



Creative Industry performance

A statistical analysis for the DCMS

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1.0 Introduction (1)

- The Creative Industries are defined as the following 13 industries: Advertising, Architecture, Art & Antiques, Computer Games, Crafts, Design, Designer Fashion, Video, Film & Photography, Music, Visual and Performing Arts, Publishing, Radio and TV and Software.
- High level analysis of the Creative Industries suggests that they make a significant contribution to the UK economy and that this is increasing over time. In 2004, the Creative Industries accounted for 7.3% of total UK GVA. Creative Industry GVA grew by an average of 5% per annum between 1997 and 2004, compared with the UK average of 3% for the same period*.
- The evidence also suggests that this performance may be driven by a small number of the 13 Creative Industries. For example, Software and Computer Games was the fastest growing Creative Industry between 1997 and 2004, growing by an average of 9% per annum, compared with the Creative Industry average of 5%. This industry was also the largest, accounting for 36% of total Creative Industry GVA.
- Frontier has been asked by DCMS to prepare an in-depth statistical analysis of the performance of the Creative Industries and the drivers of performance using the Inter Departmental Business Register (IDBR) database. To do this, Frontier has considered a number of key issues:
 - *Issue 1:* Whether the current definition of the Creative Industries could be updated in light of improvements in data availability. In particular the availability of industry data at the 5-digit Standard Industry Classification (SIC) code level, as opposed to the 4-digit SIC code level data currently used to produce statistics.
 - *Issue 2:* Whether more can be understood about which industries are instrumental in driving overall Creative Industry performance, in light of improved data. In addition, whether particular types of firms (such as large firms) are driving Creative Industry performance.
 - *Issue 3:* Whether multinational firms play an important role in driving Creative Industry performance.

* *Source: DCMS, Creative Industries Economic Estimates Statistical Bulletin, September 2006.*

1.0 Introduction (2)

- To address these issues Frontier has drawn on a wide range of statistical sources. These include statistics compiled by DCMS; firm level data from the Inter Departmental Business Register (IDBR) database; firm level data from the Bureau Van Dyke Amadeus (BVDA) database; individual firms' accounts from Companies House and Thomson Datastream; and firms' annual reports.
- This report summarises Frontier's analysis and key findings. The remainder of the report is structured as follows:
 - *Summary* – This sets out the key findings and conclusions from our analysis;
 - *Defining the Creative Industries* - This describes the key issues surrounding the statistical definition of the Creative Industries. It also examines the implications of alternative approaches to defining the Creative Industries by comparing the statistical characteristics* of the Creative Industries using the current definition with alternative definitions. The final part of this analysis focuses on defining the Software and Computer Games industries and the implications for Creative Industry performance from defining these two industries separately.
 - *Identifying important industries* – This compares performance across the Creative Industries to identify which of the 13 Creative Industries are performing particularly strongly in terms of employment and turnover.
 - *Industry focus* – This final section comprises an in-depth analysis of each Creative Industry. It starts with a summary of the performance and characteristics* of each stage of the supply chain. It then focuses on layer 1 activities of the industry to describe in detail, overall industry performance and the contribution that foreign owned and large firms make to the industry.
- Creative Industry growth is not examined in this report. This is addressed by a separate detailed report.

* A note on the available statistics: Gross Value Added (GVA) statistics are not reported in any of the datasets that we have analysed, we have therefore been unable to analyse the GVA contribution of the Creative Industries. Because of this we have included turnover as one of our indicators of Creative Industry characteristics.

2.0 Summary

We have developed a more disaggregated definition of the Creative Industries

- The current approach to defining the Creative Industries is based on Standard Industrial Classification (SIC) code data defined at the 4-digit level. This does not permit detailed analysis to be carried out. For example, some Creative Industries such as Design, cannot be defined at all using 4-digit SIC code data.
- Dis-aggregated 5-digit data is available which allows a more in-depth analysis to be carried out. However, a definition of the Creative Industries does not exist at this level. The starting point for our analysis was to develop a 5-digit definition.
- To do so, we used a supply chain framework, which describes each industry in terms of a series of layers. Each layer corresponds to a distinct stage in the industry's supply chain:
 - **Layer one** represents potentially the most creative activities which lie at the top of each supply chain. These include activities such as composition for the Music industry, programming for the Computer Games industry and writing for the Publishing industry.
 - **Layer two** represents those activities which directly support layer one activities in the supply chain, including, for example, activities such as casting for the Performing Arts industry.
 - **Layer three** includes activities such as the manufacture of the hardware which directly supports the creative process – for example, the manufacture of television cameras and other hardware directly used in creating television programmes.
 - **Layer four** includes, for example the manufacture and wholesale of raw materials and also the manufacture of hardware that is used in the consumption of Creative Industry products such as arcade machines for the Computer Games industry.
 - **Layer five** represents the least Creative activities of any Creative Industry. In many cases layer five activities include consumer retail such as the sale of DVD players for the music industry, and games consoles for the Computer Games industry.
- Understanding where to draw the line when considering what should form part of the Creative Industries is difficult. For example, while it is clear that layer one activities should fall within any definition of the Creative Industries, it is less clear that activities in other layers – particularly from layer 3 onwards should be included.
- For the purposes of this study, we have adopted layer one as our key definition of the Creative Industries., as this appears to represent the most creative activities associated with any of the industries.
- The proposed 5-digit definition is narrower than the current 4-digit definition. The current 4 digit definition suggests that in 2005 they had turnover of £129 billion and employment of 982,000. The 5-digit layer one definition suggests that they had turnover of £99 billion and employment of 728,000 in 2005.

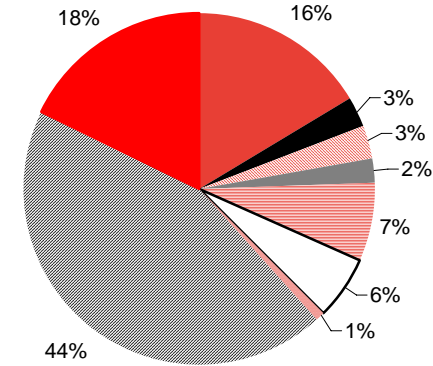
The creative industries are very different in terms of size and structure

- The Creative Industries are diverse. The turnover they generate ranges from £43.5bn in the Software and Games industry to £0.8bn in the Publishing industry and their employment ranges from 363,000 in the Software and Games industry to 1,100 in Publishing.
- Differences are also apparent in the types of firms that make up each industry:
 - Small UK owned firms (0-9 employees) make the most significant contribution to turnover and employment in the Designer Fashion, the Film, Video and Photography and the Music and Performing Arts industries;
 - Medium UK owned firms (10-249 employees) make the most significant contribution to turnover and employment in the Advertising and Architecture industries;
 - Large UK owned firms (250+ employees) make the most significant contribution to turnover and employment in TV and Radio; and
 - Foreign owned firms make the most significant contribution to turnover and employment in the Publishing and Computer games and Software industries.

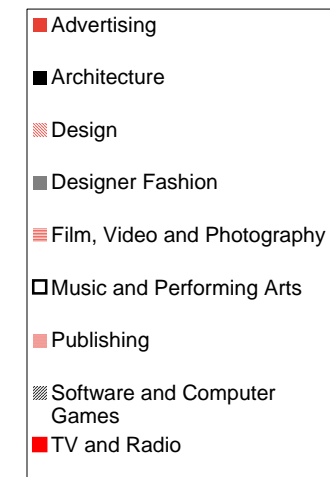
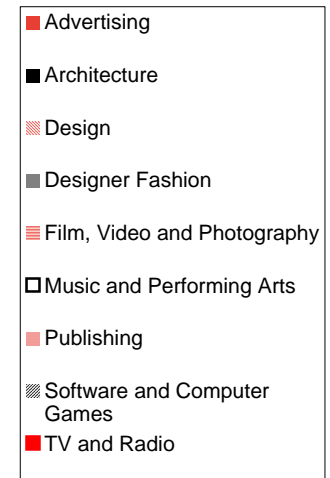
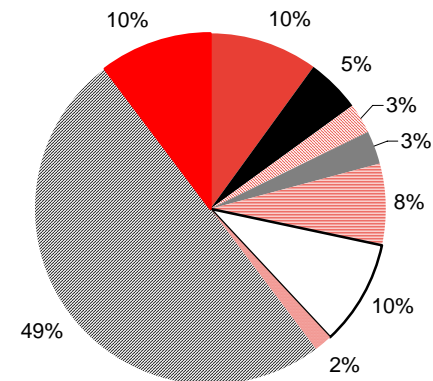
Computer games and software constitute a substantial part of the Creative Industries

- The Computer games and software industry is the largest Creative Industry in terms of employment and turnover. The industry employed 363,000 individuals and had a turnover of £43.5bn in 2005. This is equivalent to:
 - 49% of total Creative Industry layer one employment; and
 - 44% of total Creative Industry layer one turnover.
- Software makes up the bulk of the overall Computer games and software industry. It accounts for 98% of Computer games and software industry employment and 41% of industry turnover.
- Although there are 69,000 firms in the Computer games and software industry, the industry is concentrated. The largest 4 firms make up 19% of industry turnover; the largest 8 firms 27%. Some of the biggest players in the industry are:
 - Cap Gemini
 - Computacenter
 - Electronic Data Systems (EDS)
 - Dimension Data
 - Misys
 - Logica CMG
 - Atos Origin
 - Capita Business Services
 - Siemens Business Services and IT solutions
 - Microsoft UK

Turnover

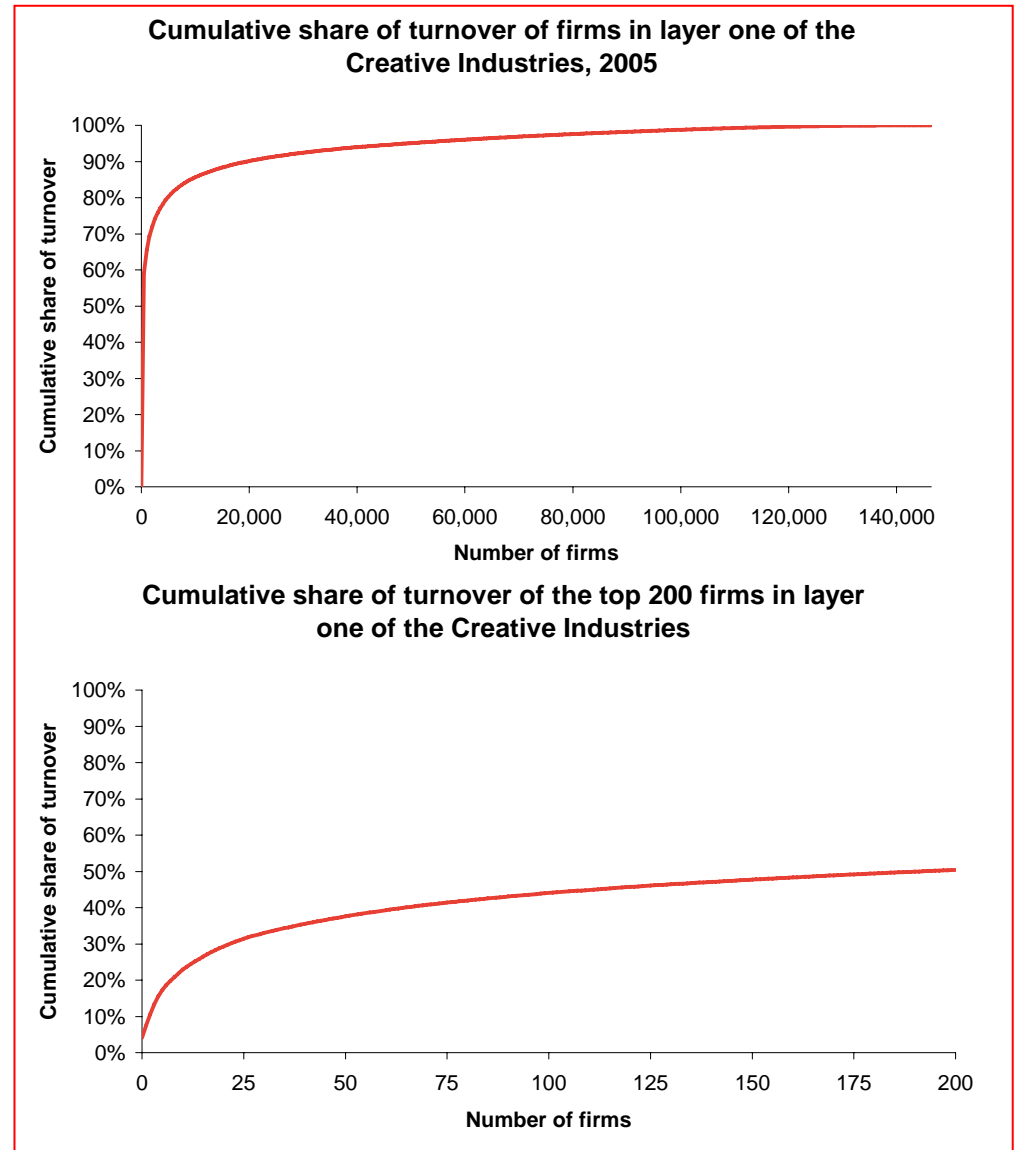


Employment



A relatively small number of firms account for a substantial proportion of Creative Industry turnover and employment

- There are over 140,000 firms in the Creative Industries. However, around 200 of these firms make up almost 50% of Creative Industry turnover.
- Many of the largest firms within the Creative Industries are household names including:
 - The BBC
 - The Royal National Theatre
 - Microsoft UK
 - Burberry
 - Aardman Animations – the creators of Wallace and Gromit
- The most concentrated of the Creative industries are:
 - Television and Radio – the largest four firms make up 64% of industry turnover;
 - Publishing – the largest four firms make up 58% of industry turnover; and
 - Design – the largest four firms make up 32% of industry turnover.



2.1 Industry summary

Summary of Advertising performance

- The Advertising industry is one of the largest Creative Industries:
 - It employed 72,000 or 10% of all Creative Industry employees in 2005
 - It had the third largest turnover out of the Creative Industries (£16bn or 16% of total Creative Industry turnover in 2005)
- In 2005, medium firms contributed 41% and 49% to total layer one employment and turnover, respectively.
- Foreign owned firms are relatively important, contributing 26% and 33% of employment and turnover, respectively.

Industry summary	
Turnover	Employment
£16 bn	72000
Type of firm accounting for largest proportion of:	
Turnover	Employment
Medium UK owned firms	Medium UK owned firms
% of industry turnover of largest:	
4 firms	8 firms
18%	28%
Largest firms	
Publicis, M&C Saatchi	

Summary of Architecture industry performance

- The Architecture industry is one of the smallest amongst the Creative Industries:
 - It employed 38,000 or 5% of all Creative Industry employees in 2005
 - It had the fourth smallest turnover out of the Creative Industries (£2.9bn or 3% of total Creative Industry turnover in 2005)
- In 2005, medium sized firms contributed 53% and 49% to total layer one employment and turnover, respectively.
- Foreign and large UK owned firms are relatively unimportant, collectively contributing 8% and 19% of employment and turnover, respectively.
-

Industry summary

Turnover	Employment
£2.9 bn	38,000

Type of firm accounting for largest proportion of:

Turnover	Employment
Medium UK owned firms	Medium UK owned firms

% of industry turnover of largest:

4 firms	8 firms
16%	20%

Largest firms

Aedas Architects, Chapman Taylor

Summary of Design performance

- The Design industry is one of the smallest Creative Industries:
 - It employed 19,000 or 3% of all Creative Industry employees in 2005
 - It had the fourth smallest turnover out of the Creative Industries (£2.9bn or 3% of total Creative Industry turnover in 2005)
- In 2005, foreign owned firms contributed 41% of total layer one employment and 58% of total layer one turnover.
- In terms of turnover, the Design industry is concentrated. In 2005, the top 2% of firms (60 firms) generated 80% of total industry turnover.

Industry summary

Turnover	Employment
£2.9bn	19,000

Type of firm accounting for largest proportion of:

Turnover	Employment
Foreign owned firms	Foreign owned firms

% of industry turnover of largest:

4 firms	8 firms
32%	47%

Largest firms

Nissan Design, Altair Engineering

Summary of Designer Fashion Industry performance

- The Designer Fashion industry is one of the smallest Creative Industries:
 - It employed 22,000 or 3% of all Creative Industry employees in 2005
 - It had the second smallest turnover out of the Creative Industries (£2.1bn or 3% of total Creative Industry turnover in 2005)
- In 2005, small firms contributed 68% and 58% to total layer one employment and turnover, respectively.
- Foreign and large UK owned firms are relatively unimportant, contributing 7% and 8% of employment and turnover, respectively.

Industry summary	
Turnover	Employment
£2.1bn	22,000
Type of firm accounting for largest proportion of:	
Turnover	Employment
Small UK owned firms	Small UK owned firms
% of industry turnover of largest:	
4 firms	8 firms
11%	14%
Example firms	
Burberry, Stella McCartney	

Summary of Film, Video and Photography performance

- The Film, Video and Photography industry is relatively large, when compared with other Creative Industries:
 - It employed 55,000 or 8% of all Creative Industry employees in 2005
 - It had the fourth largest turnover out of the Creative Industries (£7.3bn or 7% of total Creative Industry turnover in 2005)
- In 2005, small firms contributed 48% total layer one employment and turnover.
- Foreign and large UK owned firms are relatively unimportant, contributing 20% and 18% of employment and turnover, respectively.

Industry summary	
Turnover	Employment
£7.3bn	55,000
Type of firm accounting for largest proportion of:	
Turnover	Employment
Small UK owned firms	Small UK owned firms
% of industry turnover of largest:	
4 firms	8 firms
11%	15%
Example firms	
Aardman Animations, Working Title Films	

Summary of Music Industry performance

- The Music and the Performing Arts industry is one of the largest amongst the Creative Industries:
 - It employed 72,000 or 10% of all Creative Industry employees in 2005
 - It had the fifth largest turnover of all the Creative Industries (£5.7bn or 4% of total Creative Industry turnover in 2005)
- In 2005, small firms contributed 62% and 69% to total layer one employment and turnover, respectively.
- Foreign and large UK owned firms are relatively unimportant, contributing 13% and 7% of employment and turnover, respectively.

Industry summary

Turnover	Employment
£5.7bn	72,000

Type of firm accounting for largest proportion of:

Turnover	Employment
Small UK owned firms	Small UK owned firms

% of industry turnover of largest:

4 firms	8 firms
7%	10%

Example firms

The Really Useful Group, The Royal National Theatre

Summary of Publishing performance

- The Publishing industry is one of the smallest when compared with other Creative Industries:
 - It employed 12,000 or 2% of all Creative Industry employees in 2005
 - It had the fifth largest turnover of the Creative Industries (£5.7bn or 4% of total Creative Industry turnover in 2005)
- In 2005, foreign owned firms contributed 29% to total layer one employment. Foreign owned firms contributed 70% of total layer one turnover.

Industry summary

Turnover	Employment
£0.8bn	12,000

Type of firm accounting for largest proportion of:

Turnover	Employment
Foreign owned firms	Foreign owned firms

% of industry turnover of largest:

4 firms	8 firms
58%	71%

Example firms

The Press Association Group, Blackwell Publishing

Summary of our analysis of the Software industry

- The Software industry is the largest of the Creative Industries.
 - It employed 355,000 or 49% of total Creative Industry employment in 2005
 - Similarly, the turnover of the Software industry in 2005 was £40.9bn, which is equivalent to 41% of total Creative Industry turnover.
- Foreign owned firms make a significant contribution to Software industry employment and turnover. In 2005, foreign owned firms contributed 29% and 41% of total industry employment and turnover respectively.

Industry summary	
Turnover	Employment
£43.5bn	363,000
Type of firm accounting for largest proportion of:	
Turnover	Employment
Foreign owned firms	Foreign owned firms
% of industry turnover of largest:	
4 firms	8 firms
19%	27%
Example firms	
Cap Gemini, Computacenter, Electronic Data Systems, Dimension Data, Misys, Logica CMG, Atos Origin, Capita Business Services, Siemens Business Services and IT solutions, Microsoft UK	

Summary of Television and Radio performance

- The Television and Radio industry is the second largest of the Creative Industries:
 - It employed 76,000 in 2005 (10% of all Creative Industry employees)
 - It generated turnover of over £18bn or 18% of total Creative Industry turnover in 2005.
- Large firms (i.e., firms with 250 or more employees) are relatively important both in terms of their employment and their turnover contribution. In 2005, large firms contributed 67% and 76% to total layer one employment and turnover, respectively.

Industry summary	
Turnover	Employment
£17.6bn	75,800
Type of firm accounting for largest proportion of:	
Turnover	Employment
Large UK owned firms	Large UK owned firms
% of industry turnover of largest:	
4 firms	8 firms
64%	74%
Example firms	
The BBC, All3Media	

3.0 Defining the Creative Industries

Defining the Creative Industries (1)

- The starting point for any analysis must be to define what it is that we are analysing – in this case, the Creative Industries.
- The current approach to defining the Creative Industries is based on Standard Industrial Classification (SIC) code data defined at the 4-digit level (see overleaf for more detail on SIC codes). This data is quite aggregated and does not permit much in the way of detailed analysis to be carried out. For example, some Creative Industries such as Design, cannot be defined at all using 4-digit SIC code data.
- More dis-aggregated 5-digit data is now available which should allow a more in-depth analysis to be carried out. As a definition of the Creative Industries does not currently exist at this dis-aggregated level, we must start our analysis by developing a robust definition of the Creative Industries at the 5-digit level.
- It is important that this 5-digit definition is:
 - robust;
 - acknowledged as representative by all stakeholders; and
 - consistent with the current 4-digit definition.
- Another important consideration with this definition is its ability to define the Software and Computer Games industries in more detail. We have already identified the fact that, under the current definition, the Software and Computer Games industry is a key driver of industry performance, accounting for over one-third of total Creative Industry GVA. It is crucial therefore, that any alternative approach should enable us to understand more about this industry and potentially separate out the contribution of the Software industry from the Computer Games industry.
- The remainder of this section deals with these issues and is structured in the following way:
 - the current approach to defining the Creative Industries;
 - alternative approaches to defining the Creative Industries in light of improved data, with particular focus on the Software and Computer Games industry; and
 - the implications of these alternative approaches in terms of Creative Industry performance.

Defining the Creative Industries (2)

A note on the differences between market and industry definition

Our analysis is intended to provide a working definition of the Creative Industries for statistical purposes. It is important that this analysis is not confused with that of market definition or any other analysis from which inferences can be drawn on the degree of market competition or the dominance of firms in the market.

Our definition of the Creative Industries joins together firms which share the same SIC code and which produce similar products, in terms of their function. This is not the same as market definition analysis which comprises a much more fine-grained analysis of a given product market in terms of the demand for the product and its close substitutes.

There are a number of tests for market definition which would need to be employed before one could make any inferences regarding the degree of competition prevailing in the many markets which make up the Creative Industries.

A note on SIC code data

Data on UK firms and industries is often classified according to the Standard Industrial Classification system. This system allows firms to be classified according to their principal activities so that firms can be grouped into industries. There are many levels at which this can be done. Two-digit SIC codes define industries at the broadest level. For example, SIC code 74 covers all firms which carry out 'Other Business Activities'. Three, four and five-digit SIC codes define industries in more detail. For example the 3-digit code 74.2 refers to 'Architectural and engineering activities and related technical consultancy', whereas the 5-digit code, 74.20/1 is more specific, referring only to 'Architectural activities'.

In practice firms allocate themselves to a SIC code. This means that in some cases some firms may be mis-classified. This is a particular problem when the SIC code definitions change (or more are added), as firms may take time to adjust their definition.

3.1 The current approach to defining the Creative Industries

4-digit SIC code data is currently used to define the Creative Industries

- The current DCMS approach to defining the Creative Industries is based on 4-digit Standard Industrial Classification (SIC) code data.
- To define each industry, DCMS has selected where possible, one or more 4-digit SIC codes that correspond closely to the activities of that industry. In some cases, the 4-digit code includes activities which lie outside of the Creative Industry definition. Where this is the case, only a percentage of the 4-digit code is taken as being part of that Creative Industry.
- The Creative Industry SIC codes and any percentages which are applied to the codes are shown overleaf.

The current approach defines seven of the 13 Creative Industries separately

- The current approach clearly defines some industries such as advertising and radio and television. In these cases a 4-digit code can be used to represent the Creative Industry without the need to apply a percentage to the code.
- In contrast, some industries are much harder to define. In these cases small percentages of the 4-digit SIC code are taken to represent that part of the code which refers to the Creative Industries. For example, for Designer Fashion 0.5% of nine clothing manufacturing codes are taken to represent the industry.
- The current approach also does not allow some industries to be defined separately. This is a particular problem for the software and computer games industries who collectively account for over one-third of total Creative Industry GVA.
- In some cases, a Creative Industry cannot be defined at all. This is the case for the Crafts and the Design industries.

Creative Industry	SIC code	Proportion of code included
Advertising	Advertising (74.40)	100%
Architecture	Architecture and engineering activities and related technical consultancy (74.20)	25%
Art & Antiques	Other retail sale in specialised stores (52.48); Retail sale of second-hand goods in stores (52.50)	5%
Crafts	None	None
Design	None	None
Designer fashion	Clothing manufacture (9 codes)	0.5%
Video, film and photography	Reproduction of video recording (22.32); Photographic activities (74.81); Motion picture and video production, distribution and projection (92.11 to 92.13).	25%
Music and the visual and performing arts	Publishing of sound recordings (22.14); Reproduction of sound recording (22.31); Artistic and literary creation and interpretation (92.31); Operation of arts facilities (92.32); Other entertainment (92.34).	25% - 50%
Publishing	Publishing of books, newspapers, journals & periodicals (22.12 & 22.13); other publishing (22.15); news agency activities (92.40)	0% - 50%
Software and computer games	Reproduction of computer media (22.33)	25%
Radio and TV	Radio and television activities (92.20)	100%

3.2 A framework for defining the Creative Industries

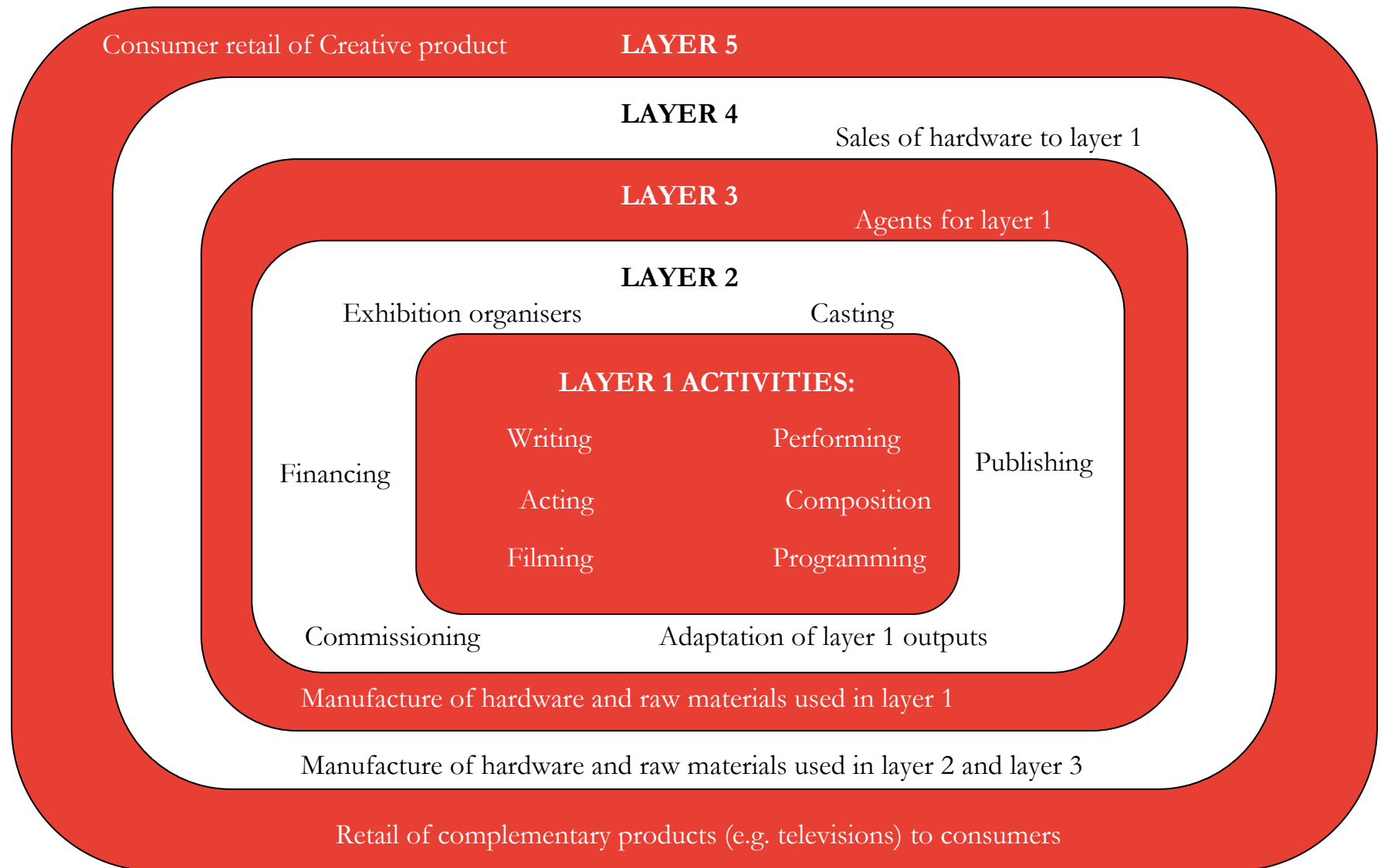
Our approach to defining the Creative Industries is based on 5-digit SIC code data

- To understand Creative Industry performance we need to be able to analyse the Creative Industries at a greater level of detail than the existing data allows us to do. As a result, DCMS has obtained firm level data at the 5-digit SIC code level. The first stage in our analysis is to see whether we can identify an appropriate definition of the Creative Industries.
- Two key issues must be addressed when exploring how to define the Creative Industries:
 - whether a greater level of detail allows some industries to be defined more accurately and, where no definition currently exists, whether this data enables a definition to be constructed; and
 - where to draw the line when defining each industry (for example, for the television industry, do we include only activities such as acting, and programme production, or do we extend our definition to include activities such as the manufacture of televisions?).
- To address these issues we have started by analysing each Creative Industry's supply chain. This sets out, for each industry, all of its activities (as defined at the 5-digit SIC code level). In addition, it classifies these activities in terms of their position within the industry supply chain.

A supply chain framework is used to define each Creative Industry

- Our first step in defining the Creative Industries has been to establish a generic supply chain framework. This framework describes each industry in terms of a series of five layers. Each one of these layers corresponds to a distinct stage in an industry's supply chain:
 - *Layer one* broadly represents those activities which lie at the top of each supply chain. These include activities such as composition for the Music industry, programming for the Computer Games industry and writing for the Publishing industry. Layer one arguably describes the creative element of each Creative Industry. We have therefore adopted layer one as our key definition of the Creative Industries.
 - *Layer two* of any Creative Industry broadly represents those activities which directly support layer one activities in the supply chain. In many cases these are the activities which translate the creative activity into a marketable product. This includes activities such as publishing for the Publishing industry, casting for the Performing Arts and computer related work for the Software and Computer Games industries.
 - *Layer three* of a Creative Industry is one stage further removed from layer one and includes those activities which support layer one and layer two activities described above. In many cases this includes the manufacture of the hardware which directly supports the creative process – for example, the manufacture of television cameras and other hardware directly used in creating television programmes. In addition it includes the next stage in the production process from layer two activities - for example, this would include book binding for the Publishing industry and the reproduction of software for the Software and Computer Games industry.
 - *Layer four* of a Creative Industry represents those activities which support the layers described above. In general this includes the manufacture and wholesale of raw materials such as printing ink and pulp for the publishing industry and also the manufacture of hardware that is used in the consumption of Creative Industry products such as televisions for the television industry and arcade machines for the Computer Games industry.
 - *Layer five* represents the least Creative activities of any Creative Industry. In many cases layer five activities include the retail to the final consumer such as the sale of DVD players for the music industry, and games consoles for the Computer Games industry.

A generic supply chain for the creative industries



We have defined each Creative Industry in terms of its layer one activities

- One of the key issues for defining the Creative Industries is where to draw the line in terms of the activities that are included in any definition. Our supply chain framework has helped us to analyse this by ordering the activities of each Creative Industry in terms of its supply chain.
- This approach has revealed a distinct set of layer one activities. These appear to represent the creative processes which drive each Creative Industry. We have therefore adopted layer one as our working definition for each Creative Industry.
- Annexe 1 sets out, for each Creative Industry, the activities included in each layer.

Example 1 – Defining the Design Industry

- The Design industry is not defined in the current DCMS Creative Industry analysis. This is because 4-digit SIC code data is not sufficiently detailed.
- The availability of more detailed 5-digit data has allowed us to create a definition of the Design industry.
- Our definition of layer one is ‘engineering design for industry’. These activities are captured under the 5-digit code 74.20/5.
- Although this definition represents an improvement to the definition of the design industry (in that design activities can now be measured), there are still a number of issues with this which means there is scope for further improvement.
- The key issue with the definition is the fact that engineering design for industry represents only a subset of all design activities. Other creative design activities such as interior and graphic design are not included in our definition. Instead these are captured under our definition of Designer Fashion, as these activities are covered by the same SIC code.
- In terms of the firms that fall under our definition of the Design industry, these include the Mott MacDonald Group and Jacobs Engineering.

Creative Industry	5-digit SIC code description	Current 4-digit definition	Top 5 firms*
Design			
Layer one	Engineering design for industry (74.20/5)	None	Mott MacDonald Group Ltd.; Jacobs Engineering UK Ltd; Halcrow Holdings Ltd.; Mouchel Parkman Services Ltd.; Bechtel Ltd.

** These estimates are based on UK turnover in 2005. Our 5-digit SIC code database does not contain firm names. We have therefore had to use a 4-digit SIC code database to compile the list of top 5 firms plus further research on the firms' characteristics*

Example 2 – Defining the Software and Computer Games industry

- The Software and Computer Games industries are currently defined jointly as one industry. Three 4-digit SIC codes are currently used to do this:
 - development of ready made software (72.21);
 - development of made to order software, software consultancy and web-page design (72.22); and
 - reproduction of software (22.33).
- The availability of more detailed 5-digit data has allowed us to create a finer-grained definition of Software and Computer Games.
- The 5-digit definition of layer one of Software and Computer Games includes:
 - the first two of the 4-digit codes listed above; and
 - an additional five digit code – ‘manufacture of other games and toys not elsewhere classified’ (36.50/9).
- The revised definition excludes the 4-digit code, ‘reproduction of software’, as this is classified as a Layer 3 activity in our supply-chain framework.
- Although this definition represents an improvement to the definition of the Software and Computer Games industry, there are still a number of issues with this, namely that it has not been possible to separate Software from the Computer Games industry using 5-digit data.
- Key firms in the Software and Computer Games sector include CompuCenter PLC and Cap Gemini UK PLC.

Creative Industry	5-digit SIC code description	Current 4-digit definition	Top 5 firms*
Software and Computer Games			
Layer one	Manufacture of other games and toys (36.50/9); Development and supply of ready made software (72.21); Development of made to order software, Software consultancy and web page design (72.22)	Development and supply of ready made software (72.21); Development of made to order software, Software consultancy and web page design (72.22); Reproduction of software (22.33).	CompuCenter Plc.; Electronic Data Systems Ltd.; Dimension Data Holdings Plc.; Cap Gemini UK Plc.; Misys Plc.

** These estimates are based on UK turnover in 2005. Our 5-digit SIC code database does not contain firm names. We have therefore had to use a 4-digit SIC code database to compile the list of top 5 firms plus further research on the firms' characteristics*

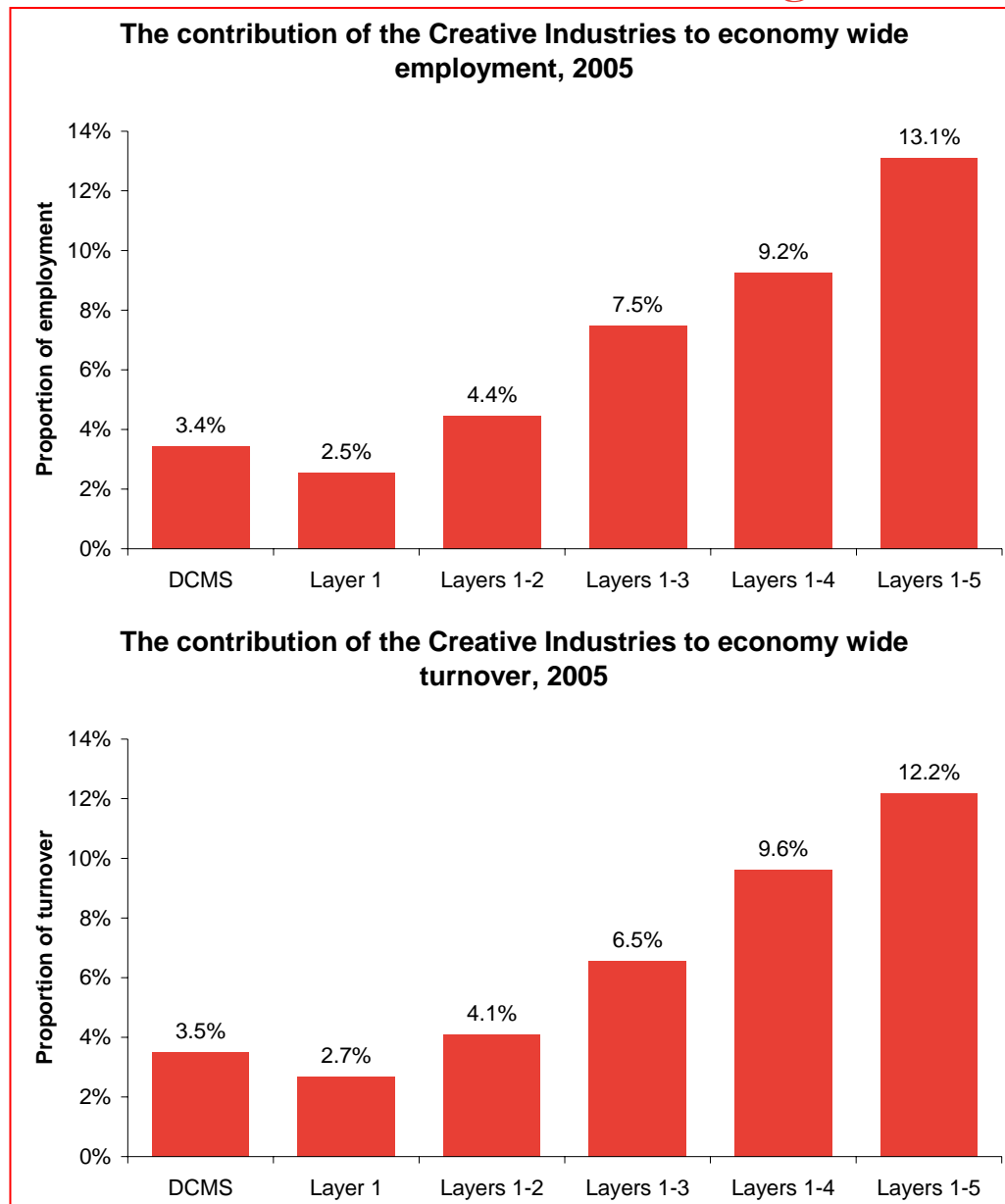
We have defined a set of layers for all of the Creative Industries

- Our framework allows each industry to be described in terms of a series of five layers. Layer one can be described as the creative element of an industry. We have adopted this as our definition of the Creative Industries.
- Our analysis of the 5-digit SIC code data suggests that using this data:
 - most of the Creative Industries can be defined more accurately, without the need for applying proportions to the data;
 - in some cases we have been able to define layer one for an individual industry - this is the case for Architecture, Advertising, Design, Designer Fashion, Publishing and TV & Radio.
 - in other cases it has been necessary to combine layer one of two Creative Industries - this is the case for: Film, Video and Photography; Music and the Performing Arts; Art, Antiques and Crafts; and Software and Computer Games.
- We have presented a number of examples of how we have applied this framework to define layer one of some Creative Industries. A more detailed and complete summary describing all of the outer layers and the relevant SIC codes for each Creative Industry is contained in Annexe 1.
- There are a number of important issues with the database that we are using to construct these definitions. These are discussed in the Annexe.
- We now discuss the implications of adopting these definitions of the Creative Industries.

3.3 Implications of defining the Creative Industries using 5-digit data

The revised Creative Industries definition is narrower than the existing one

- The previous section defined each Creative Industry in terms of its layer one activities using 5-digit SIC code definitions.
- It is important that we sense check this definition against the current definition of the Creative Industries. We do this below for employment and for turnover*.
- Under the new 5-digit definition we estimate that the Creative Industries employed 728,000 and had a turnover of £99bn in 2005. The estimates are lower than those under the existing definition of 982,000 employees and £129bn.
- The charts on the right compare Creative Industry employment and turnover under the current definition (DCMS) with the alternative definition of the layer one and then layer one and the outer layers.
- The analysis shows that the new definition is narrower than the existing definition. For example, under the existing definition the Creative Industries account for 3.4% of UK employment and 3.5% of UK turnover. Under the new definition (layer one), the contribution falls to 2.5% and 2.7% respectively.

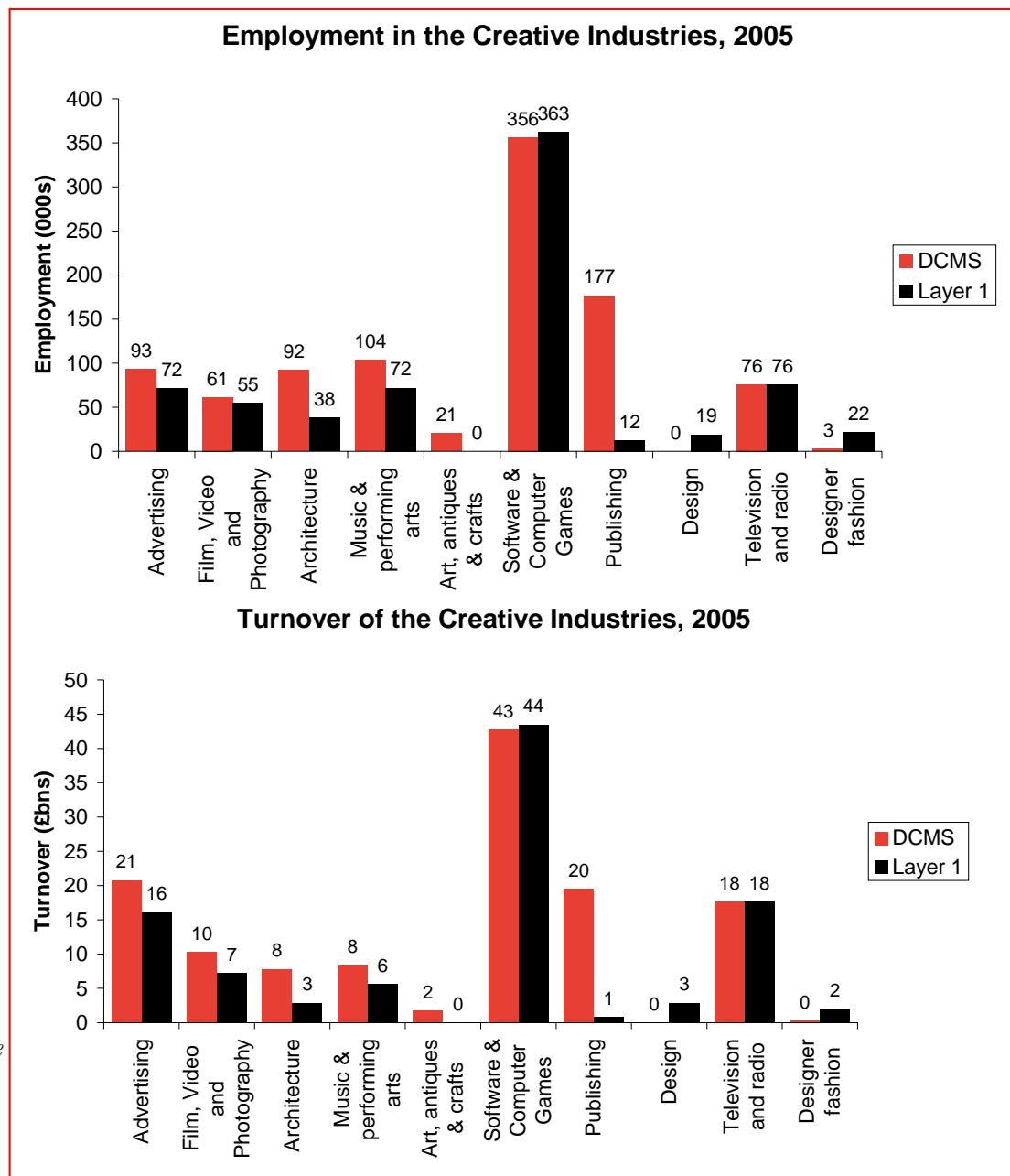


* We use turnover statistics in the place of GVA because GVA data was not available at the 5-digit level

The new definition has a significant impact on some of the Creative Industries

- The charts on the right compare employment and turnover for each of the Creative Industries under both the new definition (“layer one”) and the current definition (“DCMS”).
- For Software and Computer Games, and Television and Radio, the two definitions give similar results for both employment and turnover levels.
- For Designer Fashion, the revised definition leads to levels of creative industry employment and turnover that are roughly 7 times higher than under the current definition, while for Design it was previously not possible to estimate employment and turnover. *
- For Publishing, the revised definition suggests a smaller creative industry than would be seen using the current definition. Turnover and Employment are approximately 5% of the levels seen under the current definition.
- For the remaining industries, turnover and employment under the revised definition is between 40% and 90% of the level suggested by the current definition.

* Note: Estimates in the DCMS Creative Industries Statistical Bulletin use the Design Industry Valuation Survey, the results of which are not reported here.



4.0 Industry focus

Overview

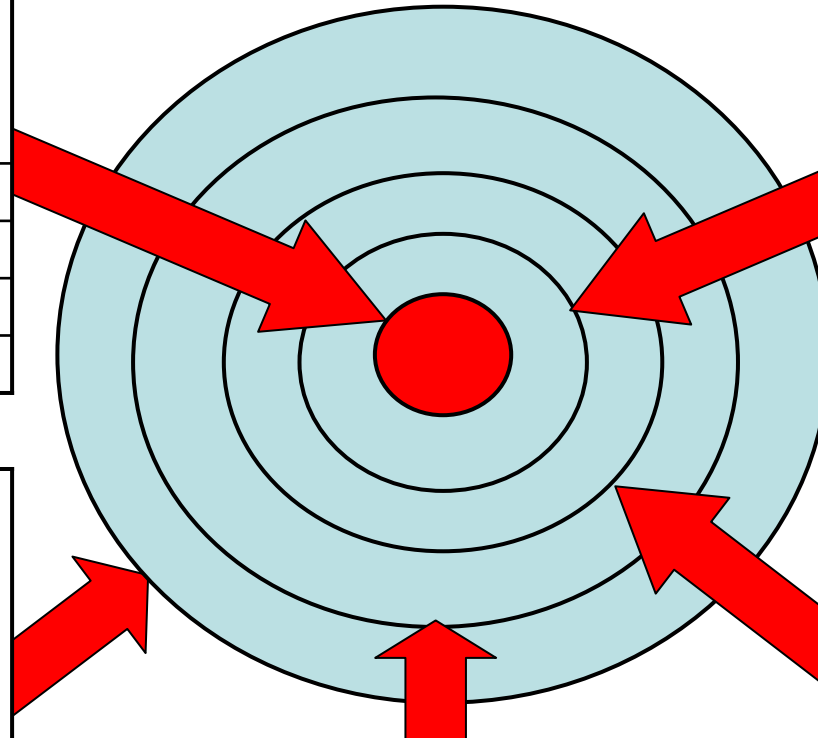
- This section examines the characteristics of each Creative Industry and its performance.
- For each industry we:
 - describe its supply chain in terms of the size of each of the layers as well as the types of firms which operate within them;
 - examine overall industry concentration;
 - describe the characteristics of key firms in layer one of each industry; and
 - examine the relative importance of small, medium and large (UK) firms and foreign owned firms.

4.1 The Advertising industry

The Advertising supply chain

LAYER ONE	
Planning and creating advertising campaigns e.g. WPP, M&C Saatchi and Publicis	
No. Firms	Employment
9,200	72,000
Turnover	
£16.2bn	

LAYER FIVE	
Leasing advertising space or time, including handing out free samples e.g. Street Broadcast (lamppost advertising space specialist)	
No. Firms	Employment
4,800	21,000
Turnover	
£4.6bn	



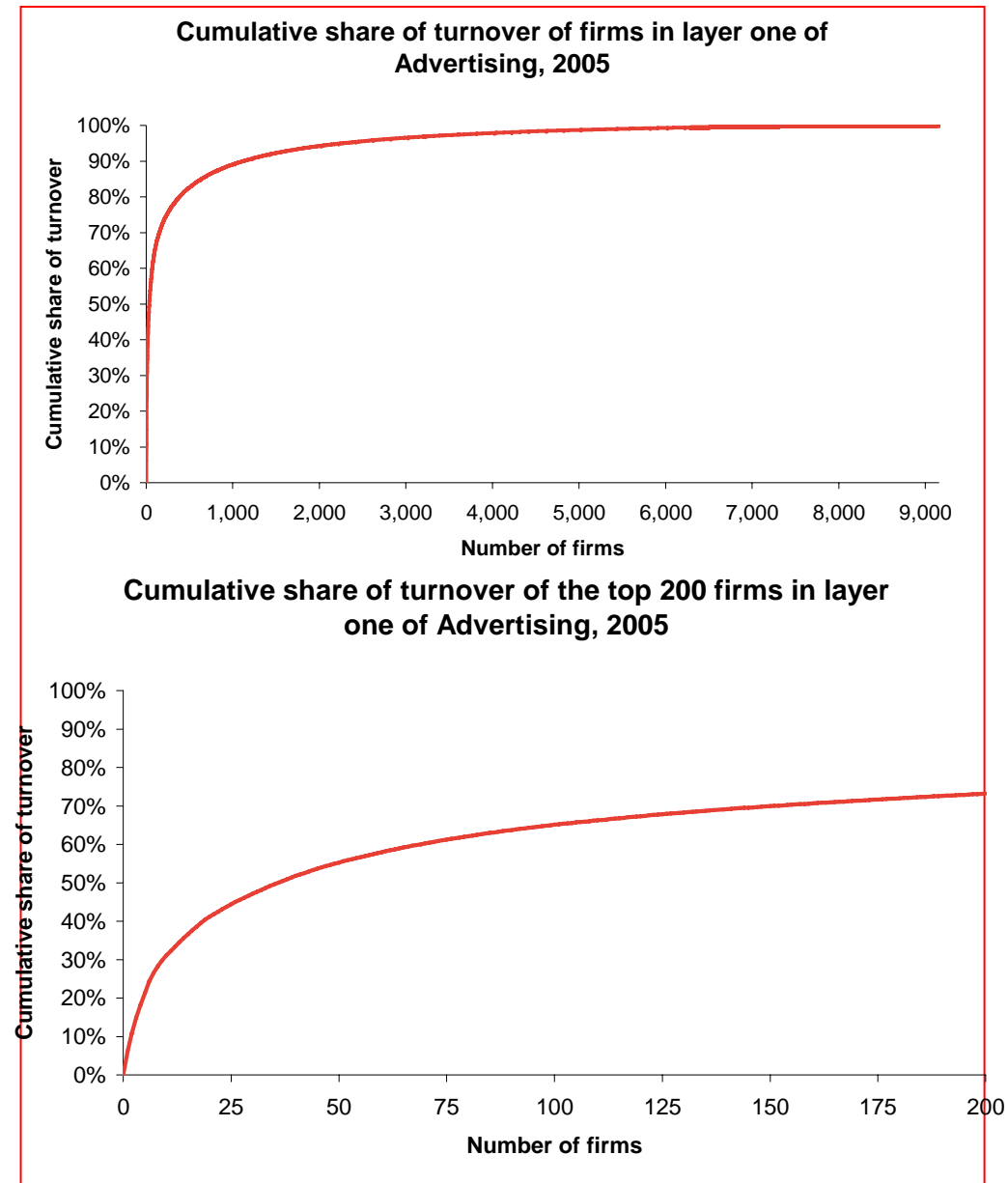
LAYER TWO – not identified

LAYER THREE – not identified

LAYER FOUR – not identified

The largest 400 firms account for 80% of industry turnover

- To examine further the importance of the largest firms in layer one of the Advertising industry we have also examined the concentration of the Advertising industry in terms of the turnover contribution of firms.
- The graph on the right illustrates the cumulative share of turnover of all 9,000 firms in layer one of the Advertising industry.
- This analysis shows that the industry is relatively concentrated. For example the largest 4% of firms (around 400 firms) account for 80% of total industry layer one turnover.
- The graph below zooms in on the top graph to show the contribution of the top 200 firms in layer one of the Advertising Industry.
- This shows that the top 50 firms in the layer one of the industry generate 55% of total turnover.
- It can also be shown that the top 4 firms in the Advertising industry generate 18% and the top 8, 28% of total layer one turnover (see Annexe 3 for a comparison of these C4 and C8 ratios between industries).
- We examine the characteristics of the largest firms in layer one of the industry in more detail over the page.



Examples of large UK based firms in layer one of Advertising

Publicis

- Publicis UK is part of Publicis Groupe, a French firm which also owns Saatchi and Saatchi.
- Publicis UK is the fourth largest Advertising Agency in the UK. It employs around 300 people who are based in mainly in London and Edinburgh.
- The UK firm has several major UK accounts such as the British Army and United Biscuits. In addition it can bid for work for large global accounts such as L'Oreal and Renault.
- Its key activities include creating adverts for television, magazines, billboards as well as customer magazines (e.g., for Asda), direct mail material and website design.
- *Source: Publicis website and interview with Publicis UK.*

M&C Saatchi

- M&C Saatchi launched in 1995 and has grown rapidly. It has always had offices in London, Sydney, New York, Hong Kong and Singapore.
- Its global operation employs approximately 800 people. The UK accounts for over 80% of its turnover.
- Recent examples of its work include adverts for ITV's 2007 broadcast of The Boat Race. It also accounts for the majority of TFL's £15 million advertising budget.
- *Source: M&C Saatchi website & Annual Report 2005*

Performance of layer one

The employment contribution of the Advertising industry

- Layer one of the Advertising industry employed 72,000 people in 2005. This is equivalent to:
 - 77% of the entire Advertising industry; and
 - 10% of total Creative Industry layer one employment
- This employment contribution ranks the Advertising industry as the joint second largest Creative Industry in terms of layer one employment (along with TV & Radio and the Music and Performing Arts industry).
- The performance of the industry was also strong relative to the wider economy. High-tech industries such as the Pharmaceutical and Biotech industries employed 44,000 employees and 22,000 employees respectively*.

** These statistics refer to the entire industry – we have not defined a set of layers for the Pharmaceutical and Biotech industries. Pharmaceutical estimates are from the IDBR database; Biotech industry estimates are from the DTI (DTI (2005) Comparative Statistics for the UK, European and US Biotechnology Sectors: Analysis Year 2003, Report prepared by Critical I Limited for the Department of Trade and Industry (London: DTI).*

Turnover performance of the Advertising industry

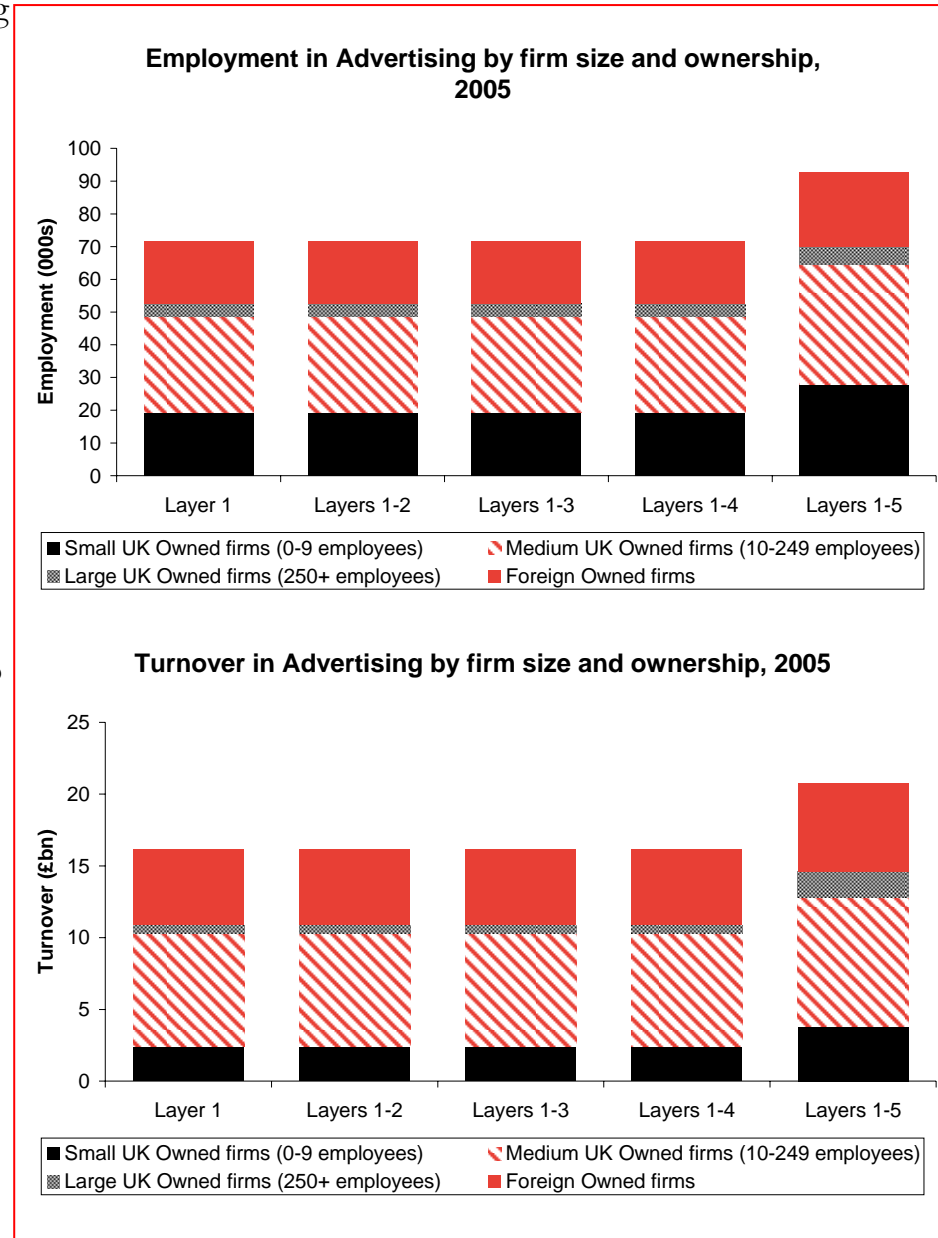
- Layer one of the Advertising industry had a turnover of £16bn in 2005. This is equivalent to:
 - 78% of the entire Advertising industry; and
 - 16% of total Creative Industry layer one turnover.
- This turnover performance ranks the Advertising industry as the joint third largest Creative Industry in terms of layer one turnover (behind Software and the Television & Radio and with the Music and Performing Arts industries).
- Turnover performance of the Advertising industry is strong relative to other comparable industries in the wider economy. High R&D industries such as the Pharmaceutical and Biotech industries had a turnover of £10bn and £3.6bn respectively*.

** These statistics refer to the entire industry – we have not defined a set of layers for the Pharmaceutical and Biotech industries. Pharmaceutical estimates are from the IDBR database; Biotech industry estimates are from the DTI (DTI (2005) Comparative Statistics for the UK, European and US Biotechnology Sectors: Analysis Year 2003, Report prepared by Critical I Limited for the Department of Trade and Industry (London: DTI).*

The importance of large and foreign owned firms

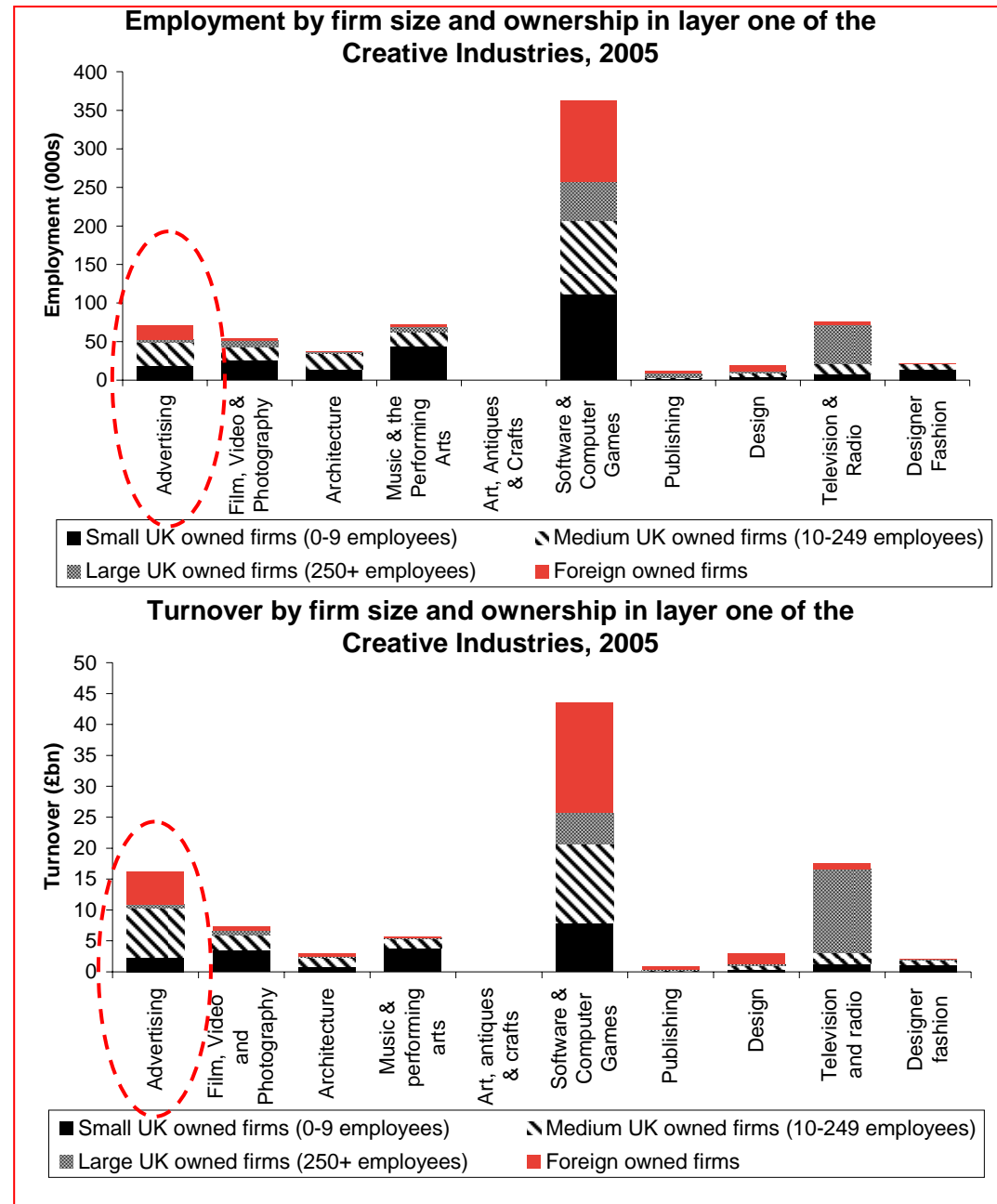
Medium firms make a significant contribution, especially in layer one

- This sub-section explores whether particular types of firms are making a relatively important contribution to the Advertising Industry.
- In particular we examine the relative contributions of the following firm types to industry employment and turnover in 2005:
 - Small UK owned firms – 0-9 employees;
 - Medium UK owned firms – 10-249 employees;
 - Large UK owned firms – 250+ employees; and
 - Foreign owned firms.
- Both graphs show that medium sized firms (represented by the red dashed shaded area of each bar) are relatively important in terms of employment. In 2005, medium sized firms contributed 41% of total layer one employment and 49% of total layer one turnover.
- Foreign owned firms also appear to make a significant contribution to layer one of the industry – representing 26% and 33% of industry employment and turnover, respectively.



Medium sized firms make a larger contribution than in other Creative Industries

- The graphs on the right compare the importance of different firm types in layer one of the Advertising industry, relative to layer one of the other Creative Industries.
- The top graph compares the layer one employment contribution of different firm types in 2005. This shows that relative to other Creative Industries, medium firms make a large employment contribution. For example, 41% of Advertising employment was provided by medium firms and 25% and 16% of Music and Performing Arts and Television and Radio employment was provided by medium firms.
- The bottom graph compares the layer one turnover contribution of different firm types in 2005. This shows that relative to other Creative Industries, medium firms also make a large turnover contribution. For example 49% of Advertising turnover was provided by medium firms, 24% and 11% of Music and Performing Arts and Television and Radio turnover was provided by medium firms.

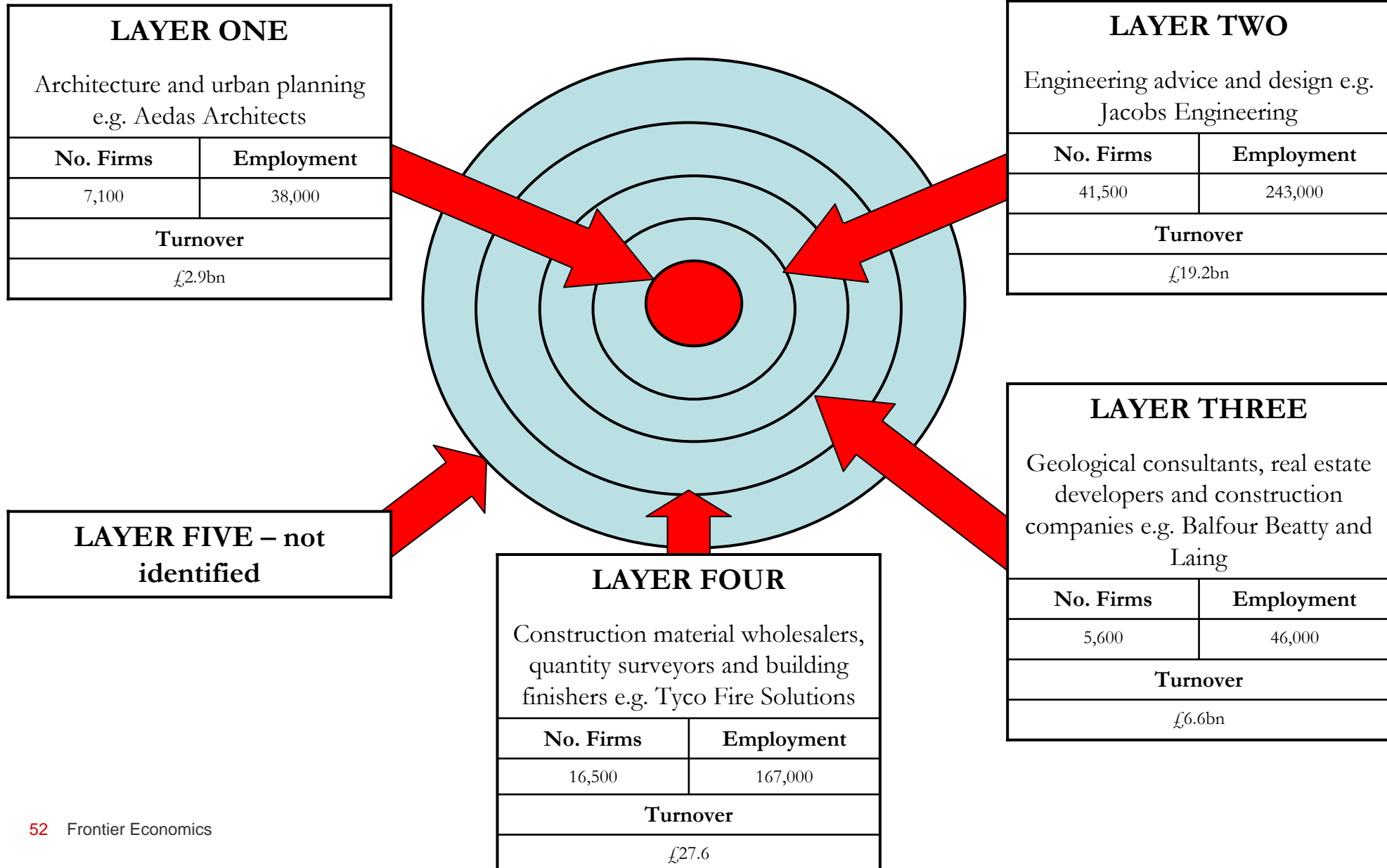


Summary of Advertising performance

- Layer one of the Advertising industry is one of the largest amongst the Creative Industries:
 - in terms of layer one employment it is the joint second largest industry, employing 72,000 or 10% of all Creative Industry employees in 2005; and
 - in terms of layer one turnover it is the third largest industry, turning over £16bn or 16% of total Creative Industry turnover in 2005.
- Our analysis of firms types suggests that medium firms (i.e., firms with 10-249 employees) are relatively important both in terms of their employment and their turnover contribution. In 2005, medium firms contributed 41% and 49% to total layer one employment and turnover, respectively. Foreign owned firms are relatively important, contributing 26% and 33% of employment and turnover, respectively.
- The Advertising industry is highly concentrated. In 2005, the top 10% of firms generated nearly 90% of total industry turnover.

4.2 Architecture

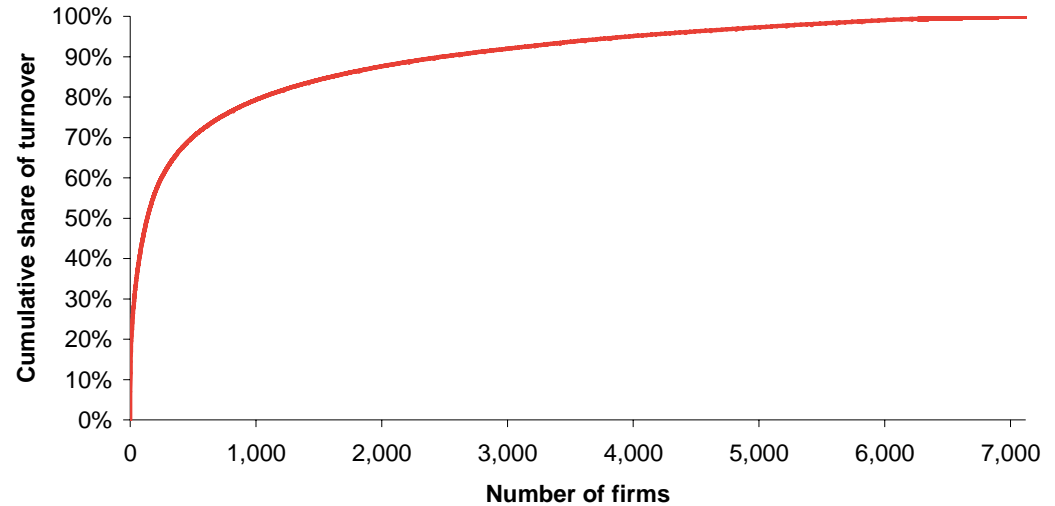
The Architecture supply chain



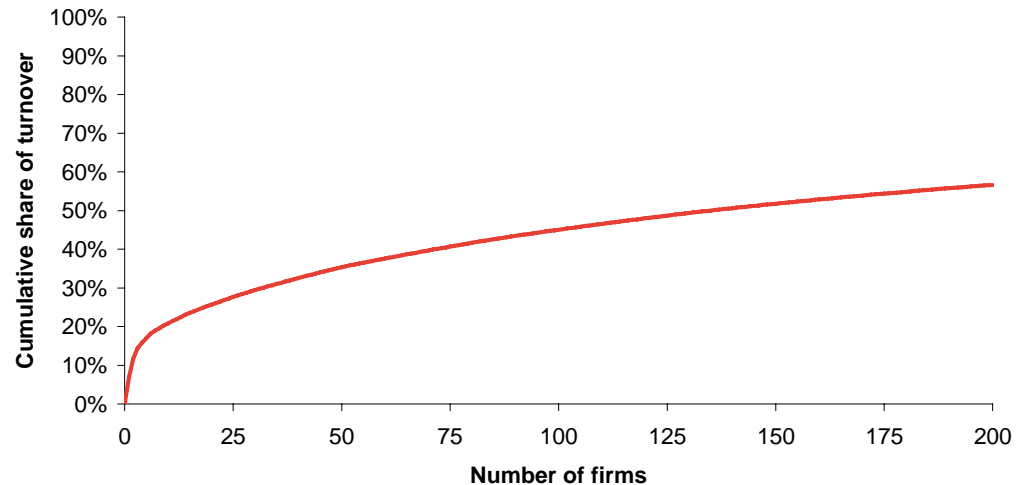
The largest 1,000 firms account for 80% of layer one turnover

- To examine further the importance of the largest firms in layer one of the Architecture industry we have also examined the concentration of the Architecture industry in terms of the turnover contribution of firms.
- The graph on the right illustrates the cumulative market share of all 7,100 firms in layer one of the Architecture industry.
- This analysis shows that the industry is relatively unconcentrated. For example the largest 15% of firms (around 1,000 firms) account for 80% of total industry turnover.
- The graph below zooms in on the top graph to show the contribution of the top 200 firms in layer one of the Architecture Industry.
- This shows that the top 50 firms in layer one of the industry generate 25% of total turnover.
- It can also be shown that the top 4 firms generate 16% and the top 8, 20% of total layer one turnover (see Annexe 3 for a comparison of these C4 and C8 ratios between industries).
- We examine the characteristics of the largest firms in layer one of the industry in more detail over the page.

Cumulative share of turnover of firms in layer one of Architecture, 2005



Cumulative share of turnover of the top 200 firms in layer one of Architecture, 2005



Examples of large UK based firms in layer one of Architecture

Aedas Architects

- Currently the sixth largest architectural practice in the world. It has 11 offices in the UK, employing over 600 people. It also has a substantial presence in Asia, with six offices employing nearly as many people, and smaller presences in other locations.
- It works across a large range of sectors, from business parks to student residences.
- Recently it worked on designing Bridgewater Place in Leeds, a 30 storey block of offices and apartments. It also developed designs for a sports pavilion in London's Regent's Park, completed architectural work for several Academies (e.g. Sheffield Park) and designed a number of hospitals (e.g. Withington Community Hospital, Manchester).
- *Source: Aedas Architects website and Annual Review May 2006*

Chapman Taylor

- Chapman Taylor has offices in London, Manchester and Across Europe. The UK offices employ more than 170 people.
- It works across a wide range of sectors including urban regeneration, residential, transportation and healthcare.
- It is currently a member of the consortium that is the preferred bidder for the PFI contract to extend Salisbury hospital and is planning the integration of shops and cafes into the refurbished London St Pancras station.
- *Source: Chapman Taylor website*

Performance of layer one

The employment contribution of the Architecture industry

- Layer one of the Architecture industry employed 38,000 employees in 2005. This is equivalent to:
 - 8% of the entire Architecture industry; and
 - 5% of total Creative Industry layer one employment.
- This employment contribution ranks the Architecture industry as the sixth largest Creative Industry in terms of layer one employment (ahead of Art, Antiques and Crafts, Publishing, Design and Designer Fashion).
- The performance of layer one of the industry has been comparable with high tech industries in the wider economy. The Pharmaceutical and Biotech industries employed 44,000 employees and 22,000 employees respectively*.

** These statistics refer to the entire industry – we have not defined a set of layers for the Pharmaceutical and Biotech industries. Pharmaceutical estimates are from the IDBR database for 2005; Biotech industry estimates are from the DTI (DTI (2005) Comparative Statistics for the UK, European and US Biotechnology Sectors: Analysis Year 2003, Report prepared by Critical I Limited for the Department of Trade and Industry (London: DTI).*

Turnover performance of the Architecture industry

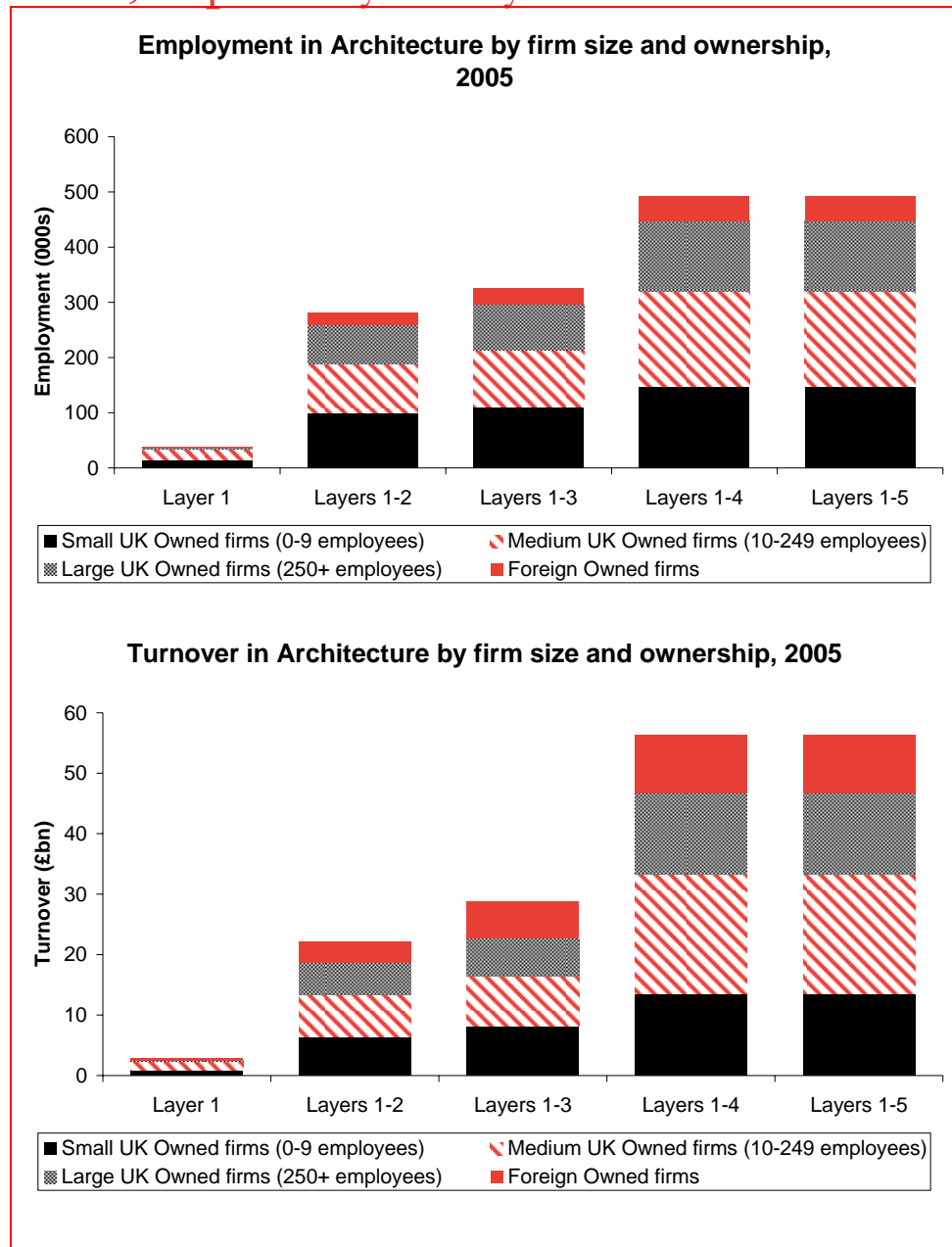
- Layer one of the Architecture industry had a turnover of £2.9bn in 2005. This is equivalent to:
 - 5% of the entire Architecture industry; and
 - 3% of total Creative Industry turnover.
- This turnover performance ranks the Architecture industry as the joint fourth smallest Creative Industry in terms of layer one turnover (ahead of Art, Antiques and Crafts, Publishing, Designer Fashion and with Design).
- The turnover of layer one of the Architecture industry is lower than high tech industries such as the pharmaceutical and bio-tech industries. The Pharmaceutical and Biotech industries had a turnover of £10bn and £3.6bn respectively*.

** These statistics refer to the entire industry – we have not defined a set of layers for the Pharmaceutical and Biotech industries. Pharmaceutical estimates are from the IDBR database for 2005; Biotech industry estimates are from the DTI (DTI (2005) Comparative Statistics for the UK, European and US Biotechnology Sectors: Analysis Year 2003, Report prepared by Critical I Limited for the Department of Trade and Industry (London: DTI).*

The importance of large and foreign owned firms

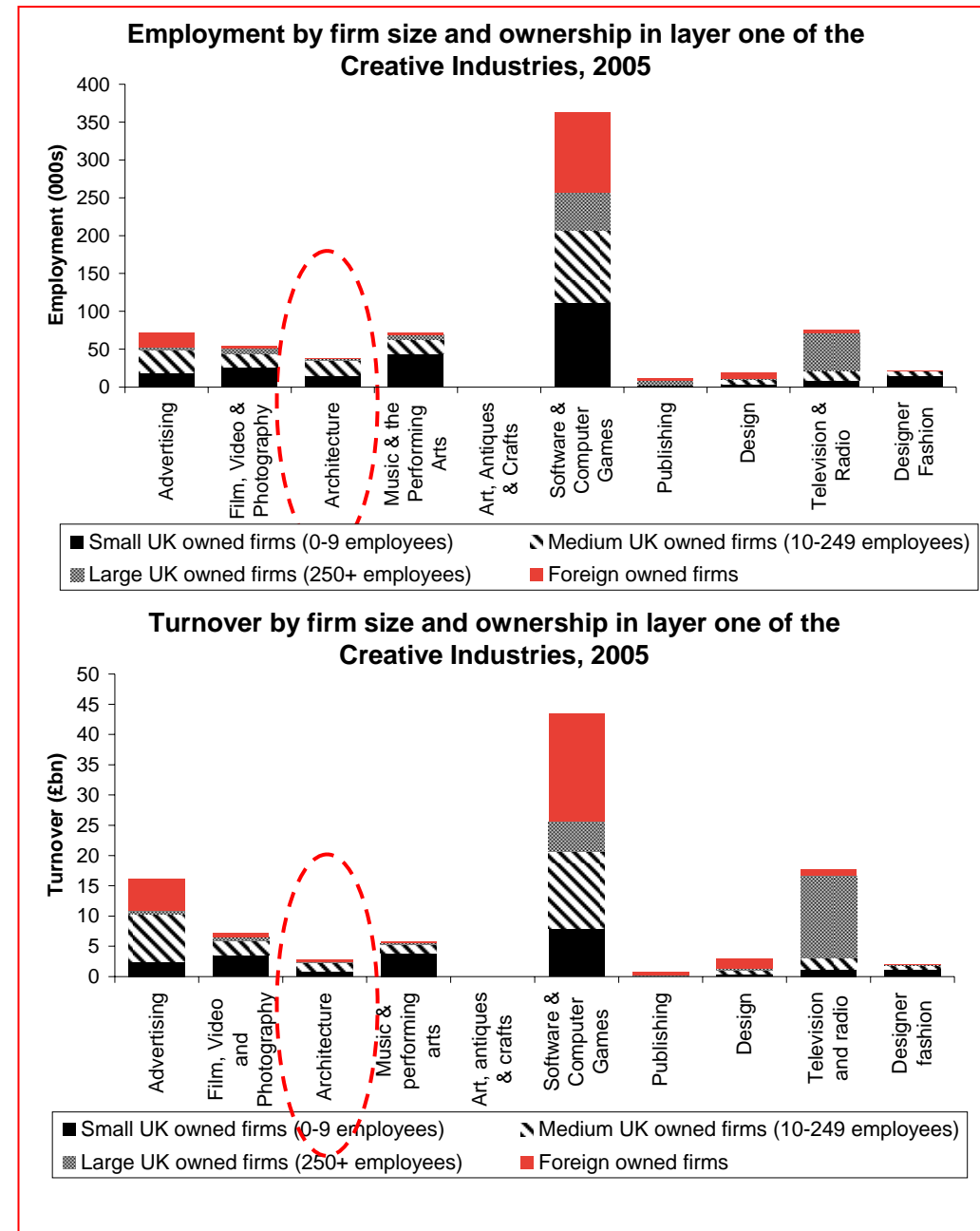
Small firms make a significant contribution, especially in layer one

- This sub-section explores whether particular types of firms are making a relatively important contribution to the Architecture Industry.
- In particular we examine the relative contributions of the following firm types to industry employment and turnover in 2005:
 - Small UK owned firms – 0-9 employees;
 - Medium UK owned firms – 10-249 employees;
 - Large UK owned firms – 250+ employees; and
 - Foreign owned firms.
- Both graphs show that medium sized firms (represented by the red striped area of each bar) are relatively important both in terms of their employment and their turnover contribution. For example, medium sized firms contributed 53% and 49% to total layer one employment and turnover, respectively.
- In contrast, large and foreign owned firms appear to make a relatively small contribution to layer one of the industry – representing 8% and 19% of industry employment and turnover, respectively.



Medium sized firms make a larger contribution than in other Creative Industries

- The graphs on the right compare the importance of different firm types in layer one of the Architecture industry, relative to layer one of the other Creative Industries.
- The top graph compares the layer one employment contribution of different firm types in 2005. This shows that relative to other Creative Industries, medium sized firms make a large employment contribution. For example, 53% of Architecture employment was provided by medium firms. 11% and 41% of Publishing and Advertising employment was provided by medium firms.
- The bottom graph compares the layer one turnover contribution of different firm types in 2005. This shows that relative to other Creative Industries, medium firms also make a large turnover contribution. For example, 49% of Architecture turnover was provided by medium firms. 49% and 35% of Advertising and Film, Video & Photography turnover was provided by medium sized firms.

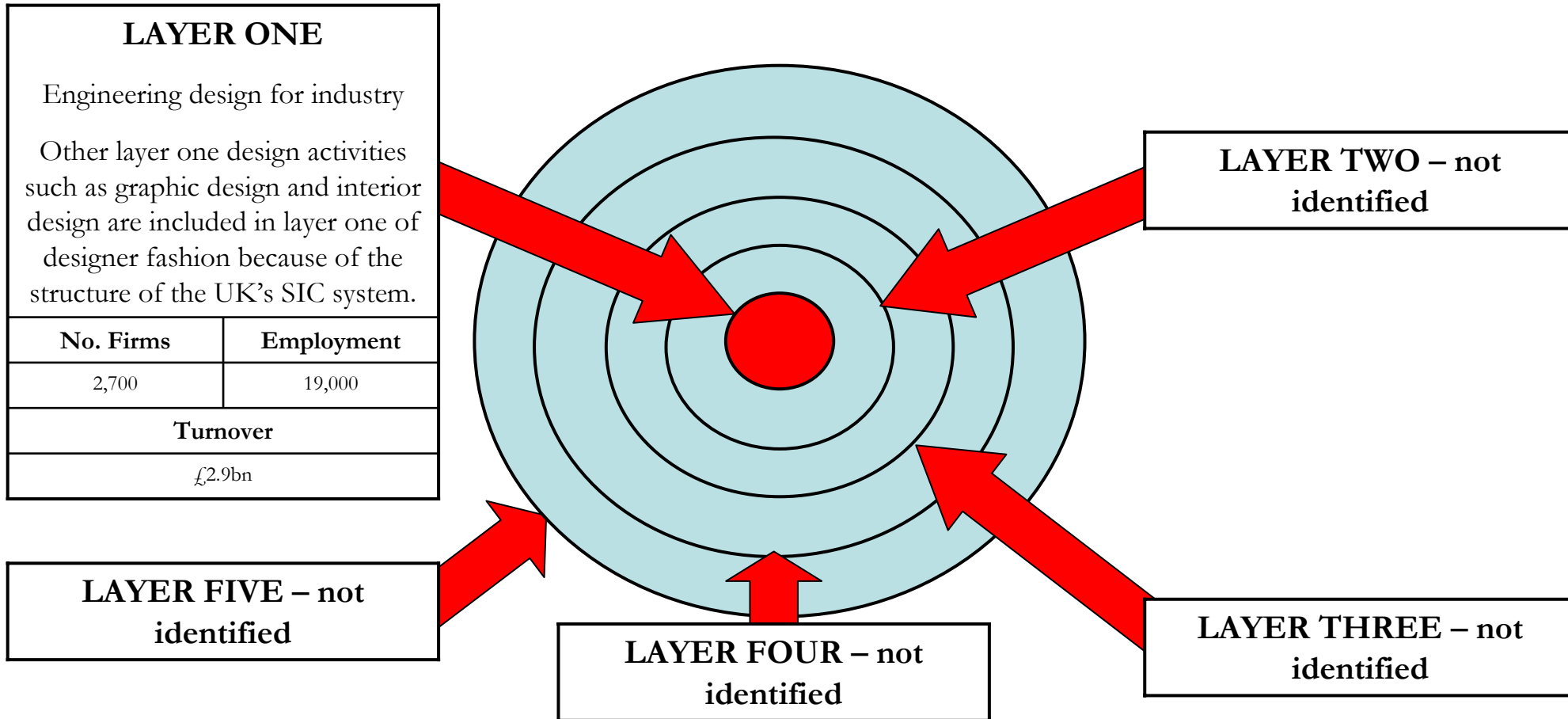


Summary of Architecture industry performance

- Layer one of the Architecture industry is one of the smallest amongst the Creative Industries:
 - in terms of layer one employment it is the sixth largest industry, employing 38,000 or 5% of all Creative Industry employees in 2005; and
 - in terms of layer one turnover it is the fourth smallest largest industry, turning over £2.9bn or 3% of total Creative Industry turnover in 2005.
- Our analysis of firms types suggests that medium sized firms (i.e., firms with 10-249 employees) are relatively important both in terms of their employment and their turnover contribution. In 2005, medium sized firms contributed 53% and 49% to total layer one employment and turnover, respectively. Foreign and large UK owned firms are relatively unimportant, collectively contributing 8% and 19% of employment and turnover, respectively.
- The industry is relatively concentrated. In 2005, the top 1,000 firms (15% of all firms) generated 80% of total industry turnover.

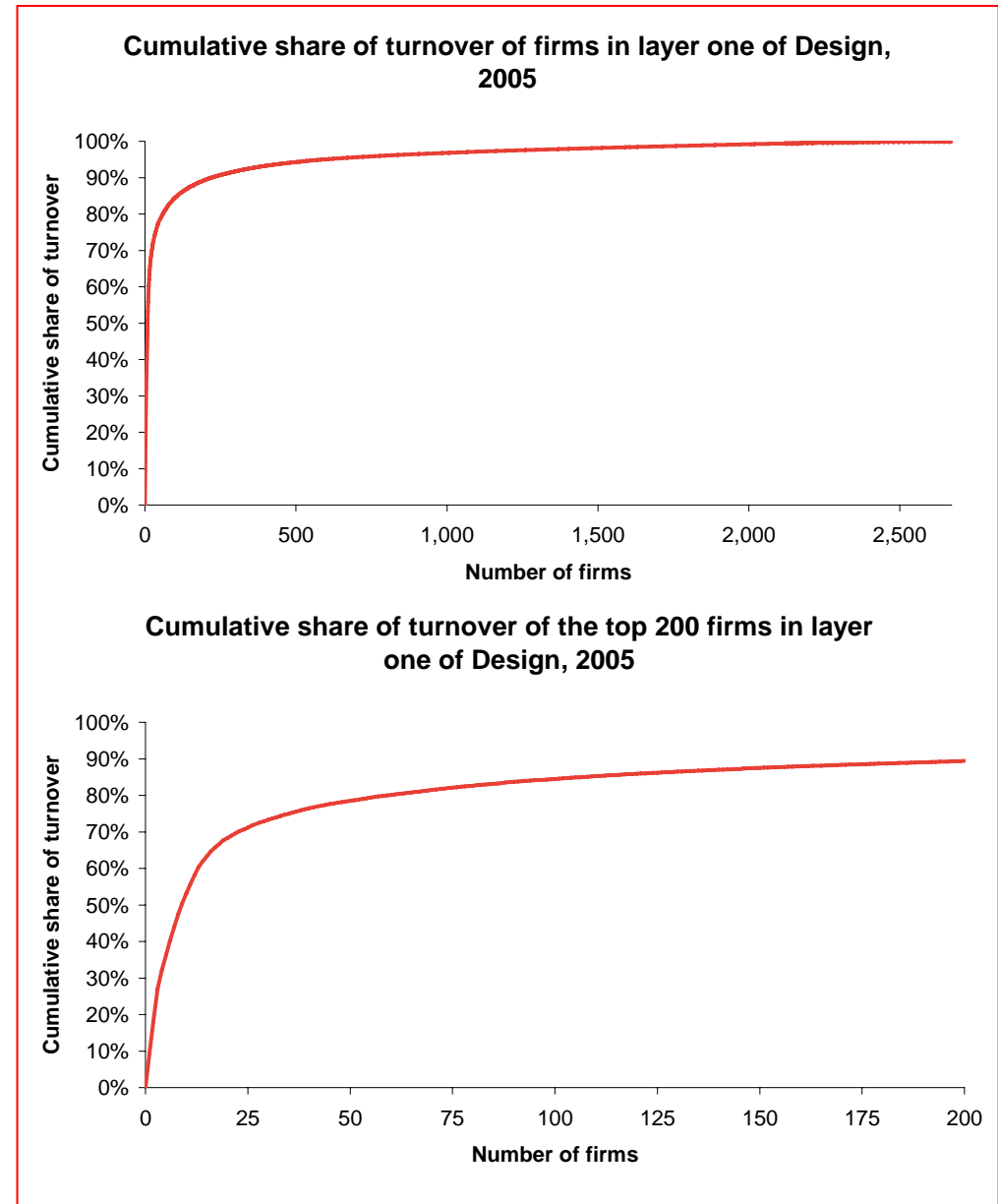
4.3 Design

The Design supply chain



The largest 60 firms account for 80% of layer one turnover

- To examine further the importance of the largest firms in layer one of the Design industry we have also examined the concentration of the Design industry in terms of the turnover contribution of firms.
- The graph on the right illustrates the cumulative market share of all 2,700 firms in layer one of the Design industry.
- This analysis shows that the industry is highly concentrated. For example the largest 2% of firms (around 60 firms) account for 80% of total industry layer one turnover.
- The graph below zooms in on the top graph to show the contribution of the top 200 firms in layer one of the Design Industry.
- This shows that the top 50 firms in layer one of the industry generate 79% of total turnover.
- It can also be shown that the top 4 firms in the Design industry generate 32% and the top 8, 47% of total layer one turnover (see Annexe 3 for a comparison of these C4 and C8 ratios between industries).
- We examine the characteristics of the largest firms in layer one of the industry in more detail over the page.



Examples of UK based firms in layer one of the Design Industry

Nissan Design

- Nissan Design is based in London and employs about 30 people. They are one of the major automotive design firms in the UK.
- Most of their output is for Nissan itself, including design for the US and Japanese markets, as well as Europe.
- They have, however, also designed for other car manufacturers.
- *Sources: Interview with Nissan Design UK*

Altair Engineering

- Altair Engineering is a global firm that was established in the USA in 1985. It assists in the design of products through computer based simulation and also supplies commercial design software.
- It employs 850 people globally, and has been active in the UK for 12 years. It employs approximately 30 people in the UK.
- Examples of its work in the UK include helping Jaguar design a steering wheel and helping Airbus design wing ribs for the A380.
- *Sources: Altair Engineering website and Bureau Van Dijk Amadeus database*

Note: as Altair Engineering specialises in computer based simulation, it could also be placed in layer one of Software and Computer Games.

Performance of layer one

The employment contribution of the Design industry

- Layer one of the Design industry employed 19,000 employees in 2005. This is equivalent to:
 - 100% of the entire Design industry (because only layer one has been defined for this industry); and
 - 3% of total Creative Industry layer one employment.
- This layer one employment contribution ranks the Design industry as the joint third smallest Creative Industry in terms of employment (with Designer Fashion and behind the Publishing and Art, Antiques and Crafts industry).
- Layer one of the Design industry is also small relative to other industries in the wider economy. High-tech industries such as the Pharmaceutical and Biotech industries employed 44,000 employees and 22,000 employees respectively*.

** These statistics refer to the entire industry – we have not defined a set of layers for the Pharmaceutical and Biotech industries. Pharmaceutical estimates are from the IDBR database for 2005; Biotech industry estimates are from the DTI (DTI (2005) Comparative Statistics for the UK, European and US Biotechnology Sectors: Analysis Year 2003, Report prepared by Critical I Limited for the Department of Trade and Industry (London: DTI).*

Turnover performance of the Design industry

- Layer one of the design industry had a turnover of £2.9bn in 2005. This is equivalent to:
 - 100% of the entire Design industry (because we have only identified layer one for the industry); and
 - 3% of total Creative Industry turnover.
- This layer one turnover performance ranks the Design industry as the joint fourth smallest Creative Industry in terms of turnover (behind Art, Antiques and Crafts, Publishing, Designer Fashion and joint with Architecture).
- The turnover of layer one of the Design industry is smaller than many other industries in the wider economy. High-tech industries such as the Pharmaceutical and Biotech industries had a turnover of £10bn and £3.6bn respectively*.

** These statistics refer to the entire industry – we have not defined a set of layers for the Pharmaceutical and Biotech industries. Pharmaceutical estimates are from the IDBR database for 2005; Biotech industry estimates are from the DTI (DTI (2005) Comparative Statistics for the UK, European and US Biotechnology Sectors: Analysis Year 2003, Report prepared by Critical I Limited for the Department of Trade and Industry (London: DTI).*

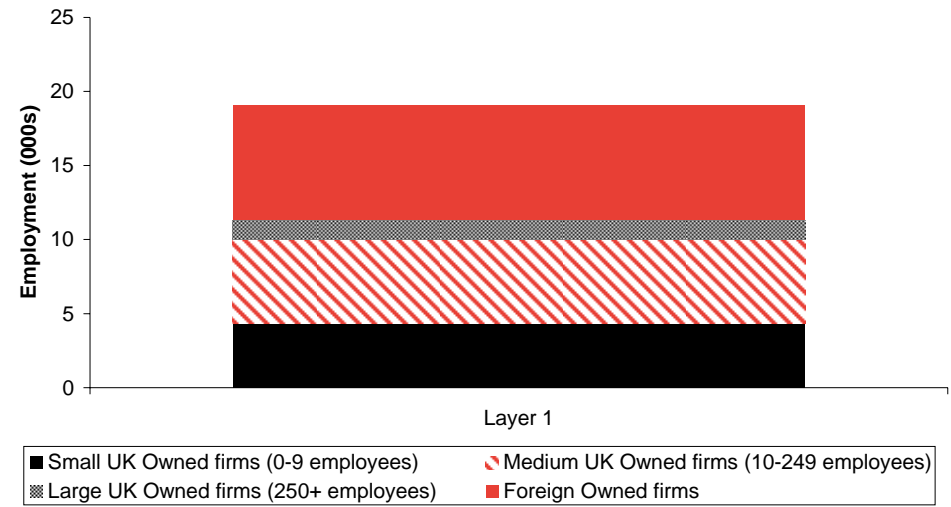
*** Statistics for these industries refer to the period 1995 - 2005*

The importance of large and foreign owned firms

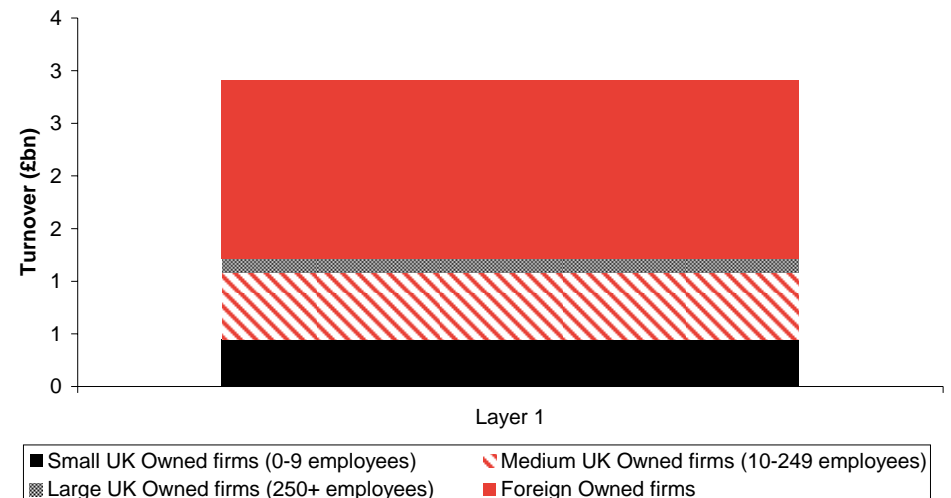
Foreign owned firms make a significant contribution to industry performance

- This sub-section explores whether particular types of firms are making a relatively important contribution to the Design Industry.
- In particular we examine the relative contributions of the following firm types to industry employment and turnover in 2005:
 - Small UK owned firms – 0-9 employees;
 - Medium UK owned firms – 10-249 employees;
 - Large UK owned firms – 250+ employees; and
 - Foreign owned firms.
- In contrast to other industries, we only consider layer one of Design. This is because no outer layers have been identified for this industry.
- The top graph illustrates the relative importance of these firm types for employment. This shows that foreign owned firms are relatively important, accounting for 41% of total employment in 2005.
- The bottom graph shows that foreign owned firms are even more important in terms of turnover. In 2005, foreign owned firms accounted for 58% of total Design layer one turnover.

Employment in Design by firm size and ownership, 2005

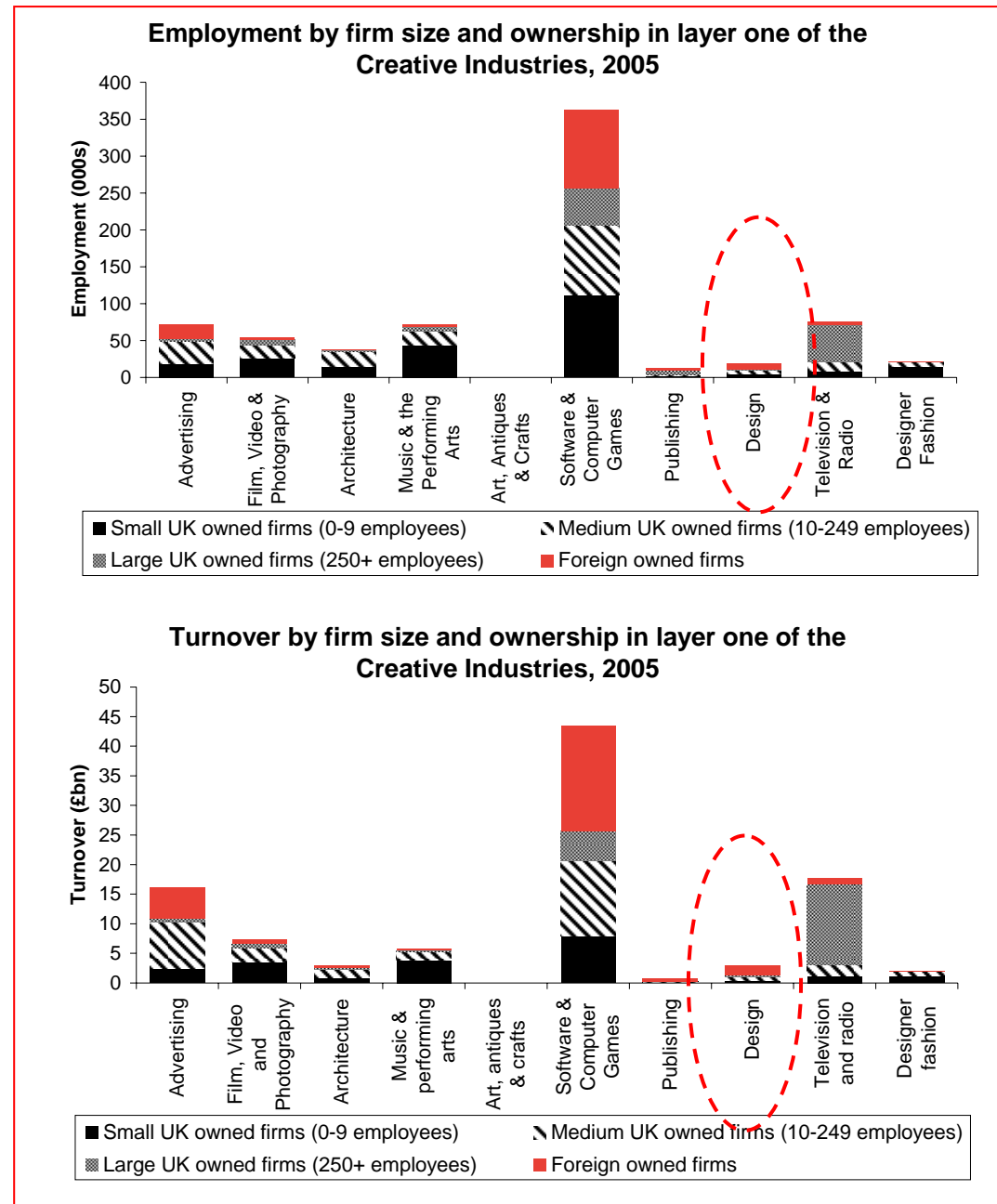


Turnover in Design by firm size and ownership, 2005



Foreign firms make a larger turnover contribution than in other Creative Industries

- The graphs on the right compare the importance of different firm types in layer one of the Design industry, relative to layer one of other Creative Industries.
- The top graph compares the layer one employment contribution of different firm types in 2005. This shows that relative to other Creative Industries, foreign owned firms make a large employment contribution. For example, whereas 41% of Design employment was provided by foreign owned firms, these firms contributed 26% and 29% of Advertising and Software and Computer Games employment.
- The bottom graph compares the layer one turnover contribution of different firm types in 2005. This shows that relative to other most other Creative Industries, foreign owned firms also make a large turnover contribution (58%). The only other industry where foreign owned firms are more important is Publishing (70%). The graph also shows foreign owned firms make a significant contribution to the Software and Computer Games industry (41%).



Summary of Design performance

- Layer one of the Design industry is one of the smallest Creative Industries:
 - in terms of layer one employment it is the third smallest industry, employing 19,000 or 3% of all Creative Industry employees in 2005; and
 - in terms of layer one turnover it is the fourth smallest largest industry, turning over £2.9bn or 3% of total Creative Industry turnover in 2005.
- Our analysis of firm types suggests that foreign owned firms are relatively important both in terms of their employment and their turnover contribution. In 2005, foreign owned firms contributed 41% of total layer one employment and 58% of total layer one turnover.
- In terms of turnover, the Design industry is highly concentrated. In 2005, the top 2% of firms (60 firms) generated 80% of total industry turnover.

4.4 Designer Fashion

The Designer Fashion supply chain

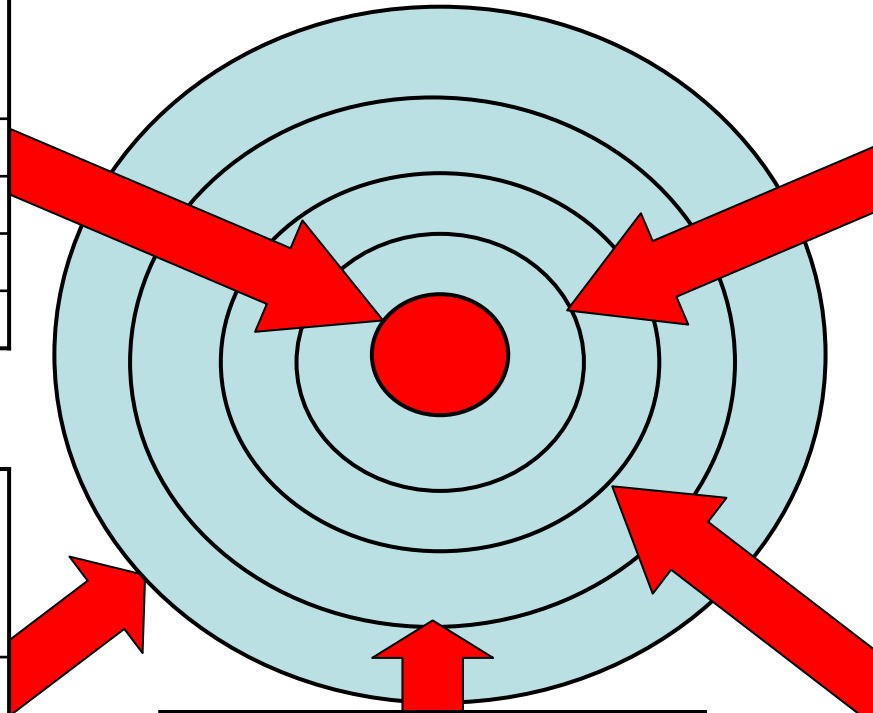
LAYER ONE	
Fashion design e.g. Burberry, Stella McCartney	
No. Firms	Employment
8,600	22,000
Turnover	
£2.1bn	

LAYER TWO – not identified

LAYER FIVE	
Retail sellers of clothing e.g. Next and Matalan	
No. Firms	Employment
19,200	443,000
Turnover	
£32.7bn	

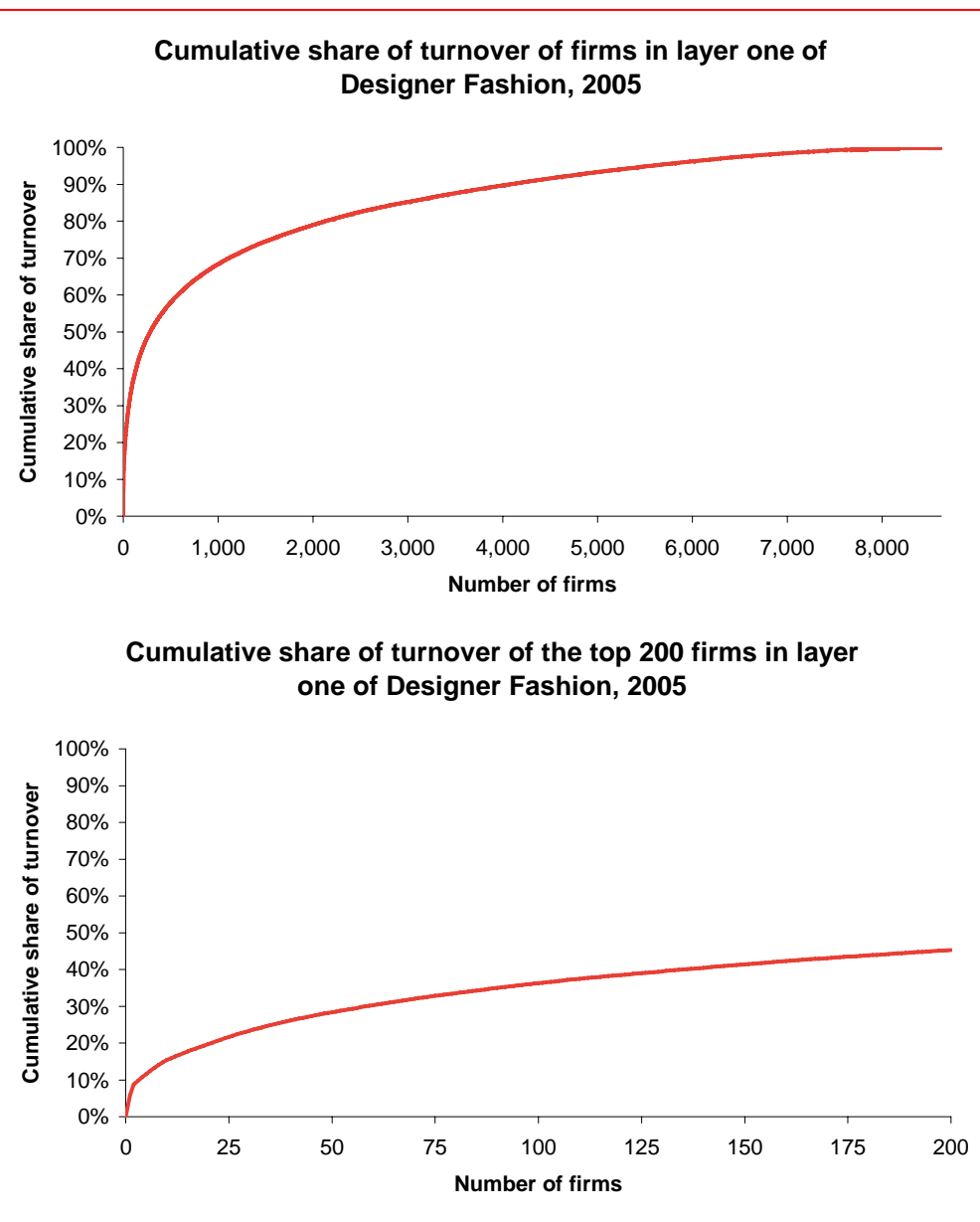
LAYER THREE	
Manufacture of clothes, hats, bags, luggage etc. e.g. Samsonite	
No. Firms	Employment
5,900	66,000
Turnover	
£6.1bn	

LAYER FOUR	
Manufacture and wholesale of textiles e.g. Homestead fabrics Ltd	
No. Firms	Employment
13,300	112,000
Turnover	
£18.9bn	



The largest 2,100 account for 80% of layer one turnover

- We have examined the concentration of layer one of the Designer Fashion industry in terms of the turnover contribution of firms.
- The chart on the right illustrates the results of this analysis. It shows the cumulative turnover of all 8,600 firms in layer one of the Designer Fashion industry.
- This analysis shows that the industry is quite concentrated. For example the largest 24% of firms (approximately 2,100 firms) account for 80% of total industry layer one turnover.
- The graph below zooms in on the top graph to show the contribution of the top 200 firms in layer one of the Designer Fashion Industry.
- This shows that the top 50 firms in layer one of the industry generate 28% of total turnover.
- It can also be shown that the top 4 firms in layer one of the Designer Fashion industry generate 11% and the top 8, 14% of layer one turnover (see Annexe 3 for a comparison of these C4 and C8 ratios between industries).
- We examine the characteristics of the largest firms in layer one of the industry in more detail over the page.



Examples of UK based firms in layer one of the Designer Fashion industry

Burberry

- Burberry was founded as an outfitters shop in the UK over 150 years ago. Among other things, it was responsible for the design of the original trench coat in 1914 for the British Army.
- It is now a fashion house that designs and manufactures its own range of clothing, accessories and fragrances.
- Burberry UK employed approximately 1,700 people in 2005, although it has since closed a factory in South Wales that employed 300 people.
- The fashion house now has a network of 260 directly operated stores and concessions.

Sources: Burberry website, Annual Report 2005/06, Bureau Van Dijk Amadeus database and BBC news website

Stella McCartney

- Stella McCartney graduated from Central St Martins College of Art and Design in 1995. Having established her name in the industry she launched her own fashion house in 2001, in a joint venture with Gucci.
- The fashion house now has three flagship stores worldwide.

Source: Stella McCartney website

Performance of layer one

The employment contribution of the Designer Fashion industry

- Layer one of the Designer Fashion industry employed 22,000 people in 2005. This is equivalent to:
 - 3% of the entire Designer Fashion industry; and
 - 3% of total layer one Creative Industry employment.
- The Designer Fashion industry is one of the smallest creative industries. Its layer one employment contribution ranks it as the joint third smallest industry (with Design and ahead of Publishing and Arts, Antiques and Crafts).
- Employment in Designer Fashion in 2005 was only half of that in Pharmaceuticals.

** The statistics on pharmaceuticals refer to the entire industry – we have not defined a set of layers for the Pharmaceutical industry. Pharmaceutical estimates are from the IDBR database.*

Turnover performance of the Designer Fashion industry

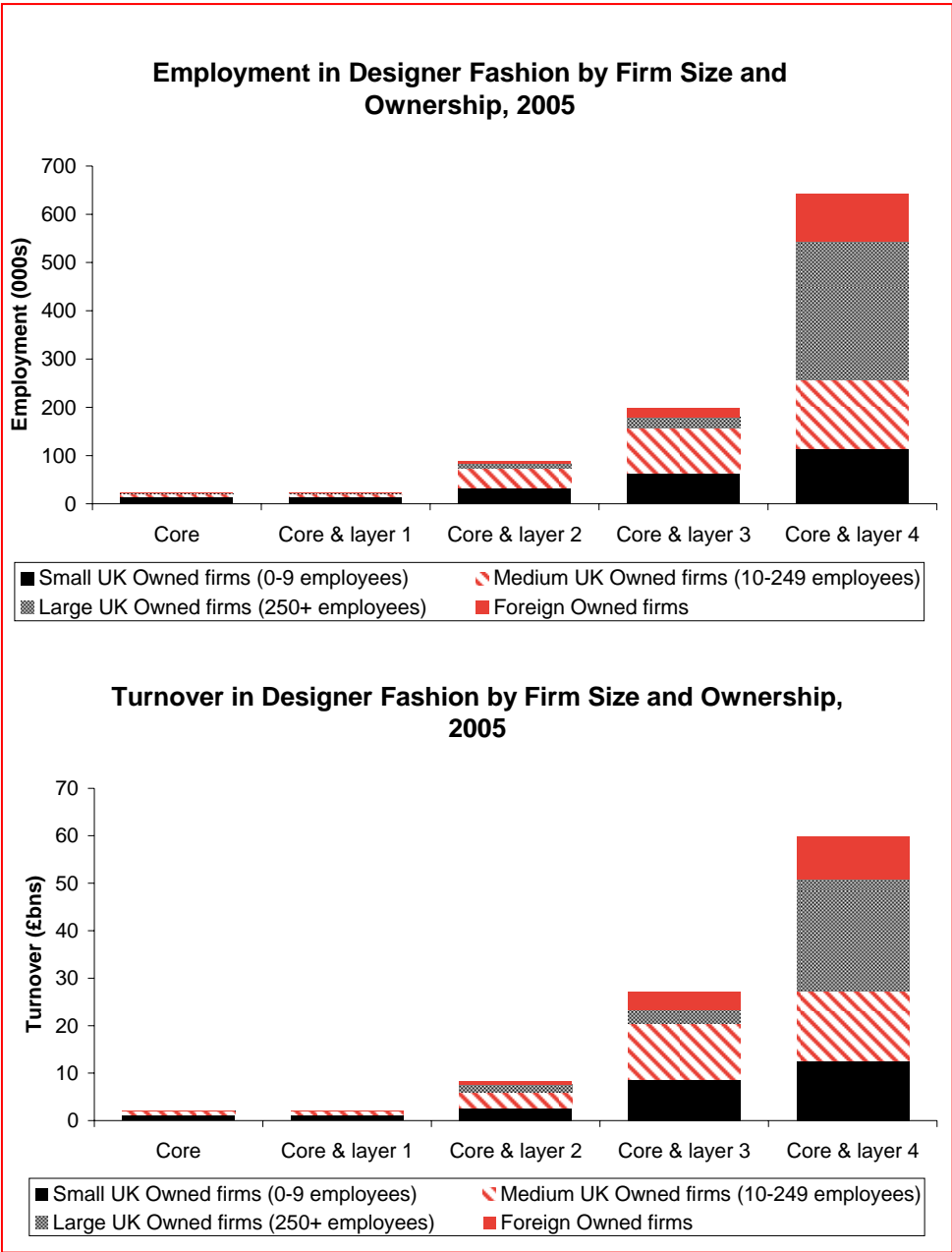
- Layer one of The Designer Fashion industry had a turnover of £2.1bn in 2005. This is equivalent to:
 - 3% of the entire Designer Fashion industry; and
 - 3% of total Creative Industry turnover.
- This turnover performance ranks the Designer Fashion industry as the second smallest Creative Industry.
- This level of turnover is also small compared with comparator sectors in the wider economy. High R&D industries such as the Pharmaceutical and Biotech industries had a turnover of £10bn and £3.6bn respectively*.

** These statistics refer to the entire industry – we have not defined a set of layers for the Pharmaceutical and Biotech industries. Pharmaceutical estimates are from the IDBR database; Biotech industry estimates are from the DTI (DTI (2005) Comparative Statistics for the UK, European and US Biotechnology Sectors: Analysis Year 2003, Report prepared by Critical I Limited for the Department of Trade and Industry (London: DTI).*

The importance of large and foreign owned firms

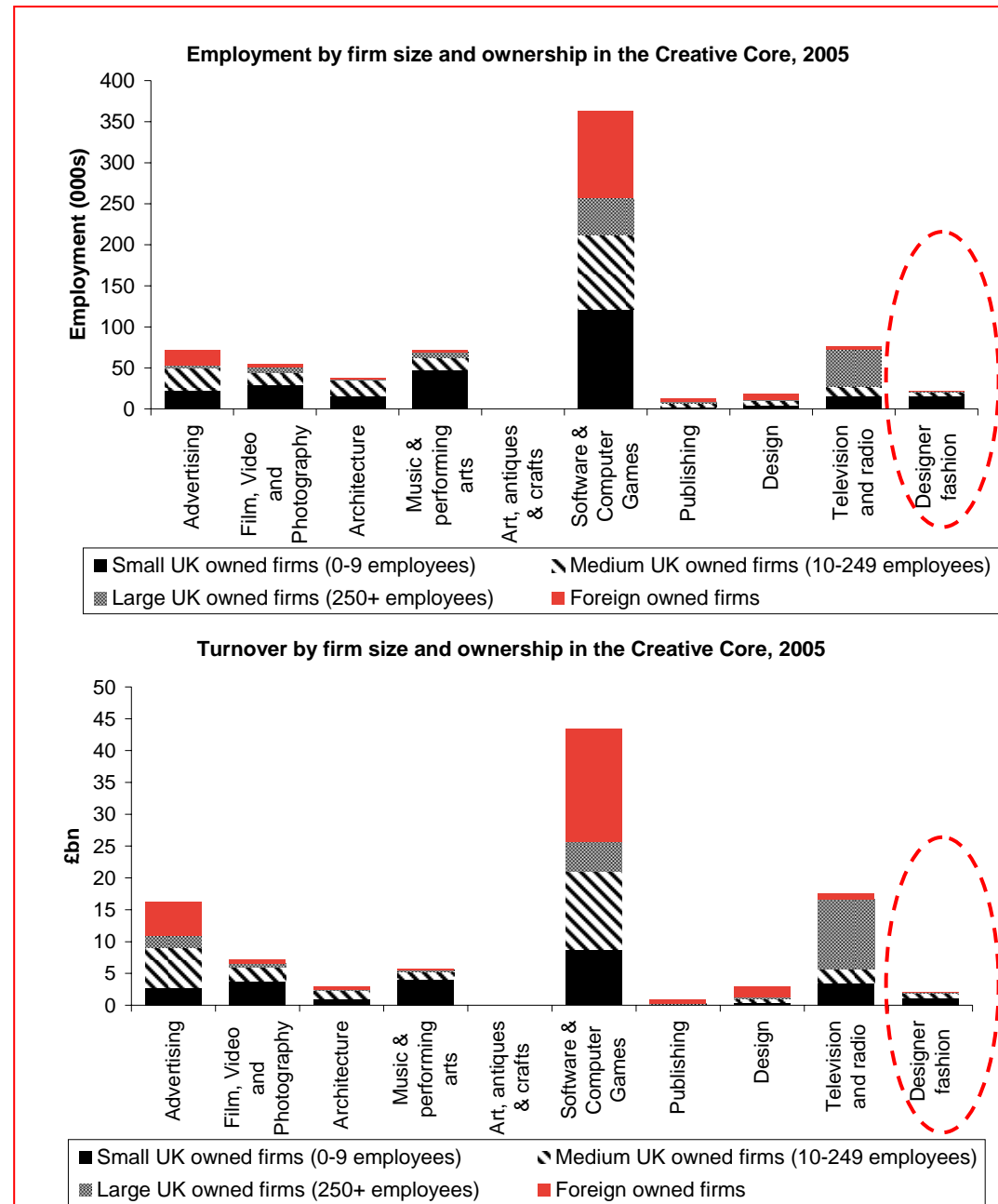
Small firms make a significant contribution, especially in layer one

- This sub-section explores whether particular types of firms are making a relatively important contribution to the Designer Fashion Industry.
- In particular we examine the relative contributions of the following firm types to industry employment and turnover in 2005:
 - Small UK owned firms – 0-9 employees;
 - Medium UK owned firms – 10-249 employees;
 - Large UK owned firms – 250+ employees; and
 - Foreign owned firms.
- Both graphs show that small firms (represented by the black shaded area of each bar) are relatively important both in terms of their employment and their turnover contribution. For example, small firms contributed 68% and 58% to total layer one employment and turnover, respectively.
- Foreign owned firms appear to make a relatively small contribution to layer one of the industry – representing 2% of industry employment and turnover.



Small firms make a larger contribution than in other Creative Industries

- The graphs on the right compare the importance of different firm types in layer one of the Designer Fashion industry, relative to layer one of other Creative Industries.
- The top graph compares the employment contribution of different firm types in 2005. This shows that small firms are more important the fashion design industry in terms of employment than the other Creative Industries. 68% of Fashion employment was provided by small firms, whilst 62% of Music industry employment was provided by small firms.
- The bottom graph compares the turnover contribution of different firm types in 2005. This shows that relative to other Creative Industries, small firms also make a large turnover contribution to the Designer Fashion industry. For example, 58% of Designer Fashion turnover was provided by small firms and 48% and 31% was provided by small firms in the Film and Architecture industry respectively.



Summary of Designer Fashion Industry performance

- Layer one of the Designer Fashion industry is one of the smallest Creative Industries:
 - in terms of layer one employment it is the joint third smallest industry, employing 22,000 or 3% of all Creative Industry employees in 2005; and
 - in terms of layer one turnover it is the second smallest industry, turning over £2.1bn or 3% of total Creative Industry turnover in 2005.
- Our analysis of firms types suggests that small firms (i.e., firms with 0-9 employees) are relatively important both in terms of their employment and their turnover contribution. In 2005, small firms contributed 68% and 58% to total layer one employment and turnover, respectively. Foreign and large UK owned firms are relatively unimportant, contributing 7% and 8% of employment and turnover, respectively.
- Despite this, the industry is relatively concentrated. In 2005, the top 24% of firms (2,100 firms) generated 80% of total industry turnover.

4.5 Film, Video and Photography

The Film, Video and Photography supply chain

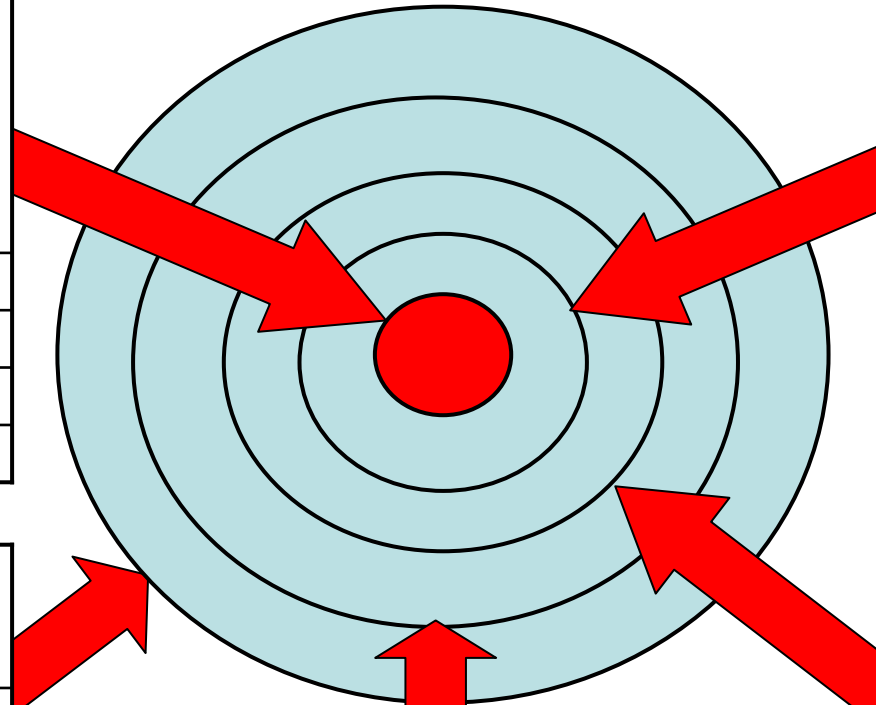
LAYER ONE	
Production and post production of films and specialist photography e.g. Aardman Animations and Metro Imaging (specialist photographers)	
No. Firms	Employment
15,400	55,000
Turnover	
£7.3bn	

LAYER FIVE	
Cinemas e.g. Vue	
No. Firms	Employment
300	15,000
Turnover	
£0.7bn	

LAYER TWO	
Portrait photography e.g. Photocorp, operators of Pixifoto studios in chains like Tesco	
No. Firms	Employment
800	4,000
Turnover	
£0.2bn	

LAYER THREE	
Motion picture distribution, reproduction of DVDs, film processing and manufacturing of cameras e.g. Icon Film Distribution and Bonusprint	
No. Firms	Employment
4,800	37,000
Turnover	
£7.4bn	

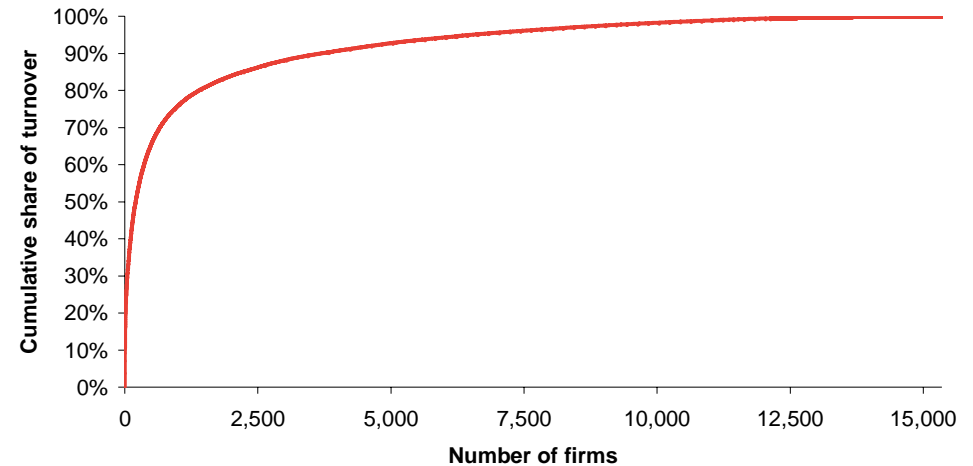
LAYER FOUR- not identified



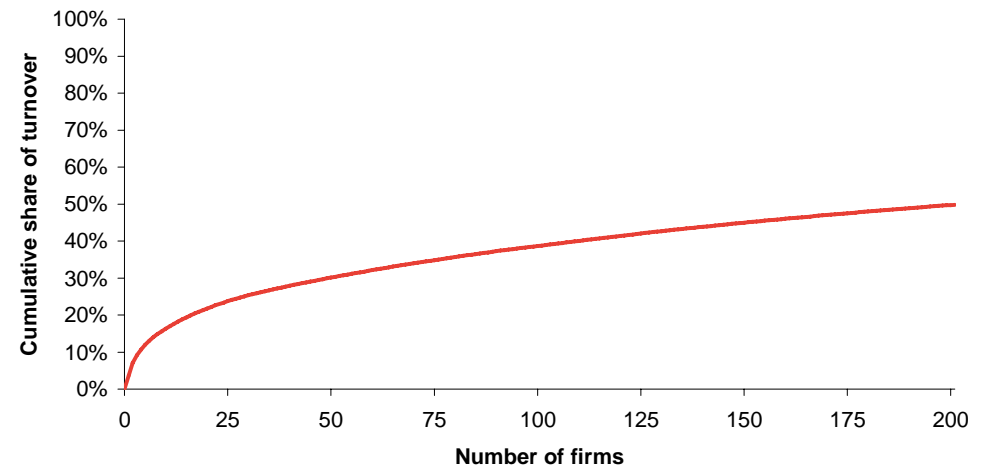
The largest 1,400 firms account for 80% of layer one turnover

- To examine the importance of the largest firms in layer one of the Film, Video and Photography industry we have examined the concentration of the industry in terms of the turnover contribution of firms.
- The graph on the right illustrates the cumulative market share of all 15,000 firms in layer one of the Film, Video and Photography industry.
- This analysis shows that the industry is relatively concentrated. For example the largest 9% of firms (around 1,400 firms) account for 80% of total industry layer one turnover.
- The graph below zooms in on the top graph to show the contribution of the top 200 firms in layer one of the Film, Video and Photography Industry.
- This shows that the top 50 firms in layer one of the industry generate 30% of total layer one turnover.
- It can also be shown that the top 4 firms in the Film, Video and Photography industry generate 11% and the top 8, 15% of total industry turnover (see Annexe 3 for a comparison of these C4 and C8 ratios between industries).
- We examine the characteristics of the largest firms in the industry in more detail over the page.

Cumulative share of turnover of firms in layer one of Film, Video & Photography, 2005



Cumulative share of turnover of the top 200 firms in layer one of Film, Video & Photography, 2005



Examples of large UK based firms in layer one of Film, Video and Photography

Aardman Animations

- Aardman Animations was established in 1976. The following year, it created Morph for the BBC production *Take Hart*.
- In 1985 Nick Park, the creator of Wallace and Gromit, joined the studio
- More recently, Chicken Run was the first film to be released as part of a five picture agreement with DreamWorks Pictures.
- *Source: Aardman Animations website*

Working Title Films

- Working Title Films was founded by Tim Bevan and Eric Fellner.
- Universal Pictures is a major shareholder.
- It has produced a host of successful pictures. These include Hot Fuzz, Pride and Prejudice, Billy Elliot and Bridget Jones' Diary.
- *Source: Working Title Films website, BBC news website and Bureau Van Dijk Amadens Database*

Performance of layer one

The employment contribution of the Film, Video and Photography industry

- Layer one of the Film, Video and Photography industry employed 55,000 employees in 2005. This is equivalent to:
 - 50% of the entire Film, Video and Photography industry; and
 - 8% of total Creative Industry layer one employment.
- This employment contribution ranks the Film, Video and Photography industry as the fifth largest Creative Industry in terms of layer one employment (behind Software, Television and Radio, Music & Performing Arts, Advertising).
- The performance of the industry was also strong relative to the wider economy. High-tech industries such as the Pharmaceutical and Biotech industries employed 44,000 employees and 22,000 employees respectively*.

** These statistics refer to the entire industry – we have not defined a set of layers for the Pharmaceutical and Biotech industries. Pharmaceutical estimates are from the IDBR database; Biotech industry estimates are from the DTI (DTI (2005) Comparative Statistics for the UK, European and US Biotechnology Sectors: Analysis Year 2003, Report prepared by Critical I Limited for the Department of Trade and Industry (London: DTI).*

Turnover performance of the Film, Video and Photography industry

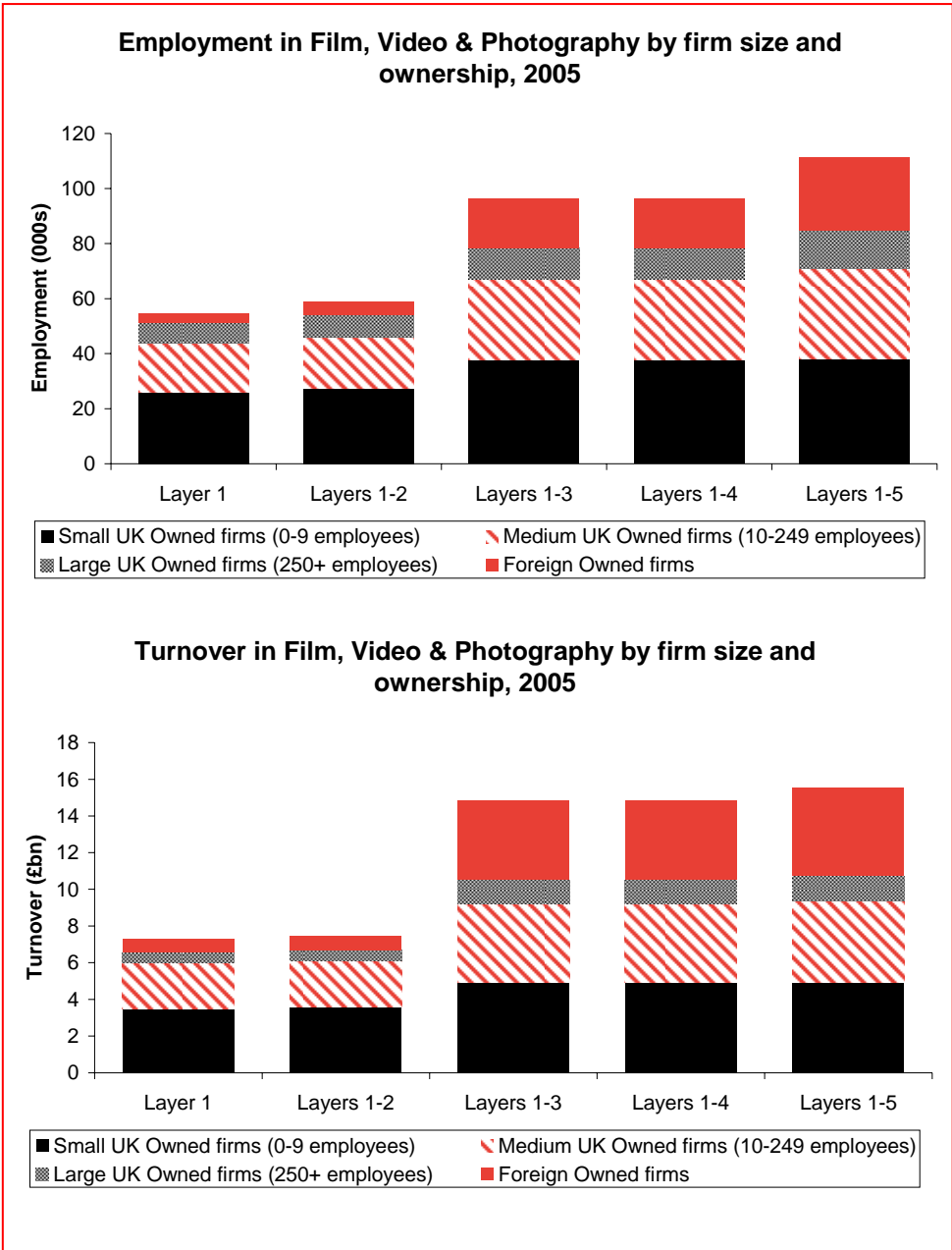
- Layer one of the Film, Video and Photography industry had a turnover of £7.3bn in 2005. This is equivalent to:
 - 47% of the entire Film, Video and Photography industry; and
 - 7% of total Creative Industry turnover.
- This layer one turnover performance ranks the Film, Video and Photography industry as the fourth largest Creative Industry in terms of turnover (behind Software; Television & Radio; Film, Video & Photography; and Advertising).
- Turnover performance of the Film, Video and Photography industry is strong relative to high-tech industries in the wider economy. For example, the Pharmaceutical and Biotech industries had a turnover of £10bn and £3.6bn respectively*.

** These statistics refer to the entire industry – we have not defined a set of layers for the Pharmaceutical and Biotech industries. Pharmaceutical estimates are from the IDBR database; Biotech industry estimates are from the DTI (DTI (2005) Comparative Statistics for the UK, European and US Biotechnology Sectors: Analysis Year 2003, Report prepared by Critical I Limited for the Department of Trade and Industry (London: DTI).*

The importance of large and foreign owned firms

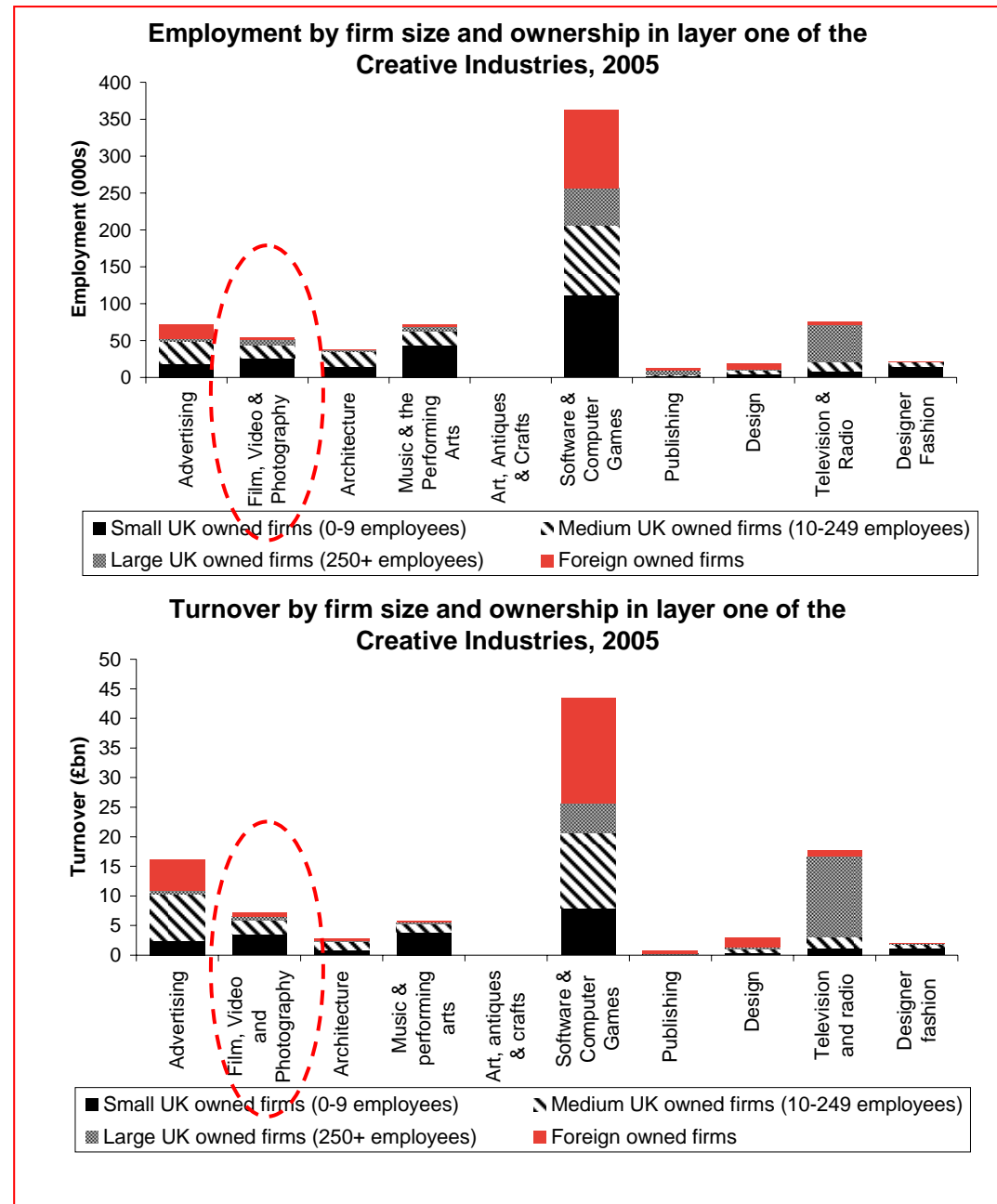
Small firms make a significant contribution, especially in layer one

- We examine the relative contributions of the following firm types to industry employment and turnover in 2005:
 - Small UK owned firms – 0-9 employees;
 - Medium UK owned firms – 10-249 employees;
 - Large UK owned firms – 250+ employees; and
 - Foreign owned firms.
- Both graphs show that small firms (represented by the black shaded area of each bar) are relatively important both in terms of their employment and their turnover contribution. For example, small firms contributed 48% to total layer one employment and turnover.
- In contrast, large and foreign owned firms appear to make a relatively small contribution to layer one of the industry – representing only 20% and 18% of industry employment and turnover, respectively.



Small firms make a large contribution relative to many other Creative Industries

- The graphs on the right compare the importance of different firm types in layer one of the Film, Video and Photography industry, relative to layer one of the other Creative Industries.
- The top graph compares the layer one employment contribution of different firm types in 2005. This shows the Film, Video and Photography industry is one of the few Creative Industries where small firms make a large employment contribution. For example, 48% of Film, Video and Photography employment was provided by small firms and 27% and 31% of Advertising and Software and Computer Games employment was provided by small firms.
- The bottom graph compares the layer one turnover contribution of different firm types in 2005. This shows that relative to other Creative Industries, small firms are important to the Film, Video and Photography industry. The only other industry where small firms are as or more important is the Music and Performing Arts industry where 69% turnover was provided by small firms.

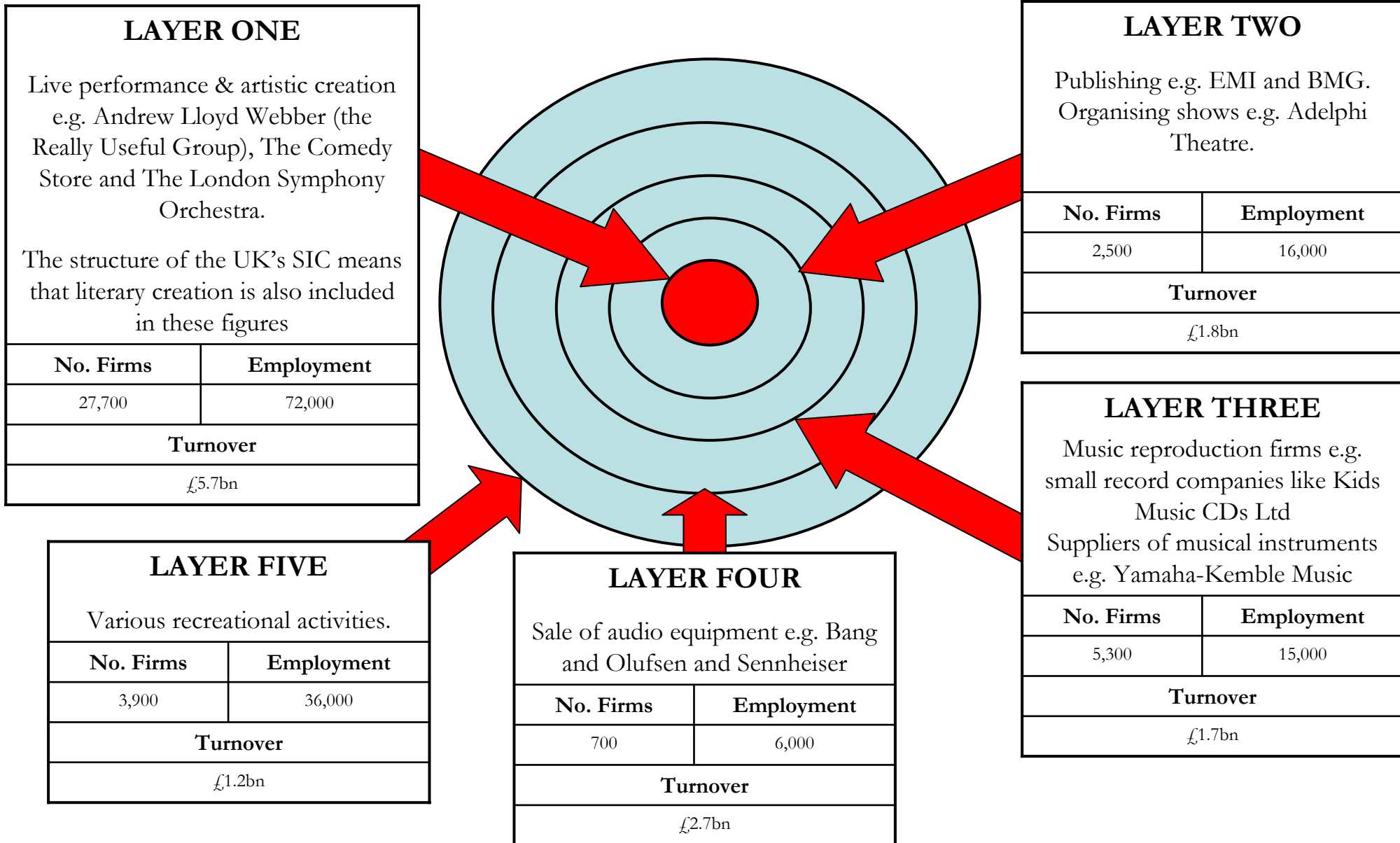


Summary of Film, Video and Photography performance

- Layer one of the Film, Video and Photography industry is relatively large, when compared with layer one of the other Creative Industries:
 - in terms of layer one employment it is the fifth largest industry, employing 55,000 or 8% of all Creative Industry employees in 2005; and
 - in terms of layer one turnover it is the fourth largest industry, turning over £7.3bn or 7% of total Creative Industry turnover in 2005.
- Our analysis of firms types suggests that small firms (i.e., firms with 0-9 employees) are relatively important both in terms of their employment and their turnover contribution. In 2005, small firms contributed 48% total layer one employment and turnover. Foreign and large UK owned firms are relatively unimportant, contributing 20% and 18% of employment and turnover, respectively.
- Despite this, the industry is relatively concentrated. In 2005, the top 9% of firms (1,400 firms) generated 80% of total industry turnover.

4.6 Music and Performing Arts

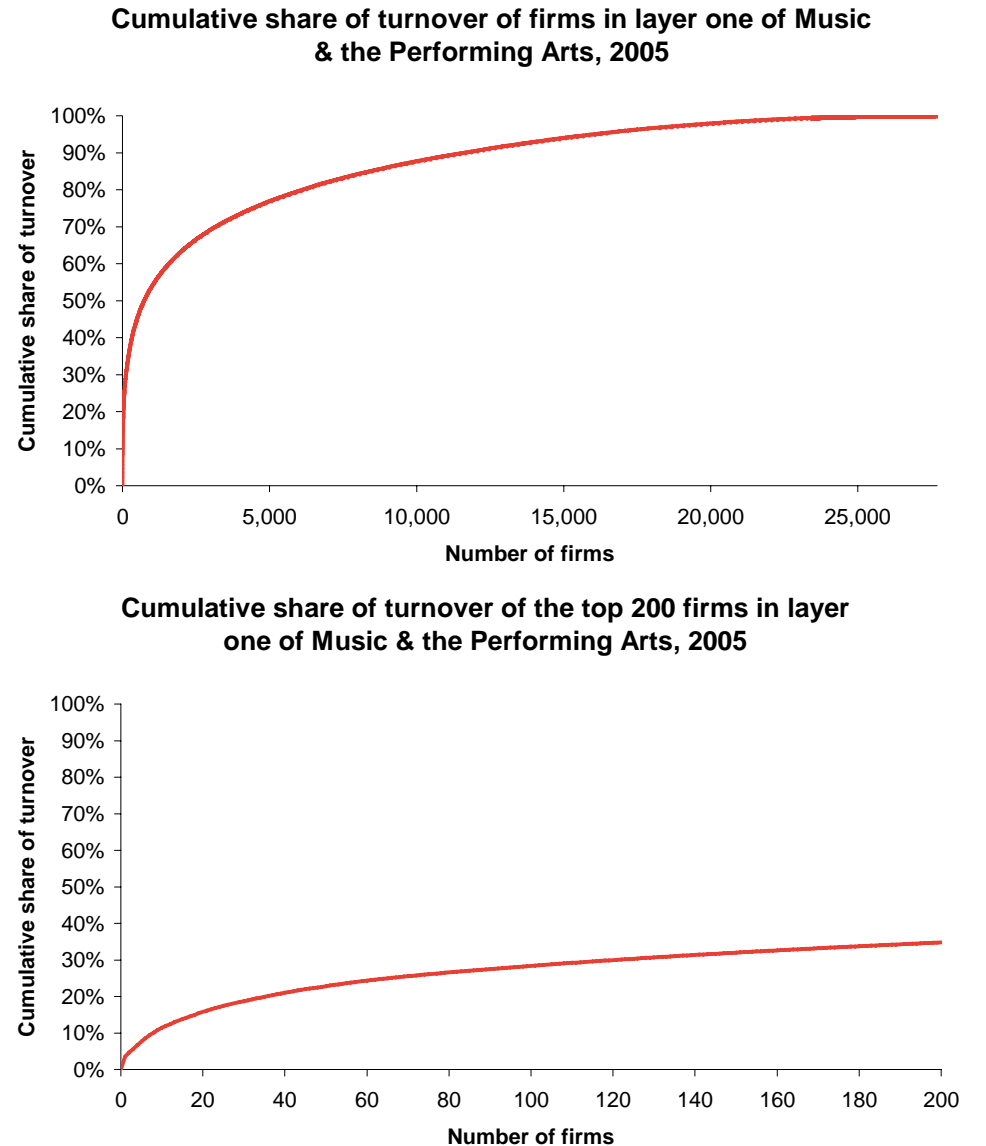
The Music and Performing Arts supply chain



Note: All statistics are reported for 2005. Source: BVDA and IDBR databases

The largest 6,000 firms account for 80% of layer one turnover

- To examine further the importance of the largest firms in the layer one of the Music and Performing Arts industry we have also examined the concentration of the Music & Performing Arts industry in terms of the turnover contribution of firms.
- The graph on the right illustrates the cumulative share of industry turnover of all 28,000 firms in layer one of the Music & Performing Arts industry.
- This analysis shows that the industry is less concentrated than other industries. For example the largest 22% of firms (around 6,000 firms) account for 80% of total industry turnover. This is explored in more detail below.
- The graph below zooms in on the top graph to show the contribution of the top 200 firms in layer one of the Music and Performing Arts Industry.
- This shows that the top 50 firms in the industry generate 23% of total layer one turnover.
- It can also be shown that the top 4 firms in the Music and Performing Arts industry generate 7% and the top 8, 10% of total layer one turnover (see Annexe 3 for a comparison of these C4 and C8 ratios between industries).
- We examine the characteristics of the largest firms in layer one of the industry in more detail over the page.



Examples of large UK based firms in layer one of Music and the Performing Arts

The Really Useful Group

- Andrew Lloyd Webber established the Really Useful Group in 1977, and the firm holds the rights to his work.
- The group owns and operates seven theatres in London.
- As well as putting on theatrical productions, the group is active in films, music and merchandising. For example, its music publishing arm represents Andrew Lloyd Webber's song catalogue, while musicals such as Phantom of the Opera have been adapted to the screen .
- *Source: Really Useful Group website*

The Royal National Theatre

- The National Theatre Company gave its first ever performance in 1963. It currently employs about 850 people.
- The theatre offers a wide range of both modern and classical plays.
- In 2005-06, over a million tickets were sold to their shows on the South Bank and on tour, both in the UK and overseas.
- *Sources: National Theatre website and Annual report 2005-06*

Performance of layer one

The employment contribution of the Music and Performing Arts industry

- Layer one of the Music and Performing Arts industry employed 72,000 employees in 2005. This is equivalent to:
 - 50% of the entire music and performing arts industry; and
 - 10% of total Creative Industry layer one employment.
- This layer one employment contribution ranks the Music and Performing Arts industry as the joint third largest Creative Industry in terms of employment (together with Advertising and behind Software and Television and Radio).
- The performance of the industry was also strong relative to the wider economy. High-tech industries such as the Pharmaceutical and Biotech industries employed 44,000 employees and 22,000 employees respectively*.

** These statistics refer to the entire industry – we have not defined a set of layers for the Pharmaceutical and Biotech industries. Pharmaceutical estimates are from the IDBR database; Biotech industry estimates are from the DTI (DTI (2005) Comparative Statistics for the UK, European and US Biotechnology Sectors: Analysis Year 2003, Report prepared by Critical I Limited for the Department of Trade and Industry (London: DTI).*

Turnover performance of the Music and Performing Arts industry

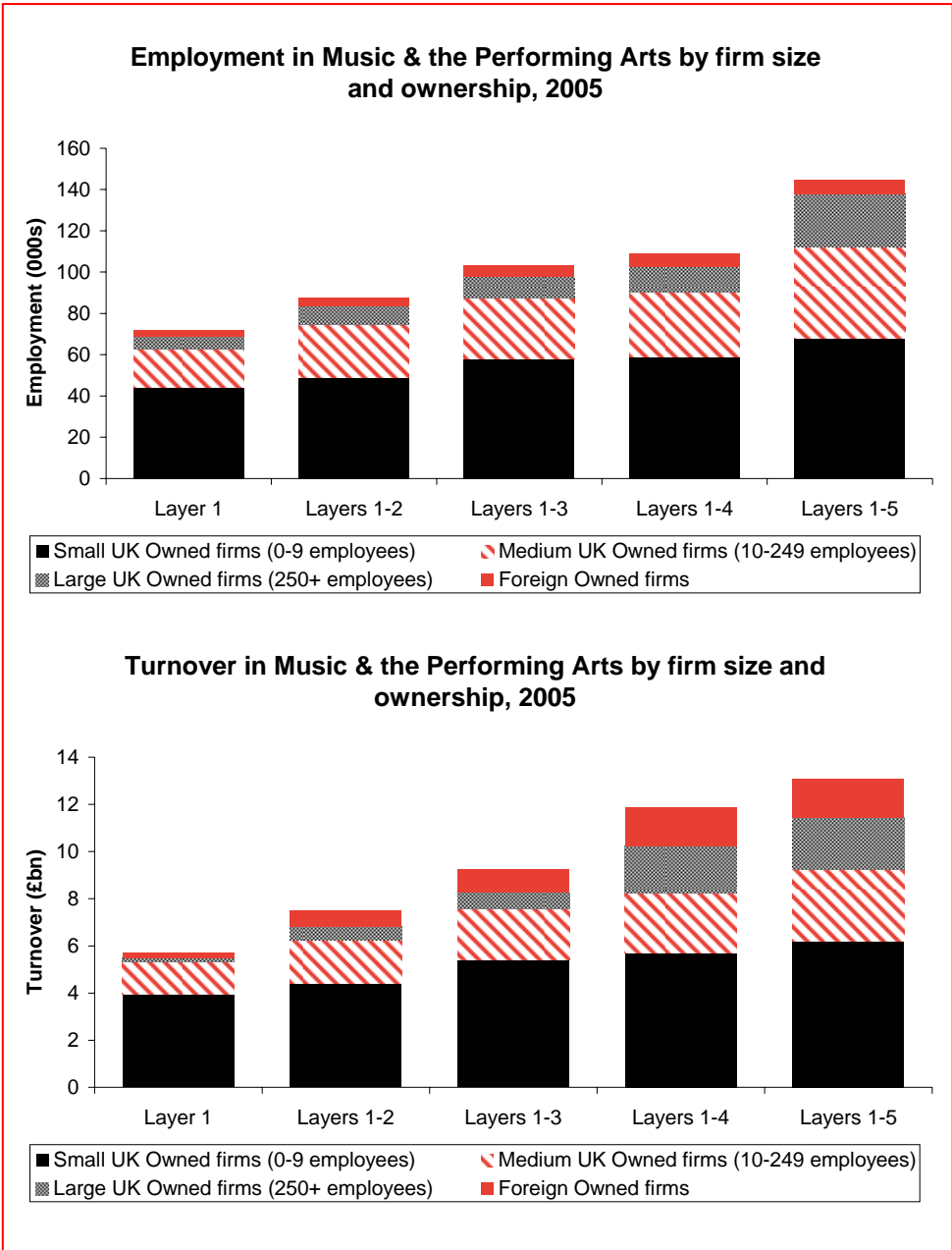
- Layer one of the Music and Performing Arts industry had a turnover of £5.7bn in 2005. This is equivalent to:
 - 44% of the entire music and performing arts industry; and
 - 4% of total Creative Industry turnover.
- This layer one turnover performance ranks the Music and Performing Arts industry as the fifth largest Creative Industry in terms of turnover (behind Software; Television & Radio; Film, Video & Photography; and Advertising).
- Turnover performance of the Music and Performing Arts industry is strong relative to other comparable industries in the wider economy. High R&D industries such as the Pharmaceutical and Biotech industries had a turnover of £10bn and £3.6bn respectively*.

** These statistics refer to the entire industry – we have not defined a set of layers for the Pharmaceutical and Biotech industries. Pharmaceutical estimates are from the IDBR database; Biotech industry estimates are from the DTI (DTI (2005) Comparative Statistics for the UK, European and US Biotechnology Sectors: Analysis Year 2003, Report prepared by Critical I Limited for the Department of Trade and Industry (London: DTI).*

The importance of large and foreign owned firms

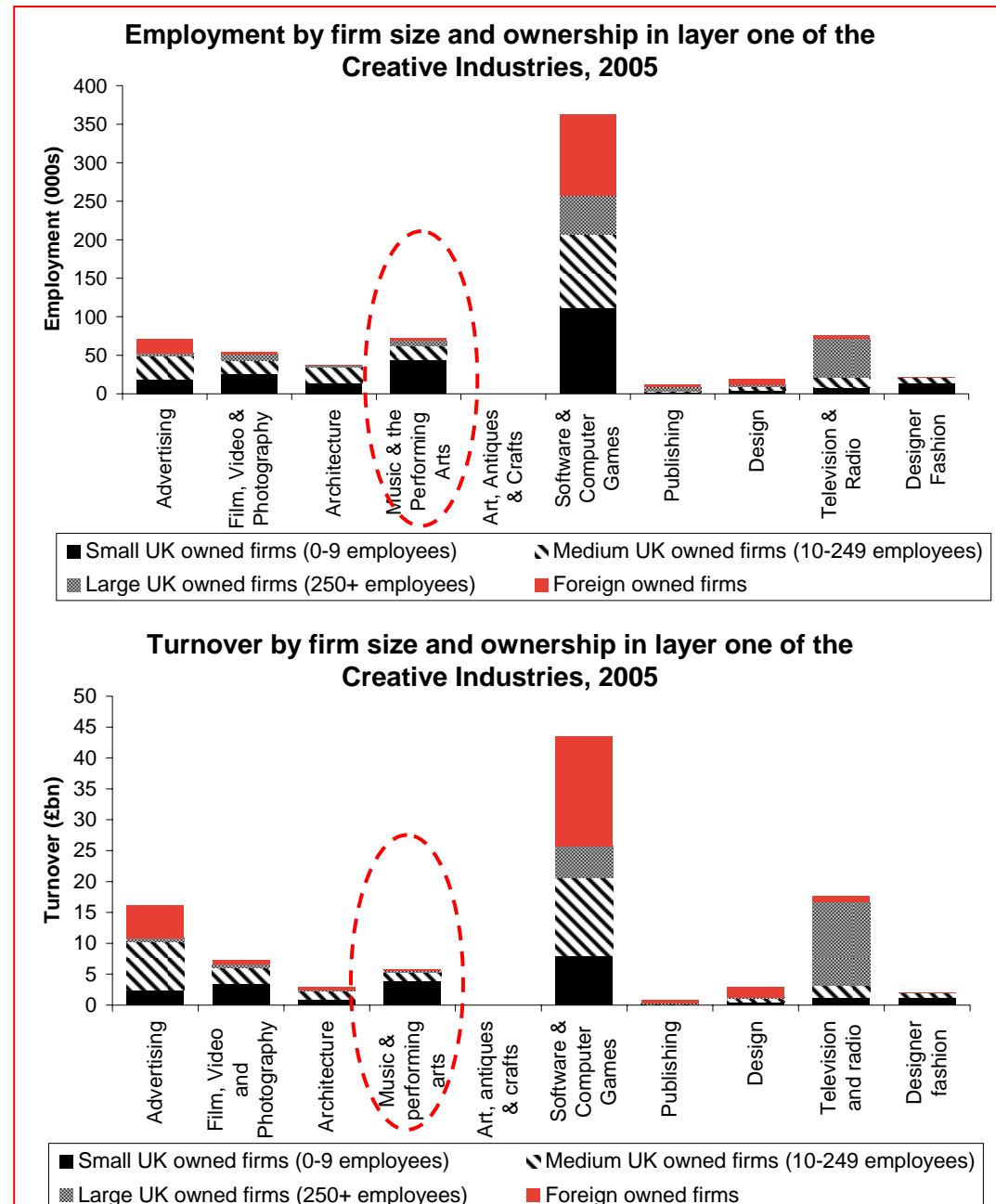
Small firms make a significant contribution, especially in layer one

- We examine the relative contributions of the following firm types to industry employment and turnover in 2005:
 - Small UK owned firms – 0-9 employees;
 - Medium UK owned firms – 10-249 employees;
 - Large UK owned firms – 250+ employees; and
 - Foreign owned firms.
- Both graphs show that small firms (represented by the black shaded area of each bar) are relatively important both in terms of their employment and their turnover contribution. For example, small firms contributed 63% and 72% to total layer one employment and turnover, respectively.
- These graphs also show that small firms become less important as we move away from the layer one. Small firms' contribution falls to 51% and 50% of total employment and turnover when the four outer layers are taken into account.
- In contrast, large and foreign owned firms appear to make a relatively small contribution to layer one of the industry – representing only 15% and 8% of industry employment and turnover, respectively.



Small firms make a larger contribution than in other Creative Industries

- The graphs on the right compare the importance of different firm types in layer one of the Music and the Performing Arts industry, relative to layer one of other Creative Industries.
- The top graph compares the layer one employment contribution of different firm types in 2005. This shows that relative to other Creative Industries, small firms make a large employment contribution. For example, whereas 62% of Music and Performing Arts employment was provided by small firms, 27% and 31% of Advertising and Software and Computer Games employment was provided by small firms.
- The bottom graph compares the layer one turnover contribution of different firm types in 2005. This shows that relative to other Creative Industries, small firms also make a large turnover contribution. For example, 69% of Music and Performing Arts turnover was provided by small firms, 15% and 18% of Advertising and Software and Computer Games turnover was provided by small firms.

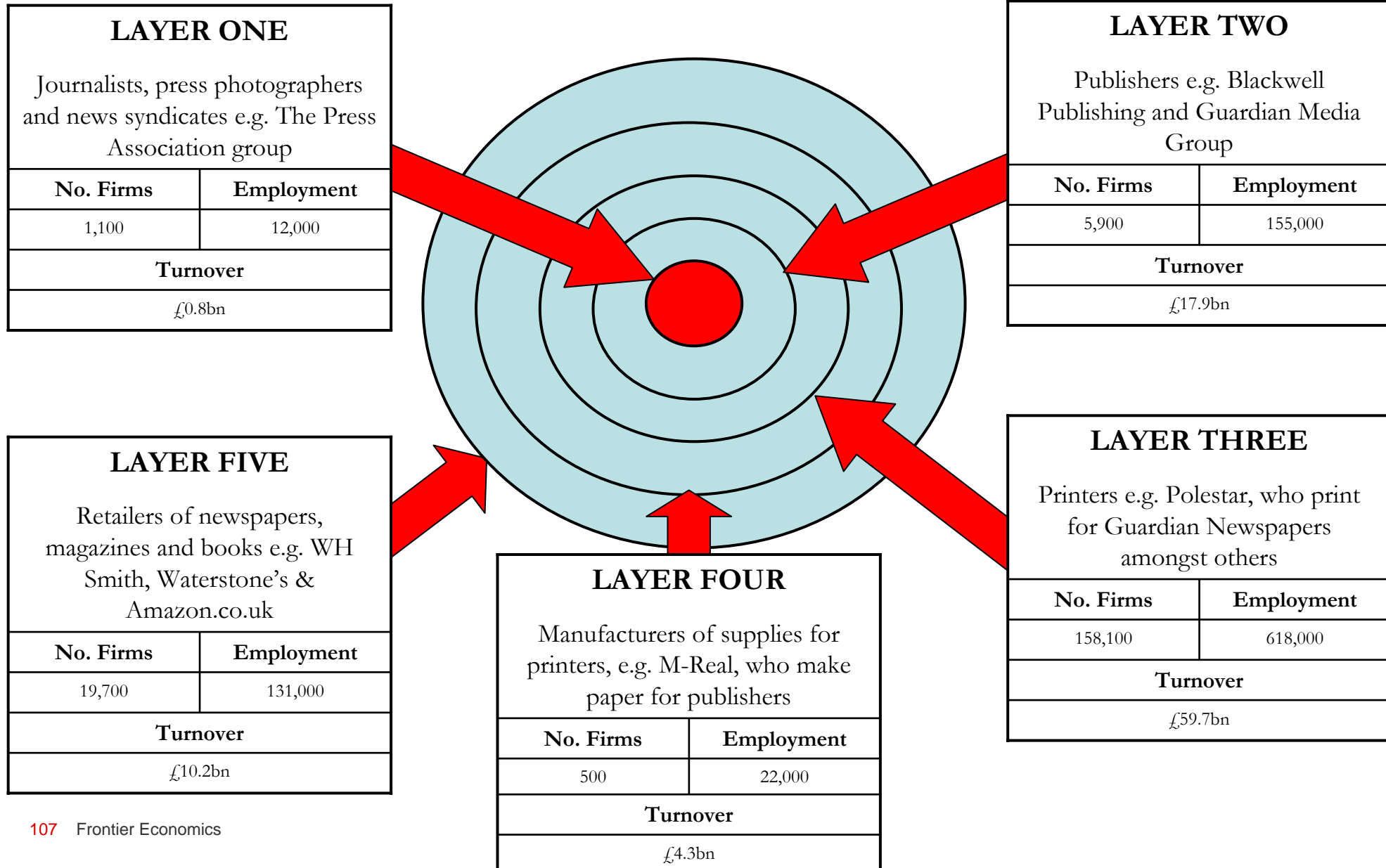


Summary of Music Industry performance

- Layer one of the Music and the Performing Arts industry is one of the largest amongst the Creative Industries:
 - in terms of layer one employment it is the joint second largest industry, employing 72,000 or 10% of all Creative Industry employees in 2005; and
 - in terms of layer one turnover it is the fifth largest industry, turning over £5.7bn or 4% of total Creative Industry turnover in 2005.
- Our analysis of firms types suggests that small firms (i.e., firms with 0-9 employees) are relatively important both in terms of their employment and their turnover contribution. In 2005, small firms contributed 62% and 69% to total layer one employment and turnover, respectively. Foreign and large UK owned firms are relatively unimportant, contributing 13% and 7% of employment and turnover, respectively.
- Despite this, the industry is relatively concentrated. In 2005, the top 10% of firms (2,800 firms) generated nearly 70% of total industry turnover.

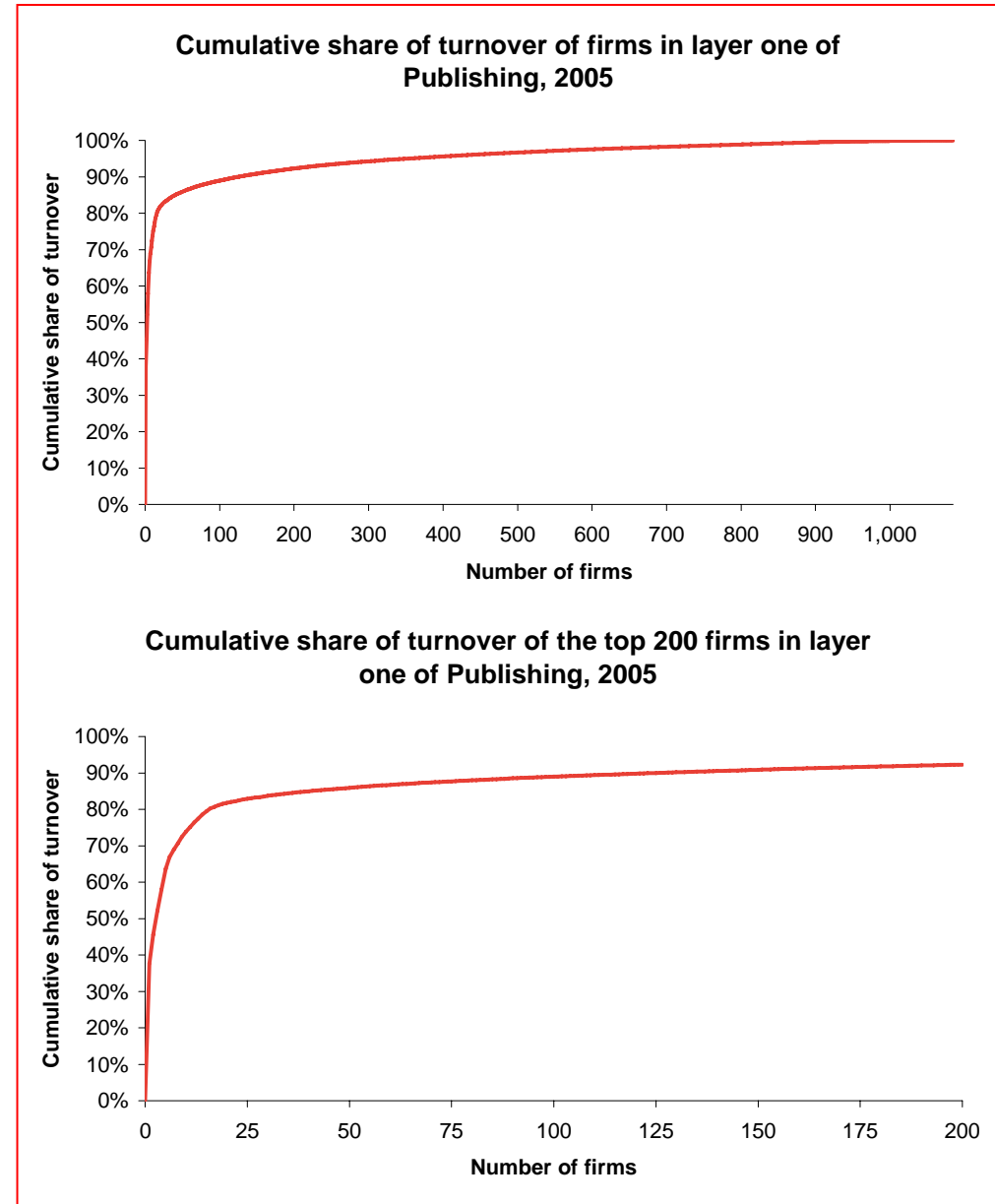
4.7 Publishing

The Publishing supply chain



The largest 20 firms account for 80% of layer one turnover

- To examine further the importance of the largest firms in layer one of the Publishing industry we have also examined the concentration of the Publishing industry in terms of the turnover contribution of firms.
- The graph on the right illustrates the cumulative market share of all 1,100 firms in layer one of the Publishing industry.
- This analysis shows that the industry is highly concentrated. For example the largest 2% of firms (around 20 firms) account for 80% of total industry layer one turnover.
- The graph below zooms in on the top graph to show the contribution of the top 200 firms in layer one of the Publishing Industry.
- This shows that the top 50 firms in layer one the industry generate 86% of turnover.
- It can also be shown that the top 4 firms in the Publishing industry generate 58% and the top 8, 71% of total layer one turnover (see Annexe 3 for a comparison of these C4 and C8 ratios between industries).
- We examine the characteristics of the largest firms in layer one of the industry in more detail over the page.



Examples of large UK based firms in layer one of Publishing

The Press Association Group

- The Press Association was founded in 1868 to provide a London-based service of collecting news from around the UK for a number of provincial newspapers. It is still owned by national and regional newspaper groups.
- It employs nearly 1,400 people, including reporters, sub editors and photographers.
- It covers the full spectrum of news, including business, sport, entertainment and the weather as well as the headline news events
- *Source: Press Association Group website*

Blackwell Publishing

- Blackwell started as a small bookstore in Oxford. It published its first book in 1897.
- Its global headquarters are still in Oxford, and Blackwell Publishing employs over 600 people.
- It is responsible for publishing 805 journals and also publishes about 650 new books each year.
- *Sources: Blackwell Publishing Website and Bureau Van Dijk Amadens database*

Performance of layer one

The employment contribution of the Publishing industry

- Layer one of the Publishing industry employed 12,000 employees in 2005. This is equivalent to:
 - 1.3% of the entire Publishing industry; and
 - 2% of total Creative Industry layer one employment.
- This employment contribution ranks the Publishing industry as the second smallest Creative Industry in terms of layer one employment (behind the Art, Antiques and Crafts industry).
- Layer one of the Publishing industry is also small relative to other industries in the wider economy. High-tech industries such as the Pharmaceutical and Biotech industries employed 44,000 employees and 22,000 employees respectively*.

** These statistics refer to the entire industry – we have not defined a set of layers for the Pharmaceutical and Biotech industries. Pharmaceutical estimates are from the IDBR database for 2005; Biotech industry estimates are from the DTI (DTI (2005) Comparative Statistics for the UK, European and US Biotechnology Sectors: Analysis Year 2003, Report prepared by Critical I Limited for the Department of Trade and Industry (London: DTI).*

Turnover performance of the Publishing industry

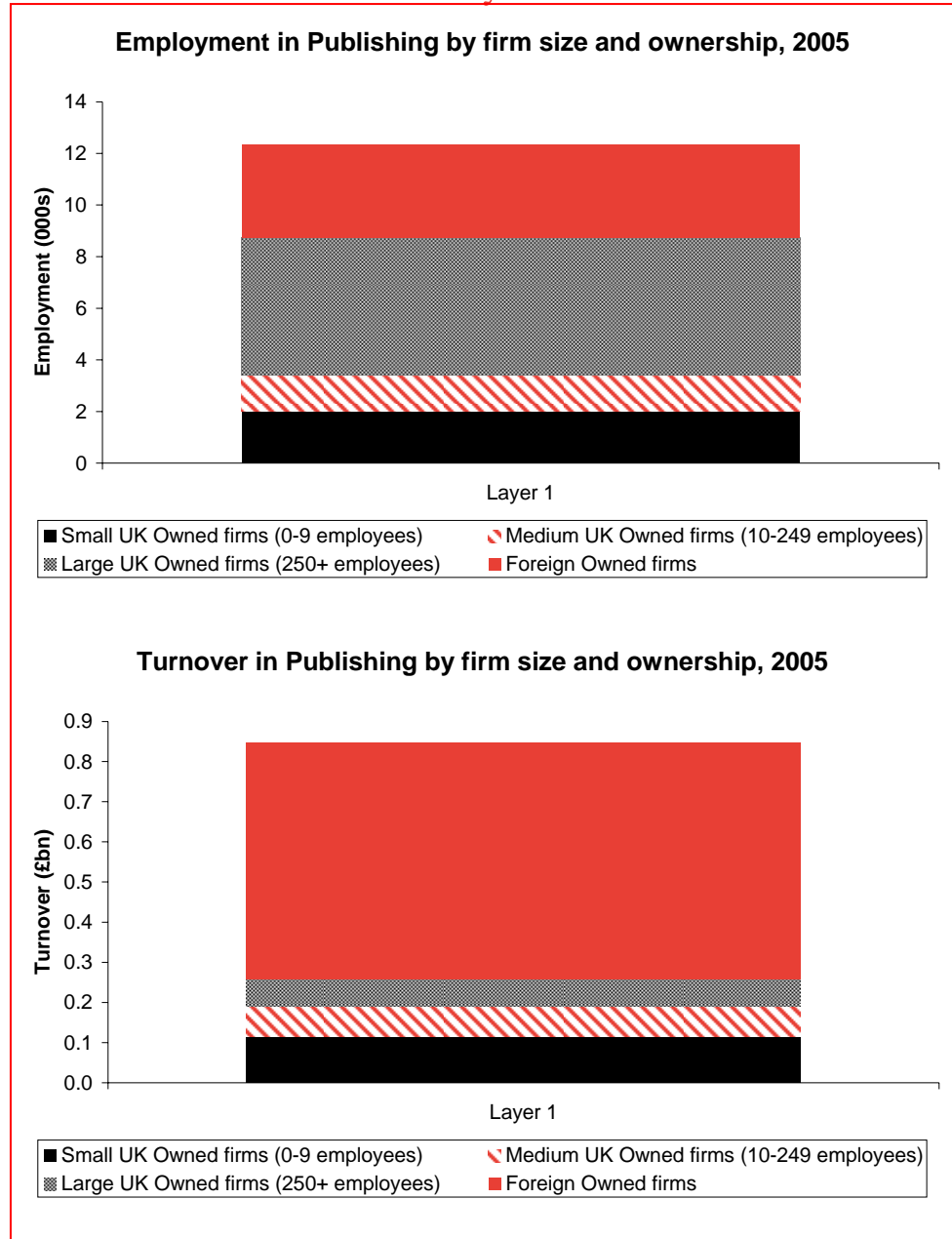
- Layer one of the Publishing industry had a turnover of £0.8bn in 2005. This is equivalent to:
 - 1% of the entire Publishing industry; and
 - 1% of total Creative Industry turnover.
- This layer one turnover performance ranks the Publishing industry as the second smallest Creative Industry in terms of turnover (behind the Art, Antiques and Crafts industry).
- The Turnover of layer one of the Publishing industry is smaller than many other industries in the wider economy. High-tech industries such as the Pharmaceutical and Biotech industries had a turnover of £10bn and £3.6bn respectively*.

** These statistics refer to the entire industry – we have not defined a set of layers for the Pharmaceutical and Biotech industries. Pharmaceutical estimates are from the IDBR database for 2005; Biotech industry estimates are from the DTI (DTI (2005) Comparative Statistics for the UK, European and US Biotechnology Sectors: Analysis Year 2003, Report prepared by Critical I Limited for the Department of Trade and Industry (London: DTI).*

The importance of large and foreign owned firms

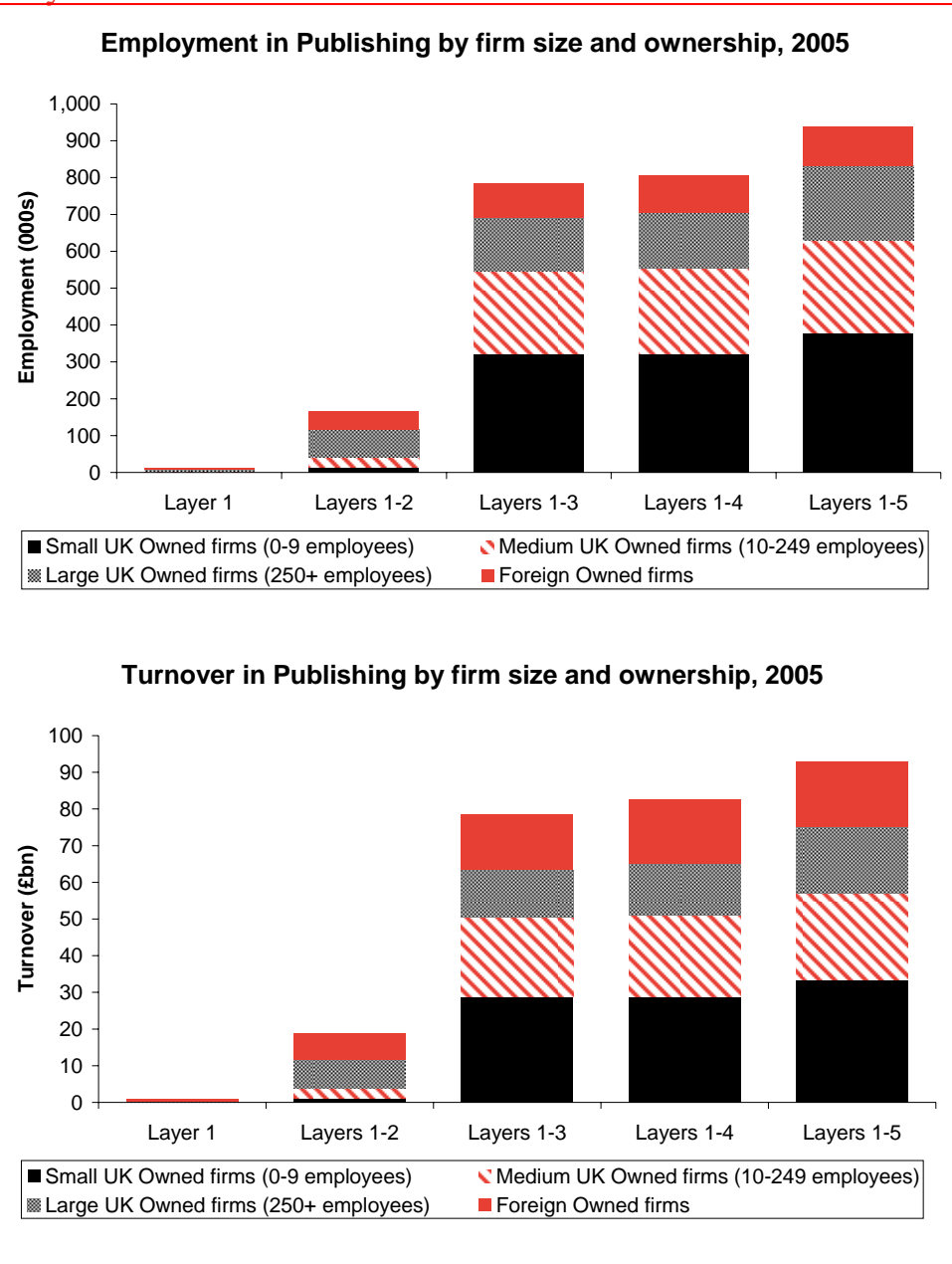
Foreign owned firms make a significant contribution to layer one turnover

- This sub-section explores whether particular types of firms are making a relatively important contribution to the Publishing Industry.
- In particular we examine the relative contributions of the following firm types to industry employment and turnover in 2005:
 - Small UK owned firms – 0-9 employees;
 - Medium UK owned firms – 10-249 employees;
 - Large UK owned firms – 250+ employees; and
 - Foreign owned firms.
- The top graph illustrates the relative importance of these firm types for employment. This shows that UK owned large firms are relatively important, accounting for 43% of total employment in 2005.
- In contrast, the bottom graph shows that foreign owned firms are relatively important in terms of turnover. In 2005, foreign owned firms accounted for 69% of total Publishing layer one turnover.



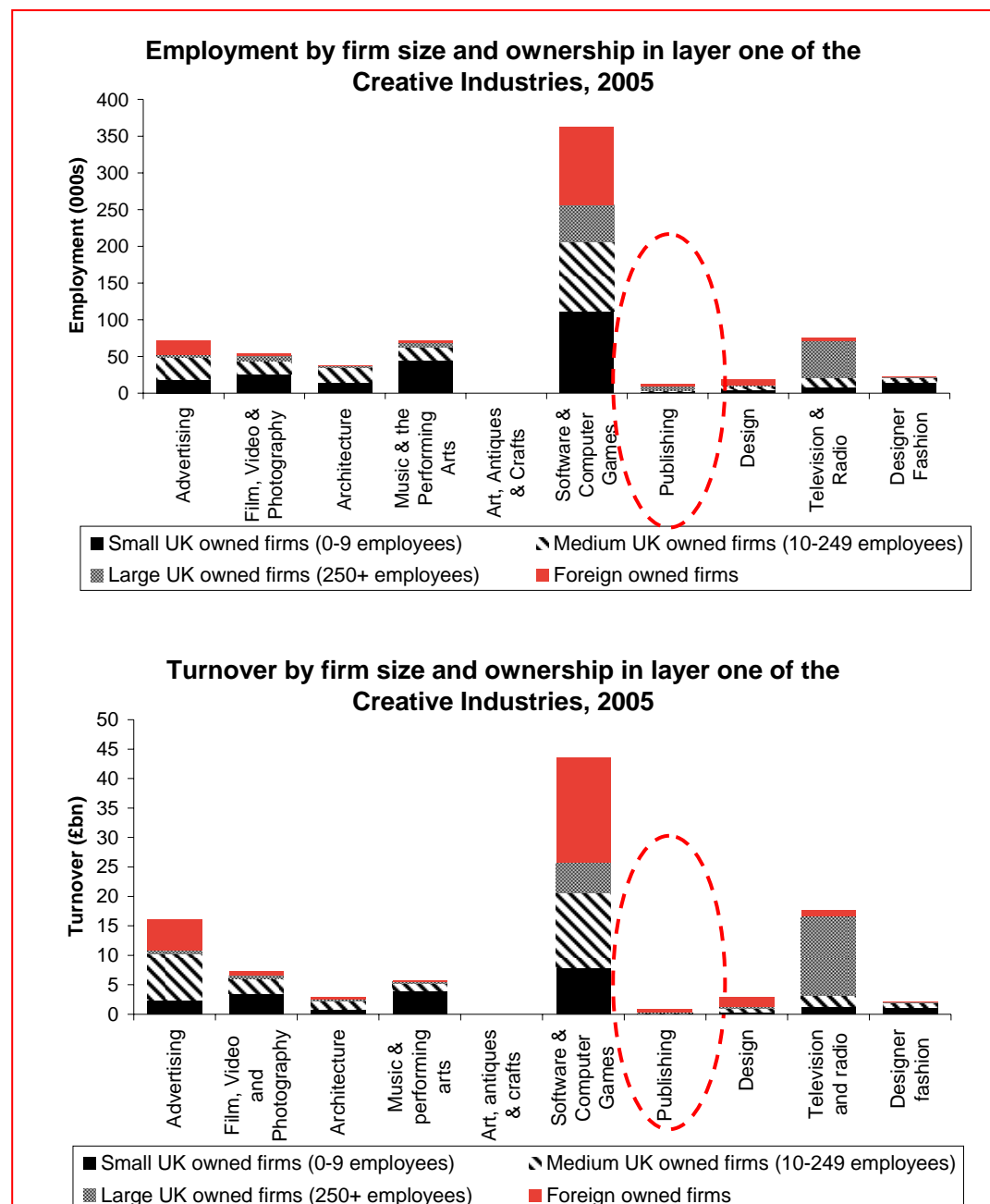
Foreign owned firms are important to layer one

- The graphs on the right compare the relative importance of these different firm types when we consider layer one as well as the outer layers.
- The top graph shows that in 2005, foreign owned firms contributed 29% and 70% to layer one employment and turnover.
- In contrast small firms contributed 16% to employment and 14% to turnover in layer one.



Foreign firms make a larger turnover contribution than in other Creative Industries

- The graphs on the right compare the importance of different firm types in the layer one of the Publishing industry, relative to layer one of the other Creative Industries.
- The top graph compares the layer one employment contribution of different firm types in 2005. This shows that relative to other Creative Industries, foreign owned firms make a large employment contribution. For example, 29% of Publishing employment was provided by foreign owned firms and 26% and 29% of Advertising and Software and Computer Games employment was provided by foreign owned firms.
- The bottom graph compares the layer one turnover contribution of different firm types in 2005. This shows that relative to other Creative Industries, foreign owned firms also make a large turnover contribution. For example, 70% of Publishing turnover was provided by foreign owned firms. 33% and 41% of Advertising and Software and Computer Games turnover was provided by foreign owned firms.



Summary of Publishing performance

- Layer one of the Publishing industry is one of the smallest when compared with other Creative Industries:
 - in terms of layer one employment it is the second smallest industry, employing 12,000 or 2% of all Creative Industry employees in 2005; and
 - in terms of layer one turnover it is the fifth largest industry, turning over £5.7bn or 4% of total Creative Industry turnover in 2005.
- Our analysis of firm types suggests that foreign owned sized firms are relatively important. In 2005, foreign owned firms contributed 29% to total layer one employment. Foreign owned firms contributed 70% of total layer one turnover.
- In terms of turnover, the Publishing industry is highly concentrated. In 2005, the top 2% of firms (20 firms) generated 80% of total industry turnover.

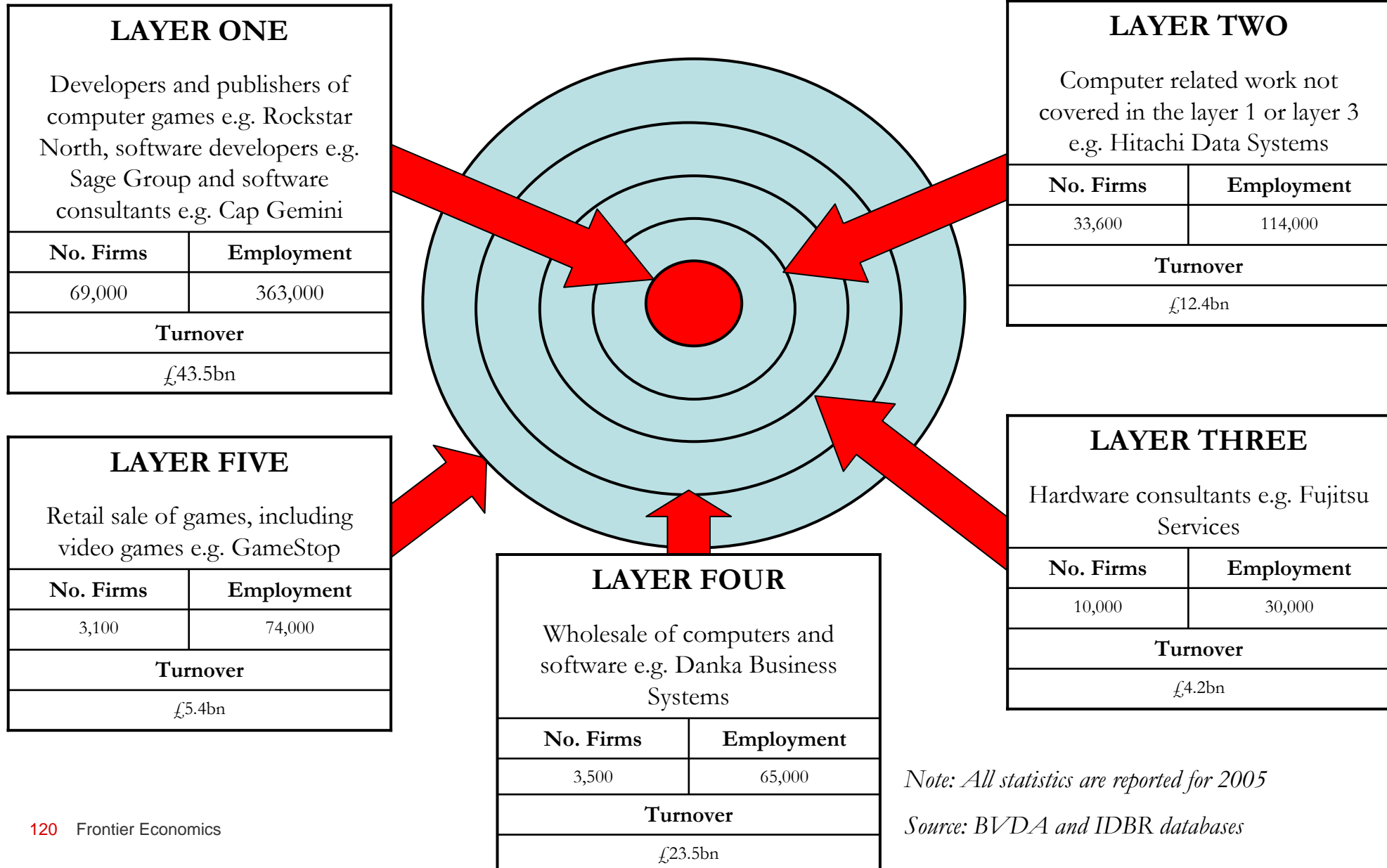
4.8 The Software and Computer Games industry

Understanding the relative contribution of software and computer games

- It has not been possible to construct separate definitions for the Software and the Computer Games industries using the current DCMS definition or the proposed 5-digit definition of the Creative Industries.
- However, the combined Computer Software and Computer Games industry is significant in terms of its employment and turnover contribution. This suggests that in order to understand the Creative Industries in more detail, it will be important to understand the individual contributions of the Software and the Computer Games industry.
- There is at present little information on the individual contributions of the Software and the Computer Games industry. To date there has been no way of knowing the relative importance of Software and Computer Games to the above figures.
- We have addressed this issue using data from the Bureau Van Dyke Amadeus (BVDA) database. This has allowed us to construct a separate definition of the Computer Games industry.
- In brief, this analysis shows the size of the Computer Games industry to be small. Our estimates suggest that:
 - Around 8,070 individuals are employed directly in layer one of the Computer Games industry
 - the industry has a total layer one turnover of around £2.6bn.
- In terms of layer one of the overall Software and Computer Games industry, this suggests that Computer Games contributes:
 - 2% of employment
 - 6% of turnover.
- In terms of all the Creative Industries, these estimates suggest that Computer Games contributes just 1% to total Creative Industry layer one employment and 3% to total Creative Industry layer one turnover**.
- The remainder of this section presents analysis from the IDBR data that does not currently split software and computer games

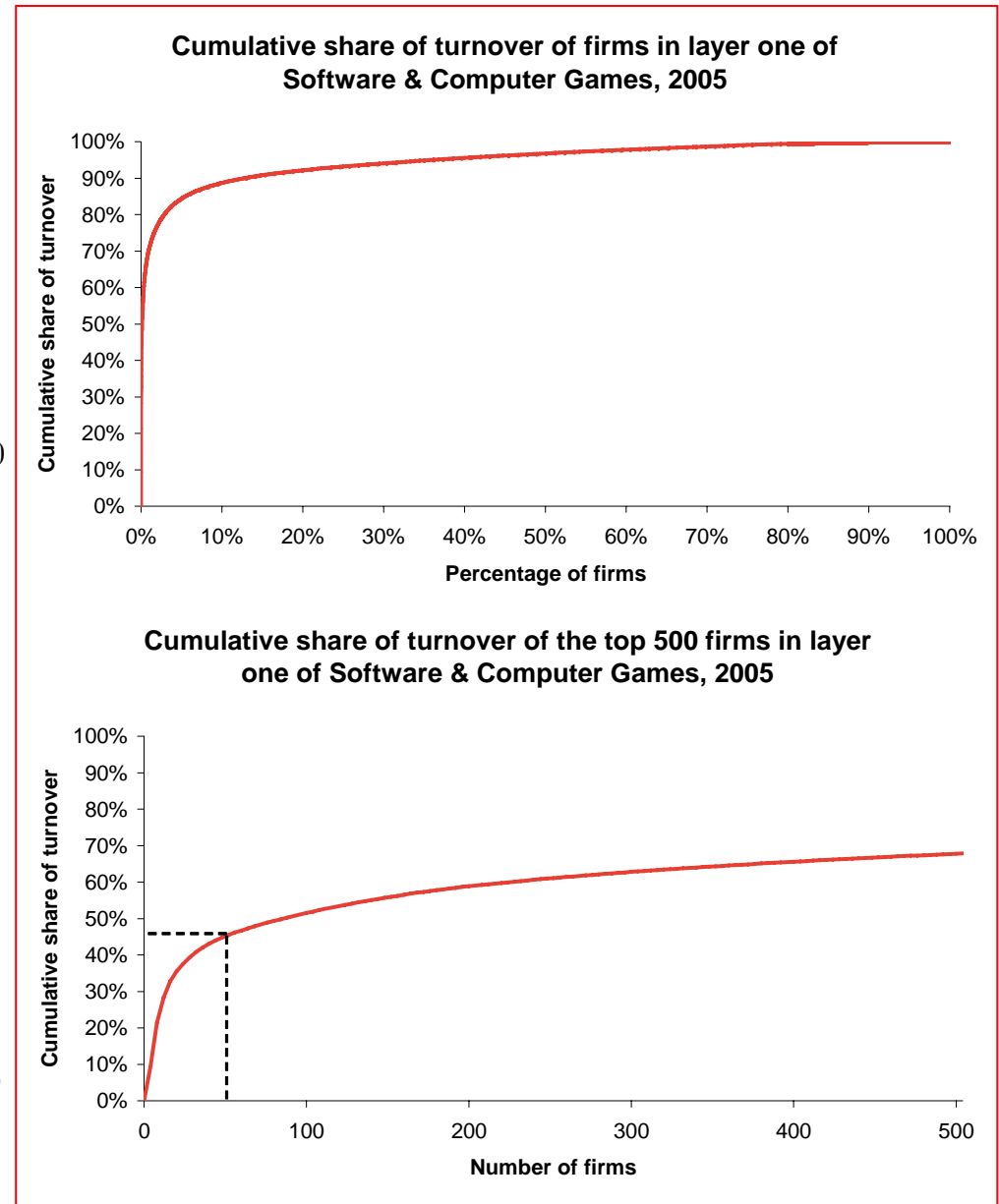
*** Source: Frontier analysis using ELSPA and TIGA member data and further companies house and firm website information.*

The Software and Computer Games supply chain



The largest 6,900 software and computer games firms generate 80% of layer one turnover

- We have examined the concentration of layer one of the Software and Computer Games industry in terms of the turnover contribution of firms. As we discussed above, this analysis will be broadly reflective of the Software industry.
- The graph on the right illustrates the cumulative share of turnover of all 69,000 firms in layer one the Software and Computer Games industry.
- This analysis shows that the Software industry is highly concentrated. For example the largest 10% of firms (6,900 firms) account for 89% of layer one turnover.
- We have also examined the turnover contribution of the largest 50 firms in layer one of the industry. This analysis is illustrated in the lower of the two charts.
- The chart illustrates that the largest 50 firms in layer one of the industry accounted for 46% of turnover in 2005. However, in 1995 the largest 50 firms in the industry accounted for only 27% of turnover. This demonstrates that major Software & Computer Games firms have been an important driver of the increase in the size of the industry between 1995 and 2005.
- It can also be shown that the top 4 firms in layer one of Software and Computer Games generate 19% and the top 8, 27% of total layer one turnover (see Annexe 3 for a comparison of these C4 and C8 ratios between industries)
- We examine the characteristics of the largest firms in the industry in more detail over the page.



The characteristics of the ten largest UK based layer one software firms (1)

This analysis considers the ten largest UK based computer software firms. They include well known firms such as Cap Gemini (a major global IT, consultancy and outsourcing services firm with a large presence in the UK) and Microsoft.

Cap Gemini

- Cap Gemini was founded in France in 1967 and acquired Ernst and Young consulting in 2000.
- It now employs approximately 9,000 people in the UK
- In 2003 it won a major IT outsourcing contract with the Department of Inland Revenue, estimated to be worth around £3 billion over ten years at the time the deal was signed.
- Other work has included helping Somerfield develop initiatives to improve the in-store experiences of customers.
- *Source: Cap Gemini UK website*

Computacenter

- Computacenter supplies technology and support to IT departments.
- Founded in 1981 its UK turnover first rose above £1 billion in 1997.
- Examples of its work include managing PCs and laptops for EDF Energy and Abbey.
- It also supported BT in improving the computing hardware and cabling infrastructure in the Department for Work and Pensions' data centre.
- *Source: Computacenter website*

The characteristics of the ten largest UK based layer one software firms (2)

Electronic Data Systems (EDS)

- EDS is a US firm that first established a presence in the UK in 1984, now employing approximately 16,000 across the country.
- The firm's major clients include several government bodies. For example, EDS was involved in the Department for Work and Pensions project to make job vacancies available online at special kiosks in all Jobcentre Plus offices. EDS also developed and rolled out the Oyster card ticketing system for Transport for London.
- Examples of the firm's work for private sector clients include outsourcing functions like post-sale processing for Abbey and developing a system for Interconnector Ltd to help manage the flow of natural gas between the UK and the European Union.
- *Source: EDS website*

Dimension Data

- The firm was founded in South Africa in 1983. It listed on the London Stock Exchange in 2000, and has grown in the UK through acquisitions.
- Work in the UK has included installing internet, telephone and TV cables to 2,500 student rooms for Derby university and installing an internet telephony system for Dolphin Drilling, an oil and gas exploration and production firm.
- *Source: Dimension Data website*

The characteristics of the ten largest UK based layer one software firms (3)

Misys

- Misys is listed on the London Stock Exchange and has over 1,400 employees in the UK. They also have a major presence in the USA, with nearly 3,000 employees. 80% of their product development takes place in Bangalore or Manila.
- The firm provides software and services to the banking, corporate treasury, capital markets, and healthcare industries.
- Misys systems manage approximately 1 in 3 loan transactions around the world. In healthcare, they provide software for the electronic management of patient records.
- *Source: Misys Annual Report 2006*

Logica CMG

- Logica CMG is listed on both the London Stock Exchange and Euronext (Amsterdam).
- The firm employs approximately 6,000 people in the UK. They also currently have more than 1,000 people working in India on UK based business.
- In 2005 over 45% of its UK revenue from IT services (£712million), its major business area, came from public sector clients. Logica CMG's UK public sector revenue was stable between 2004 and 2005, following “years of very high growth”, according to the companies' 2005 Annual Report.
- Outsourcing of business IT services is a large part of their business, and they recently won major contracts with the Ministry of Defence, Transport for London and Thames Water.
- *Source: Logica CMG Annual Report 2005*

The characteristics of the ten largest UK based layer one software firms (4)

Atos Origin

- Atos Origin was formed in 2000 by the merger of a French company and a subsidiary of Philips Electronics. These firms, in turn, had been formed by mergers in the mid-1990s. It recently acquired KPMG consulting in the UK.
- Its UK operation has more than 7,000 staff, with a turnover of over £600 million.
- The firm designs, builds and operates IT systems and solutions for its clients. About 60% of its revenue comes from longer term contracts such as outsourcing or systems maintenance.
- Atos Origin processes and distributes one in ten payslips in the UK.. It has also been involved in a number of projects for Network Rail, and developed the Transport Direct online portal for the Department for Transport, which helps plan journeys using all forms of transport.
- *Source: Atos Origin website*

Capita Business Services

- Capita is a major business processing outsourcing firm, employing nearly 26,000 people in the UK and with a turnover of over £1.7billion.
- The public sector accounts for over 50% of its revenues.
- Major contracts include a 10 year partnership with the BBC to handle TV licence revenue collection and enforcement, a 5 year contract with Transport for London to design and operate a management system for the Congestion Charge and a contract to handle customer care and sales telephone calls for Dixons Store Group.
- *Source: Capita Website and Annual Report 2005*

The characteristics of the ten largest UK based layer one software firms (5)

Siemens Business Services and IT solutions

- Taken together, Siemens Business Services and Siemens IT Solutions (two parts of the much larger Siemens group) employ roughly 7,000 people in the UK. Their UK turnover is approximately £600 million.
- In 2004 Siemens won a £2 billion, 10 year contract to provide broadcast and IT services to the UK.
- *Sources: Siemens UK website and Bureau Van Dijk Amadeus database*

Microsoft UK

- Microsoft's presence in the UK employs nearly 2,000 people and has a turnover of over £400 million.
- As well as handling their UK sales and marketing operations, they are also involved in technical IT consultancy. This involves working closely with major customers (such as large corporations or the public sector) to help them get the most out of Microsoft Software. In addition Microsoft Research provides blue skies research to Microsoft's global research and development arm.
- *Source: Microsoft UK website*

Examples of two Computer Games firms

This analysis considers two key UK based computer games developers (as opposed to publishers). The first of these is an example of a firm that has been acquired by an international publisher. The second firm is an example of a UK firm that has remained UK owned.

Rockstar North/ Take 2 Interactive

- Rockstar North is a significant games developer in the UK based in Edinburgh.
- Founded in 1988 as DMA, it has been a part of US publisher Take 2 Interactive's internal games development network since 1997.
- Its biggest success is the *Grand Theft Auto* series of games, the ninth instalment of which is now in development.
- Sales of the *Grand Theft Auto: San Andreas* were in excess of 12 million units by the end of January 2005 – 4 months after its release.

Traveller's Tales/ TT Games

- Traveller's Tales is the games development arm of UK independent publisher TT Games.
- Founded in 1990, its most successful development has been the *Lego Star Wars* series of games.
- The original instalment of *Lego Star Wars* sold over 2.5 million copies worldwide by April 2006.
- This, along with its other titles, made Traveller's Tales the most successful games developer in 2006.

Performance of layer one

We examine employment and turnover in the Software industry

- This section examines the employment and turnover contribution of the Software industry and compares this with performance of other Creative Industries and the wider economy.
- To carry out this analysis we use statistics on the overall Software and Computer Games sector to infer the characteristics and performance of the Software industry. This assumption is drawn from our previous analysis which showed the Software industry to account for the majority of Software and Computer Games industry employment and turnover.

Employment performance of the Software and Computer Games industry

- Layer one of Software and Computer Games had 363,000 employees in 2005. Our analysis of the Computer Games industry suggests that 354,930 of these were employed in the Software industry. This is equivalent to:
 - 98% of software industry turnover; and
 - 48% of total Creative Industry layer one employment
- This employment performance ranks the Software industry as the largest Creative Industry in terms of employment.
- The employment contribution of the industry was also strong relative to the wider economy. Hi-tech industries such as the Pharmaceutical and Biotech industries employed 44,000 employees and 22,000 employees respectively*.

** These statistics refer to the entire industry – we have not defined a set of layers for the Pharmaceutical and Biotech industries. Pharmaceutical estimates are from the IDBR database; Biotech industry estimates are from the DTI (DTI (2005) Comparative Statistics for the UK, European and US Biotechnology Sectors: Analysis Year 2003, Report prepared by Critical I Limited for the Department of Trade and Industry (London: DTI).*

Turnover performance of the Software industry

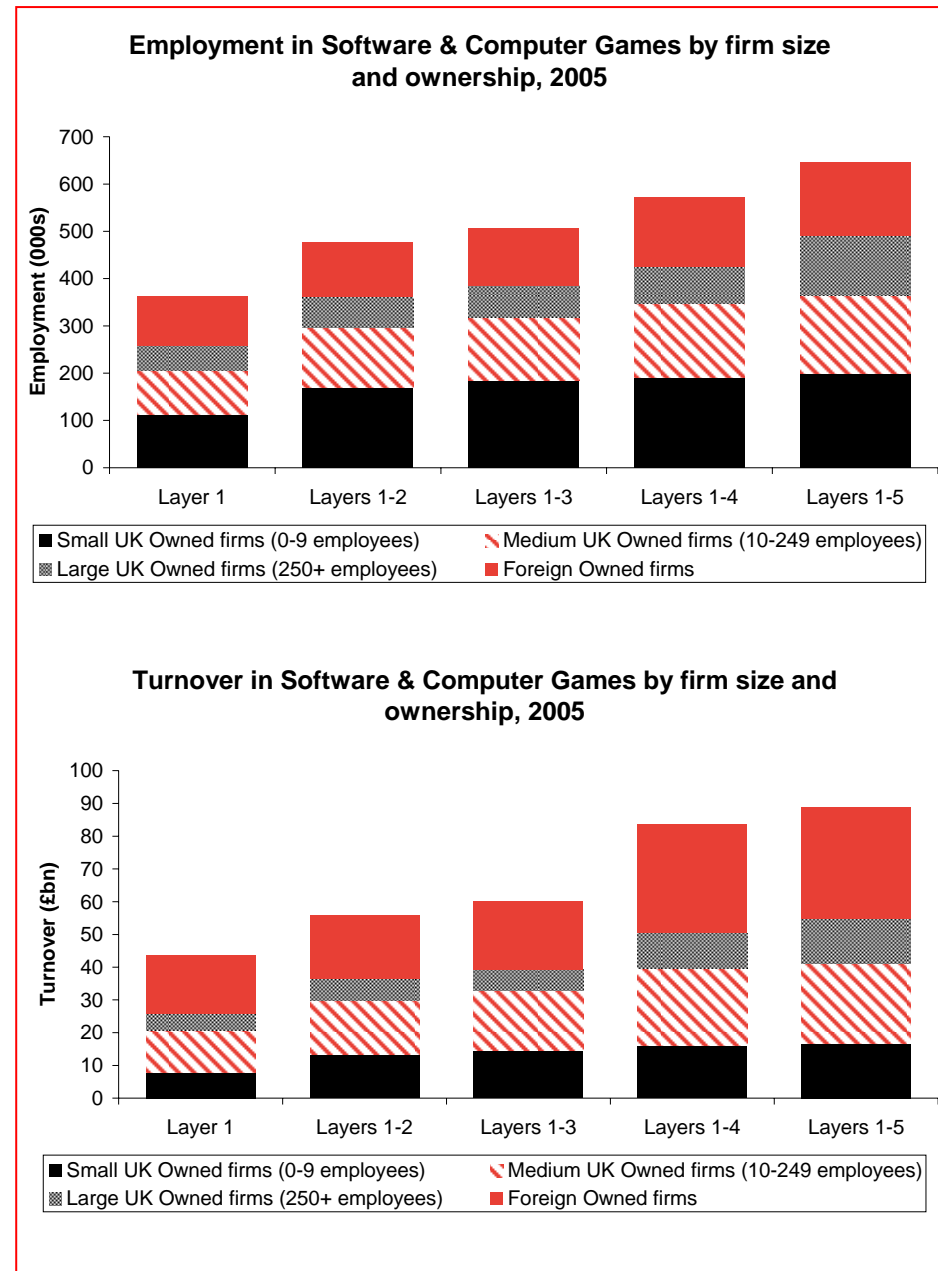
- Turnover in layer one Software and Computer Games was £43.5bn in 2005. Our analysis of the Computer Games industry suggests that Software turnover accounts for £40.9bn. This is equivalent to:
 - 94% of overall Software and Computer Games industry turnover; and
 - 41% of total Creative Industry layer one turnover.
- Layer one turnover performance of the Software industry is strong relative to other comparable industries in the wider economy. High tech industries such as the Pharmaceutical and Biotech industries had a turnover of £10bn and £3.6bn respectively*.
- The turnover contribution of the industry is also strong relative to high-tech firms in the wider economy. Hi-tech industries such as the Pharmaceutical and Biotech industries had a turnover of £10bn and £3.6bn respectively*.

* These statistics refer to the entire industry – we have not defined a set of layers for the Pharmaceutical and Biotech industries. Pharmaceutical estimates are from the IDBR database; Biotech industry estimates are from the DTI (DTI (2005) Comparative Statistics for the UK, European and US Biotechnology Sectors: Analysis Year 2003, Report prepared by Critical I Limited for the Department of Trade and Industry (London: DTI).

The importance of large and foreign owned firms

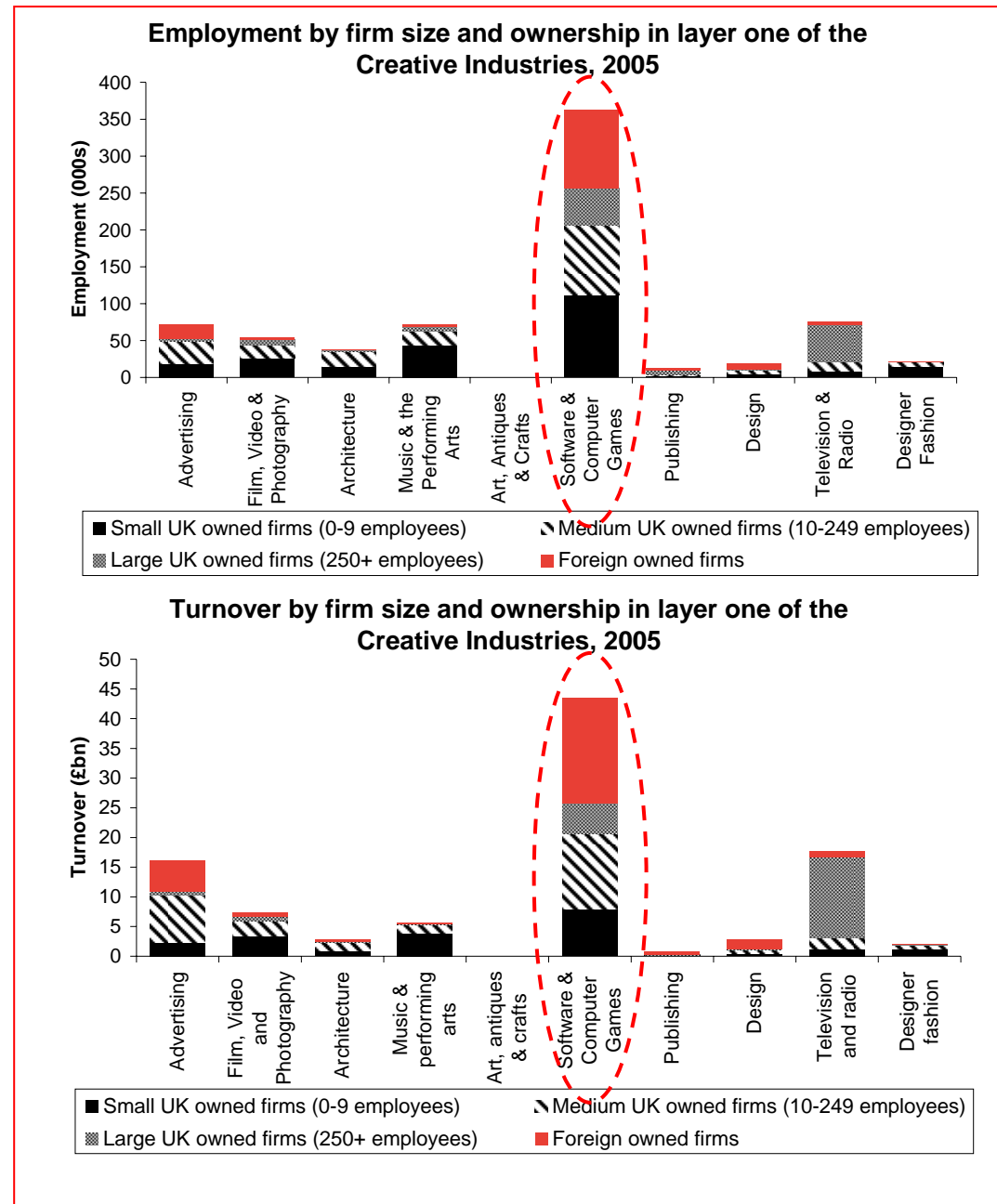
Foreign owned firms make a significant contribution to the Software Industry

- This sub-section explores whether particular types of firms are making a relatively important contribution to the Software Industry. As before we present statistics on the overall Software and Computer games industry on the understanding that these are broadly indicative of Software performance alone.
- In particular we examine the relative contributions of the following firm types to industry employment and turnover in 2005:
 - Small UK owned firms – 0-9 employees;
 - Medium UK owned firms – 10-249 employees;
 - Large UK owned firms – 250+ employees; and
 - Foreign owned firms.
- Both graphs show that foreign owned firms (represented by the red shaded area of each bar) are relatively important both in terms of their employment and their turnover contribution. For example, foreign owned firms contributed 29% and 41% to total layer one employment and turnover, respectively.
- Small firms appear to make a relatively large contribution to layer one employment (33%), but a smaller contribution to turnover (20%).



...and in comparison with their contribution to other Creative Industries

- The graphs on the right compare the importance of different firm types in layer one of the Software industry, relative to layer one of other Creative Industries. Again the results should be read as indicative of the Software industry alone.
- The top graph compares the layer one employment contribution of different firm types in 2005. This shows that relative to other Creative Industries, foreign owned firms make a large employment contribution. For example, 26% of Software and Computer Games employment was provided by foreign owned firms and 26% of Advertising employment was also provided by foreign firms.
- The bottom graph compares the layer one turnover contribution of different firm types in 2005. This shows that relative to other Creative Industries, foreign owned firms also make a large turnover contribution. For example, whereas 41% of Software and Computer Games turnover was provided by foreign owned firms, 4% and 6% of Music and Television & Radio turnover was provided by foreign owned firms.



Summary of our analysis of the Software industry

- Our key finding from our analysis of the Software industry is its significant contribution to both the employment and turnover of the Creative Industries. Employment in layer one of the Software industry in 2005 was 355,000. This is equivalent to 49% of total Creative Industry employment. Similarly, the turnover of the Software industry in 2005 was £40.9bn. This is equivalent to 41% of total Creative Industry turnover.
- In terms of firm types, our analysis has shown that foreign owned firms make a significant contribution to Software industry employment and turnover. In 2005, foreign owned firms contributed 29% and 41% of total industry employment and turnover respectively.
- The largest firms in the industry are also important. Our analysis of industry concentration shows the Software industry to be highly concentrated with the largest 10% of firms providing almost 90% of total industry turnover

4.9 The Television and Radio industry

Overview of our analysis of the Television and Radio industry

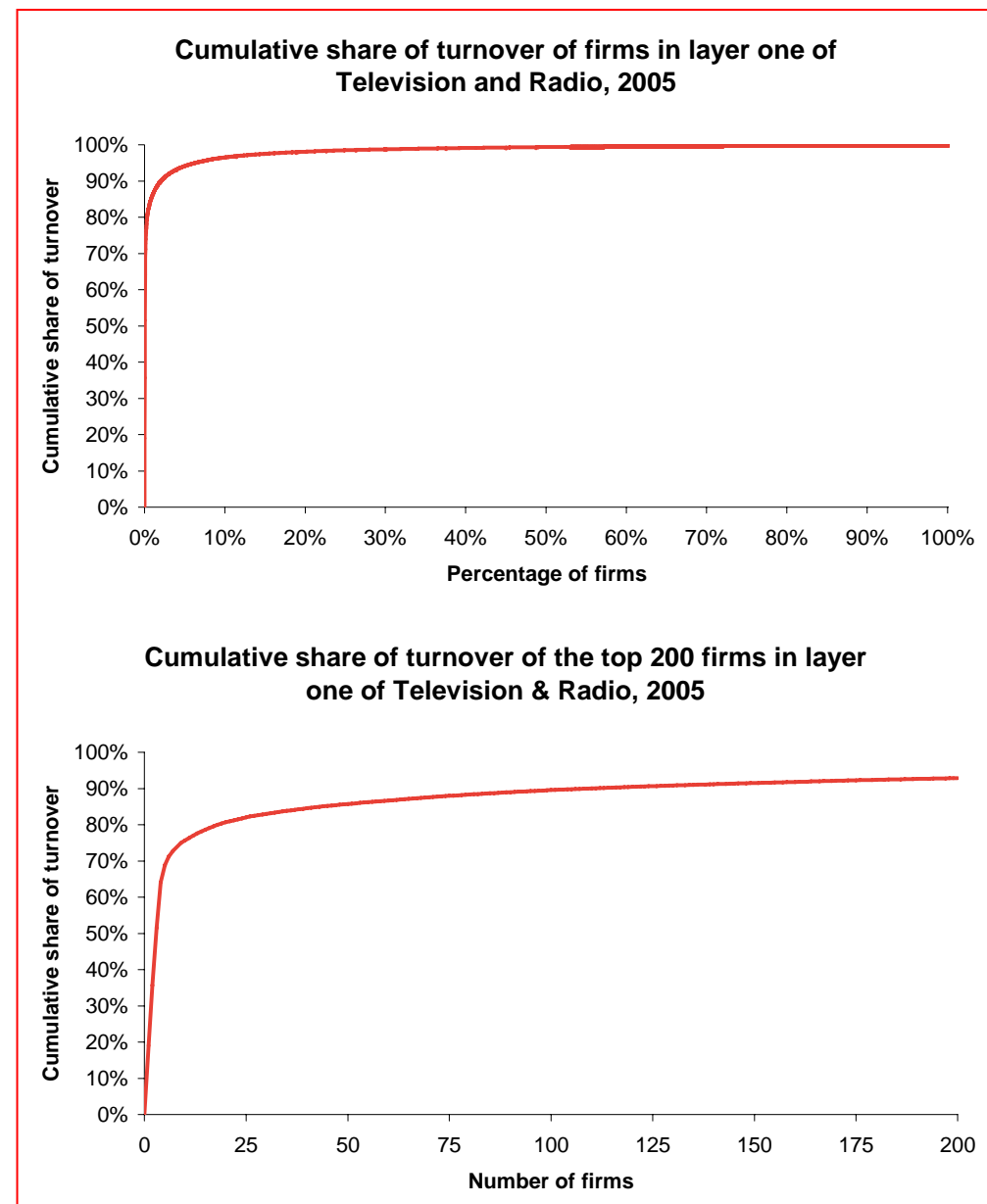
- This section is intended to provide an in-depth analysis of the performance of the Television and Radio industry, focusing in particular on its layer one activities.
- We begin by describing the Television and Radio industry supply chain. This analysis provides information on the size of each of the layers as well as the types of firms which operate within them.
- We also examine the characteristics of the largest firms in layer one of the industry. We do this through a brief analysis of some of the key firms in the industry. Then we examine overall industry concentration and the contribution of the 50 largest firms in the industry.
- Next we move our focus to a more detailed analysis of the performance of layer one of the Television and Radio industry. This sets out:
 - its employment performance in terms of the number of people that are employed in the industry; and
 - its turnover performance in terms of the number and the total turnover of firms in layer one of the industry.
- Our final analysis examines the relative importance of small, medium and large (UK) firms and foreign owned firms to the Television and Radio industry. Here we present an overview of the relative importance of these groups to each layer of the industry in terms of employment and turnover.

The Television and Radio industry supply chain



The largest 17 firms account for 80% of layer one turnover

- To examine further the importance of the largest firms in layer one of the Television and Radio industry we have also examined the concentration of the Television and Radio industry in terms of the turnover contribution of firms.
- The graph on the right illustrates the cumulative market share of all firms in layer one of the Television and Radio industry.
- This analysis shows that the industry is relatively concentrated. For example, only 17 firms (less than 1% of the industry) account for 80% of total industry layer one turnover.
- The graph below zooms in on the top graph to show the contribution of the top 200 firms in layer one of the Television and Radio Industry.
- This shows that the top 50 firms in layer one of the industry generate 86% of total layer one turnover.
- It can also be shown that the top 4 firms in the Television and Radio industry generate 64% and the top 8, 74% of total layer one turnover (see Annexe 3 for a comparison of these C4 and C8 ratios between industries).
- We examine the characteristics of the largest firms in the industry in more detail over the page.



Examples of large UK based firms in layer one of Television and Radio

The BBC

- The BBC employs around 25,000 people. Of these, 19,000 are accounted for by its UK Public Service Broadcasting operation.
- During March-April 2006, 20 million people watched at least 15 minutes of *Planet Earth*.
- Its objectives include producing high quality programmes that offer value for public money, and driving forwards digital TV and radio services.
- *Source: BBC Annual Report and Accounts 2005/2006*

All3Media

- All3Media was formed in 2003 following the acquisition of Chrysalis Group's TV division by a management team backed by private equity capital from Bridgepoint. The private equity group Permira is now its majority shareholder, following a further sale in 2006.
- It has made several further acquisitions, such as Company Pictures, another Television Production Group.
- Its major productions include *Midsomer Murders*, *Richard and Judy* and Formula 1 racing for ITV.
- *Sources: All3Media website*

Performance of layer one

The employment contribution of the Television and Radio industry

- Layer one of the Television and Radio industry employed 76,000 people in 2005. This is equivalent to:
 - 36% of the entire Television and Radio industry; and
 - 10% of total Creative Industry layer one employment.
- This employment contribution ranks the Television and Radio industry as the second largest Creative Industry in terms of layer one employment (behind Software).
- The performance of the industry was also strong relative to the wider economy. High-tech industries such as the Pharmaceutical and Biotech industries employed 44,000 employees and 22,000 employees respectively*.

** These statistics refer to the entire industry – we have not defined a set of layers for the Pharmaceutical and Biotech industries. Pharmaceutical estimates are from the IDBR database; Biotech industry estimates are from the DTI (DTI (2005) Comparative Statistics for the UK, European and US Biotechnology Sectors: Analysis Year 2003, Report prepared by Critical I Limited for the Department of Trade and Industry (London: DTI).*

Turnover performance of the Television and Radio industry

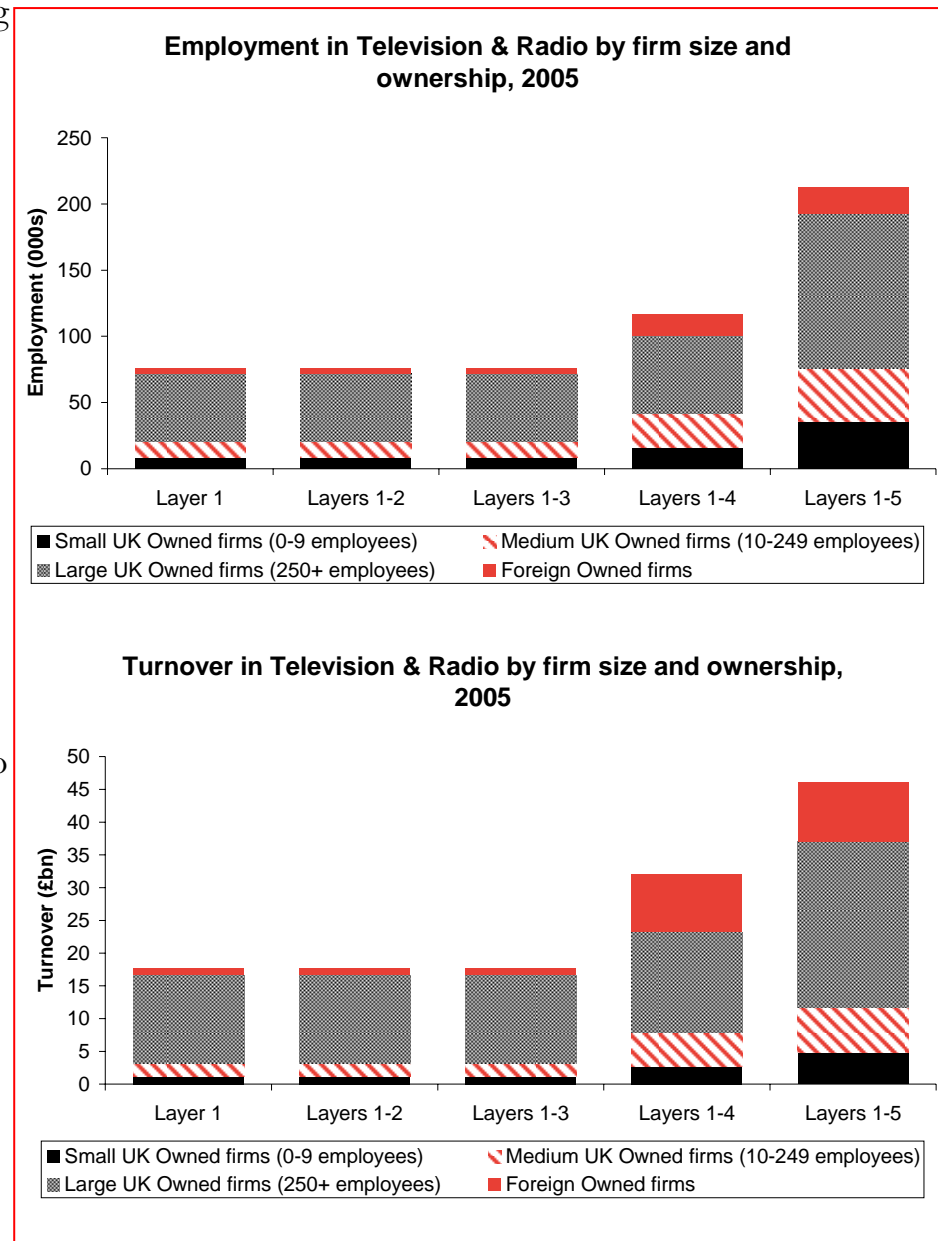
- Layer one of the Television and Radio industry had a turnover of £18bn in 2005. This is equivalent to:
 - 38% of the entire Television and Radio industry; and
 - 18% of total Creative Industry turnover.
- This turnover performance ranks the Television and Radio industry as the second largest Creative Industry in terms of layer one turnover (behind Software).
- Turnover performance of the Television and Radio industry is strong relative to other high-tech industries in the wider economy. High-tech industries such as the Pharmaceutical and Biotech industries had a turnover of £10bn and £3.6bn respectively*.

** These statistics refer to the entire industry – we have not defined a set of layers for the Pharmaceutical and Biotech industries. Pharmaceutical estimates are from the IDBR database; Biotech industry estimates are from the DTI (DTI (2005) Comparative Statistics for the UK, European and US Biotechnology Sectors: Analysis Year 2003, Report prepared by Critical I Limited for the Department of Trade and Industry (London: DTI).*

The importance of large and foreign owned firms

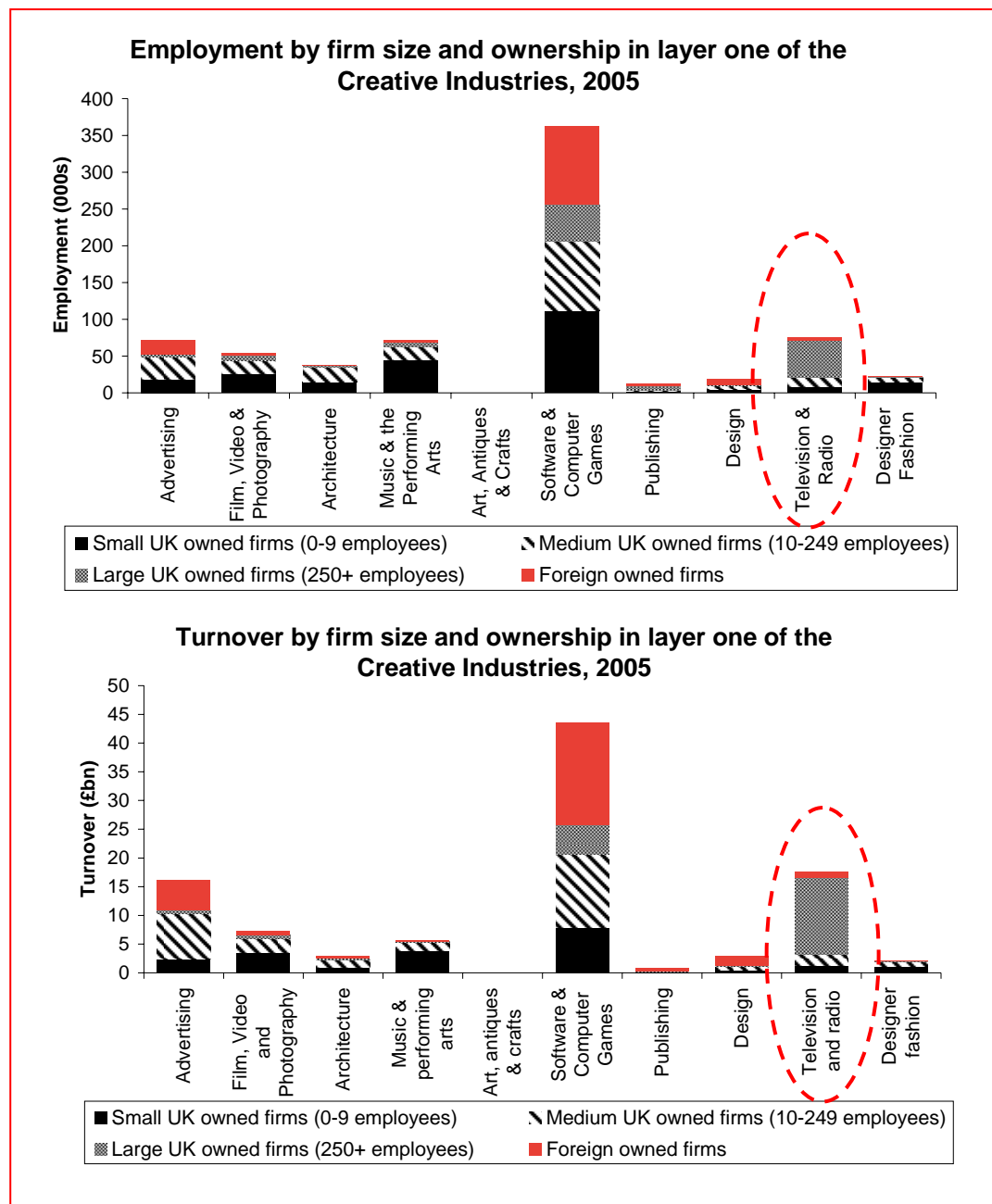
Large firms make a significant contribution, especially in layer one

- This sub-section explores whether particular types of firms are making a relatively important contribution to the Television and Radio Industry.
- In particular we examine the relative contributions of the following firm types to industry employment and turnover in 2005:
 - Small UK owned firms – 0-9 employees;
 - Medium UK owned firms – 10-249 employees;
 - Large UK owned firms – 250+ employees; and
 - Foreign owned firms.
- Both graphs show that large firms (represented by the grey shaded area of each bar) are relatively important in terms of employment. In 2005, large firms contributed 67% of total layer one employment and 76% of total layer one turnover.
- Foreign owned firms on the other hand make a small contribution to the industry. In 2005, foreign owned firms contributed 5% and 6% to overall industry employment and turnover, respectively.



Large sized firms make a larger contribution than in other Creative Industries

- The graphs on the right compare the importance of different firm types in layer one of the Television and Radio industry, relative to layer one of other Creative Industries.
- The top graph compares the layer one employment contribution of different firm types in 2005. This shows that relative to other Creative Industries, large firms make a significant employment contribution. For example, 67% of Television and Radio employment was provided by medium firms and 14% of Software and Computer Games employment was provided by large firms.
- The bottom graph compares the layer one turnover contribution of different firm types in 2005. This shows that relative to other Creative Industries, medium firms also make a large turnover contribution. For example, 76% of Television and Radio turnover was provided by medium firms and 12% of Software and Computer Games turnover was provided by large firms.



Summary of Television and Radio performance

- Layer one of the Television and Radio industry is the second largest of the Creative Industries:
 - in terms of layer one employment it is the second largest industry, employing 76,000 or 10% of all Creative Industry employees in 2005; and
 - in terms of layer one turnover it is also the second largest industry, turning over £18bn or 18% of total Creative Industry turnover in 2005.
- Our analysis of firms types suggests that large firms (i.e., firms with 250 or more employees) are relatively important both in terms of their employment and their turnover contribution. In 2005, large firms contributed 67% and 76% to total layer one employment and turnover, respectively. Foreign owned firms are less important, contributing 5% and 6% of employment and turnover, respectively.
- As a result the industry is highly concentrated. In 2005, the top 10% of firms generated around 95% of total industry turnover.

Annexes

Annexe 1 – Creative Industry definitions

Advertising activities

Layer	SIC Code	Description
Layer 1	74.40/2	Planning, creating and putting in place advertising campaigns
Layer 5	74.40/9	A "catch all" code for advertising, including handing out free samples and aerial advertising
	74.40/1	Selling or leasing advertising space or time

SIC codes in red are those previously used by DCMS to identify the Creative Industries.

Architecture activities

Layer	SIC Code	Description
Layer 1	74.20/1	Architectural design and construction supervision
	74.20/2	Urban planning and landscape architecture
Layer 2	74.20/4	Engineering advice and design for construction projects
Layer 3	74.20/6	Scientific consultancy like weather and geological surveying
	74.15/3	Construction holding companies and head offices
	70.11	Real estate developers
	45.21/1, 45.21/2, 45.21/3, 45.22, 45.23, 45.24, 45.25	All types of construction work, like residential buildings, bridges, roads, sports facilities, dams and related work like laying foundations and putting up scaffolding.
Layer 4	74.20/3	Quantity surveying
	51.54	Wholesale of hardware, plumbing and heating equipment and supplies
	51.53	Wholesale of construction materials and sanitary equipment (e.g. toilets and sinks)
	51.13	Agents who sell timber and building materials
	45.41, 45.42, 45.43, 45.44, 45.45	All types of building completion like plastering, painting and glazing, Floor and wall covering and installing swimming pools
	45.31, 45.32, 45.33, 45.34	All types of building installation like electrical work, insulation work and plumbing

SIC codes in red are those previously used by DCMS to identify the Creative Industries.

Arts, Antiques and Crafts activities

Layer	SIC code	Description
Layer 2	74.87/3	Exhibition and fair organisation
	52.50/1, 52.48/6	Retail sale of antiques and retail sale in commercial art galleries
Layer 3	36.63/9	Catch all SIC code for "other manufacturing" (potentially some craft firms, if they are large enough to be covered by the IDBR)
	36.22, 36.61	Manufacture of jewellery and dinnerware made of precious metals and imitation jewellery
	36.30, 33.50	Making musical instruments and watch & clock making
	28.75, 28.61	Making various metal products like swords but also ship propellers etc. and making cutlery
	27.54, 27.41, 26.82/9	Casting and production of heavy and precious metals and manufacture of mineral products
	26.30, 26.25, 26.21, 26.70	Making ceramic tiles, pots, jars, tableware, statuettes etc. and cutting stone for building and ornamental use
	17.51/9, 17.51/2, 17.51/1	Carpet and rug making
Layer 4	51.47/9	A catch all SIC code that includes the wholesale of floor coverings but also stationary and sportswear etc.
	51.44, 51.47/8	Wholesale of china and of travel and fancy goods
	51.47/3, 51.47/4	Wholesale of jewellery and imitation jewellery

SIC codes in red are those previously used by DCMS to identify the Creative Industries.

Design activities

Layer	SIC code	Description
Layer 1	74.20/5	Engineering design for industry

SIC codes in **red** are those previously used by DCMS to identify the Creative Industries.

Designer Fashion activities

Layer	SIC Code	Description
Layer 1	74.87/2	Fashion design but also interior design and graphic design
Layer 3	17.53, 17.71, 17.72, 18.10, 18.22/1, 18.22/2, 18.23/1, 18.23/2, 18.24/1, 18.24/3, 18.24/9, 18.30, 19.20, 19.30	Manufacture of clothing items like hats, shoes, outerwear and underwear or accessories like bags and luggage.
Layer 4	17.11, 17.12, 17.13, 17.14, 17.15, 17.16, 17.17, 17.21, 17.22, 17.23, 17.24, 17.25, 17.30, 17.54/1, 17.54/2, 17.54/9, 17.60, 19.10	Manufacture of fibres, textiles, prepared fur and prepared leather
	51.16, 51.24/1, 51.24/9, 51.41, 51.42/1, 51.42/2, 51.42/3, 51.42/9	Wholesale of, and activates of agents involved in the sale of, fabrics, fur and clothing,
Layer 5	52.42/1, 52.42/2, 52.42/3, 52.42/4, 52.43/1	Retail sale of cloths, accessories and footwear

SIC codes in red are those previously used by DCMS to identify the Creative Industries.

Film, Video and Photography activities

Layer	SIC code	Description
Layer 1	74.81/3	Specialist photography (e.g. underwater)
	74.81/9	Photos for commercials, fashion, tourism etc.
	92.11/1	Producing films, cartoons and documentaries
	92.11/9	Dubbing, editing, post production etc.
Layer 2	74.81/2	Portrait photos (mainly passport photo companies, although doesn't include photo machines)
Layer 3	92.12	Motion picture distribution
	74.81/4	Film processing
	52.48/2	Retail sale of cameras but also office equipment
	51.47/6	Wholesale of photographic goods
	33.40/3	Manufacture of cameras, projectors etc.
	24.65	Manufacture of unrecorded media (also includes unrecorded media for computers)
	24.64	Manufacture of photographic chemicals
	22.32	Reproduction of DVD's and tapes
Layer 5	92.13	Cinemas

SIC codes in red are those previously used by DCMS to identify the Creative Industries.

Music and the Performing Arts activities

Layer	SIC code	Description
Layer 1	92.31/1	Live theatrical presentation
	92.31/9	Artistic and literary creation and interpretation
Layer 2	92.72/1	Casting for theatres, motion pictures or television
	92.32	Theatres, concert halls, arts facilities and ticket agencies
	22.14	Music publishing
Layer 3	92.34/9	"Other entertainment activities" code that includes VUE and Tussauds
	51.47/5	Wholesale of musical instruments
	22.31	Reproduction of sound recording
Layer 4	51.43/1	Wholesale of records, CD's etc. and players
Layer 5	92.72/9	"Other recreational activities" code

SIC codes in red are those previously used by DCMS to identify the Creative Industries.

Publishing Supply activities

Layer	SIC Code	Description
Layer 1	92.40	Journalists, press photographers and news syndicates
Layer 2	22.13	Publishing journals
	22.12	Publishing newspapers
	22.11	Publishing books
Layer 3	74.87/9	Business activities note covered by other SIC codes, including author's agents but also consultants etc.
	22.25	Activities like embossing and laminating
	22.24	Pre-press work, like composition and typesetting
	22.23	Bookbinding
	22.22	Printing maps, magazines, music manuscripts, diaries and similar items
	22.21	Printing newspapers
	22.15	Publishing photos, posters, timetables etc.
Layer 4	24.30/2	Manufacture of printing ink
	21.12	Manufacture of paper and paperboard
	21.11	Manufacture of pulp
Layer 5	52.47	Retail sale of books, newspapers and stationery
	52.11/1	Retail sale by newsagents, confectioners etc.

SIC codes in red are those previously used by DCMS to identify the Creative Industries.

Software and Computer Games activities

Layer	SIC code	Description
Layer 1	36.50/9	Manufacture of video game machines but also chess sets, dolls, playing cards etc.
	72.21	Development and supply of ready made software "off the shelf"
	72.22	Development of made to order software, software consultancy and web page design
Layer 2	72.60	Computer related work not covered under other SIC codes
Layer 3	72.10	Hardware consultancy
	22.33	Reproduction of software
Layer 4	51.84	Wholesale of computers, peripherals and software
	51.47/7	Wholesale of toys, including video games
	36.50/1	Manufacture of arcade games, including billiards etc.
Layer 5	52.48/5	Retail sale of toys (including video games), spots goods, stamps and coins

SIC codes in red are those previously used by DCMS to identify the Creative Industries.

Television and Radio activities

Layer	SIC code	Description
Layer 1	92.20/1	Radio production and broadcast
	92.20/2	Television production and broadcast
Layer 3	32.20/2	Transmitters and television cameras
layer 4	51.43/9	Wholesale of radios, TV's, lighting equipment and some other appliances
	32.30	Manufacture of TV's, video recorders, camcorders, record decks, microphones and similar goods
Layer 5	52.45	Retail sale of radios, TV's, DVD's, musical instruments and musical scores

SIC codes in red are those previously used by DCMS to identify the Creative Industries.

Annexe 2 – Key assumptions and their implications for estimating Computer Games turnover and employment

Missing information and firms' reporting standards mean we have made assumptions

- To estimate the total turnover and employment of the Computer Games industry we have had to make a number of assumptions. This is because:
 - employment and/ or turnover information was not reported for all years by all firms;
 - employment and/or turnover was not reported at all for some (small) firms; and
 - the figures that were reported corresponded to the firm's overall business – in some cases this extended beyond Computer Games and/or the UK.
- The implications of this are:
 - all of our statistical estimates for Computer Games are likely to overstate the size of the industry; and
 - reliable growth statistics are not available for Computer Games.
- These are discussed in more detail below.

Issue 1 - information is missing for some years for some firms

- Employment and turnover data was not reported for all years for many firms in the industry. This has meant firstly that a consistent estimate for employment or turnover for a single year has not been achievable. We have therefore used the most up-to-date data for each firm. In practice this has meant using data from the period 2003-2005 to estimate Computer Games performance.
- One of the key implications of this is that we have been unable to obtain a reliable time-series for employment and turnover in the Computer Games industry. As a result, it has not been possible to estimate employment or turnover growth for Computer Games.

* Source: Frontier analysis using ELSPA and TIGA member data and further companies house and firm website information.

Issue 2 – information is missing for all years for smaller firms

- Employment or turnover figures were unavailable for nearly half of the firms in the industry (43 firms). Because large firms in the UK have to report their financial performance, it is likely that these firms for which data is missing are the smallest firms in the industry.
- Where data is missing we have sought to estimate this by assuming that the turnover and employment performance of these firms is equal to or less than the average turnover and employment for those firms in the industry for which we have data, excluding the ten largest**.
- Because this sample contains relatively large firms such as Atari UK Ltd. and Vivendi Games Ltd., one of the key implications of this is that we are likely to overestimate the true size of the UK Computer Games industry.

** The ten largest firms in the Computer Games industry include Sony and SEGA. It is highly unlikely that these firms would be representative of firms for which no performance data is available.

Issue 3 – some firms' activities go beyond Computer Games or the UK

- Employment and turnover figures for some of the largest firms' (e.g., Sony and Electronic Arts - the first and second highest ranking firms)) are only reported for their entire European operations. We have left the non-UK activities in the data to ensure that we are consistently over-estimating ILS's contribution to the UK economy.
- Similarly, some of the firms' figures refer to both their Computer Games activities as well as wider activities that are not related to software development and publishing. This applies for example to Sony Computer Entertainment Europe Limited, which manufactures Sony Playstations in the UK. Again we have left these activities in the data to ensure we are consistently over-estimating the potential size of the Computer Games industry.

** The ten largest firms in the Computer Games industry include Sony and SEGA. It is highly unlikely that these firms would be representative of firms for which no performance data is available.

Annexe 3 – C4 and C8 ratios for the Creative Industries

C4 and C8 ratios for the Creative Industries

- The table below gives the percentage of turnover for layer one of each industry that is contributed by:
 - the largest four firms, ranked according to their turnover (C4 ratio); and
 - the largest eight firms, ranked according to their turnover (C8 ratio).

Creative Industry	C4 Ratio	C8 Ratio
Advertising	18%	28%
Architecture	16%	20%
Design	32%	47%
Designer Fashion	11%	14%
Music and the Performing Arts	7%	10%
Publishing	58%	71%
Software and Computer Games	19%	27%
Television and Radio	64%	74%

Annexe 4 – Statistical definitions

Statistical definitions (1)

This annexe is intended as a reference guide to how each statistic in the report has been calculated and represented. In the event of the results from this report being reported elsewhere, the relevant definition as provided below should also be quoted to ensure they are reported and interpreted accurately.

- The IDBR database must be cleaned before statistics on employment, turnover and the number of firms in a particular sector can be calculated. This is because the ONS “roll forwards” the data recorded against business units that close down for their own statistical analysis purposes. This means that firms are recorded as having positive employment and turnover even after they have closed down. The date on which firms close down is, however, also recorded, and this has been used to remove from the statistics any firms that closed down before 2005.

2. Key themes

- Page 9 – Share of industry turnover of firms in Layer One of the industry

Calculated by ranking firms according to their turnover in 2005 and calculating a cumulative total turnover starting with the largest firms in the Creative Industries. The source for the data is the IDBR database and Creative Industries were defined using the revised SIC code definitions as presented in Annexe 1.

3. Defining the Creative Industries

- Page 25 – The importance of the Creative Industries to economy wide employment/ turnover, 2005

Each statistic presents the total employment or turnover of all firms captured by the different definitions of the Creative Industries as a percentage of UK total employment or turnover. The UK economy statistic is taken from the ONS. The DCMS statistic was constructed using the current SIC code definition for the Creative Industries. This definition was then applied to the IDBR data base to generate the data. The layer 1 and layer 1-5 statistics were constructed using the revised SIC code definitions of the Creative Industries (see Annexe 1). Again, the data was generated by applying these definitions to the IDBR database.

- Page 26 – Employment and turnover in the Creative Industries, 2005

As above, the current Creative Industry SIC code definition is used to calculate DCMS statistics and the revised SIC code definition (see Annexe 1) is used to generate the Creative Industry layer 1 statistics. These definitions are applied to the IDBR database to generate the statistics. Turnover and employment statistics reflect the total employment and turnover of all firms who categorised themselves in Creative Industry SIC code in 2005 (as per the definitions discussed above).

Statistical definitions (2).

This annexe is intended as a reference guide to how each statistic in the report has been calculated and represented. In the event of the results from this report being reported elsewhere, the relevant definition as provided below should also be quoted to ensure they are reported and interpreted accurately.

4. The Creative Industries in context

○ Page 26 – Relative contribution of Creative Industries to overall employment/turnover in layer 1.

The revised SIC code definitions (see Annexe 1) were used to construct these statistics. These definitions were then applied to the IDBR database to generate the results. Turnover and employment statistics reflect the total employment and turnover of all firms who categorised themselves in Creative Industry SIC code in 2005 (as per the definitions discussed above).

Statistical definitions – industry focus sections

This annexe is intended as a reference guide to how each statistic in the report has been calculated and represented. In the event of the results from this report being reported elsewhere, the relevant definition as provided below should also be quoted to ensure they are reported and interpreted accurately.

5. Industry focus

Note – the page numbers below refer to the first industry in the industry focus section (Advertising). The same analysis is carried out for firms in the other Creative Industries, therefore the statistical definitions (and the chart titles) should also be applied to these analyses.

- Page 39 – Cumulative share of industry turnover/employment of firms in layer 1 of [Advertising]
Calculated by ranking firms according to their turnover in 2005 and calculating a cumulative total turnover starting with the largest firms in the Creative Industries. The source for the data is the IDBR database and Creative Industries were defined using the revised SIC code definitions as presented in Annexe 1.
- Page 45 – Employment/ Turnover in Advertising by firm size and ownership, 2005
As before the Creative Industry is defined in terms of the revised definition of layers 1-5 (see Annexe 1 for a full description of the definition). The data is then generated by applying this revised definition to the IDBR database. The results that are presented show the total employment/turnover of all firms whose SIC code corresponds to the revised Creative Industry definition in 2005 for layer 1 and also layers 1-5. Employment and turnover is broken down according to the turnover/ employment of small UK owned, medium UK owned, large UK owned and foreign owned firms. Small is defined as firms with between one (i.e., sole traders) and nine employees. Medium is defined as firms with between 10 and 249 employees. Large is defined as firms with 250 employees or more. Foreign owned firms are defined as firms which have a base in the UK but are not UK owned. UK owned firms are defined as those firms whose country of ownership is recorded as the UK or not known. The assumption on firms with unknown ownership is justified as they are typically sole traders.

Annexe 5 –The IDBR database

Annexe 5 – The IDBR database

A note on the IDBR data used to conduct the analysis

- The main source for the statistics reported here is the Inter Departmental Business Register (IDBR).
- The IDBR is held by the Office of National Statistics (ONS) and it brings together information from VAT registrations and Pay As You Earn taxation schemes (PAYE), as well as other sources.
- It covers nearly 99% of economic activity in the UK.*
- The IDBR is used as the sampling frame for the Annual Business Enquiry survey - one of the sources of information on which estimates of GDP are based.
- The IDBR records information on individual business units. These units may form part of a larger enterprise but they operate independently in some way, or represent an individual site. The information covered by the database for each firm includes their:
 - date of starting up and closing down (if they have closed);
 - Standard Industrial Classification;
 - turnover;
 - employment;
 - country of ownership (where available);
 - legal status (e.g. company or public corporation); and
 - enterprise group (a marker that links business units that form part of the same larger enterprise).

(Source: National Statistics)

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