Chapter 4

Defining the creative industries
The creative industries are beneficiaries of the same drivers propelling the growth of the knowledge economy. The rapid growth of intangible investment has created a buoyant market for advertising, computer software services and design, which together constitute almost half of total turnover of the UK’s 13 creative industries.

The evolution of experience-searching, so-called ‘apex’ consumers has also generated rapid growth in demand for all forms of creative expression – from film to the performing arts. Digitisation is creating both new competitive challenges and new potential for experimentation and co-creation with consumers. In these respects the creative industries should be regarded as one of the more dynamic components of the knowledge economy.

The 13 creative industries, however, are often perceived as having as many differences as similarities. Indeed, even within an industry like publishing the differences between, say, newspapers and educational publishers are often perceived to loom larger than their similarities.

In fact each creative industry has a core communal business model. All originate ideas of ‘expressive value’, which they commercialise. Other parts of the economy certainly engage in creative acts of origination – and in the knowledge economy there is an increasing reliance on creatively originating new offerings and experiences. Moreover every part of the economy commercialises their outputs and offerings by pricing them in markets. But these activities are defined by having a practical function.

What is distinct about the creative industries is that their revenues are largely generated by commercialising ‘expressive value’ and that necessarily a greater part of their commercial turnover is attributable even more so than other parts of the knowledge economy to acts of genuine ‘creative origination.’

Expressive value

Expressive value can be understood as every dimension (in the realm of ideas) which, in its broadest sense, enlarges cultural meaning and understanding. Professor David Throsby has identified the following dimensions of the expressive values in which the creative industries deal.139
Expressive values

Aesthetic value – the value that reflects beauty, harmony and form as well as other aesthetic characteristics.

Spiritual value – this might be either secular or religious – the quest for spiritual meaning shared by all human beings. The benefits derived from spiritual value include understanding, insight and awareness.

Social value – an important aspect of artistic work is its capacity to forge ties among otherwise separated individuals. It illuminates the character of the society that we inhabit and creates a context in which relationships and identities can thrive.

Historical value – “Each one of us is an historical being, held in a pattern created by Time”, noted the historian JH Plumb. Part of the importance of artistic outputs is that they offer a unique snapshot of conditions at the time they were created and, in turn, provide clarity and a sense of continuity with the present.

Symbolic value – expressive objects are repositories of meaning. To the extent that individuals extract meaning from a work, that work’s symbolic value will lie in the meaning conveyed by the work and its value to the consumer.

Authenticity value – this underlines the fact that the work is the real, original and unique artwork which it is represented to be.

4.7 Essentially expressive value creates new insights, delights and experiences; it adds to our knowledge, stimulates our emotions and enriches our lives.

4.8 In the first decade of the 21st century, expressive value is no longer confined to traditional artforms. Expressive value (in the sense of symbolic value) is represented in software programmes and video games such as the Grand Theft Auto and Metal Gear series where engrossing narratives combine with performance-driven play and increasingly naturalistic graphics. Expressive value (in the sense of social value) is represented in the range of interactive, user generated cultural material found on the internet.
Copyright and patent law

4.9 Importantly English common and statute law build on expressive value in their definition of intellectual property rights (IPR) when distinguishing between copyright and patent. IPR of course is only one modality by which firms can appropriate the benefit from investments in knowledge. Formally, trademarks, design rights and confidentiality agreements may also be used, while strategic mechanisms such as lead-time on competitors, trade secrecy and complexity of design are also important.

4.10 A patent is a limited monopoly granted to an individual for a period of 20 years in return for the public disclosure of technical information of an invention. Critically, patents protect ‘useful ideas’. To qualify, an idea must be novel, involve an inventive step, must be capable of industrial application and not be ‘excluded’. Aesthetic creations – including music, art, dance and literature – are specifically excluded.

4.11 Copyright, on the other hand, protects original expression. The property protected by copyright is special in that it comes into effect automatically and is generally for the benefit of the author, a key concept that has shaped the development of copyright doctrine. The term of protection for literary, dramatic, musical and artistic works is life plus 70 years due to historical reasons, although there are many exemptions, such as so-called entrepreneurial works.

4.12 Unlike patent law that concentrates on the relationship between the invention and information in the public domain, the originality test in copyright is concerned with the relationship between the creator and work; that is, the expressive input that brings the idiosyncracies and serendipities of skill, labour and judgement to bear on the resulting output.

4.13 The common denominator of the creative industries is that all – to a greater or lesser extent – use copyright in their business model. Indeed some American commentators refer to the ‘copyrightable’ rather than the creative industries.

4.14 Their common business challenges can be seen as more intense versions of some of the challenges that confront the knowledge economy more generally. Here our analysis is indebted to the University of Harvard’s Professor Richard Caves, one of the first theorists successfully to apply contractual and organisational theory to the creative industries.

Creative industry challenges

1. Nobody knows – the value of the outputs of the creative industries to individual consumers is only known after they have been consumed or experienced. They correspond to what Michael Darby and Edi Karni identify as ‘credence goods’ whose quality cannot be perfectly determined by the buyer even after consumption.
It is very difficult to state with confidence what constitutes an arresting piece of music, or an addictive video game – in sharp contrast with more functional goods whose attributes – speed, accuracy, ease of use, greater fuel efficiency or whatever – can be more readily measured and a technological frontier established.\textsuperscript{146}

Louis Levy-Garboua and Claude Montmarquette suggest that consumers are not aware of their true tastes in cultural markets.\textsuperscript{147} Rather they discover them through repeated experiences in a sequential process of unsystematic learning by consuming. Because there is an infinite variety of creative offerings, this discovery process may, in effect, be never-ending. And to the extent that individuals are unsure of what they like, it is not surprising that producers of goods of expressive value struggle to anticipate market value.

It is against this background that the American author and screen writer William Goldman famously remarked of the movie industry that ‘nobody knows anything’.\textsuperscript{148} As he noted, industry executives may know a great deal about what worked in the past but that knowledge was of no help when predicting what would work in the future. One result is that seeming certainties can sink without a trace. Michael Cimino’s \textit{The Deer Hunter} was a commercial and critical hit. His next film \textit{Heaven’s Gate}, however, flopped, effectively ending Cimino’s career.\textsuperscript{149} By contrast, blockbusters like \textit{Star Wars} can be guilelessly overlooked.

‘Cascade effects’ may give creative goods another layer of unpredictability.\textsuperscript{150} The natural uncertainty about whether or not a product is good means that the judgement of others can have a trigger effect in convincing the buyer of the respective merits of a creative offering, leading to a cascade of buying.\textsuperscript{151} Hence the role of word-of-mouth, hearsay, newspaper book reviews, or radio airplay in music both in helping buying decisions and then amplifying them into potential bubbles.

All buying decisions are influenced by social and peer group pressures, but in the creative industries these effects are more marked because of the inherently social dimension of creative offerings. The music market, for example, is not just about ‘good’ music: as Tyler Cowen observes “people buy music to signal their hipness, to participate in current trends or to distinguish themselves from previous generations” as much as because it is objectively ‘good’.\textsuperscript{152}
For these paradoxical reasons, creative markets can go into reverse. A product becomes part of the *zeitgeist*, but once too many people participate in a particular fashion, it may cease to be attractive, and the trend will die off. This is the volatile interplay, as the celebrated sociologist Georg Simmel observed, between an individual’s urge for individuality and novelty on the one hand and belonging and order on the other.

A further important feature of creative goods is that while other products typically end their life with the arrival of a substitute performing the same task better and cheaper, creative goods can have second or even third lives. The car and personal computer made the horse-and-cart and typewriter irreversibly obsolete. An anthology of Beatles songs or a collection of Pop Art paintings, after being first fashionable, and then less attractive, may once again become valued as ‘classics’, experiencing repeated streams of consumption.

Businesses find it difficult to fashion responses to these structural uncertainties. One obvious strategy is to develop a portfolio of creative offerings in the hope that at least one will succeed. Another is to use stars, sequels, elaborate marketing and increasingly adaptations to reduce the uncertainty they face. To the extent that these strategies serve as pre-commitment devices – no individual or business will risk damaging their reputation by consciously releasing poor products – they can also signal that the offering is likely to be of high quality.

2. **Sunk costs** – the risk is further increased because all the costs of producing a creative good have to be irretrievably incurred before any kind of market information can be gathered about whether it will succeed. The film, play or recording has to be made before it can be market tested. Some precautions are available – first drafts can be tested to try to cull likely failures from the portfolio; but creative industries are also littered with examples of culled turkeys that turned out to fly.

One way to protect against being ‘landed with a loser’ is to organise the creative project in a series of steps, with options for continuance at various critical moments in the life of the project. In reality the step process does not work as an effective brake. The mechanisms for ensuring that hope does not triumph over reality are always imperfect: projects get carried to completion that rationally should have been abandoned.
The variance between success and failure can be very high. In the film industry, a comprehensive sample of films produced between 2001 and 2004 showed that a studio’s return on investment (ROI) swung from -96.7 per cent to over 677 per cent, with a median of -27.2 per cent. The top four films represent 20 per cent of revenues and the top eight represent 30 per cent.156

Content producers – authors, bands, scriptwriters – are keenly aware of the risks and look for deals in which they are advanced guaranteed cash against the expectation of future royalties which are hard to predict. In music, for instance, only the very top bands receive any income other than the advance they receive from the recording company, because the actual royalties rarely exceed the combination of advance and expenses.

3. Quality choice – in markets that are imperfectly competitive, producers may strategically spend more money on a creative good to help raise its attraction to consumers (again this incentive is heightened insofar as the pre- and post- consumption quality of the product is so difficult to assess). Where markets are large and unified, a process which digitisation is facilitating, the creative firm can not only raise its own profits but capture those of its competitors by increasing its outlays. As one company spends, so another is forced to respond – often in a vicious and wasteful spiral of mutually-offsetting investments. In the creative industries cost escalation is an ever-present hazard.

This creates considerable advantages for big studios, publishers and venues, and accounts for the extreme shift in industrial and geographic concentration in the film industry in the early 20th century, where the European presence in both US and European markets was marginalised by the rise of the Hollywood film studios.157 Smaller US and European producers simply could not compete with the massive real increase in film costs which the large Hollywood studios could underwrite.158

This pattern is now being reproduced in the video games industry. Giddying advances in technology159 – the Playstation 3’s graphics processor is seven times more powerful than Intel’s Pentium 4 processor160 – have saddled video games publishers with unprecedented development costs that are up to 50 per cent higher than the previous generation of consoles.

Playstation 3 games are anticipated to cost $20 million to develop over a 25-month period while Xbox 360 games are predicted to cost $15 million over 21 months.161 Development costs for games for the Nintendo Wii are also expected to be high, averaging $12.5 million and 18 months.
British games companies – in an eerie parallel with the film industry in the 1920s – are increasingly unable to compete against this pattern of cost escalation, and are subcontracting to international publishers or find themselves being taken over.

4. **Art for art’s sake** – the creative industries are peopled by creative talents who themselves get pleasure and utility from what they do. They are ‘called to their art’. One upside from the business perspective (although it attracts complaints of exploitation) is that their ‘reservation’ wages – the lowest they are prepared to work for – are lower than the marginal value of what they produce, making labour particularly cheap.\(^{162}\) A downside is that the ‘talent’ care deeply about how the creative work is organised, which may discourage concessions or compromises to management.

5. **The ‘motley crew’ property** – complex creative products require a diversity of input; a mix of the highly creative together with more humdrum skills and inputs that complicates the organisation of creative activity. In order to shoot a film or record a piece of music, for example, every performer along with every technician has to perform at some minimum level at the same time to produce a valuable outcome. To group together particular actors or locations films may have to be shot out of sequence; everybody has to be available and one absence can hold up the entire work. The challenge is to select appropriate team members, coordinate and sequence their activities, and maintain their cooperation.

6. **The creative process** – the creative industries are not underpinned by a large scientific or technical base with formal logical structures. The process of learning and creating tends to be intuitive, iterative and trial and error rather than analytical and explicit.\(^{163}\) As such, knowledge within the creative industries tends to be even more tacit than in the knowledge economy generally. The creation process is largely *sui generis* to individuals, teams, networks and organisations. If the teams are broken up in any way, the creative knowledge they generate can quickly be dissipated.

In **figure 4.1** – which is based on the analysis in the report ‘The Economy of Culture’ prepared by KEA European Affairs for the European Commission – we deploy the notion of expressive value to map the creative industries in a series of concentric circles radiating out from the ‘bull’s-eye’ of *core expressive value* creation.\(^{164}\) The ‘bull’s-eye’ represents where pure creative content is generated. This is the domain of the author, painter, film-maker, dancer, composer, performer and software writer.
The creative industries

Figure 4.1 – A stylised typology

Manufacturing and service sectors benefit from and exploit the expressive outputs generated by the creative industries.

Cultural industries

Core creative fields

Commercial outputs possess a high degree of expressive value and invoke copyright protection.

The use of expressive value is essential to the performance of these sectors.

Activities involve mass reproduction of expressive outputs. Outputs are based on copyright.

Examples of expressive outputs: film, publishing, music, video games.

The rest of the economy

Creative industries and activities

eg the emotional ergonomics of the Apple iPod and Dyson’s vacuum cleaner, or the ‘retailtainment’ of service, eg Virgin Atlantic and BA.
4.16 It is peopled by men and women who have the urge to create which, following American novelist Don DeLillo’s urgent description, the rest of us find so compelling that we are delighted and enriched.

“It’s a democratic shout. Anybody can write a great novel, one great novel, almost any amateur off the street... Some nameless drudge, some desperado with barely a nurtured dream can sit down and find his voice and luck out and do it. Something so angelic it makes your jaw hang open. The spray of talent, the spray of ideas. One thing unlike another, one voice unlike the next.”

4.17 Although the creator seeks an audience and market, the activity is the pure expression of personalised value in which both creator and users have a unique relationship from which both gain. It is the most intensely felt experiential form of both delivering and consuming expressive value. It can be generated by the artist as sole trader, as part of the content generation of a large company or via public support; in whatever structure care has to be taken to ensure that that creator has the opportunity to experiment and to dare.

4.18 Importantly creation in the ‘bull’s-eye’ should not be interpreted solely in terms of traditional artforms. The writing of computer software, the establishment of a 2.0 website or the evolution of a new character in a video game all belong here.

4.19 In terms of the current industry classification the performing arts, arts and antiques and crafts would situate their activity in this part of the diagram – as would pure content creation of any of the creative industries.

4.20 The circle beyond represents those industries that focus primarily or solely on the commercialisation of pure expressive value – the cultural industries – such as music, television, radio, publishing, computer games and film in the industrial classification.

4.21 Firms in the cultural industries traditionally organise themselves so that all or most functions (content creation, recording, marketing, manufacturing and distribution) are carried out in-house. Though this vertical integration still operates in many areas, as with today’s video games publishers with large in-house games development teams or major music labels such as EMI, it is starting to give way to more networked forms of organisation.
4.22 Thus film studios, music companies etc deal with an array of independent content providers to whom they may advance money in return for a cut of the cake – and then process the content which has been independently created. Hollywood studios, for example, do so-called ‘pick up’ or ‘first look’ deals with a large number of independent producers.

4.23 In the UK television production is increasingly organised in this way. Channel 4 was founded on the basis it would solely commission independent production companies to deliver content. Its success persuaded policy makers to introduce a quota for the BBC in which 25 per cent of its expenditure on television is outsourced to content providers, now followed by a further 25 per cent contested between independent content and in-house content providers – the so-called Window of Creative Competition (WOCC). Independent television producers have become part of the ecology of British television.

4.24 But whether a core creative field or a cultural industry, and whatever the organisational linkages between how content is created and processed, the heart of the business model is generating copyrightable acts of origination of expressive value.

4.25 The next concentric circle represents the focus of the creative industries. These are analytically first cousins to the cultural industries; distinct while belonging to the same family of activity. Architecture, design, fashion, computer software services and advertising are all creative industries whose market offerings pass both an expressive and workability test.

4.26 They deliver both expressive and functional value. They tend to respond to the close demands of clients for creative offerings that work to their specifications; they constitute intermediate input in sectors in the wider economy.

4.27 Adverts have to sell products, but work best if they succeed in expressing the cultural zeitgeist. Buildings should be both aesthetically pleasing and work. Design should embody the culture but is useless if the products do not function well. Fashion products have to be culturally in the vanguard but wearable. Not every single building, dress or design needs to pass both tests; but the creative industries are healthier and more vital to the degree that as many as possible do.

4.28 Nor is this new. Professor Avner Offer details how design has always been important. He quotes the chairman of GM noting in 1941 that “today the appearance of a motor car is a most important factor in the selling end of the business – perhaps the most important single factor”. By 1954, market research revealed that styling was “the most significant factor in creating the desire to buy”. It was non-price competition on design that allowed Ford to outflank Chrysler with its iconic 1949 model, while Chrysler’s ‘Airflow’ design did not work and scarred the company for almost two decades.
The creative and cultural industries are highly porous; individuals can pursue careers in both, and increasingly there is collaboration between them. There are also many interdependencies; advertising expenditure finances much commercial TV and radio. Radio serves TV; many television comedies started life as radio programmes. Equally many successful film scripts are adaptations of successful novels.

In addition the creative industries are an important bridge to the wider economy. As we detail below a growing number of designers, advertisers and software writers work not just within firms situated in the creative industries, but beyond. The concentric circle at the perimeter of the circles represents creativity in the wider economy, and the linkages that exist between it and the creative industries.

As was argued in chapter 3, one of the drivers of the knowledge economy is the necessity of creative business responses. This report does not argue that creativity is somehow exclusive to the creative industries; only that their business model is more completely built upon acts of origination that have expressive value than any other sector of the economy.

Each of the creative industries may have a business model that is part of the same family, but to what extent is their creativity and economic success interdependent and self-reinforcing? And to what extent does their creativity spillover into the rest of the economy?

Unlike other parts of the economy, our understanding of the creative industries’ linkages is comparatively weak, made worse by poor statistics or sometimes no statistics at all.

The necessary if insufficient precondition for creative industry success is a flourishing core. Without a supply of high quality creative content and the wider structures that nurture and incubate there would be no indigenous content to commercialise.

Chapter 5 sets out some of the background conditions which nurture content creativity. Diversity, a culture of openness and a supply of creators with the requisite combination of hard and soft skills are clearly vital – along with the character of demand that calls forth creative supply.

Most of the activity in the core is the spontaneous, self-financing articulation of expressive value by talented content creators. However if such activity is to be sustained, it has to be economic; the creators’ bills have to be paid – either by the market paying a high enough price for their creative wares or, if that is inadequate, by support from the public purse.
Expressive value is often expensive to generate and hard to get sufficient revenues to justify the cost because consumers tend to free ride if they can, without public investment it tends to be underprovided.

This is the essence of the case for the BBC licence fee. Broadcasting involves high fixed costs: the licence is a guaranteed way of ensuring that the public pays for the services it consumes.

The BBC has managed to find an ongoing means of ‘crowding in’ creativity – the BBC is generally regarded as highly creative – while broadly keeping the BBC at a ‘goldilocks’ size. Although the correct size for the BBC is fiercely contested, so far it has neither dominated private broadcasters nor been dominated by them, while becoming a major source of economic support for the UK’s creative core.

The BBC has also done a great deal to promote diversity, free from the demands of commercial advertisers. For example, the BBC was critical to the success of Britpop in the 1990s, with independent DJs like John Peel devoting a higher proportion of programming to unproven pre- or new releases.168

In 1996, one in four records played on Radio 1 was ‘pre-release’ – this contrasts with the two national commercial radio stations, Atlantic 252 and Virgin 1215 which played one pre-release in every 67 records and 1 in 19 respectively.169

Music executives have told us that the diversity and objectivity of BBC Radio 1 play-lists are central to the popular music business’ success in the UK. The BBC also sustains four other music stations, five orchestras, and, by supporting a range of music festivals from the Proms to the London Jazz Festival every year, plays a key role in both offering performers a platform to show off their ability and to educate demand.

The BBC has played a no less important role, along with Channel 4, in the creation of the UK’s vigorous independent television production sector. The quota and the Window of Creative Competition (see earlier), together with Channel 4’s commissions and the increasing use of independents by other terrestrial, satellite and cable broadcasters, have created a production sector that is creative (ranked by awards nationally and internationally) and whose output is predicted to grow from some £780 million in 2004 to £1.5 billion by 2015.170

Subsidised theatre also plays an important part in succouring the creative industries. In the United States over the past 20 years, 44 per cent of new plays to appear on commercial/for-profit Broadway can trace their roots to the non-profit sector.171 The figures are similar for the UK. Many successful British actors honed their skills in publicly funded British theatre.
Educational publishers recognise the importance of libraries in sustaining the production runs of otherwise unprofitable titles. Museums may inspire commercially-oriented actors and provide them with new ideas. Vivienne Westwood’s ‘Cut and Slash’ collection (spring/summer 1991), for example, was inspired by studying 17th century costume at the V&A: meanwhile research for the V&A’s modernism exhibition inspired the BBC to produce a series of four programmes entitled ‘Marvels of the Modern World’.172

**Valuing creative industries in the UK economy**

4.46 Identifying the remunerated links between the creative industries and other sectors is important for establishing the significance of creative businesses to the UK economy. Mapping these links helps pinpoint the drivers of the creative industries and assess how interventions in one area may have consequences for another.

4.47 Sectors which have strong supply and demand relationships with creative businesses may have a key role to play in both the design and implementation of policy for creative industries.

4.48 As the outer layer of the concentric circles makes clear, the creative industries do not work in isolation. ONS data, for example, show that 55 per cent of creative products supplied to the economy are purchased by other businesses – including other creative businesses.173 Within the creative industries, the advertising, architecture and software industries sell the vast majority of their outputs to other businesses – and are especially sensitive to upturns and downturns in the wider economy (as discussed in chapter 2).

4.49 The creative industries’ close supply chain links with firms in the wider economy mean they have indirect impacts on employment and output as well as direct impacts to value added and employment.

4.50 These so-called multiplier effects consist of supplier impacts (where creative businesses purchase goods and services from firms in other sectors) and indirect effects (where resulting increases in household income leads to higher consumer spending).
4.51 Estimates of these multiplier effects vary in size but can sometimes be significant. One survey of employment multipliers estimates that for every job in an arts organisation a further 1.8 – 2.8 are created in the regional economy.\textsuperscript{174} Despite their popularity, a major limitation of such multiplier estimates is that they do not allow for the opportunity cost of the additional spending on the creative industries.

David Throsby describes this as follows:

“….while the net valuation of external effects is in principle a valid component of the total economic value of a facility such as an art museum, there are conceptual difficulties of measurement which have to do with identifying how ‘net’ the measured values really are. So, for example, the so-called ‘multiplier’ or ‘second-round’ impacts of a public investment project involving a museum might be properly disregarded in a cost-benefit appraisal because such impacts would accrue to any other similar project to which the investment capital might be devoted.”\textsuperscript{175}

4.52 A proper analysis of multiplier effects would require the simulation of extra spending on creative industry products in a behavioural general equilibrium model of the economy.

4.53 Interestingly, two of the three creative industries most closely associated with the growth of intangibles – advertising and software – have a large number of employees working outside their sector. Together with design they are the three creative industries most directly plugged into the growth of intangibles which has been associated with the growth of the knowledge economy. Figure 4.2 illustrates these employment patterns using estimates derived by DCMS from the Labour Force Survey. It plots for each DCMS 13 sector for which data are available that proportion of individuals in creative occupations who are working in their home sector. So, for example, according to the Labour Force Survey 100% of art and antiques professionals work in the art and antiques sector, whereas only 40 per cent of advertising professionals do so.

4.54 The Design Council has made considerable effort to establish the impact of design on turnover and profits. It argues that every £100 spent on design increases a firm’s turnover subsequently by £225 and profit by £83. Other research reveals that 61 design-intensive companies outperformed the FTSE 100 index by more than 200 per cent over 1994–2004.\textsuperscript{176}
These are impressive figures. Design is increasingly viewed by firms as key to their businesses – for manufacturers, the proportion is as high as 41 per cent. The main reason appears to be that design allows firms to overcome competition on the basis of low price – of business where design is key to strategy, only 21 per cent say are forced to focus on price. Indeed, non-price characteristics such as design are especially important drivers of competitiveness in markets where the UK has a strong interest.

However, the evidence of a causal relationship between design input and firm performance is more difficult to establish. The relationship between high performing firms and their spending on design can often be attributed to other factors such as their overall competitiveness and commitment to high capital spending; the causation may run from their high performance to their willingness to spend on design rather than the other way round.

Despite these caveats, some independent evidence suggests that firms that spend more on design do enjoy faster product growth and introduce more product innovations. Around one-half of all projects for which export information was available enjoyed improved trade performance. In addition, roughly one-half of actual export sales made by winners of the ‘Queens Award for Exports’ – chosen for their reputation and performance in exports – could be directly linked to their investment in design.
Computer software also has a significant impact on the wider economy. Investment in ICT including software, for example, has played a crucial role in UK productivity growth in recent years. A higher rate of technological progress in the production of ICT worldwide than in other sectors has led to a fall in the relative price of ICT products – businesses have responded by stepping up their ICT investments. The evidence suggests that ICT has also raised the rate of labour productivity growth through channels that cannot be explained by investment – in other words, by raising total factor productivity growth in the economy.

Some estimates suggest that this technological progress in ICT may alone have accounted for as much as 20–30 per cent of long-run labour productivity growth. The software industry has been at the vanguard of the ICT revolution. Investment spending on software alone amounted to just under 2 per cent of GDP in 2003, broadly similar to the US (Figure 4.3).

**Figure 4.3**
Software investment as a per cent of GDP
1970–2004

Source: ONS

‘Spillover’ effects

Spillovers are the conditions in which firms or consumers benefit from knowledge, market opportunities, innovations, or skilled employees that they have not paid for directly. They are unremunerated benefits – that is, the producer or consumer of the new ideas or products is not compensated for any external benefits their production/consumption decision confers on other people.

Plainly the economy benefits from spillovers, but because they are unremunerated there is an innate tendency for them to be under-produced. These effects are traditionally understood in the context of scientific Research & Development, where they provide the rationale for government intervention. They also certainly apply to the creative industries, but it is difficult without better statistics to establish the extent and nature of spillovers both within the creative industries and between them and the wider economy. However, the following categories provide a useful framework.
1. **Organisational knowledge spillovers** – Many creative businesses specialise in project-based work where teams form and develop their products in intense outbursts of creative activity, before dissolving and reforming around new projects.\(^{184}\) Insofar as this model is increasingly relevant to innovation in other sectors of the economy, creative enterprises may serve as role models to other businesses.\(^ {185}\)

There are other organisational knowledge spillovers that the creative industries may generate: after all, many are operating in an environment of constant change. The digital revolution is having disruptive effects on business models for media, advertising and other creative firms. Businesses in the wider economy may have much to learn from the experiences of the creative industries.

2. **Experiential knowledge spillovers** – A specific area where firms in the wider economy may draw on creative business models is in the provision of so-called experiential services. In these services, the focus is on the whole experience of the customer when interacting with the organisation, rather than just the functional benefits following product or service delivery.\(^ {186}\) Such services are often described as a performance itself, involving a stage, actors, a script, an audience and a backstage area.\(^ {187}\) The qualitative evidence collected confirms that many lead innovators in the experiential services area look consciously outside their own industry for inspiration, including to the creative industries.\(^ {188}\)

3. **Interdisciplinary knowledge spillovers** – Creative industries may be able to pass on a culture of interdisciplinary work to firms in the wider economy. Clearly, they have a strong interdisciplinary tradition which in some cases is driving innovations of major social significance.

Biomimetic applications\(^ {189}\) in architecture, drawing from nature and used in building design – eg Plantation Place in the City of London where the air filtration system works as a human lung, or the Eden Project in Cornwall, whose copper-clad roof is based on geometric patterns found in many plant seeds – are cases in point. Games houses – drawing on the skills of computer programmers, designers and artists to develop technically ever-more sophisticated Massively-Multiplayer Online Role-playing Games (MMORPGs) – are another example.

Spillovers from innovations which create new disciplines may be very significant indeed (witness the explosion in recent years in applications of nano-technology, for example).
4. **Entrepreneurial knowledge spillovers** – The very large numbers of small firms and sole traders in many creative sectors are consistent with a high degree of entrepreneurialism (see chapter 2). There is a long tradition in the film and television industries, for example, of producers leaving public broadcasting companies to set up as independent production companies. The founders succeed in exploiting the knowledge and experience gained in their previous occupations. Creative industry entrepreneurs may have significant spillovers if they inspire risk-taking and an entrepreneurial culture more generally.190

5. **Job mobility spillovers** – One of the most potent ways the creative industries can create spillovers is when professionals carry over transferable ideas and knowledge into other sectors when moving job.

   In other parts of the economy labour mobility is seen as an important way of transferring tacit knowledge. Labour mobility can also generate spillovers if it supports social networks including creative and non-creative businesses which are vital for innovation in many industries. Unfortunately, evidence on the longer term career destinations of creative individuals is lacking. Data on the short-term destinations of graduates suggest that, six months after graduation, only around one-third of art and design graduates in the UK had secured work in sectors directly related to their degrees, compared with over 40 per cent of IT graduates and two-thirds of those who had studied civil engineering.193

   Second-jobbing between sectors also appears to be more prevalent in the arts than in non-arts sectors: around 7.4 per cent of those working in the arts compared with 4.5 per cent of non-arts workers. Interestingly, a much greater share of artists’ second jobs are high-skilled. This echoes the experience of creative industry workers in other countries: more than 39 per cent of musicians in the US hold a second job in another profession.196

   Together, these findings suggest that there is a strong tendency for individuals with creative skills to bring their talents to the wider workforce.

6. **Demand spillovers** – As with all businesses in the economy, firms in the creative industries generate demand spillovers for complementary products in other industries. This can be seen in the example of complementary accessories for the Apple iPod, only some of which are licensed to Apple; they benefit from iPod sales for which they do not compensate Apple. Moreover the iPod itself has genuinely created new demand for recorded music.197
The rate of spillover diffusion is plainly related to the speed and breadth of adoption. In general, new knowledge and innovations are adopted faster the more they are seen as superior to what they might supersede, the more they are consistent with users’ needs, the less difficult they are to deploy, the ease with which they can be experimented, and the more obvious their benefits.

Urban and regional regeneration

There is compelling evidence that the presence of a large, diverse pool of artistic talent in a region can create a ‘lead market’ for artistic and creative products. When functioning properly, this should enable local businesses to design their products better and market their products more successfully, better preparing them for the marketplace later on. This has been seen among artists working in the San Francisco Bay and Los Angeles metropolitan areas.

Creative businesses and a well-developed cultural sector may make regions more attractive for firms outside the creative sectors to do business. Richard Florida controversially found that the incidence of ‘bohemians’, which he defines as artists and designers, is significantly correlated with high-tech success across metropolitan regions in the US.

Investment bankers are said to prefer working in London rather than elsewhere in Europe because of its thriving creative and cultural sector. Similarly, Manchester and Cornwall in different ways have benefited from their emergent creative industries – the Tate helping to attract richer tourists to Cornwall, for example.

The UK Film Council estimates that UK films promote tourism to an estimated value of £800 million per year. More recent research finds that film and television programmes have significant – and persistent – spillovers for UK tourism.

Some of these claims are disputed. Businesses look for workers with the right skills when making location decisions, but the reverse holds too: workers prize locations with jobs, affordable housing and quality social facilities like schools. Equally, criticism has been levelled at the usefulness of some local authority commissioned art; it attracts little interest and the artist finds it hard to be inspirational.

Nonetheless, a growing number of cities have placed creative and cultural activities at the heart of their development strategies, in some cases – such as Glasgow and Gateshead – with very positive results.
NESTA (2007) argues that UK policy needs what it calls ‘intelligent competition’ to ensure that not every city and region is trying to capture the same benefits the same way – and so cancelling each other out. It notes the high degree of homogeneity in local development strategies across regions. So, for example, of England’s nine regional innovation and economic strategies, five mention the creative industries. This homogeneity in approach increases the risk that different regions are ‘competing’ for cultural spillovers, raising the possibility that the net effects to the UK as a whole are nugatory.

Wider objectives

In addition to economic spillovers, the creative industries contribute to wider social objectives, including diversity and tolerance of alternative lifestyles. Studies have often focused on the role of high art while suggesting – implicitly or explicitly – that mass culture tends to a lowest common denominator path. This division is challenged by those who point to the rise of narrative complexity in modern shows such as The Sopranos and the abstract problem-solving skills required by many video games.

And the creative industries have an even broader impact, however difficult it is to measure. Some suggest that it contributes to a country’s soft power, tempering the effects of traditional military power. Harvard University’s Professor Joseph Nye believes that the likes of the BBC and The Beatles significantly enhanced the UK’s image during the Cold War. As one of Gorbachev’s aides later conceded, “The Beatles were our quiet way of rejecting ‘the system’ while conforming to most of its demands.” Against the backdrop of a multi-polar world, culture is seen as a way of navigating new uncertainties. This is not to argue that culture should be used as an instrument of diplomacy. But it is one more piece of evidence supporting the argument that this is a very distinctive sector of the economy.
Notes Chapter 4


140 Richard Posner, the influential legal philosopher and judge, made a powerful case for considering video games as art in the Seventh Circuit Court of Appeals, American Amusement Machine v. Kendrick.

141 The Gowers Review of Intellectual Property, op cit. This partly leads Karjala to suggest that the distinction between patent and copyright subject matter is one of functionality, with copyright applying to nonfunctional works of art, music, and literature and patent applying to functional works of technology. ‘Distinguishing patent and copyright subject matter’, D Karjala, 35 Conn. L. Rev, Winter 2003.(2003)

142 1977 Patents Act s.1(1)(c); European Patent Convention Art. 52(1); Chiron v. Murex (1996) RPC 536, 606 (Morritt LJ). Inventions specifically exclude ‘a literary, dramatic, musical or artistic work or any other aesthetic creation whatsoever’.

143 There are a host of exceptions to the general ‘life+70 years’ rule: computer-generated works; Crown copyright; parliamentary copyright and international organisations; artistic works used in design; works of unknown authorship; unpublished works not in the public domain. So-called entrepreneurial works – such as sound recordings, broadcasts and cable programmes and typographical arrangements – also have shorter periods of protection.

144 See ‘Intellectual Property Law’, L Bently and B Sherman, Oxford University Press, 2001. It is no coincidence that natural rights arguments have generally played a larger role in copyright than in patent. That said, the law is as much an accretion of multiple influences as a pristine distillation of one or two justificatory ideals.

145 Design differs insofar as it is governed by a system of registered and unregistered design rights. Still, in order to be registrable, a design must have ‘eye appeal’ – 1949 Registered Designs Act s.1(1). Case law suggests that ‘eye appeal’ refers to the appeal that is ‘created by a distinctiveness of shape, pattern or ornament as calculated to influence the customers’ choice’ as per Lord Oliver in Interlego AG v. Tyco (1988) RPC 343, 355. As such, it is reasonable to conclude that purely functional considerations should not be taken into account. A further obstacle to registration lies in the fact that applicants must prove that appearance, both generically and specifically, is important to consumers – RDA s.1(3). Over time, the evolution of case-laws suggests a subtle aesthetisation of the registered design system.

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151 This hypothesis is corroborated experimentally. ‘Experimental Study of Inequality and Unpredictability in an Artificial Cultural Market’, M Salganik, P Dodds and D Watts, Science Vol. 311, February 2006. The authors created an artificial music market in which over 14,000 participants downloaded previously unknown songs either with or without knowledge of previous participants’ downloads. Significantly, the particular songs that became hits were markedly different under these two settings. Quality, proxied in terms of a song’s popularity when individuals chose independently, was only a weak predictor of real-world success when individuals could observe others choices. To the extent that ‘good’ songs generally gained higher market share than ‘bad’ ones, the authors also found that a song in the Top 5 in terms of quality had only a 50 percent chance of making the Top 5 of success and vice-versa. Thus, one song ‘Lockdown’, by 52metro enjoyed top spot in one social-influence world even though it was ranked a desultory 26th out of 48 in quality.
153 This point is persuasively made by Kretschmer, Klimis and Choi, op cit.
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158  Between 1914 and 1927 the average cost of Fox Feature Films increased seven times, Paramount’s increased eightfold between 1913 and 1920 while Warner Brother’s nearly doubled between 1922 and 1927.

159  Stanford’s Folding@Home, a distributed computing project aimed at understanding protein folding and misfolding and related diseases such as Parkinsons and Alzheimer’s, relies in part on the idle processing power of two million CPUs, including a network of 30,000 active Playstation 3s that collectively outperform all other operating systems participating in the project combined. The Playstation 3 has allowed the performance of simulations in weeks that would normally require over a year to calculate. http://fah-web.stanford.edu/cgi-bin/main.py?qtype=osstats

160  Measured using transistor count, a common measurement of chip complexity: Intel’s Pentium 4 (2000) has 42 million, Sony/Nvidia’s RSX GPU numbers 300 million.

161  ‘Next Generation Consoles: Games publishing, hardware analysis and forecasts to 2010’ Screen Digest, 2007.


164  This borrows from ‘The Economy of Culture’, a study prepared for the European Commission, October 2006.


166  Note that this is not the same concept as the broader set of DCMS 13 creative sectors.

167  A Offer, p.194, op cit.


169  A graphic example is the BBC’s decision to play Cornershop’s ‘Brimful of Asha’. Despite being signed to the small label, Wiija and having no success in the sales charts, the single was placed on the A list and played at very high rotation for more than five weeks before actual release.

170  ‘From the cottage to the City: evolution of the UK Independent Production sector’, Mediatique and M Horsman, a Report for the BBC September 2005.

171  T Cowen p.39, op cit.

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175  Throsby, op cit.
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**Salford MediaCity:UK will be the UK’s first, 200 acre, digital media city providing 15,000 jobs in the creative industries.**

The Manchester City Region is the strongest pole of economic growth in the North of England, and with an established economic base in both the knowledge and creative industries. The BBC’s decision to relocate key departments to Salford, at the heart of the City Region, is now forming the basis for a much bigger project of international significance.

The BBC will move around 1,500 jobs to Salford by 2011. It will be home to eight BBC departments, including Children’s BBC and Radio 5 Live as part of their BBC North base. The area will also provide employment opportunities for 15,500 people and will include space for 1,150 media, creative and related businesses, as well as housing the UK’s largest, state-of-the-art TV production studio block.

MediaCity:UK will complement the Manchester-Salford Knowledge Capital proposals already transforming the regional economy. MediaCity:UK will be a beacon for Manchester City Region demonstrating in the UK how creative industries will transform the workplace, create jobs, and lead to better economic performance.

MediaCity:UK is an opportunity for people, in the North West to realise in creative industries their talents and skills.