Economic Contribution Study:

An Approach to the Economic Assessment of Arts & Creative Industries in Scotland

Executive Summary
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EXECUTIVE SUMMARY

Introduction

This study has been commissioned by Creative Scotland in partnership with Scottish Enterprise. The aim of the research was to obtain a comprehensive and robust picture of the contribution of the Arts and Creative Industries (A&CI) to the wider Scottish economy.

The study builds on publically available, official statistics, with an aspiration for the research to be transparent and replicable in future years. In doing so, it exploits the improved measurement that derives from new statistical classification systems[1]. These changes have enabled a more refined assessment and categorisation of the A&CI in Scotland, reflecting both the character of artistic, cultural and creative endeavour in Scotland, and its industrial structure within the country's various geographic areas.

In the final scope adopted for this study, a list of **sixteen industries** has been established. The development of this Scottish scope draws on analysis of industry and occupation data for Scotland and the UK, Scottish Government Growth Sectors definitions, international comparisons and academic and policy commentary. It also reflects on issues identified locally and in the sector consultation events carried out as part of the study methodology.

The sixteen industries contrast with the thirteen historically utilised by the Department for Culture, Media and Sport (DCMS). The main adjustments made in order to develop this Scottish scope include: splitting out and rearranging some industries into more appropriate categories; adding in industries (or parts of industries) outside the DCMS definition that are regarded as core parts of the A&CI in Scotland; retaining some categories recently removed by DCMS; and amending the DCMS weightings (i.e. the proportion of an industry that is defined as creative) for some specific industries in order to make them more relevant to Scotland at the current time.

The rationale for extending and amending the DCMS definition **is discussed in more detail in Section 2 and Annex 1 of the main report.**

The study also addresses a range of additional, wider economic impacts, including the indirect, induced and tourism impacts of the A&CI. It also attempts to estimate some of the harder to capture employment related to the A&CI, such as roles in further and higher education and local authorities, as well as those in creative occupations outside of the A&CI.

However, there remains an ongoing challenge of accurately identifying the scale of self-employment, sole traders, and portfolio and project based workers that are operating within the A&CI – these activities being more prevalent in the A&CI than in other sectors of the economy.

The Direct Contribution of the Arts & Creative Industries

Adopting the Scottish scope for defining the Arts and Creative Industries (A&CI) in Scotland shows that direct employment in the A&CI in Scotland in 2010 was 84,400. Software and Electronic Publishing is the largest industry in terms of employment, followed by Writing and Publishing and the Heritage sector.

[1] Most notably the approach has also been able to exploit the improved measurement that derives from new statistical classification systems (i.e. SIC2007) which represents the first major revision of the Standard Industrial Classification system since 1992, and enables a more refined assessment and categorisation of Arts and Creative Industries.

Conventionally accounted, A&CI GVA accounts for £3.2billion. In terms of GVA the largest sector is Software and Electronic Publishing (£940million), followed by conventional Publishing & Writing (£820 million). The next tier of industries – Fashion & Textiles (£350 million), Architecture (£250 million), Advertising (£230 million) and Design (£160 million) are all recognisably at the commercial end of the spectrum of creative activities.

For some areas of the A&CI, the conventional approach to GVA does not capture their full impact – particularly Heritage and broadcasting. The impact of bringing Heritage and Radio & TV accounting practices into line with other industries is to increase the estimate of the total GVA of the A&CI from £3.2 billion to £3.7 billion.

Key data for the 16 sectors are set out in the table below and in Section 4 of the main report:

Scottish Arts & Creative Industries - Direct Employment and Gross Value Added Results (2010)				
CULTURAL DOMAIN	SCOTTISH ARTS & CREATIVE INDUSTRIES	Direct Employment (rounded)	Gross Value Added (£ million)	Adjusted Gross Value Added (£ million)
Visual Art	Advertising	3,600	230	230
	Architecture	6,100	250	250
	Visual art	800	30	30
	Crafts	2,300	80	80
	Fashion & Textiles	7,000	280	280
	Design	4,700	160	160
Performance	Performing Arts	4,700	90	90
Audio-Visual	Music	400	10	10
	Photography	900	30	30
	Film & video	3,500	120	120
	Computer games[2]	200	0	0
	Radio & TV	3,500	50	400
Books & Press	Writing & Publishing	16,400	810	810
Heritage	Heritage	10,700	120	250
Digital Industries	Software/Electronic Publishing	19,100	940	940
Cultural Education	Cultural Education	400	10	10
TOTAL FOR ARTS & CREATIVE INDUSTRIES IN SCOTLAND		**84,400**	**£3,220**	**£3,690**

This estimate is larger than that achieved by applying the standard DCMS CIEE 2011 definition for the Creative Industries. A table showing the comparison between the two datasets is set out at the end of this executive summary. These differences principally result from: the retention of some categories within Software and Electronic Publishing (in line with the recent Scottish Government User Consultation on Growth Sectors[3]); the

[2] Note: due to rounding of the GVA results, Computer Games is recorded as zero in the table above, but the sector does report GVA of less than £10 million.

[3] The retention of Software and Electronic Publishing reflects the Growth Sector has been named in the Government Economic Strategy as 'Creative Industries (including Digital)' and the recent User Consultation proposes the continued inclusion of business software.

inclusion of Textiles within the Fashion and Textiles category; the inclusion of museums, galleries and historic sites within the Heritage category; and the addition of the Creative Education category (a newly identified industrial classification code covering employment in informal instruction in the arts, drama and music).

The study aimed to capture the economic contribution of the Crafts sector through official statistics for the first time, by identifying the appropriate economic statistics for craft activities and assessing (through data analysis at the local level) which elements constitute manufacturing and therefore should be excluded. However, the results for employment within the Crafts sector remain lower than in recent other research estimates[4], likely reflecting the high numbers of sole traders and self-employed working in the sector.

Similarly, recent research for the Computer Games industry appears to be anomalous to other recent research which show a higher level of employment than the results here identify[5]. This variance is primarily thought to be due to how such businesses report their activity under industrial classifications - a proportion of firms involved in Computer Games will have been captured within Software and Electronic Publishing sector, and others may be divisions of non-Games businesses classified elsewhere in economic statistics under the parent company's code.

The study also splits out the Music, Visual and Performing Arts sectors for the first time, although it is recognised that the estimates for the music sector are thought to be an underestimate. Some Music activity continues to be classified under Performing Arts and nearly half of musicians are classified to non-creative industries such as entertainment.

Understanding Economic Performance

Geographically, Glasgow and Edinburgh together account for 40% of total employment in the Arts & Creative Industries (A&CI). Controlling for population size, Edinburgh, Glasgow, Aberdeen and Dundee all show higher than average employment intensity[6] for the A&CI. However, other areas also show above average employment intensity, including the Scottish Borders, Orkney and Shetland.

The study has used the DCMS CIEE 2011 definition to compare Scotland to other UK nations and regions. For employment, (which amounted to 593,000 for the UK in 2010), the dominance of London and then the South East is clear; these regions together account for more than half of all Creative Industries employment across the UK.

Given that London is the UK's largest region in terms of population, it is useful to consider the intensity of Creative Industry employment[7] across the UK's nations and regions. Scotland ranks fourth in terms of employment intensity, behind London, the South East and Yorkshire; the latter having notable levels of activity in the Publishing sector.

The economic performance of the A&CI in Scotland over time has reflected the wider economy but has been more cyclical; experiencing an earlier and more pronounced recession, although not all of the sixteen industries examined follow this pattern. The earlier decline in the economic performance of the A&CI (from 2007-2008) resulted mainly from trends in the Writing & Publishing and Software industries. More recently,

[4] Crafts Council: Crafts in an Age of Change
http://www.creativescotland.com/sites/default/files/editor/Craft_in_an_Age_of_Change_-_Full_Report.pdf

[5] The research was commissioned by TIGA and carried out by Games Investor Consulting (GIC) and identified a total of 593 jobs in 2010.

[6] Employment intensity is expressed as the number of employee jobs in a local authority per '000 population

[7] Employment intensity is expressed as the number of employee jobs in a local authority per '000 population

Advertising and Architecture have contributed to the decline, as discretionary spending has fallen and investment projects in both the public and the private sector have borne the brunt of the UK recession.

Total turnover of businesses operating in the A&CI for 2010 is estimated to be £6.3billion, distributed across the various Arts & Creative Industries in a similar pattern to GVA. Again, bringing Heritage and broadcasting accounting practices into line with other industries increases this estimate to £7.2 billion.

Based on the most recently available data (2008) there are estimated to be around 12,000 business units operating in the Arts & Creative Industries in Scotland. One-third of these are in the Software industries, including many micro-enterprises. By UK standards, Scotland has relatively few A&CI businesses and they are typically larger than in most other nations and regions of the UK. In terms of business unit intensity[8] the results show that there are proportionately more A&CI business units in Edinburgh than elsewhere, with notably few in suburban areas.

The Wider Economic Contribution of the Arts & Creative Industries

The study estimates that the Arts and Creative Industries (A&CI) in Scotland generate an additional £3.06 billion turnover in indirect impacts (i.e. supply chain effects). The supply chain for the A&CI in Scotland is relatively Scottish-focused, with many of the industries tending to purchase from within their own industry (including freelancers), other sectors within the A&CI, or local business services or transport. This wider impact is discussed in **Section 5 of the main report.**

The A&CI in Scotland also generate induced effects (i.e. spending by those employed directly and indirectly in these industries) amounting to £2.22 billion turnover. Again, the main contributing sectors are Writing & Publishing, Software/Electronic Publishing and Radio & TV.

In terms of GVA, the A&CI in Scotland therefore generate an additional £1.35 billion GVA indirectly, and £1.25 billion GVA through induced impacts. Overall, the direct, indirect and induced impacts of the A&CI in Scotland amount to almost 130,000 jobs, £6.3 billion GVA, and £12.5 billion in turnover (see Table below).

Summary of Direct, Indirect and Induced Effects of Arts & Creative Industries in Scotland

	Direct (adjusted[9])	Indirect Effects	Induced Effects	Total
Turnover (£ million) excl. VAT etc.	£7,200	£3,060	£2,220	**£12,480**
GVA (£ million)	£3,700	£1,346	£1,254	**£6,300**
Employment	84,400	19,200	26,100	**129,700**

An assessment of the relationship of the A&CI to tourism shows that it has both a direct and indirect influence in attracting visitors, with the strongest effects being in the Heritage and Performing Arts sectors. Tourism expenditure of over £1 billion can be

[8] Business unit intensity is measured as the number of business units in a local authority per '000 population.

[9] The GVA and Turnover figures presented here and used in the analysis of the indirect and induced effects are the adjusted figures presented in Section 4. This is because, regardless of which GVA figure is used (conventional or adjusted) as the key headline measure, the supply chain and income effects should be based on the adjusted figure to ensure the wider (indirect and induced effects) of broadcasting and heritage are analysed.

ascribed to overnight tourism motivated by the A&CI, and this gives rise to a direct GVA of £280 million.

The study further examines associated employment impacts for the A&CI in Scotland **(Section 6 of the main report)**. Within the A&CI, creative occupations are very fragmented; the workforce is employed in a wide diversity of roles. Almost 6,500 worker proprietors have been identified within the A&CI in Scotland, accounting for close to 8 per cent of the identified 84,400 jobs. These 6,500 equate to around 4.5 per cent of worker-proprietors nationally (a greater proportion than in the wider economy), suggesting that the A&CI are effective cradles for entrepreneurs.

However, conventional categorisation still fails to capture many of those working as sole traders or in small businesses, and the 'portfolio lifestyle' of many freelancers involved in the A&CI is not yet adequately captured. There are estimated to be around 52,000 people employed in creative occupations in Scotland, with around 21,000 of these jobs sitting outside the 84,400 jobs already identified. These additional jobs are a combination of those in creative occupations but outside the Arts & Creative Industries sectors (e.g. graphic designers working in non-A&CI sectors), and those working within the A&C I sectors, but not captured because they work in non-PAYE, non-VAT registered jobs (e.g. sole traders and the self-employed in the A&CI).

An assessment of A&CI related employment within Higher Education and Further Education estimates that there are approximately 2,300 jobs in Higher Education and a further 1,800 in Further Education linked to A&CI related subjects.

Similarly, an assessment of A&CI related employment within local authorities estimates that there are more than 1,500 FTE staff employed by local authorities in related positions[10]. Local authority expenditure in 2009-10 on identifiable A&CI related services is estimated to be in the region of £130 million.

[10] This data is drawn from CIPFA Cultural Statistics 2010 and is therefore regarded as providing coverage primarily related to the arts and cultural services related areas of activity.

Scottish Arts & Creative Industries Economic Contribution Study - Direct Employment (2010) – comparing with DCMS

DCMS (CIEE 2011)	CIEE Employment (rounded)	SCOTTISH ARTS & CREATIVE INDUSTRIES	SACI Employment (rounded)	Reason for variance
Advertising	3,600	Advertising	3,600	Same definition used
Architecture	4,700	Architecture	6,100	Definition extends beyond SIC architecture to also include 'Urban planning and landscape architectural activities'and 'Engineering design activities for industrial process and production' (partial) and higher proportion of 'Specialised design activities' based on Scottish Input-Output tables
Art & antiques	600	Visual art	800	'Music and Visual and Performing Arts' sector has been separated out into three sectors – and antiques included within crafts (see below). Addition of 'Artistic creation' (weighting of 50% based on Scottish occupational and self-employment data.
Crafts	0	Crafts	2,300	Crafts is not captured by DCMS – wide range of SIC codes included, with extra analysis carried out to remove large scale (non-crafts) production. Crafts includes SIC codes for Furniture and wood crafts; Jewellery; Pottery; Glass; Textile craft goods; Antiques markets
Designer Fashion	100	Fashion & Textiles	7,000	Definition includes designer fashion as defined by DCMS and also includes range of fashion and textiles SIC codes aimed at capturing Scottish fashion and textiles sector. This includes some larger-scale textiles and fashion not included within the 'Textile craft goods' captured within the Crafts sector definition above, but not large routine-product factories.
Design	1,700	Design	4,700	Part of 'Engineering design activities for industrial process and production' added, based on assessment of Scottish Input Output tables
Music & Visual & Performing Arts	6,200	Performing Arts	4,700	'Music and Visual and Performing Arts' sector has been separated out into three sectors
		Music	400	'Music and Visual and Performing Arts' sector has been separated out into three sectors
Film & Video & Photography	3,400	Photography	900	Film & Video & Photography sector from DCMS has been separated out. Also 'film processing' now included - has become creative, not mechanical
		Film & video	3,500	Film & Video & Photography sector from DCMS has been separated out. Also part of 'Motion picture, television and other theatrical casting' included. Part of 'Motion picture, video and television programme post-production activities' included here (moved from Radio & TV)
Digital & Entertainment Media	200	Computer games	200	Same SIC definition used (although recognise that other sector estimates are wider in scope than either DCMS CIEE or SACI)

Scottish Arts & Creative Industries Economic Contribution Study - Direct Employment (2010) – comparing with DCMS				
DCMS (CIEE 2011)	**CIEE Employment (rounded)**	**SCOTTISH ARTS & CREATIVE INDUSTRIES**	**SACI Employment (rounded)**	**Reason for variance**
Radio & TV	3,600	Radio & TV	3,500	Part of 'Motion picture, television and other theatrical casting' included. Part of 'Motion picture, video and television programme post-production activities' moved to Film & Video
Publishing	9,500	Writing & Publishing	16,400	Part of 'Artistic creation' included, and 'Translation and interpretation activities' also included. Definition of printing is wider than DCMS definition – based on assessment of occupational data for Scotland.
		Heritage	10,700	Not included in DCMS CIEE
Software & Electronic Publishing	600	Software & Electronic Publishing	19,100	Definition of Software/Electronic Publishing includes aspects now excluded from (but previously within) DCMS. So this covers: 'Other software publishing'; 'Business and domestic software development'; and 'Computer consultancy activities'. The retention of Software and Electronic Publishing also reflects the Growth Sector as defined in the Government Economic Strategy: 'Creative Industries (including Digital)' and the recent User Consultation about Key Sectors proposes the continued inclusion of business software.
		Cultural Education	400	Not included in DCMS CIEE
TOTAL	**34,200**		**84,400**	