

# Creative industry spillovers

## NON TECHNICAL SUMMARY

DCMS is currently undertaking a wide ranging review of the creative industries. From a policy perspective one is typically interested in an industry if it is of particular strategic importance to the economy as a whole. This may be because of several factors:

- it accounts for a substantial element of employment;
- it is a high value sector in terms of contribution to gross value added; or
- it has strong links to, or creates value for, other sectors of the economy.

Frontier was asked to consider this last factor in relation to the creative industries. In particular, Frontier was asked to examine the extent to which the creative industries might be creating spillovers that are of value to other sectors of the economy.

There is very little evidence available that allows one to identify and measure the spillovers that the creative industries generate and the value they bring. Consequently, the focus of Frontier's work has been on the development of an evidence based framework that:

- clearly identifies what we mean by spillovers;
- sets out the types of spillover that the creative industries are most likely to create; and
- establishes the evidence needed to properly value the spillovers generated by the creative industries.

This paper sits alongside the technical report produced for DCMS, and is intended to provide a brief non-technical overview of the findings of the work.

## WHAT IS A SPILLOVER?

The key feature of a spillover is that the firm that benefits from it does not pay for it. It is a benefit that one firm receives (for free) as a result of the activities carried out by another firm or firms in the economy.

A classic example of a spillover is where a firm in one industry develops a new production system and firms in other industries observe the new system and adapt it for use in their own industry. For example, the Toyota Production System (or just in time production) is world famous and has been copied and adapted by manufacturers in hundreds of other industries. For the most part, those manufacturers have benefited from Toyota producing its system without having to pay for the right to use it. So, Toyota has generated value for firms in other industries that those firms did not have to pay for.

It is equally important to understand what spillovers are not. Take, for example, the design industry. If a firm pays a design company to develop a new product,

or process for it, then this is not a spillover. The firm has contracted the design firm to develop the product or process and has paid the design firm to do so. Consequently, this is a transaction in the same way as going to the supermarket and so the value to the firm created by the design firm's product or process cannot be counted as a spillover.

### Why are we interested in spillovers?

Economists have been trying to define, understand and measure spillovers for about two hundred years. A Google search for spillovers will produce hundreds of papers all talking about different types of spillover and the circumstances in which they will occur.

From a policy perspective there are two key reasons why we care about spillovers:

- **We may undervalue industries:** Typical measures of the value or importance of an industry will miss out on the value spillovers may generate for the economy as a whole. This is precisely because spillovers fall outside the price system. It is important to capture these benefits to understand the true value of an industry. Typically, we would expect to find that high value added industries – those based on constant developments of knowledge, creativity or innovation – are most likely to generate spillovers.
- **We may produce too little:** When a firm decides to develop a new product or process it only does so if the benefit it receives outweighs the costs of the investment. The firm does not care if other firms benefit from its proposed investment and does not take the value other firms receive into account when it makes its investment decision. This means that investments with high spillover values may not go ahead (if the cost of the investment outweighs the benefit to the individual firm) even though society as a whole would be better off if they did. This is an example of a **market failure** and has often been used as a justification for public intervention in markets where spillovers are thought to be important.

### DO THE CREATIVE INDUSTRIES CREATE SPILLOVERS?

The economic literature distinguishes between three types of spillover:

- **Knowledge spillovers:** firms benefit from new ideas or processes developed by other firms without having to pay for that benefit (for example, the Toyota production process);
- **Product spillovers:** the demand for a firm's product increases as a result of the development of a new product by another firm (for example, the iPod substantially increased demand for pre-recorded music). Alternatively, a firm is able to adapt or replicate a new product developed by another firm (for example, high street fashion retailers often base new lines or styles on the designs of high profile designers such as Stella McCartney); and

- **Network spillovers:** a grouping together of firms from an industry or industries may make a location more attractive to other firms or individuals (for example, the success of high profile UK artists and the ‘cool Britannia’ phenomenon is widely regarded as having been associated with attracting foreign investment and making the UK an attractive location for highly skilled workers).

Our analysis suggests that each of these types of spillover could be generated by firms in the creative industries – although more needs to be done to estimate the value of these spillovers.

More importantly, our analysis suggests that the creative industries may be particularly important in generating network spillovers through their impact on the attractiveness of key cities (like London) to highly skilled workers and knowledge economy firms.

Below we discuss the importance of the creative industries in generating each type of spillover, starting with network spillovers.

### Network spillovers

The most relevant type of network spillover for the creative industries is the ability of a group of firms locating together to alter the image of a city or country, making it a more attractive location for other unrelated firms or workers.

The UK is increasingly part of an interconnected global economy. This brings with it the challenge of international competition for the best and brightest workers and for those firms in the fastest growing and highest value added sectors.

There is evidence – although more needs to be collected – that these workers and firms base their location decisions on more than just financial decisions. Specifically, high value workers may take a city’s openness, image, cultural diversity and amenity into account when making their location decisions.

The creative industries – particularly those that interact with publicly investment in culture and place – help to shape substantially the images of cities in which they locate. For example:

- **Music, art and performing arts firms** improve the cultural attractiveness of a city and can interact with public investment in culture to broaden the diversity of available activities;
- **Architecture and design firms** can substantially alter the image and landscape of the city, and there is evidence to suggest that new and innovative building design and architecture has a positive impact. In London, for example, the innovation and creativity displayed in the London Eye, the Gherkin and Tate Modern have all served to substantially change the look of the city;
- **TV programmes and films** shot in an area also have an impact on its image. For example, the films *Braveheart* and *Rob Roy* are believed to have substantially improved the image and appeal of Scotland. For

example, studies suggest they have increased the number of people visiting key sites from the films by 18%.

- **Games, software, publishing and other creative industries** bring highly skilled creative workers to a city. The influx of these workers helps to shape the cultural agenda and broaden the openness and diversity of a city. Evidence from Richard Florida's work suggests this can be important in attracting other skilled workers.

The evidence base that attempts to quantify the impact of these network spillovers is still patchy, and more needs to be done to quantify the effects of these spillovers. However, a study by Loughborough and Heidelberg universities suggests that the role of these spillovers may be important. They examined the impact that the Euro and location of the European Central Bank had on Frankfurt's standing as a base for international finance. They found that these factors had not altered London's pre-eminence:

*"We had begun by assuming that the Euro would have been more significant (in changing the dynamic of the relations between the two cities) but it came across very strongly from both London and Frankfurt that it was not an important issue at all," said Pain, one of the researchers.*

*"Frankfurt's biggest problem was the difficulty of recruiting people to work there because of its "dull" image".*

## Product and knowledge spillovers

The other types of spillover identified in the literature are product and knowledge spillovers. The accompanying technical report provides a definition of both types of spillovers and sets out the conditions necessary for them to occur in the creative industries.

Here we focus on the two types of spillover from these categories that are most likely to arise. These are:

- Market expanding spillovers – spillovers where one firm's development of a product expands the market for a whole range of complementary products; and
- Market making spillovers – spillovers where the development of a product in one market develops a new market for other products.

## Market expanding spillovers

One of the most exciting features of the creative industries is their ability to generate new and innovative products. This is particularly true in relation to the music, software and design industries.

One of the benefits that these new products bring is that they can substantially expand or create markets for complementary products. The makers of the complementary products therefore benefit hugely from the fruits of the creative firms' labour.

Take, for example, the iPod. The iPod was launched in October 2003, and has been one of the most dramatic success stories of the decade. In 2005, Apple sold one iPod every second of the day. This has generated a huge expansion in the market for complementary products.

The most important complementary product is obviously online music (technically, pre-recorded music stored in a digital format!). The iPod boom has literally driven a billion download sales (February 2006), and the trend is continuing upwards. This may well have had a positive impact on recording artists and made the market more accessible to lesser known artists.

The iPod has also created spillovers for firms outside the Creative Industries – namely, the firms that make iPod accessories. Some of these are officially licensed iPod accessory manufacturers such as JBL and Monster Cable as well as non-licensed manufacturers.

### **Market making spillovers**

New and creative products also help to make new markets for products. A classic example of this is the impact of the designer fashion industry on high street retail.

Fashion designers' life blood is the invention of new styles and designs and the innovative and creative use of different fabrics and materials. For most consumers, the closest they get to these products is on the pages of a fashion magazine.

However, consumers are influenced by the trends set by designers and demand similar styles and types of product from their high street retailers. Consequently, the creations of Stella McCartney and Tom Ford help to stimulate demand for high street retail products from outlets like Top Shop and H&M.

### **WHERE NEXT?**

Our work has demonstrated that the creative industries have the potential to generate spillovers that could benefit substantially other sectors of the economy. The evidence available today, however, does not allow us to put a value on these benefits.

More can and should be done to understand and value spillovers in this sector:

- Our work suggests they could be important – particularly in developing a competitive advantage for high skilled international labour – and if we cannot value them we are potentially substantially underselling the importance of the creative industries;
- We must make sure that the routes that spillovers take from the creative industries to the rest of the economy are not blocked by ignorance or apathy – we need to ensure that firms are making the most of benefits generated by our creative industries; and

- We must make sure that firms are given the incentive to make decisions that maximise benefits for all – whether through financial incentives, or better protection of intellectual property.

Our technical report sets out a long term research strategy to develop a fuller understanding of the role and value of spillovers in the creative industries. Following this route will give policy makers the evidence base they need to make long term decisions that ensure Britain retains its lead in the fastest growing and highest value sectors of the economy.

Frontier Economics Limited in Europe is a member of the Frontier Economics network, which consists of separate companies based in Europe (Brussels, Cologne & London) and Australia (Melbourne & Sydney). The companies are independently owned, and legal commitments entered into by any one company do not impose any obligations on other companies in the network. All views expressed in this document are the views of Frontier Economics Limited.