived from publicly available data. Our original proposal therefore offered two deliverables:

- An interim report that would use publicly available data to evidence the size, scope and economic impacts that the creative sector provides for the local economy, the number of people employed in the sector and how many creative business organisations are registered in Kirklees and in the Leeds City Region as a whole, and compare these with national figures.
- A final report that would use evidence from the actual returns submitted by business, held at the ONS's Virtual Microdata laboratory. For reasons detailed above, our request for access was refused by ONS; so we have sought to achieve the same effect by recombining a number of different public data sources.

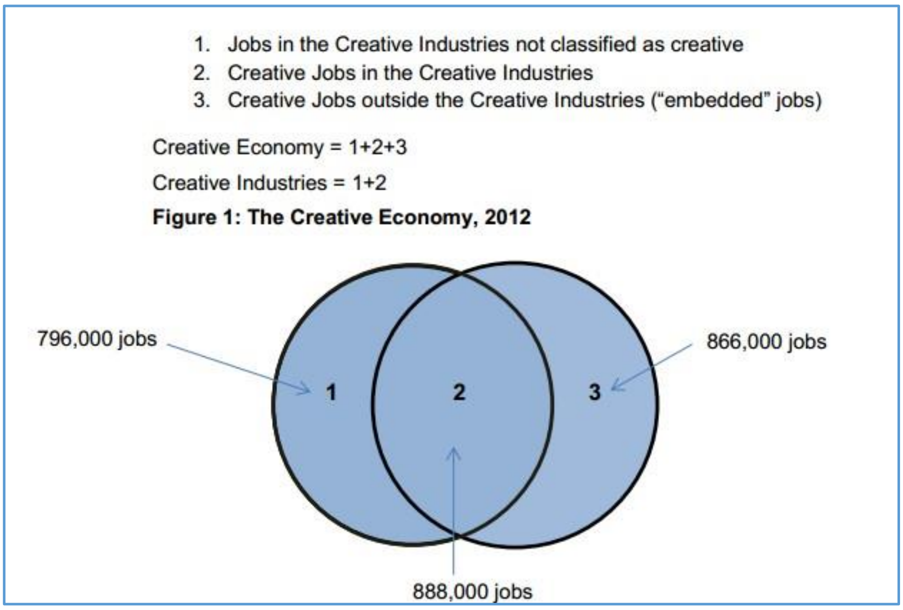
3.1 The 'Creative Trident'

Our initial goal for this research was to replicate the methodology presented by the DCMS in their statistical releases[4]. The methodology is summarised in Figure 1, below. We have provided evidence of creative jobs outside the creative industries in order to come up with a total employment figure for the creative economy of Kirklees. As a guideline, we see that the national figures presented here constitute two thirds of the creative economy (796k + 888k out of 2.5m) – which is reflected in Kirklees, where 5,020 individuals are in some form of creative employment, with only two-thirds of these (3,400) in creative industries.[5]

[4] See the latest version at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/271008/Creative_Industries_Economic__Estimates_-_January_2014.pdf

[5] Minor differences in the total employment figure reported in the report are the result of rounding

Figure 1 Employment in the creative economy – DCMS 'creative trident' approach



Source: DCMS

3.2 Accuracy of the data

We have used a range of publicly available data sources, including BRES and the Annual Population Survey, in an attempt to come up with accurate estimates and, in part, to make good our inability to access VML data as originally envisaged. The cross-referencing of a number of datasets has helped us to verify the probability of the conclusions we have drawn here; but these figures do not purport to be a census of creative employment, and similarly the GVA figures are estimates.

Our ability to answer a number of the key research questions, including an accurate breakdown of the number and output of sole traders in the creative industries, is constrained by the nature of publicly available data. The Office of National Statistics (ONS) holds detailed data at the Virtual Microdata Laboratory (VML); but is unwilling to allow access to it for studies at anything below the regional level, for reasons of disclosure. This report, therefore, presents findings based on a range of publicly available data recombined in ways that help us answer your questions.

The returns from some creative sub-sectors – notably craft – reflect difficulties in the classification and reporting of statistics even at the national level. As craft is not perceived, on a national level, to be a significant employment area, ONS and DCMS have accepted a lower level of proof, and only manufacturing of jewellery in the SIC codes included in the definition of creative industries. We know that there are more, and other kinds of, craft businesses in Kirklees; but it would take a different kind of study to establish the real size and potential of this sector.

More significantly, in terms of establishing future policy, the published statistics do not disaggregate the design sector into its constituent parts – graphic design, product design and fashion design. The relative strength of the sector in Kirklees suggests this would be a worthwhile area for further exploration in order to identify whether a focused approach to design as a whole, or any one aspect of design, might yield greater economic returns.

3.3 Innovative approach to data

This study has introduced some significant innovations to the reports prepared by BOP and University of Leeds between 2005 and 2009:

- Examination of the performance of 'digital' industries ('Fused' sub-sector definition, shown at 3.3.8 above);
- Measurement of creative employment in all sectors of the Kirklees economy, not just that in creative industries (the 'Creative Trident');
- Assessment of the relative competitiveness of particular sub-sectors, including design and software-related businesses, by use of a location quotient

VML

We had hoped to access actual company returns held by the Office of National Statistics' Virtual Microdata Laboratory (VML) to drill down to a more accurate picture of employment and economic activity than that available from the published BRES data. That would have allowed us to more accurately estimate the contribution of creative industries to the Kirklees economy, and to establish more precisely the distribution of sole traders and micro enterprises below the VAT threshold. After three months of discussion with the Office of National Statistics, however, we were advised that for reasons of disclosure – in other words, that publication of any results would have allowed the performance of individual companies to be identified – this research was not permitted at a local authority level.

We would have been able to pursue an enquiry at the regional level; but since the Yorkshire & Humber footprint does not reflect the boundaries used to determine current policy, we declined. Through our discussions, however, ONS did confirm that the cause of the apparent fall in employment in the publishing sector was the reclassification of a single large employer to more accurately reflect the product sales basis of its operation.

We had also hoped to use VML to narrow down the origins and sub-sectorial nature of the growth in the design sector. We would suggest that this would need to form the basis of a further piece of primary research with businesses.

Creative Trident

Although we did not have access to the VML data, we are able present a picture of overall creative employment in all sectors of the economy of Kirklees and Leeds City Region – not just those in creative industries firms, but also those in creative occupations (eg, marketing, design) in 'non-creative' sectors of the economy, - which allows for better understanding of the current and future demand for creative skills.

3.4 Changes to local economic geography

Changes to local economic geography, from Yorkshire & Humber region to Leeds City Region Local Enterprise Partnership (LCR) are also reflected. LCR is now the strategic and policy making forum for a number of potential interventions, including those making use of ERDF funding. Therefore, the comparators used in this study relate to the LEP area.

As Kirklees borders on two other LEPs – Greater Manchester and Lancashire – its 'travel to work' area, both for Kirklees residents commuting out of the borough for work and employees coming in – would include both of these. That, and provision of further and higher education in those neighbouring areas, will an impact on development of business and jobs in Kirklees. However, that investigation would require a degree of primary research that is out of scope of this study.

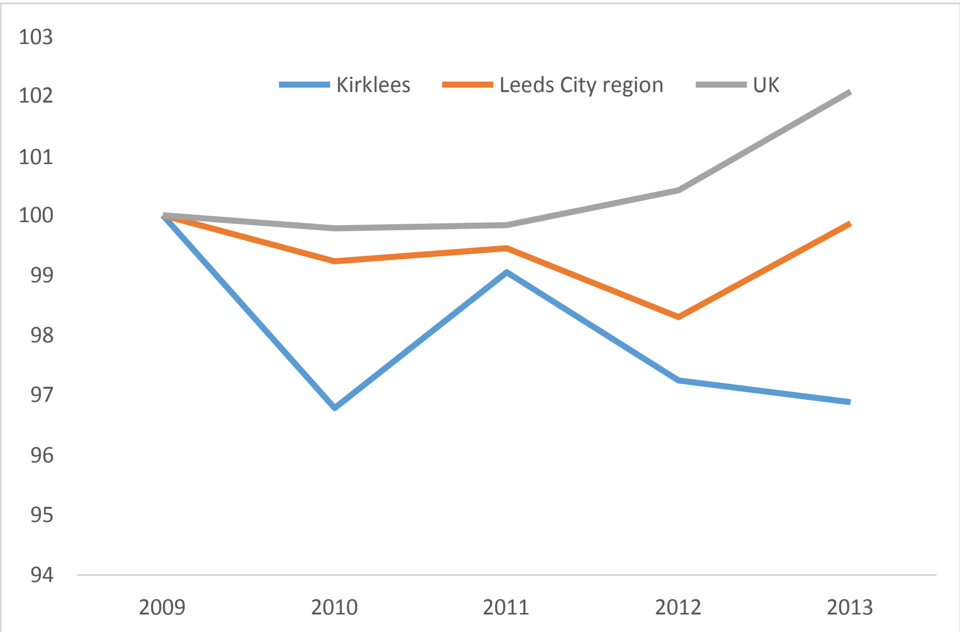
4. Employment

4.1 Total employment in Kirklees (all sectors)

Though the UK labour market has been steadily recovering from the financial crisis lows we see that the situation in the Kirklees is rather different. The identified pattern is somewhat erratic (once again, part of this result might be explained by some identified statistical red flags). The BRES data shows an overall loss of 5,000 jobs in the local authority area from approximately 150,000 in 2009 to 145,000 in 2013.

The regional comparison shows a decoupling between Kirklees and the wider Leeds City Region in 2013. Leeds City Region has returned to growth, with overall employment near that of 2009, whilst in Kirklees employment has continued to decline, albeit more slowly.

Figure 2 Total employment evolution (2009 = 100)



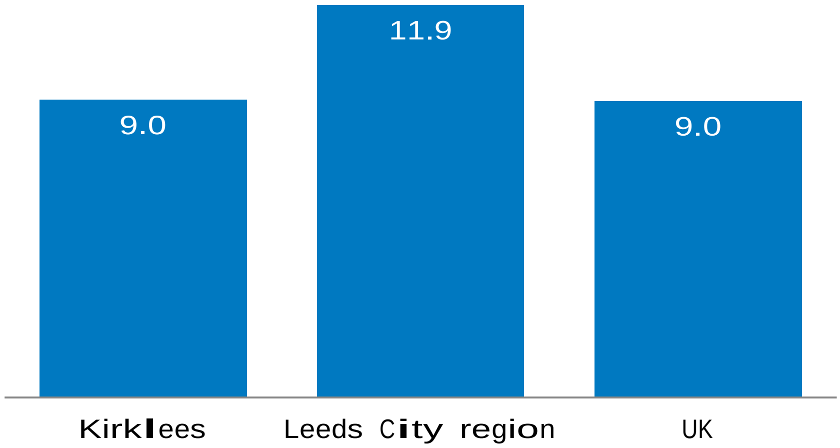
Source: BOP Consulting estimates on ONS data

Using ONS data we were able to estimate the average number of employees per business[6]. We have found that Kirklees business dimensions are pretty much in line with the national average.

Businesses in Leeds City region are slightly larger than average.

[6] These are BOP consulting estimates based on publically available data; a more refined/accurate estimate might be made with the access to microdata.

Figure 3 Average dimension of all companies (number of employees)



Source: BOP Consulting estimates on ONS data

4.2 Employment in the Creative Industries in Kirklees

For the purposes if this report we are working with a limited definition of the creative sector – the creative industries as defined by DCMS. Measured in this way, creative industries represent 2.3% of the overall employment in Kirklees. This figure is lower than the average for both Leeds City Region and the UK.

The DCMS definition comprises nine sub-sectors: Advertising and Marketing; Architecture; Crafts; Design; Film, TV, video, radio and photography; IT, software and computer services; Publishing, Museums, Galleries and Libraries; and Music, Performing and Visual Arts.

The table below presents estimates for each of the subsectors for the 2009-13 period. Naturally the dimension of the subsectors varies widely, because of their own nature but also given the characteristics of Kirklees' economy. The analysis of the data, once again, flags the variance in reporting of employment in the publishing sector in 2011 previously annotated.

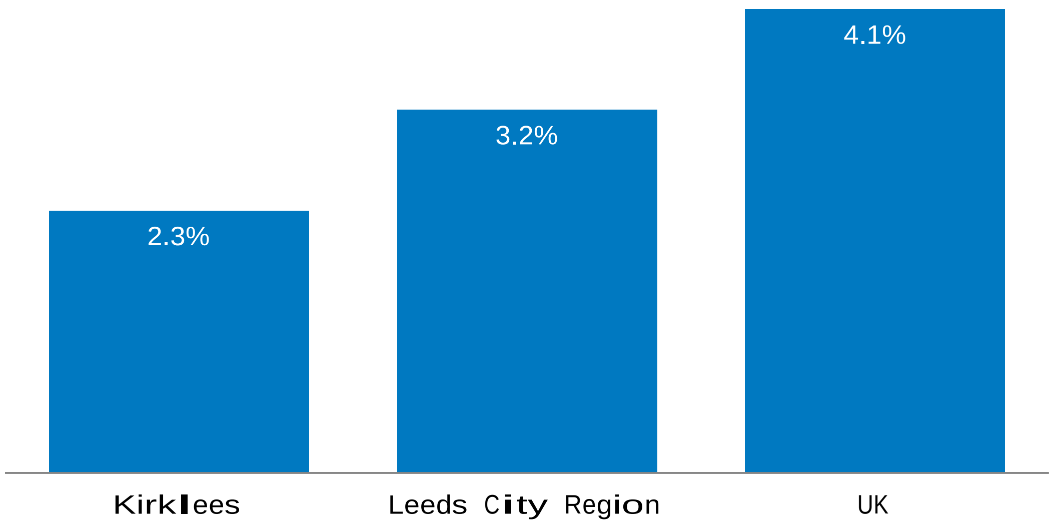
Figure 4 Number of employees per subsector (number of employees)[7]

Sub-sector	2009	2010	2011	2012	2013
Advertising	100	300	200	300	200
Architecture	200	200	200	300	300
Crafts[8]	0	0	0	0	0
Design	200	200	300	300	500
Film	200	200	300	200	300
IT	1,000	1,000	1,000	1,300	1,300
Publishing	2,900	2,700	200	400	300
Museums	400	300	200	300	300
Music	200	200	100	200	200
Total	**5,200**	**5,100**	**2,500**	**3,300**	**3,400**

[7] Following ONS guidelines the presented data is rounded to the nearest hundred. Totals might not add up.
[8] As above – the definition of 'crafts' is limited to manufacture of jewellery in the DCMS stats, and the resulting figure is below 50, so rounded to zero.

The 3,400 creative industries jobs (at the end of 2013) accounted for 2.3% of the labour force in the Kirklees. This figure is smaller than the average for the Leeds City region (3.2%) and the UK (4.1%).

Figure 5 Creative Industries weight in the total number of jobs - 2013



Source: BOP Consulting estimates on ONS data

4.3 Employment in the Creative Economy in Kirklees

As the DCMS Creative Industries Economic Estimates note:

1. The Creative Economy includes the contribution of those who are in creative occupations outside the creative industries as well as all those employed in the Creative Industries.
2. The Creative Industries, a subset of the Creative Economy which includes only those working in the Creative Industries themselves (and who may either be in creative occupations or in other roles e.g. finance).

The Creative Industries are defined by a group of Standard Industrial Classification (SIC) codes set out in this DCMS publication. We have accessed data on Kirklees from the Business Register Employment Survey (BRES) and summed employment in Kirklees within the relevant SIC codes to quantify the size of creative industries employment in Kirklees. We took a ratio of creative industries employment to creative economy employment from the DCMS publication. We applied this ratio to our figure for creative industries employment in Kirklees to derive a figure for creative economy employment in Kirklees. The results are summarised in the table below:

Figure 6 Estimation of Creative Economy Employment in Kirklees

	Kirklees - Creative Industries Employment	Kirklees - Creative Economy Employment
Advertising and marketing	240	770
Architecture	290	420
Crafts	10	110
Design: product, graphic and fashion design	510	750
Film, TV, video, radio and photography	270	300
IT, software and computer services	1250	1790
Publishing	290	240
Museums, galleries and libraries	300	390
Music, performing and visual arts	200	250
Total employment	3360	5020

Source: BRES data and BOP analysis

The Annual Population Survey also gives a figure for 'culture, media and sports occupations'[9] based on Standard Occupational Codes, which were updated in 2010 (known as 'SOC2010'). Comparing our estimate of 5,020 jobs in the creative economy of Kirklees, with figure of 3,000 culture, media and sport occupations from Annual Population Survey gives us a plausible outcome, as the creative economy is broader than these occupations.

Consistent with the 'Creative Trident' shown in Figure 1, above, it suggests that in Kirklees there are:

1. 2,000 jobs in the Creative industries not classified as 'Creative'
2. 1,400 Creative jobs in the Creative Industries
3. 1,600 Creative jobs outside the Creative Industries ('embedded' jobs)

This estimate also seems consistent with relative weightings of creative sub-sectors in Kirklees' economy, which we discuss in more detail below.

Figure 7 Number working in culture, media and sport occupations in Kirklees

	Number working in culture, media and sports occupations (SOC2010) in Kirklees[10]
Oct 2009-Sep 2010	3300
Oct 2010-Sep 2011	3800
Oct 2011-Sep 2012	3100
Oct 2012-Sep 2013	5600
Oct 2013-Sep 2014	3000

Source: Annual Population Survey (ONS)

[9] Authors, writers and translators; Actors, entertainers and presenters; Dancers and choreographers; Musicians; Art officers, producers and directors; Photographers, audio-visual and broadcast equipment operators; Graphic designers; Product, clothing and related designers; Sports players, Sports coaches, instructors and officials and Fitness instructors
[10] This chart has some crossover with the creative economy but is illustrative, as the crossover is not exact. The variation in the figures year-on-year, and the fact that it includes a number of sport occupations, make it only a proxy from which we can draw some conclusions.

5. GVA of Creative Industries in Kirklees

We estimate that creative industries in Kirklees generate over £100m per annum in GVA.

This does not include any estimate of the contribution of the 1,600 'creative' jobs embedded in other sectors of Kirklees' economy.

We have arrived at these figures by working with the ONS data on the number and size of creative industry businesses in Kirklees and the DCMS figures on average GVA per worker in these industries. Within the relevant size categories, we have multiplied the median firm size by the average GVA per worker to calculate the total GVA for each sector grouping within the DCMS definition of the creative industries and summed these groupings to arrive at a total, shown in the table below

Figure 8 GVA of Creative Industries in Kirklees

DCMS sub-sector	Total GVA (£)
Advertising and marketing	11,387,000
Architecture	5,159,000
Crafts	246,000
Design: product, graphic and fashion design	8,242,000
Film, TV, video, radio and photography	6,246,000
IT, software and computer services	63,935,000
Publishing	2,510,000
Museums, galleries and libraries	
Music, performing and visual arts	3,254,000
Total	**100,979,000**

Source: ONS and BOP analysis

6. Size of creative industries firms

It is frequently observed that creative industries tend to be smaller, in terms of number of employees, that those in other sectors. This is very much the case in Kirklees, where creative firms on average have fewer than half the number of employees than the sector in the UK as a whole.

However, given the difference between business models across different sub-sectors of the creative industries, and the significant use of freelance workers in some areas, size of company is not always a reliable proxy for scale of turnover, nor an indicator of productivity.

The estimates in the table below (and the following figure for sole proprietor businesses) are taken directly from ONS data that we have accessed through NOMIS.

Figure 9 Breakdown of creative industry businesses in Kirklees by size

Industry	Total	Micro (0 to 9)	Small (10 to 49)
Advertising and Marketing			
7021 : Public relations and communication activities	10	5	0
7311 : Advertising agencies	65	65	0
7312 : Media representation	15	15	0
Total: Advertising and marketing	**90**	**85**	**0**
Architecture			
7111 : Architectural activities	60	55	0
Total: Architecture	**60**	**55**	**0**
Crafts			
3212 : Manufacture of jewellery and related articles	5	5	0
Total: Crafts	**5**	**5**	**0**
Design: product, graphic and fashion design			
7410 : Specialised design activities	115	110	0
Total: Design: product, graphic and fashion design	**115**	**110**	**0**
Film, TV, video and photography			
5911 : Motion picture, video and television programme production activities	30	30	0
5912 : Motion picture, video and television programme post-production activities	0	0	0
5913 : Motion picture, video and television programme distribution activities	0	0	0
5914 : Motion picture projection activities	0	0	0
6010 : Radio broadcasting	0	0	0
6020 : Television programming and broadcasting activities	10	10	0
7420 : Photographic activities	30	30	0
Total: Film, TV, video and photography	**70**	**70**	**0**
IT, software and computer services			
5821 : Publishing of computer games	0	0	0
5829 : Other software publishing	5	5	0
6201 : Computer programming activities	135	135	0
6202 : Computer consultancy activities	305	295	10
Total: IT, software and computer services	**445**	**435**	**10**

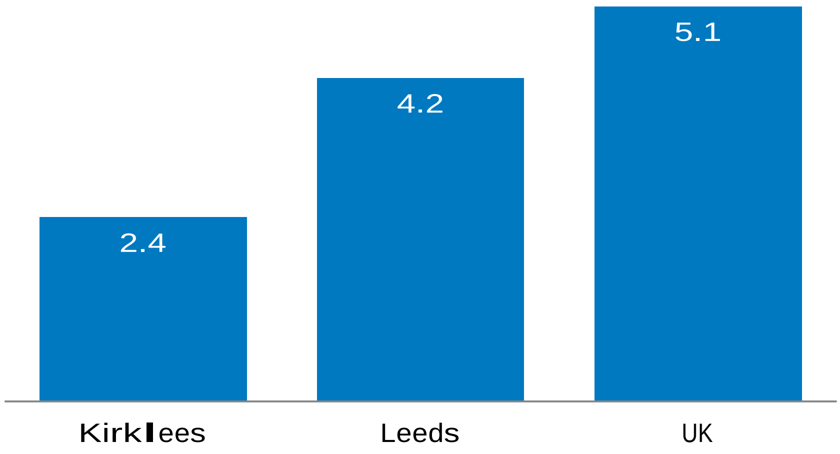
Publishing			
5811 : Book publishing	10	10	0
5812 : Publishing of directories and mailing lists	0	0	0
5813 : Publishing of newspapers	5	5	0
5814 : Publishing of journals and periodicals	10	5	0
5819 : Other publishing activities	15	10	0
7430 : Translation and interpretation activities	0	0	0
Total: Publishing	**40**	**30**	**0**
Museums, galleries and libraries			
9101 : Library and archive activities	20	15	5
9102 : Museum activities	5	0	0
Total: Museums, galleries and libraries	**25**	**15**	**5**
Music, performing and visual arts			
5920 : Sound recording and music publishing activities	5	5	0
8552 : Cultural education	0	0	0
9001 : Performing arts	20	15	0
9002 : Support activities to performing arts	5	5	0
9003 : Artistic creation	45	45	0
9004 : Operation of arts facilities	0	0	0
Total: Music, performing and visual arts	**75**	**70**	**0**

Source: ONS

6.1 Average number of employees in creative industries firms

We observed that the average number of employees across all creative industries firms in Kirklees is below that for LCR and less than half of the national average:

Figure 10 Average dimension of creative industries companies (number of employees)

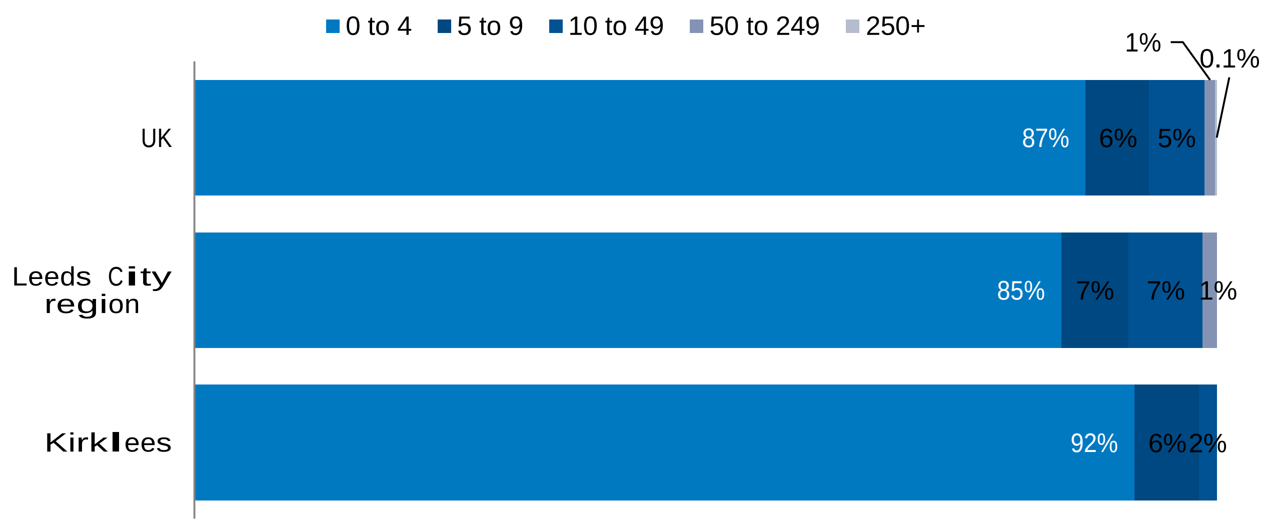


Source: BOP Consulting estimates on ONS data

6.2 Size distribution of creative industries firms

We have represented the distribution of creative industries firm by number of employees for Kirklees, LCR and the UK in the figure below:

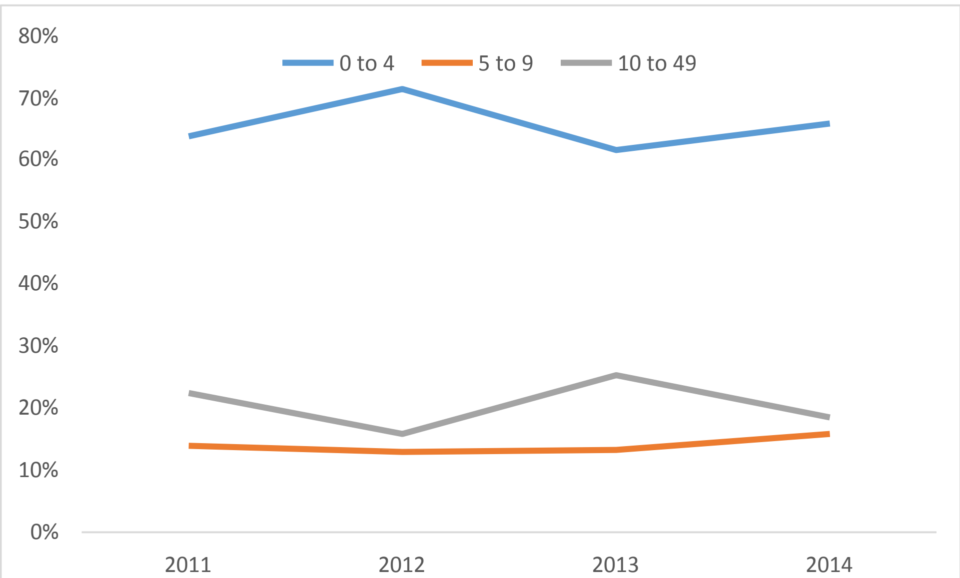
Figure 11 Number of creative industries firms per by size (employees) - 2014



6.3 Concentration of employment in microbusinesses

The largest concentration of employment in creative industries, unlike many other sectors, is within microbusinesses. In Kirklees, this represents 60-70% of creative industries jobs:

Figure 12 Estimated weighting of total employment in the creative industries by firm size – 2011-2014



6.4 Sole traders and micro-enterprises

Our 2009 study reported on achievement against particular targets for employment in micro- and small creative businesses in Kirklees. This time there are no such targets, but we have looked at employment by size of company across all creative sectors to determine the role of sole traders and micro companies (0 to 4 employees).

In line with previous findings, this shows that the creative sector in Kirklees has a higher proportion of microenterprises (92%) than either LCR or the UK. Of these, 100 are sole proprietor businesses.

Figure 13 Number of sole proprietor businesses by creative industry groupings in Kirklees

DCMS sub-sector	Number of sole proprietor businesses
Advertising and marketing	10
Architecture	0
Crafts	0
Design: product, graphic and fashion design	30
Film, TV, video, radio and photography	15
IT, software and computer services	30
Publishing	0
Museums, galleries and libraries	0
Music, performing and visual arts	15

Source: ONS

The fact that ONS figures report no sole proprietors running craft businesses goes back to the weakness in the statistical framework highlighted in our introduction: ONS figures for crafts include only jewellery manufacturers. A quick web search turns up a number of other craft activities in the borough, of which the Council is aware. We suggest that your own knowledge of these businesses would represent a useful Appendix to this report if it is to be presented more widely.

6.5 Businesses below the VAT threshold

One of our specific research questions was to identify the number of creative businesses below the VAT threshold. Using the ONS count of private businesses, we calculated what proportion of these fall below the VAT threshold by:

- Assuming that sole proprietors fall below the VAT threshold
- Reweighting the GVA attaching to each business by multiplying the average GVA per worker for the relevant creative industry category by the mid-point in the size distribution of firms, i.e. the relevant GVA per worker figure would be multiplied by 2 within the business classification of 0-4 workers
- Converting these GVA figures into turnover figures via the average ratio of GVA to turnover
- Assessing these turnover figures against the VAT threshold

We then divided the number of businesses that this indicated as being below the threshold by the total number of private businesses in these sectors in Kirklees to give a percentage figure.

Figure 14 Total Number of Private Creative Industries businesses in Kirklees and Estimation of Proportion below VAT threshold

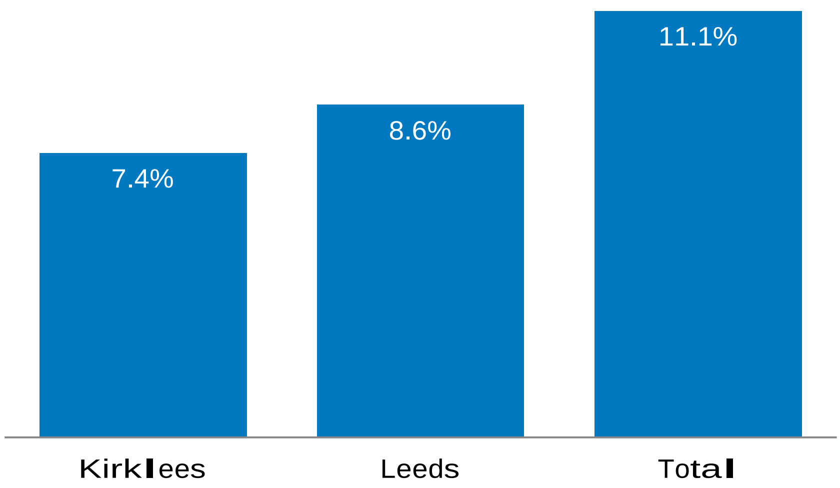
	Total number of private businesses	Proportion estimated to be below VAT threshold
Advertising and marketing	90	11%
Architecture	60	0%
Crafts	5	0%
Design: product, graphic and fashion design	115	26%
Film, TV, video, radio and photography	70	21%
IT, software and computer services	445	7%
Publishing	40	0%
Museums, galleries and libraries	0	
Music, performing and visual arts	75	20%

Source: ONS and BOP analysis

6.6 Creative industries firms as a percentage of total business stock in Kirklees

The weight of creative businesses as a percentage of the total business stock is also significant. As creative businesses have a smaller average size, the figure of 7.4% is higher than the one presented for the weight in the total number of jobs.

Figure 8 Creative Industries weight in the total number of Businesses - 2014

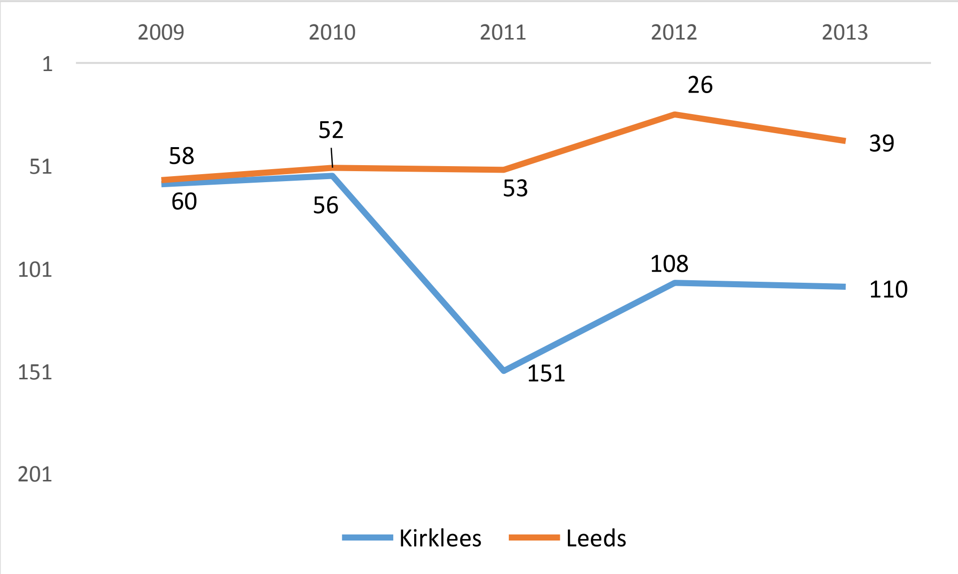


Source: BOP Consulting estimates on ONS data

7. Comparing creative industries employment in Kirklees with other local authorities

BOP has used BRES data to assess creative industries employment in each of the UK's 206 local authorities. The resulting ranking that suggests the relative importance of creative industries in each local authority area. From a ranking perspective we see that in 2009 Kirklees creative industries were in a very similar position to the city of Leeds[11]. The change in reporting of employment in the publishing sector between 2010 and 2011 created a gap (of almost 100 positions) that closed to around 70 ranking places in 2012 and has remained stable ever since.

Figure 15 Creative Industries ranking out of 206 local authorities



Source: BOP Consulting estimates on ONS data

8.1 What other local authorities are similar to Kirklees?

For setting policies and better understand the role of the creative economy in the Kirklees it might be interesting to look at 'similar' local authorities. Naturally, the concept of similar might be perceived in several ways. In the next table we included the list of the local areas ranked from 100th to 120th in their size of their local creative economy (out of 206). The Kirklees rank is 110th with 2.3% of total employment within creative industries.

[11] This refers to the local authority of the city of Leeds, not the Leeds City Region LEP

Figure 16 Kirklees and local authorities with a similar weight of the creative sector

Region	Rank	Weight
Leicester	100	2.5%
Calderdale	101	2.5%
Highland	102	2.4%
Dorset	103	2.4%
Torfaen	104	2.4%
Newham	105	2.4%
Suffolk	106	2.4%
Coventry	107	2.3%
Eilean Siar	108	2.3%
Waltham Forest	109	2.3%
Kirklees	**110**	**2.3%**
Bexley	111	2.3%
Rochdale	112	2.3%
Southend-on-Sea	113	2.3%
Monmouthshire	114	2.2%
Portsmouth	115	2.2%
St. Helens	116	2.1%
Shropshire	117	2.1%
Wirral	118	2.1%
Oldham	119	2.1%
The Vale of Glamorgan	120	2.1%

We also have created a “similarity index” based on the structure of the creative sector of each subsector. The index is defined as the sum of the differences in weight of each of the 9 sub-sectors of the creative sector[12]. The most similar areas are presented in the table below. In this metric a lower result reads as more similar, while a higher scores as less similar. This table presents a view of similarity based on which areas have a more similar structure (among the different subsectors), where the table below focused on which areas had a more similar size for the total creative sector.

Figure 17 Local authorities with a more similar structure of the creative sector ("Similarity Index")

Region	Similarity Index (low score indicates greater similarity)
North Ayrshire	5%
Scottish Borders	6%
City of Edinburgh	7%
Dudley	10%
Greenwich	14%
Monmouthshire	15%
Blaenau Gwent	15%
Calderdale	16%
Doncaster	16%
County Durham	16%

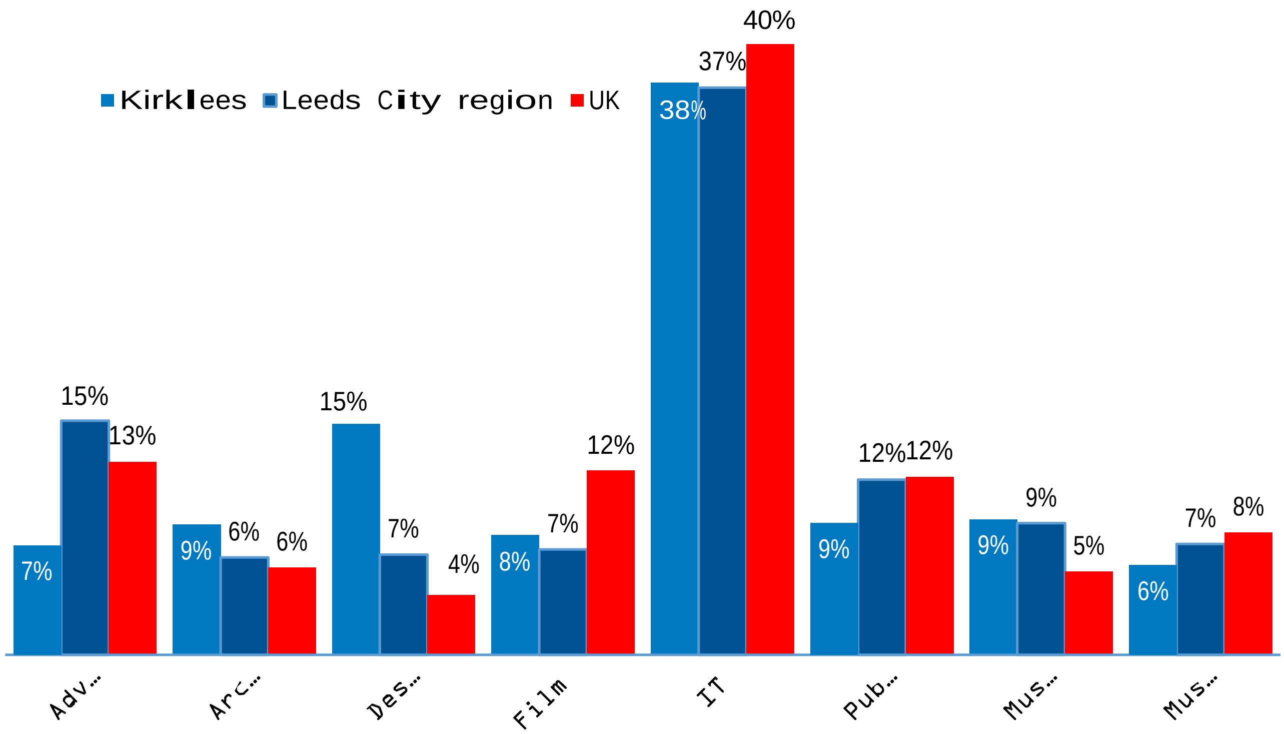
[12] For example if 8% of a local authority's creative sector jobs are in Advertising, the score would be 0.8% (has the Kirklees advertisement weight is 7.2%). To obtain the overall sector we repeat this step for each of the 9 subsectors and add the overall figure.

8. Analysis of Kirklees' creative industries sub-sectors

Our analysis found that the creative industries in the Kirklees directly employ 3,400 people. Following the approach derived by the DCMS, we present the weight of each of the sub-sectors in the creative industries[13] in the Kirklees, Leeds and the UK. A detailed analysis of the chart highlights two major differences of the Kirklees when compared with the national structure:

- A larger weight of Design (14% vs 4%)
- A reduced weight of Advertising and Marketing (7% vs 13%).

Figure 18 Creative Industries structure (excluding crafts[14])



Source: BOP Consulting estimates on ONS data

8.1 Location quotient

A different perspective of analysis is to create location coefficients for each of the sub-sectors. In a new development to our previous work, we use a 'location quotient' to measure the relative size of a number of creative industries domains in Kirklees, measured against an average of all UK local authority areas. This is important in setting in context the changes to creative industries domains, and creative employment as a whole, over the period 2009-13, relative to those in the rest of LCR

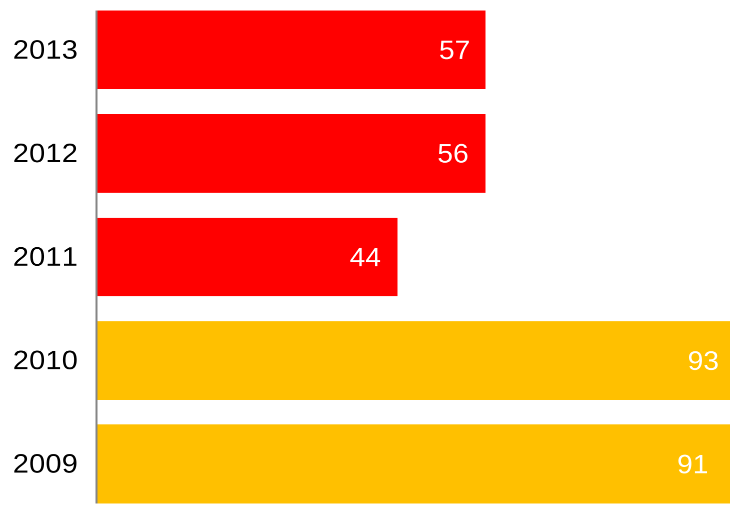
[13] Namely Advertising, Architecture, Crafts, Design, Film, IT, Publishing, Museums and Music.
[14] Given the residual importance of Crafts (0.1%)

and the UK as a whole. It helps to alert us to those sectors which have grown or shrunk significantly in that time.

Measuring the relative density of businesses within a sector sub-sector in a particular location can indicate that there is some kind of agglomeration, or clustering, effect within a particular supply chain or value chain. This location quotient, or 'LQ', can both signal places where trade between local businesses is creating a higher 'multiplier effect' within the local or regional economy, and holds out the potential to develop a competitive advantage for existing and new businesses in that location. Established creative clusters – eg, Westminster in London – will have a higher LQ.

For the creative sector as a whole in Kirklees, the decrease in its national ranking is also reflected in the evolution of the location quotient. We see that in 2009 and 2010 the Kirklees creative industries were pretty much in line with the national average – the LQ of all locations outside London are to some extent 'skewed' by the fact that some 70% of the nation's creative sector resides in the capital. However, as previously identified, there was a significant decrease in the reported size of the publishing sector in 2011. This decrease effectively halved the size of the creative sector in the Kirklees that has since then recovered some of its previous scale.

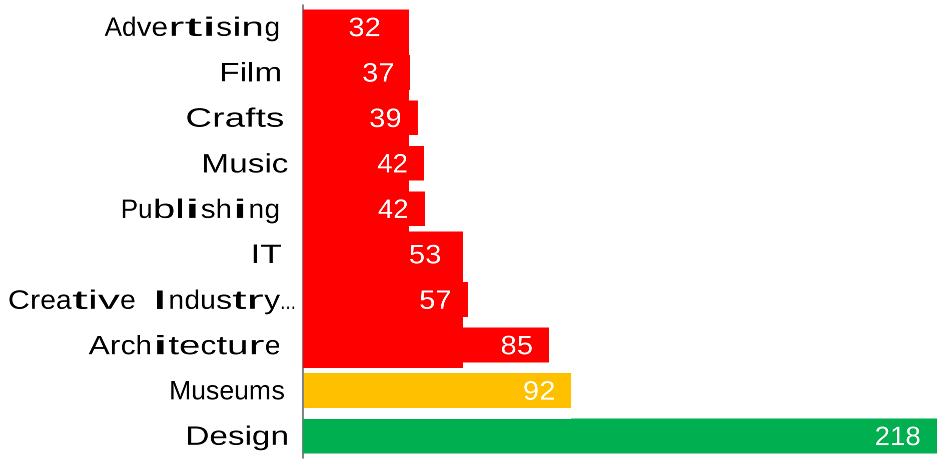
Figure 19 Creative Industries location quotient (UK average = 100)



Source: BOP Consulting estimates on ONS data

The following table shows that, currently, Design is the only subsector that is overrepresented in the Kirklees when compared with the national average.

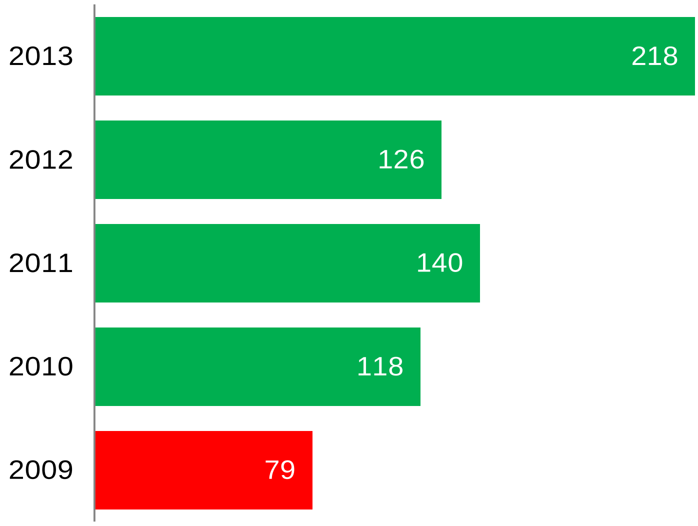
Figure 20 Sub-industry Location quotient (UK average = 100)



Source: BOP Consulting estimates on ONS data

Interestingly we see that the development of the Design subsector in Kirklees is a recent phenomenon. In 2009 the sector was underrepresented in Kirklees. Since 2010 the subsector has grown significantly and now is 2.18 times more concentrated in Kirklees than the national average.

Figure 21 Design Location quotient evolution (UK average = 100)

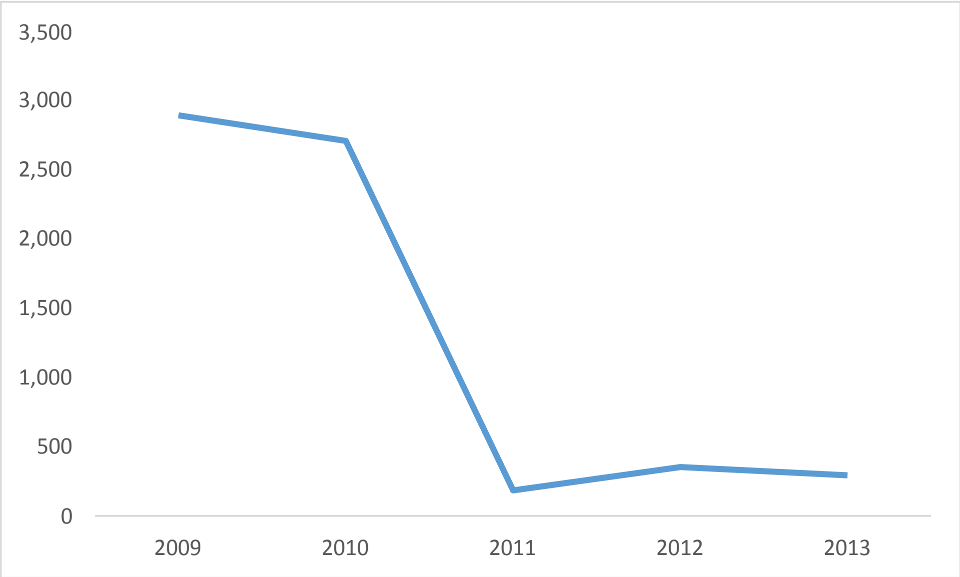


Source: BOP consulting estimates on ONS data

8.2 'Missing' jobs in the publishing sector

As illustrated in the table below, there was a drop in creative employment of almost 2,500 jobs (of which some 2,000 were part time employees) between 2010-11. Our discussions with ONS, whilst they were not prepared to allow us sight of the actual data, indicated that this was caused by one firm, which had previously been classified as part of 'other publishing', deciding to reclassify itself on its annual return under an SIC code that reflected the retail and distribution aspects of its business.

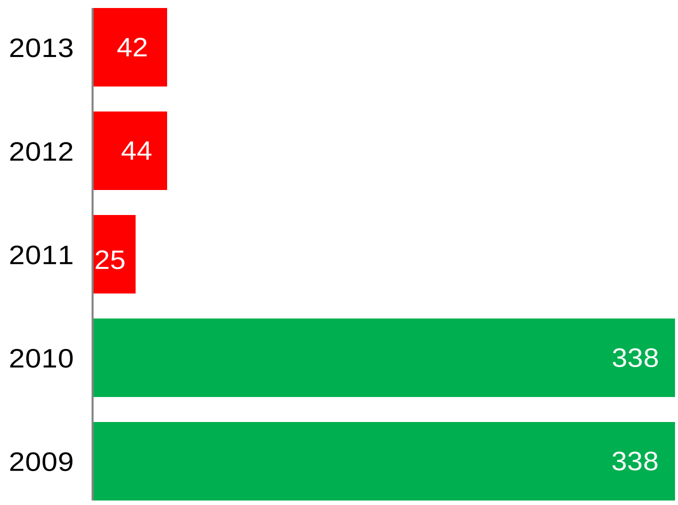
Figure 22 Total number of Jobs in the Kirklees publishing sector



Source: BOP Consulting estimates on ONS data

As a result of this change, we now observe a very low LQ for the publishing sector:

Figure 23 Publishing Location quotient evolution (UK average = 100)



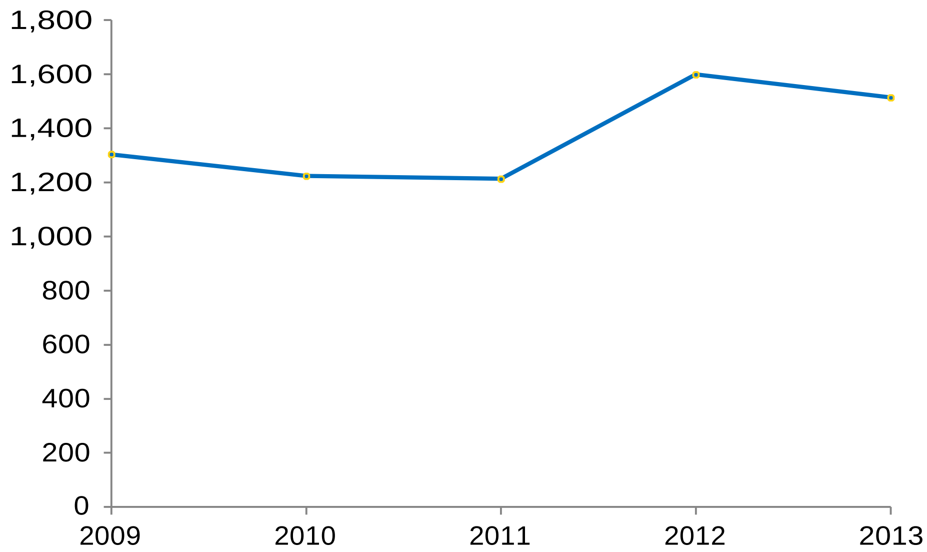
Source: BOP consulting estimates on ONS data

8.3 Software-related businesses - 'fused' digital sub-sector definition

There is a view that the definition of creative industries used by DCMS undervalues the contribution of digital companies to creative clusters. Taking the precedent of the study of Brighton's creative, digital and IT industries commissioned by the Arts and Humanities Research Council, we have used its definition of a digitally 'fused' sector, bringing together different elements of the value chain in the creation of digital products and services that overlap with those in the creative industries. This is done in part to create a clearer perspective on growth and innovation in new, digital products and services that may have displaced (or be in the process of displacing) the output, and employment, of more traditional creative sub-sectors. In this case, we wanted in particular to examine whether digital services and products may have displaced other publishing activities, which were identified as a relative strength for Kirklees in previous surveys but have declined in recent years.

The evidence here is mixed. The three extra SIC codes covering 'Software/Electronic Publishing' represent a significant portion of the Kirklees labour force, as seen in the chart below. However, there is no consistent growth trend over the period 2009-2013: although overall job numbers are higher, there has only been one year (2012) in which job numbers have increased in that period. Such employment growth as there has been is concentrated within the area of computer consultancy activities rather than software development

Figure 24 Number of jobs in the "Fused" sub-sector in Kirklees – 2009 to 2013[15]



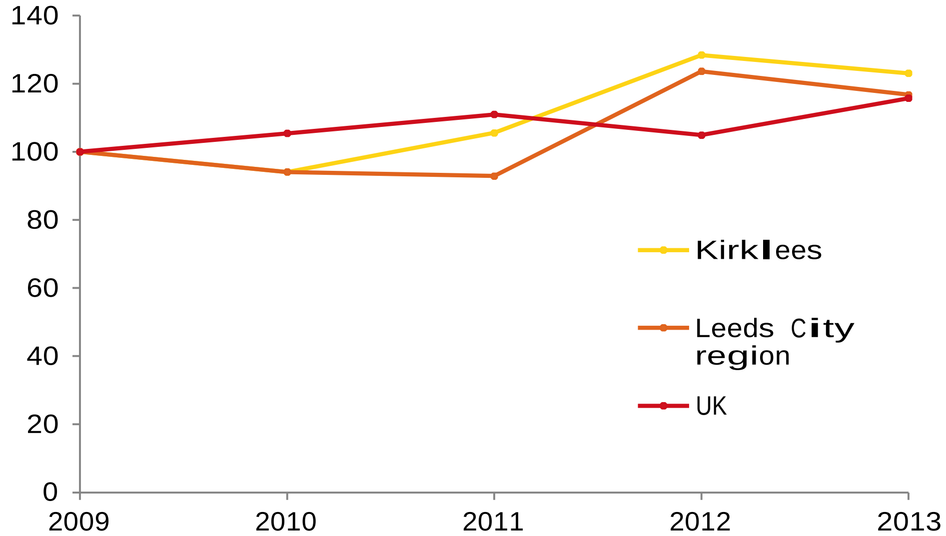
[15] On the data appendix an estimate for each SIC code is available.

Figure 25 Number of employees per sic code in the "fused" sector (number of employees)[16]

4 digit sic code	2009	2010	2011	2012	2013
62012 : Business and domestic software development	300	300	300	300	300
62020 : Computer consultancy activities	700	700	700	1,000	1,000
62090 : Other information technology and computer service activities	300	300	200	300	300
Total	**1,300**	**1,300**	**1,200**	**1,600**	**1,500**

Source: BOP Consulting estimates on ONS data

Figure 26 Changes in number of jobs in the "Fused" sub-sector – 2009 to 2013[17] (2009=100)



Source: BOP Consulting estimates on ONS data

However, the lack of consistent growth does not alter the fact that software-related firms represent the highest single source of creative jobs within Kirklees' economy (35%) and the majority of the creative sector's GVA (63%). We also note that there is a sub-sector of some 300 videogames developers – this may be an area that repays further research and investment.

[16] Following ONS guidelines the presented data is rounded to the nearest hundred. Totals might not add up.
[17] On the data appendix an estimate for each SIC code is available.

8.4 Other changes in creative employment in Kirklees

Although we have not accessed Experian Data for this study, we have tracked the fate of some of the medium and large creative employers identified when this survey was last carried out in 2009. The highlights are below:

Figure 27 Changes affecting medium and large creative businesses in Kirklees

Name (in 2009)	Activity	Employment (2009)[18]	Change in ownership	Change in structure
The In-Touch Group	Specialist packaging design and production	150	Mathews Business Solutions	One of a foreign-owned group with offices in US and Manchester
Carlton Cards	Manufacture of greetings cards	500	UK Greetings Ltd – wholly-owned subsidiary of American Greetings Corp of Cleveland, Ohio	Manufacture at Dewsbury to end by Aug 2015 and replaced with warehousing and distribution19
Adare	Marketing, communications, packaging and secure printing	270	No change	No change
Huddersfiel d Examiner	Local newspaper	160	No change	No change

[18] 2009 employment figures taken from Experian data – we do not have access to equivalent figures for 2013
[19] http://www.dewsburyreporter.co.uk/news/local/breaking-jobs-to-go-as-uk-greetings-plan-to-stop-making-cards-in-dewsbury-1-6877309

9. Conclusions

There are a number of contradictory indicators in our survey findings. Kirklees' creative industries are at one and the same time show higher levels of employment growth than the rest of the Kirklees economy, but lower growth than similar firms in the City Region of which it forms a part, and below the trend for the UK as a whole.

The borough's software-based businesses are the major source of GVA and employment for the sector as a whole – yet exhibit no consistent growth pattern.

Some other anomalies – for instance, the apparent absence of a craft sector – are a direct result of the way in which published statistics on the creative industries are derived. This could be addressed by additional, primary research both to 'fill in the gaps' and to validate the estimates we have prepared using the published data.

The survey, and our related enquiries, do suggest some areas of strength that may form the basis of a strategic action plan to grow the sector:

- The Design sector – graphic design, product design and fashion design – is relatively concentrated in Kirklees, shows remarkable growth and is at this time contributes more than £8m per annum to the borough's economy. This merits further investigation to disaggregate the respective disciplines, and identify which sub-sectors are performing particularly well.
- Related to the above point, we would observe that the 'Christopher Bailey factor' – the CEO of Burberry trained at Huddersfield University – has not been exploited to any noticeable extent either in University recruitment or promotion of Kirklees' fashion design sub-sector.
- Whilst there has been a marked fall in reported employment in publishing, reflecting overall volatility of a sector that is being disrupted by the introduction of digital technology across production and distribution, there are some strong companies with niche markets in specialised areas of printing, notably secure printing. It would be useful to understand how this could be further promoted through support for R&D; and whether there is an associated supply chain of smaller companies that could similarly be helped, and made a focus for further inward investment promotion to scale up this specialism.
- Although the overall performance of local software-related businesses is inconsistent, there are signs of both resilience and outperformance of neighbouring areas. Kirklees is surrounding by strong tech clusters in Leeds, Manchester and Sheffield – understanding the relationship of its indigenous software companies to those supply chains may reveal further opportunities for growth.
- Within the software-based firms is a sub-cluster of some 300 videogames developers. The scope of our research has not allowed us to investigate this further, but it would be good to establish who the firms are that form the basis of this mini-cluster and to alert agencies such as Innovate UK, UKTI and the new TechNorth organisation to their presence to ensure that these firms are taking best advantage of all available support, including tax breaks and support for export.

By focusing on these activities, Kirklees has an opportunity to position its creative businesses more prominently in the overall narrative of a strong cluster within the Leeds City Region. BOP would be delighted to continue to work alongside the Council in framing those narratives and an action plan to address business growth opportunities in the sector.

Appendix 1 – BRES data on employment in the creative industries in Kirklees 2009-13

Figure 20 Number of employees per subsector and sic code in the creative industries (number of employees)[20]

Sub-sector	4 digit sic code	2009	2010	2011	2012	2013
Advertising	7021 : Public relations and communication activities	0	0	0	0	0
Advertising	7311 : Advertising agencies	0	200	100	200	200
Advertising	7312 : Media representation	0	100	100	0	0
Architecture	7111 : Architectural activities	200	200	200	300	300
Crafts	3212 : Manufacture of jewellery and related articles	0	0	0	0	0
Design	7410 : Specialised design activities	200	200	300	300	500
Film	6010 : Radio broadcasting	0	0	0	0	0
Film	6020 : Television programming and broadcasting activities	0	0	0	0	0
Film	7420 : Photographic activities	0	0	100	0	100
Film	5911 : Motion picture, video and television programme production activities	0	0	0	0	0
Film	5912 : Motion picture, video and television programme post-production activities	0	0	0	0	0
Film	5913 : Motion picture, video and television programme distribution activities	0	0	0	0	0
Film	5914 : Motion picture projection activities	100	100	100	100	100
IT	6201 : Computer programming activities	300	300	300	300	300
IT	6202 : Computer consultancy activities	700	700	700	1000	1000
IT	5821 : Publishing of computer	0	0	0	0	0

[20] Following ONS guidelines the presented data is rounded to the nearest hundred. Totals might not add up.

	games					
IT	5829 : Other software publishing	100	0	0	100	0
Museums	9101 : Library and archive activities	300	300	200	200	200
Museums	9102 : Museum activities	100	0	0	100	100
Music	5920 : Sound recording and music publishing activities	0	0	0	0	0
Music	8552 : Cultural education	0	0	0	0	0
Music	9001 : Performing arts	100	100	100	100	100
Music	9002 : Support activities to performing arts	0	0	0	0	0
Music	9003 : Artistic creation	100	0	0	100	100
Music	9004 : Operation of arts facilities	0	0	0	0	0
Publishing	5811 : Book publishing	100	0	0	100	0
Publishing	5812 : Publishing of directories and mailing lists	0	100	0	0	0
Publishing	5813 : Publishing of newspapers	100	0	0	100	100
Publishing	5814 : Publishing of journals and periodicals	300	100	100	100	100
Publishing	5819 : Other publishing activities	2400	2400	0	100	100
Publishing	7430 : Translation and interpretation activities	0	0	0	0	0
Total		**5200**	**5200**	**2500**	**3300**	**3400**

Creative Kirklees