



# **The contribution of the BBC to the UK creative industries**

**A REPORT PREPARED FOR THE BBC**

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## The contribution of the BBC to the UK creative industries

<b>Executive Summary</b>	<b>1</b>
<i>Objectives of the study</i> .....	1
<i>The economic framework</i> .....	2
<i>Findings</i> .....	3
<b>1 The BBC’s position within the UK creative industries</b>	<b>7</b>
<b>2 Economic framework</b>	<b>10</b>
<b>3 First round impacts – mapping the BBC’s investments</b>	<b>19</b>
<b>4 BBC support for new British music talent</b>	<b>24</b>
4.2 <i>First round impacts</i> .....	30
4.3 <i>Second round impacts</i> .....	38
4.4 <i>Spillovers</i> .....	44
<b>5 BBC Investment in innovative technology - BBC iPlayer</b>	<b>45</b>
5.2 <i>Context to the BBC’s investment</i> .....	49
5.3 <i>First round impacts</i> .....	55
5.4 <i>Second round impacts</i> .....	58
5.5 <i>Spillovers</i> .....	60
<b>Annex 1: Methodology for mapping BBC spend within each DCMS creative industry groups</b>	<b>62</b>
<b>Annex 2: Literature underpinning the economic framework</b>	<b>68</b>
<b>Annex 3: References</b>	<b>71</b>

## The contribution of the BBC to the UK creative industries

<b>Figure 1.</b> The BBC's direct contribution to the creative industries	4
<b>Figure 2.</b> The BBC's Public Purposes	8
<b>Figure 3.</b> The position of the BBC in the creative industries	9
<b>Figure 4.</b> An illustrative transmission mechanism for the BBC	14
<b>Figure 5.</b> BBC contribution to skills and knowledge spillovers	18
<b>Figure 6.</b> First round impacts	21
<b>Figure 7.</b> BBC investment in suppliers across the creative industries	22
<b>Figure 8.</b> BBC support for small and micro-sized businesses through its first round investments	23
<b>Figure 9.</b> Transmission mechanism: BBC's promotion of new British music talent	26
<b>Figure 10.</b> BBC talent schemes	28
<b>Figure 11.</b> First radio plays for selected new British music artists	32
<b>Figure 12.</b> BBC support for new artists' singles before release	33
<b>Figure 13.</b> Percentage of radio plays in daytime slots: Sam Smith	35
<b>Figure 14.</b> % of radio plays in daytime slots for other new artists	37
<b>Figure 15.</b> Industry support for BBC platforms in promoting new artists	38
<b>Figure 16.</b> Royal Blood - career pathway	40
<b>Figure 17.</b> London Grammar - career pathway	42
<b>Figure 18.</b> Sam Smith - career pathway	44
<b>Figure 19.</b> Transmission mechanism: BBC investments in BBC iPlayer	48
<b>Figure 20.</b> Use of VOD services (UK adult %)	49
<b>Figure 21.</b> Take-up of VOD-related technologies (proportion of UK adults)	50

<b>Figure 22.</b> Development of the UK VoD market	50
<b>Figure 23.</b> Average time spent on selected watched activities per day	52
<b>Figure 24.</b> Different markets develop to create VoD services	53
<b>Figure 25.</b> Claimed use of selected VOD services	57
<b>Figure 26.</b> BBC iPlayer market share	58
<b>Figure 27.</b> Requests for BBC iPlayer by device	60
<b>Figure 28.</b> DCMS definitions of the nine creative industry groups	64
<b>Table 1.</b> UK PSB expenditure by group 2013/14	63

## Executive Summary

The BBC Public Service invests about £3.7 billion of licence fee income a year in the UK economy<sup>1</sup>. Previous work has explored where these investments are made and their impacts on the economy. For example:

- Studies by the BBC used ‘multiplier analysis’ to estimate the impacts of its investments on Gross Value Added (GVA) (the measure used to assess the ‘size’ of the economy). The most recent report suggested GVA impacts of the BBC in excess of £8 billion per year (BBC, 2013a); and
- A recent study by the BBC found that “more than ninety per cent of core controllable spend [of the BBC] is on content, distribution and related support costs” (BBC, 2014).

Although the previous analysis is important evidence, there has been little examination of the different channels through which this investment contributes to the UK’s fastest growing sector: the creative industries. This study aims to fill this gap in evidence.

## Objectives of the study

In light of the above, this study aims to:

- Develop an analytical framework which explains:
  - First round impacts of the BBC: these are the direct impacts of the BBC’s investments (in content, technology and other supporting activities) on the creative industries;
  - Second round impacts of the BBC: these reflect the different ways in which the BBC’s investments generate further activity in the creative industries and other related industries; and
  - Spillover impacts resulting from the BBC’s investments: unlike first round and second round impacts, these are not directly measurable in monetary terms, but add value by providing wider benefits to other organisations in the creative industries. Productivity gains are a typical example of such a benefit.

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<sup>1</sup> In 2013/14 the BBC’s PSB Group expenditure was £3,778 million and total licence fees collected were £3,726 million (BBC, 2014). The licence fee is supplemented by income from the commercial exploitation of licence fee funded content and infrastructure through three commercial subsidiaries including BBC Worldwide.

- Articulate and quantify, where feasible, the value of the BBC's main first round, second round and spillover benefits to the UK creative industries.

This report develops a new analytical framework for assessing how the BBC's investment of the licence fee contributes to the creative industries in the UK. It does not seek to provide a comprehensive account of the economic impact of all of the BBC's activities on the UK creative industries but it illustrates the framework through a number of examples. These focus on:

- The scale of direct investment made by the BBC in the creative industries, using BBC finance data of all purchases from suppliers in 2013/14;
- The impacts of the BBC's promotion of, and support for, new British music talent, using detailed Radiomonitor data of all radio plays over the period 2012-2014 and sales information from record labels for a sample of new music artists; and
- The impacts of the BBC's investment in BBC iPlayer, which draws on published evidence and BBC data.

## The economic framework

The framework we use to consider the channels through which the BBC contributes to the creative industries, and drives growth, is a 'transmission mechanism'. Economic growth refers to the change in the value (or 'size') of economic activity within the creative industries or others and is often measured in terms of gross value added (GVA).

The economic framework we use here captures both of the key elements of economic growth: the first element is the level of investment in **inputs**. These include labour (employees and their 'human capital' i.e. skills and knowledge) and capital (IT equipment, premises, and other creative inputs such as creative content and investment in rights and royalties). The second of economic growth is **how productively those inputs are used**.

The framework we use demonstrates how the BBC's investments and activities 'transmit' throughout the creative industries and beyond to generate additional output and investment. The three stages of the transmission mechanism are:

- **First round impacts.** These reflect the BBC's direct investments in all the elements it needs to deliver high quality creative content and meet its public purposes. This includes purchasing creative goods and services and investing in the inputs needed to produce creative products and services (ranging from TV programmes to web apps); employing on and off-screen talent (e.g.

writers, actors, producers, actors, journalists and musicians) and investing in skills, training and rights payments.

- **Second round impacts.** These refer to the economic activities (investments in capital or employees, and hence output) in the creative and related industries (such as electronic manufacturing) generated by the BBC's first round investments. Examples include commercial exploitation of intellectual property (e.g. programme sales and exports); increased record sales and exposure for new British music artists associated with the BBC's extensive radio airplay; and the additional investments made by commercial broadcasters in response to BBC investment in content<sup>2</sup>.
- **Spillover impacts.** These reflect the wider benefits across the creative and other industries that arise from the BBC's investments. For example, the creation of clusters of creative organisations that can share knowledge and ideas making them more productive. MediaCityUK in the north of England is an example of this as it has about 200 firms employing around 6,400 people. The BBC's role in training and skills development is another example as last year the BBC trained 13,500 BBC staff members and 8,000 others from the industry. High labour mobility across the creative industries means that these skills and knowledge rapidly spread across those industries as employees interact and move organisations.

Although this framework is stylised, in practice the process is not linear as at each round of impacts, there are intricate interactions across organisations and the wider network of creative industries.

## Findings

The key findings are:

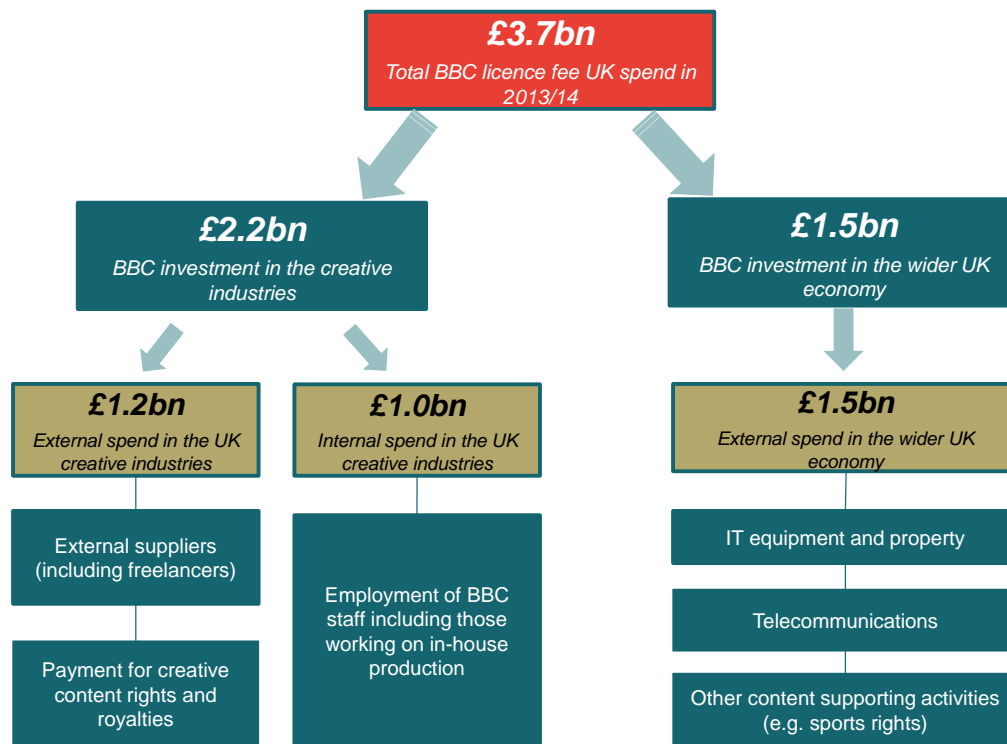
- Our analysis of BBC expenditure in 2013/14 shows that the BBC generates significant first round impacts:
  - **The BBC is a major investor in the creative industries. It invested around £2.2 billion directly in creative industries in 2013/14.** This reflects the investment flowing into creative ideas and intellectual property plus investment in talent and human capital. £1.2 billion of this total was invested outside of the BBC.

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<sup>2</sup> Such impacts were noted in Ofcom's third Public Service Broadcaster (PSB) review as it highlights "that the BBC remains the cornerstone of the system, providing the majority of PSB investment and output..." and that alongside its direct impact, it has an impact by "stimulating investment by the wider market through competition" (P72, Ofcom, 2014).

- **Of its investments in the creative industries, around £450 million was invested by the BBC in small and micro creative businesses** which are considered to be an engine of creativity and growth. Based on the data available, around 86% (2,220) of the BBC's creative suppliers in the UK were small (10-49 employees) or micro-sized (0-9 employees) businesses.
- **A further £1.5 billion was invested outside of the creative industries in the UK:** much of this investment was in the digital and high-tech industries on activities which support content creation and content distribution. See **Figure 1**.

**Figure 1.** The BBC's direct contribution to the creative industries<sup>3</sup>



Source: Frontier analysis of BBC finance data

- Our analysis of the BBC's activities to discover and promote new British music talent uses a range of a sample of new music artists and demonstrates that:

<sup>3</sup> Note that figures may not add due to rounding. The data excludes investment made outside of the UK.



- **The BBC's talent schemes help to discover and champion new talent.** *BBC Introducing* discovered 27 artists that have subsequently signed to major and significant indie record labels in the past 12 months
- **The BBC takes risks on new artists, providing support and exposure for the singles of new and emerging artists before release.** For example, for Sam Smith's first number one hit ("La La La"), the BBC played the song 281 times before it was released<sup>4</sup>; the BBC supported Royal Blood by playing their first single, "Out of the Black", 35 times before release, with increasing support over time as the BBC played their fourth single, "Figure it Out", 166 times before release.
- **For the sample of artists used in this analysis, the BBC played many of their songs before comparable commercial stations.** For example, George Ezra's first single "Did You Hear the Rain" was played 73 days before comparable commercial stations and Sam Smith's "La La La" was played 25 days sooner.
- **The BBC played a higher proportion of our sample of new artists' songs on daytime shows (as opposed to evening) than comparable commercial stations.** For example, our analysis shows that for Sam Smith's songs "La La La", "Stay with Me" and "Money on my Mind", the percentage of radio plays in daytime slots was 80-90% for the BBC, compared with around 60-70% for comparable commercial stations.
- **The BBC promotes new British music talent across its platforms, helping to drive record sales and build artist profile.** For example, London Grammar's song "Hey Now" was added to the "In New Music We Trust" playlist on BBC Radio 1 in March 2013; sales for this song rose 140% the following week. The naming of Sam Smith as 'BBC Sound of 2014' led to a spike in his album sales - they rose from 1,000th on Amazon to 6th in the following twenty-four hours.
- Our analysis of the emergence of BBC iPlayer shows how it acted as a catalyst for the development of video on-demand in the UK:
  - **The BBC's Public Service mission meant it had a clear mandate to develop BBC iPlayer and ensure that it was made widely available.** This was despite significant market uncertainties and investment costs; and the potential for such investments to take viewers away from its linear services. The investment overcame a co-ordination problem such that jointly it was in the market's interest to invest in

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<sup>4</sup> Data covers the period January 2012 to October 2014.

these emerging technologies, but individually it may not have been in each market participant's interest at the time.

- **The BBC had a strong content offering.** It is notable that 4OD launched over a year earlier than BBC iPlayer, but the BBC's strong content offering was one of the reasons it quickly became the most popular VoD service in the UK.
- **BBC iPlayer facilitated the development of the market in a number of ways:** it helped to create an audience and shape new business models (e.g. catch up TV); it prompted the development of a new rights framework which supports and incentivises content providers; and it helped develop the software skills needed to shape and develop VoD platforms.

# 1 The BBC's position within the UK creative industries

The creative industries form an important part of the UK economy and are defined and classified into industry groupings by the Department for Culture, Media and Sport (DCMS). This section describes some context for what the creative industries are and how the BBC fits within the DCMS creative industry groupings.

## 1.1.1 The UK's creative industries

The creative industries are an important driver of growth in the UK economy. In 2013, they contributed around £76.9 billion of annual Gross Value Added to the economy (GVA is a measure of the value of economic output) and accounted for 5% of the UK economy. Employment in the creative industries was 1.71 million people, or 5.6% of total UK jobs. In 2012, exports of services by creative services were valued at over £17.3 billion (DCMS, 2015).

Their dynamic contribution to support future growth is also important. By their very nature they are:

*“...industries which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property.” (DCMS, 2015)*

In line with this definition, DCMS has identified nine creative industry groupings. These are: advertising and marketing; architecture; crafts; product, graphic and fashion design; film, TV, video, radio and photography; IT, software and computer services; publishing; museums, galleries and libraries; and, music, performing and visual arts. These groups have very specific definitions in terms of the industries they cover (defined by Standard Industrial Classifications) as discussed in Annex 1.

These industry groups have been among the fastest growing sectors in the UK economy in recent years. Between 2012 and 2013, creative industries grew 9.9%. GVA of the creative industries has increased by 25.8% since 2008, compared to an increase of 11.4% for the UK economy as a whole over that period (DCMS, 2015).

## 1.1.2 The BBC

The BBC is a public intervention in the UK media sector. Its primary purpose, as set out in the BBC Charter and Agreement, is to provide the public with programmes and services that educate, inform and entertain and also deliver wider social, cultural, educational and democratic goals. To achieve these aims, it has a range of specific public purposes, shown in **Figure 2**.

The BBC's public purposes require it to innovate across content and technology and to invest in UK creative ideas and talent (e.g. writers, producers, actors, journalists and musicians). Its funding model enables it to make these investments at scale. Analysis of Ofcom data and other publically available data shows that while the licence fee accounts for around 22% of UK TV broadcast revenues, the BBC accounts for about 42% investment in original UK TV content.

**Figure 2.** The BBC's Public Purposes

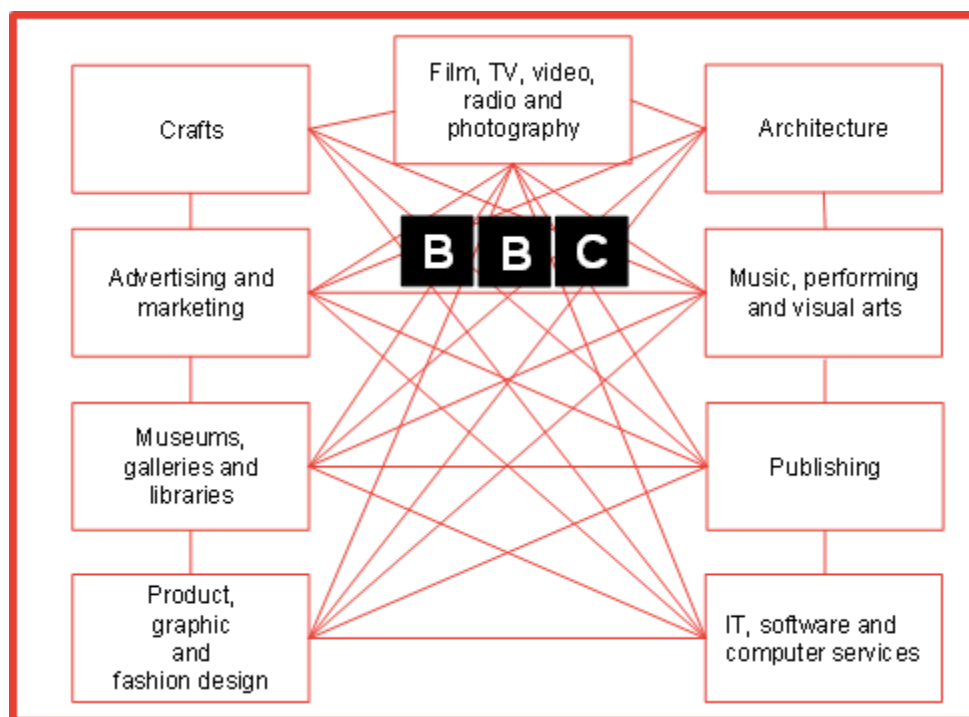
1. Sustaining citizenship and civil society. Provide high-quality news, current affairs and factual programming that informs the public on important issues and political developments.
2. Promoting education and learning. Support formal education in schools and colleges, and informal knowledge and skills building.
3. Stimulating creativity and cultural excellence. Provide output that is distinctive and creative on all platforms, and encourage interest, engagement & participation in cultural, creative & sporting activities.
4. Representing the UK, its nations, regions and communities. Content must reflect the many communities that exist in the UK.
5. Bringing the UK to the world and the world to the UK. Build a global understanding of international issues and broaden UK audiences' experience of different cultures.
6. Delivering to the public the benefit of emerging communications technologies and services. Assist UK residents to get the best out of emerging media technologies now and in the future.

Source: DCMS (2006)

### 1.1.3 The BBC's position in the creative industries

Creative industries are characterised by their highly networked nature. Organisations interact within and across sub-sectors to generate ideas, innovate and drive growth. As shown in the figure below, although the BBC is a creative organisation that formally sits within the 'Film, TV, Video, Radio and Photography' creative industry grouping, it also, by its scale, can act as a hub within this network. It is connected to other organisations within those sectors, through supply-chain linkages, continuous interactions as part of its day to day business and through mobile labour. It is these inter-connections that explain the BBC's contribution to the creative industries.

**Figure 3.** The position of the BBC in the creative industries



In line with **Figure 3**, this report provides an evidence-based assessment of the contribution of the BBC to creative industries and other supporting and complementary industries (such as telecommunications and consumer electronics manufacturing) using an economic framework: a three-stage transmission mechanism. This allows us to investigate (i) the channels through which the BBC impacts on the creative industries and complementary industries; and (ii) the potential scale of those impacts.

Overall we find that the BBC makes a significant contribution to the creative industries, spending more than half of its licence fee revenues directly on creative suppliers and its own employees ('first round' impacts). This helps to drive growth not only in 'film, TV, video, radio, video and photography' but also 'music, performing and visual arts' and 'IT, software and computer' services among others. Its contribution to the creative industries does not end there – significant 'second round' impacts and 'spillovers' also exist. The 'ripple effects' from the BBC's investments in content and technology go far and wide in the creative economy.

The next section explains the economic framework used in the analysis before discussing our methods and more detailed findings.

## 2 Economic framework

### 2.1.1 Developing the framework

The BBC invested around £3.7 billion of UK licence fee income in 2013/14. However there has been little discussion of the channels through which this investment contributes to the UK creative industries and drives growth. This section therefore develops a framework that can be applied flexibly across the range of BBC investments to both articulate and quantify, where feasible, its impacts on creative, and complementary, industries.

We recognise that the BBC's contribution to the creative industries can only be appropriately understood if we know what would have happened without the BBC. This is difficult to establish robustly. An assessment of the counterfactual is beyond the scope of this paper. However, analysis by Barwise and Picard (2014) suggests that without the BBC, "...total TV industry revenue would most likely be lower; total content investment would be lower; investment in first-run UK content would be lower; and the net impact on viewers would vary, but most would suffer a reduction in both choice and value for money". Ofcom's recent consultation feeding into the Public Service Broadcasting review is consistent with this as it reported that the BBC is the 'cornerstone' of the PSB system due to its direct contribution as well as its impact through stimulating investment by the wider market through competition (Ofcom, 2014).

#### *Drivers of economic growth in the creative industries*

We start by being clear on what we mean by economic growth. Economic growth refers to the change in the value (or 'size') of economic activity and is often measured in terms of gross value added (GVA). The economic framework we use here captures both of the key elements of economic growth: first the level of investment in **inputs** which are both labour (employees and their 'human capital' i.e. skills and knowledge) and capital (IT equipment, premises and other creative inputs such as creative content and investment in rights and royalties); and second, **how productively those inputs are used** (for example, whether they are combined and applied in a way which creates value that exceeds the value of the inputs used).

The framework must also be flexible to account for the drivers of economic growth in the creative industries at the more granular level. Standard drivers of growth were considered in the UK Government's Strategy for Sustainable Growth (BIS 2010). They are:

1. Promoting the efficient operation of markets to support growth;

2. Smarter public and private investment in the economy, including creating a highly skilled workforce; and
3. Encouraging entrepreneurialism and individual engagement in the economy to support growth.

The creative industries display these conditions for growth, as explained below (further detail is in Annex 1).

- Promoting the efficient operation of markets to support growth:
  - Competition for audiences between the public and private sectors can drive up quality of creative products. For example, this can lead to better quality programmes, more innovation and overall economic growth. International data suggests that by exerting competitive pressure on commercial broadcasters, “countries with well-funded PSBs investing in high-quality, diverse new content tend also to have commercial markets which generate strong revenues and levels of investment in high-quality, diverse new content” (BBC, 2013b).
- Smarter public and private investment in the economy, including creating a highly skilled workforce:
  - The UK broadcasting market has high investment levels in original UK content. This is primarily due to two funding mechanisms: the licence fee (BBC) and advertising (commercial PSBs). Ofcom's PSB review shows that PSB spend on first-run UK original programmes was £2.4 billion in 2013 (Ofcom, 2014).
  - Skills impact on the ability to adopt and exploit new technologies (Bresnahan et al., 2002), and to drive innovation more generally (Roberts Report, 2006). Growth in the creative industries is also driven by having a workforce with a range of people with different sets of knowledge. When these interact, they can produce better decisions and outcomes than people with similar skill sets (The Work Foundation, 2007; Blinder & Morgan, 2005; Lakhani et al., 2007).
- Encouraging entrepreneurialism and individual engagement in the economy to support growth:
  - There are approximately 150,000 creative businesses in the UK (UKTI, 2014). Creative industries are characterised by many small businesses. For example, the ‘film, TV, video, radio and photography’ group of creative industries has just over 28,000 business entities; 95% of these are small (10-49 employees) or micro (0-9 employees) (ONS data UKBBb, 2014). Investment in small firms is a key driver of growth in the creative industries (Van der Ploeg, 2002; Cincera and Galgau, 2005).

The economic framework we use to capture the BBC's impacts on the UK creative industries and how it supports the conditions for growth is the 'transmission mechanism'.

### 2.1.2 The transmission mechanism

The purpose of a transmission mechanism is to map out, in a stylised way, the channels through which the investments made by the BBC contribute to the creative industries, and in turn the wider economy.

The three stages of the 'transmission mechanism' are described below. In practice of course, the process is not linear as at each stage there are intricate interactions across organisations, across the creative industries and across the wider economy.

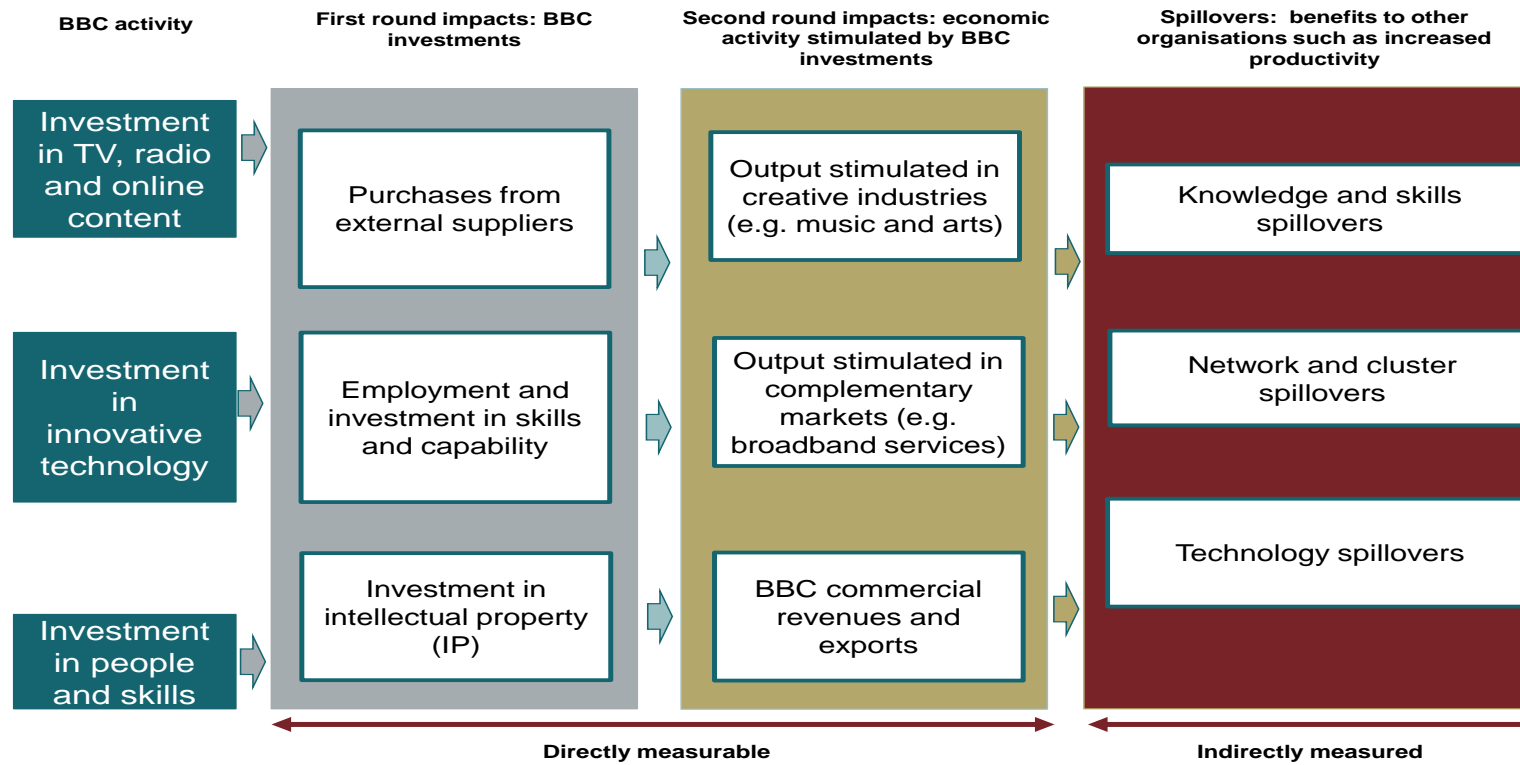
- **First round impacts.** These reflect the BBC's direct investments in all the elements it needs to deliver high quality creative content and technology, and to meet its public purposes. This includes purchasing creative goods and services; investing in the inputs needed to produce creative products and services in-house (ranging from TV programmes to web apps); employing on and off-screen talent (e.g. writers, actors, producers, actors, journalists and musicians); investing in skills and training; and investing in rights payments.
- **Second round impacts.** These refer to the economic activities (investments in capital or employees, and hence output) in creative and related industries generated by the BBC's first round investments. Examples include the increased record sales and exposure for new British music artists associated with the BBC's extensive radio airplay; commercial exploitation of intellectual property (e.g. programme sales and exports); and the additional investments made by commercial broadcasters in response to BBC investment in content. The latter was noted in Ofcom's third Public Service Broadcaster (PSB) review as it highlights "that the BBC remains the cornerstone of the system, providing the majority of PSB investment and output..." and that alongside its direct impact, it has an impact by "stimulating investment by the wider market through competition" (Ofcom, 2014).
- **Spillover impacts.** These reflect the wider benefits across the creative industries (and other industries) that arise from the BBC's investments. For example, the creation of clusters of creative organisations means those organisations can share knowledge and ideas, making them more productive. MediaCityUK in the north of England is an example of this as it currently has about 200 firms employing around 6,400 people. The BBC's role in training and skills development is another example as last year the BBC



trained 13,500 BBC staff members and 8,000 others from the industry. High labour mobility across the creative industries means that these skills and knowledge rapidly spread across those industries as employees interact and move organisations.

A stylised transmission mechanism framework for the BBC is shown in **Figure 4**, by way of example.

**Figure 4.** An illustrative transmission mechanism for the BBC



Note that this is illustrative and does not cover all activities or impacts of the BBC

### 2.1.3 First round impacts

First round impacts are measured by the investments made by the BBC in:

- Programmes, products and services bought from external suppliers in the creative industries or producing TV, radio and web services in-house by the BBC.
- Investments in talent, employment and skills: the BBC invests in a wide range of home-grown on and off-screen talent including writers, producers, actors, journalists and musicians. The BBC employs over 18,000 people, the majority of whom are in creative occupations. For example, they include specialist production teams, editors, journalists, and post-production teams. Investing in the skills and capabilities of these employees is an important way in which the BBC is able to deliver high quality content. The BBC complements the in-house skills of its employees by employing freelancers. Spending on these skilled workers was about £94 million in 2013/14.

Analysis of data on the use of freelancers for the month of October 2014 (randomly selected data used for illustration) suggests the following:

- The BBC employed over 2,000 full time equivalent freelancers, which given they often work on part time contracts, is equivalent to over 12,400 individual bookings.
- The majority of these freelancers are in the creative industries. The top ten specialisms of freelancers are: TV producer; TV editor; broadcast journalist; TV director; camera operator; broadcast assistant; make-up artist; runner; radio producer; and, assistant producer.
- Investment in intellectual property: the BBC purchases rights and pays royalties to performers to allow it to air their songs or other performances. It also makes rights payments to independent producers commissioned to make programmes shown on the BBC's public services.

### 2.1.4 Second round impacts

Second round impacts arise because the BBC's first round (direct) investments generate investment and hence output in complementary and supporting organisations in the creative industries and connected sectors. More specifically, typical examples include:

- **The investment and employment – and hence output – stimulated in the forwards and backwards supply chain, and in complementary and supporting markets.** For example, the BBC's investment in online content stimulates demand for network services (e.g. broadband); devices (e.g. smart

phones or tablets) and smart phone applications (to allow ready access to available content), so output in these sectors rises to meet that demand. Given these commercial entities will themselves sit within a complex supply chain, they in turn stimulate investment and output further down the chain.

- **Commercial revenues and exports.** Record sales can rise as a result of the BBC's support and exposure of talented music artists across its local and national platforms on air and online, or at live BBC events such as the BBC Music Awards, for example.

Also, BBC Worldwide generates substantial commercial value because it exists to “invest in, commercialise, market and showcase content from the BBC and the wider UK television industry round the world to build the reach and reputation of the BBC and to champion the best of British television”. BBC Worldwide represents content from over 250 British independent production companies and is the largest distributor of finished TV programmes outside the major US studios. Total sales for BBC Worldwide as a whole from sales of its content, advertising, downloads, DVDs and other merchandise were £362.2 million in the UK in 2013/14, and £1.04 billion globally (BBC Worldwide, 2014). The BBC's *Dancing with the Stars* (the international version of *Strictly Come Dancing*), for example, is now licensed to over 50 countries and in the US it was ABC's highest rating programme of 2014.

Commercial activities by other third parties are also generated as a result of the BBC's investments. For example, the popular children's BBC TV show “Bob the Builder” led to a global sales of toys and other merchandise including a number one hit single.

### 2.1.5 Spillovers

Spillover effects (sometimes called externalities) occur when activities of an organisation, such as the BBC, generate economic benefits for other organisations in the wider economy, that the first organisation (here, the BBC) is not compensated for. Spillovers are not directly quantifiable in monetary terms (unlike first round and second round impacts) yet they add to growth in the creative industries by creating value in other organisations, often by increasing productivity. This means they can increase the level of output that can be produced from a given level of inputs.

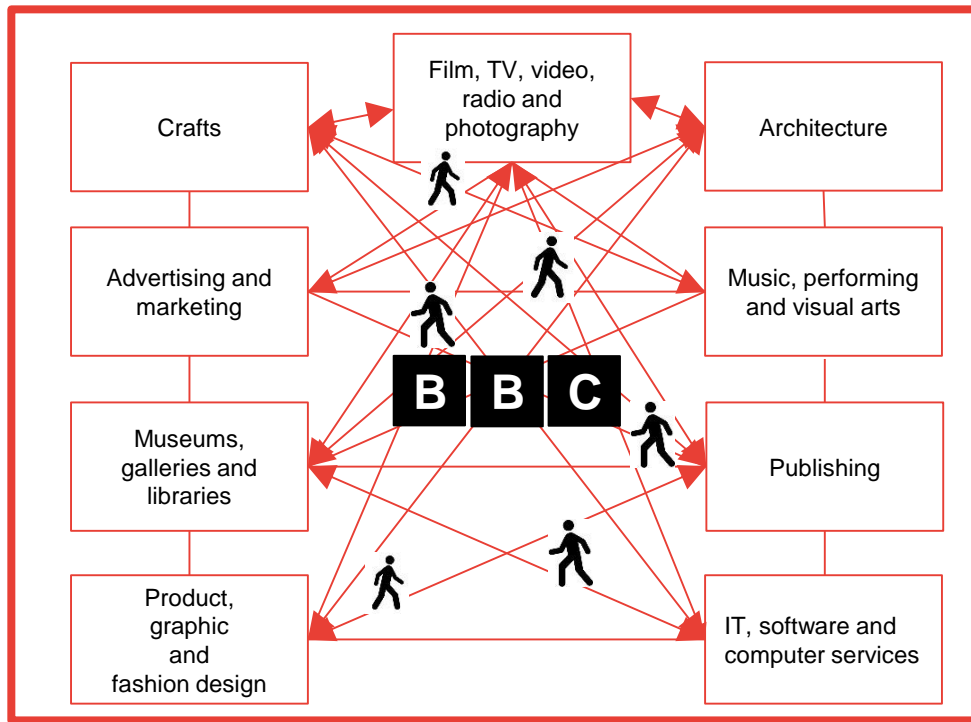
Spillovers can be either intra-market or inter-market (Jaffe, 1996). Intra-market spillovers are those that benefit organisations in the same market as the BBC. Inter-market spillovers are those that benefit organisations in different markets within the creative industries or wider economy. Different forms of spillovers that are likely to be associated with BBC activity are described below.

- **Knowledge and skills spillovers** could be generated through a number of channels. For example:
  - **Movement of labour (labour mobility).** Knowledge and skills are transferred to other firms and regions when these workers change jobs. The BBC invests in apprenticeships (about 180 at present) and the skills of its 18,000 employees – high labour mobility implies other organisations are likely to benefit as a result. Last year, the BBC trained 8,000 individuals from outside the organisation.
  - **Knowledge sharing activities.** These could be formal activities (such as conferences or skills sessions) or informal activities (e.g. social interactions). Constant interactions among those in the creative industries, including freelancers that work across many organisations, create an environment conducive to sharing knowledge and ideas.
  - **Supply chain spillovers:** the BBC sits within a range of supply chains. It can therefore prompt creativity and the sharing of knowledge forwards and backwards in the chain.

As indicated in **Figure 5**, the BBC's role as a hub employer and investor in skills and training could contribute to spillovers in the creative industries through these routes.

- **Network and cluster (agglomeration) spillovers:** Organisations in a given geographical area can attract other similar or complementary organisations to move to the same area. Organisations in the cluster would be expected to be more productive than if they were not co-located because of their ability to share ideas and information and to attract a productive pool of skilled workers. During this Charter period, the BBC has devolved significant activities outside London and the South East, and has acted as an anchor tenant for 'clusters' of creative businesses in different parts of the UK including Salford/Manchester, Bristol, Cardiff and Glasgow. MediaCityUK – which now has about 200 firms and supports around 6,400 jobs – has become one of the largest media clusters in Europe.
- **Technology spillovers:** these could potentially be generated by investment in new technologies (such as BBC iPlayer, and BBC Music Playlister). For example, where the BBC invests in a technology, the spillover would be represented by the benefit enjoyed by other firms and society from accessing the knowledge/technology, less the cost of acquiring the technology. In some cases, investment in high risk high return technologies (risk capital) could help test a market and hence provide a benefit for others who have not yet made an investment (see the BBC iPlayer example below).

**Figure 5.** BBC contribution to skills and knowledge spillovers



## 3 First round impacts – mapping the BBC's investments

### Key findings

This section finds that:

- **The BBC invested £3.7 billion of licence fee income in the UK in 2013/14.**
- **The BBC is a major investor in the UK creative industries. Of its total investment, £2.2 billion was invested directly in the creative industries in 2013/14 (of which £1.2 was outside of the BBC):** This includes purchases of creative goods and services; investment in the inputs needed to produce creative products and services in-house (ranging from TV programmes to web apps); employment of on and off-screen talent (e.g. writers, actors, producers, actors, journalists and musicians); investment in skills and training; and payments for rights and royalties.
- **Of its investment in the creative industries, the BBC invested around £450 million in small and micro creative businesses:** Based on the data available, around 86% (2,200) of the BBC's creative suppliers in the UK were small or micro-sized businesses (i.e. less than 49 employees). These businesses are an engine of creativity and growth in the creative industries.
- **A further £1.5 billion was invested outside of the creative industries in the UK;** much of this spend was in the digital and high-tech industries on activities which support content creation and content distribution.
- **The BBC plays a key role within the network of creative industries:** The creative spend was across the breadth of the creative industry groups – not only in 'Film, TV, video, radio and photography' but also other creative industry groupings such as 'Music, performing and visual arts' and 'IT, software and computer services' and 'Publishing'. About one-quarter of individual suppliers to the BBC were in the creative industries. These suppliers account for just under half of the BBC's investment outside of the BBC.

### 3.1.1 Introduction

**The BBC invested a total of some £3.7bn of licence fee income in the UK in 2013/14.** This section investigates the proportion of this spend that went into creative industries.

A recently published study which looked at how the BBC spends licence fee income found that 91% of the BBC's controllable spend was on "content, distribution and related support costs" (BBC, 2014). This analysis builds on that work by using the same underlying data but examining it through an alternative lens<sup>5</sup>.

This section maps all BBC expenditures for the year 2013/14 to the corresponding supplier and in turn maps whether those suppliers are within the creative industries.

The approach takes the definition of the creative industries from the Department for Culture, Media and Sport (DCMS). It then makes adjustments to overcome a particular problem with the standard method to classify businesses to industries i.e. the standard method allocates businesses (suppliers) to industries on the basis of their main activity. This means that when businesses have a diversified portfolio, they may actually be important players within the creative industries despite not having this as their 'designated' main activity. Adjustments have therefore been made to certain investments that were particularly affected by this issue (and other issues, such as in relation to the treatment of holding companies). Annex 1 explains more about how this re-classification was carried out.

### 3.1.2 Financial data used in the analysis

To understand the proportion of BBC investment that goes directly into the creative industries (first round impacts), we have used two sources of data from the BBC.

The first is expenditure on each of the BBC's external suppliers (i.e. suppliers outside the BBC) for the financial year 2013/14.<sup>6</sup> The total spend with external suppliers based in the UK was £2.7 billion.

The second source of data is expenditure relating to BBC employees. This covers around £1 billion relating to the employment of staff in 2013/14.

Together these data therefore cover £3.7 billion of BBC annual spend in the UK in 2013/14.

### 3.1.3 Estimating the BBC's first-round investment in the UK creative industries

Using the methodology described in 3.1.1, we have estimated the flow of BBC investment directly into the creative industries.

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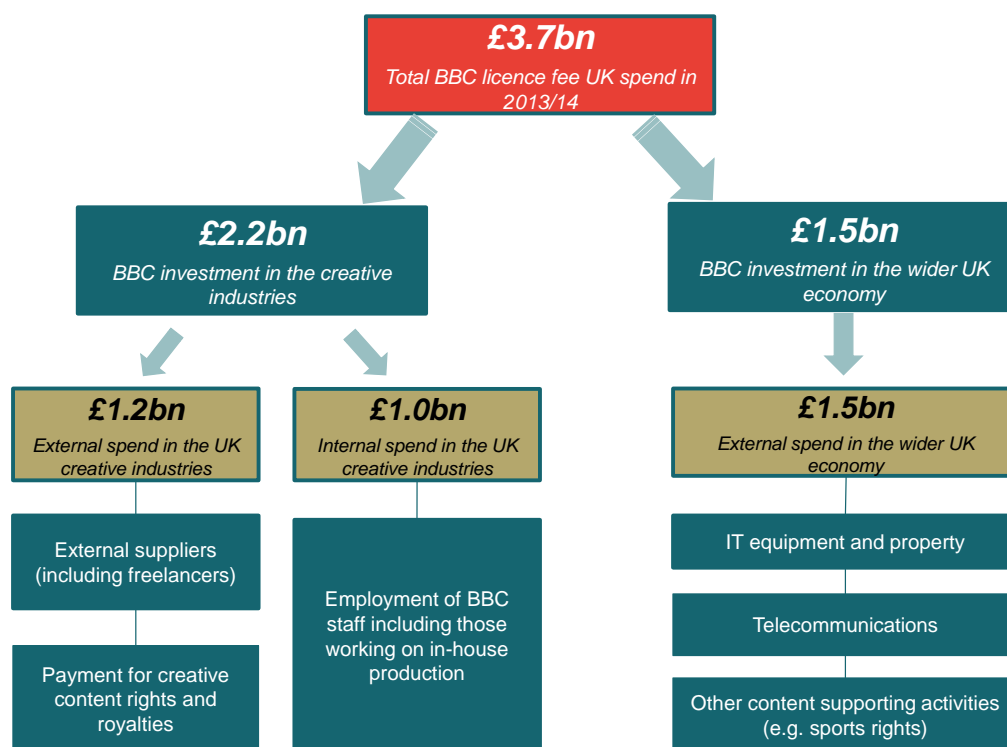
<sup>5</sup> Further detail on the underlying data is in Annex 1.

<sup>6</sup> This data excluded spend on freelancers, some media rights and most of the BBC's external obligations (e.g. local TV, broadband rollout and S4C) and so this information was provided by the BBC separately.



The findings of the analysis are presented in **Figure 6**.

**Figure 6.** First round impacts

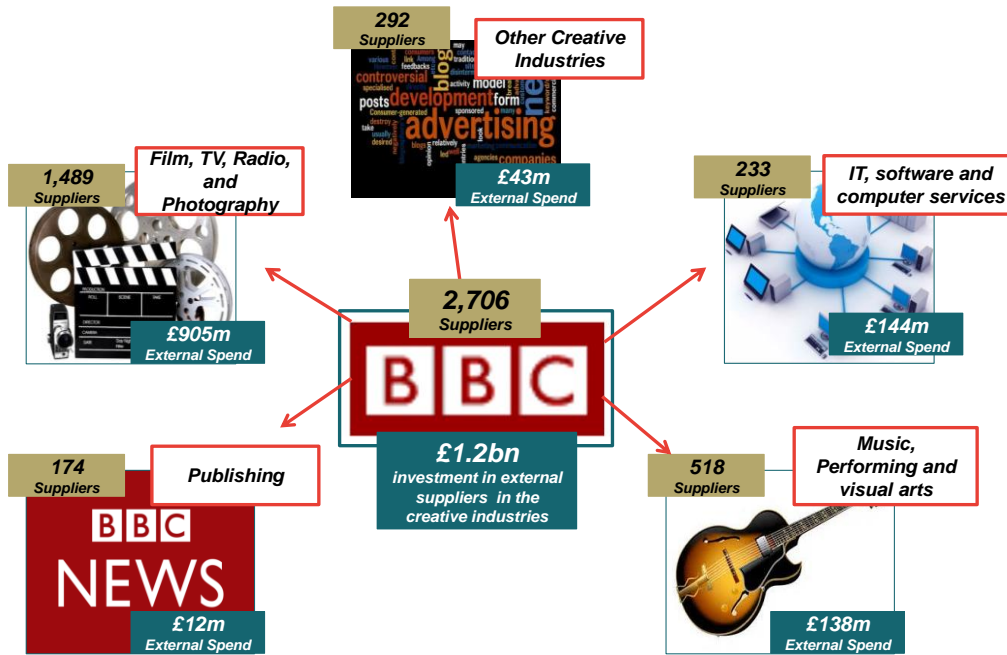


Source: Frontier analysis based on BBC finance data for 2013/14

Of total investment, **Figure 6** shows that £2.2 billion was invested directly in the UK-based creative industries. This comprises:

- £1.2 billion invested by the BBC in UK suppliers within the creative industries; and
- £1.0 billion invested in in-house activity and in BBC employees.

To understand where the £1.2 billion is invested, we explored the number of BBC suppliers and the creative industries in which they operate. The results of our analysis are in **Figure 7**. This presents the flow of BBC investments directly into each of the relevant creative industry groups as defined by the DCMS.

**Figure 7.** BBC investment in suppliers across the creative industries

Source: Frontier analysis based on BBC finance data for 2013/14

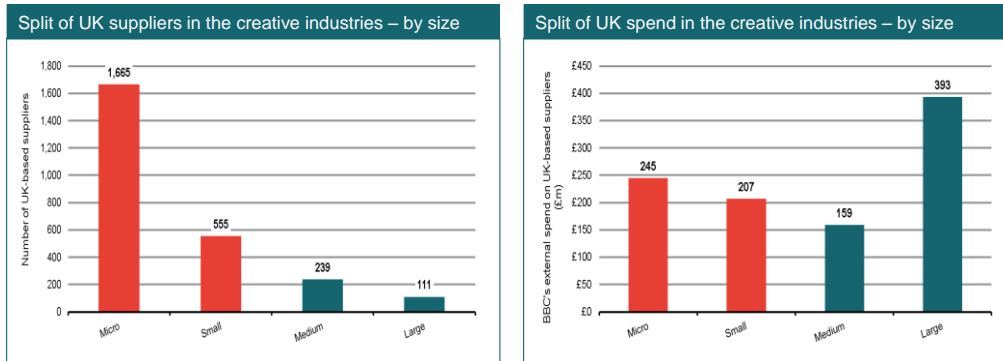
**Figure 7** shows that the BBC directly invests across the breadth of UK creative industries. The majority of the BBC's annual external spend – around three-quarters – is in the 'TV, film, radio and photography' creative industry group. This covers, for example, investment in content from independent producers. This grouping accounts for the majority of suppliers, with almost 1,500 in this category alone.

When looking at suppliers in more detail, we find that the BBC's first round (direct) investments in creative industries supported over 2,700 suppliers based in the UK.

When looking at the size of the businesses that the BBC supports, we find that 86% of the BBC's creative suppliers in the UK are small or micro-sized<sup>7</sup>. Together, these small and micro-sized businesses account for around 45% of the BBC's investments in the creative industries. This is shown in **Figure 8**.

<sup>7</sup> This analysis is based on 2,570 (95%) of the BBC's UK-based suppliers in the creative industries (data were not available for all). Micro-sized businesses are defined as employing 0-9 people and small businesses are defined as employing 10-49 people.

**Figure 8.** BBC support for small and micro-sized businesses through its first round investments<sup>8</sup>



Source: Frontier analysis based on BBC finance data for 2013/14

Investment in such businesses is around £450 million and is important when considering the BBC's impact on growth because investment in small firms is a key driver of growth in the creative industries.

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<sup>8</sup> This analysis is based on 2,570 (95%) of the BBCs UK-based suppliers in the creative industries. Data on the size of the organisation were not available for all suppliers. The charts therefore exclude £0.2 billion of BBC investment in the UK creative industries.

## 4 BBC support for new British music talent

### Findings

This analysis shows that the BBC supports and promotes new British music talent in four particular ways:

- **The BBC's talent schemes help to discover and champion new talent.** *BBC Introducing* discovered 27 artists that have subsequently signed to major or significant indie record labels in the past 12 months.
- **The BBC takes risks on new artists, providing exposure for the songs of new and emerging artists before release.** For example, BBC support for new artists is significant as our analysis shows that George Ezra's single "Budapest" was played 118 times by our sample of BBC stations before it was released and Royal Blood's "Figure it Out" was played 166 times. The number of plays before release is higher still for some of the singles of Ed Sheeran and Sam Smith. The first time that songs of our sample of new artists were heard on the radio was often on the BBC. For example, George Ezra's first single "Did You Hear the Rain" was played 73 days before comparable commercial stations and Sam Smith's "La La La" was played 25 days sooner.
- **BBC radio promotes new artists and musicians by playing their songs on shows with the biggest audiences:** For songs of our sample of new music artists, a higher proportion of BBC radio plays are in daytime slots than is the case for comparable commercial stations. For example, our analysis shows that for Sam Smith's songs "La La La", "Stay with Me" and "Money on my Mind", the percentage of radio plays in daytime slots was 80-90% for the BBC, compared with around 60-70% for comparable commercial stations.
- **The BBC promotes new British music talent across its TV, radio and online services helping to drive record sales and build profile.** For example, London Grammar's song "Hey Now" was added to the "In New Music We Trust" playlist on BBC Radio 1 in March 2013, sales for this song rose 140% the following week. The naming of Sam Smith as 'BBC Sound of 2014' in early January led to a spike in his album sales - they rose from 1,000th on Amazon to 6th in the following twenty-four hours.

#### 4.1.1 The UK music industry

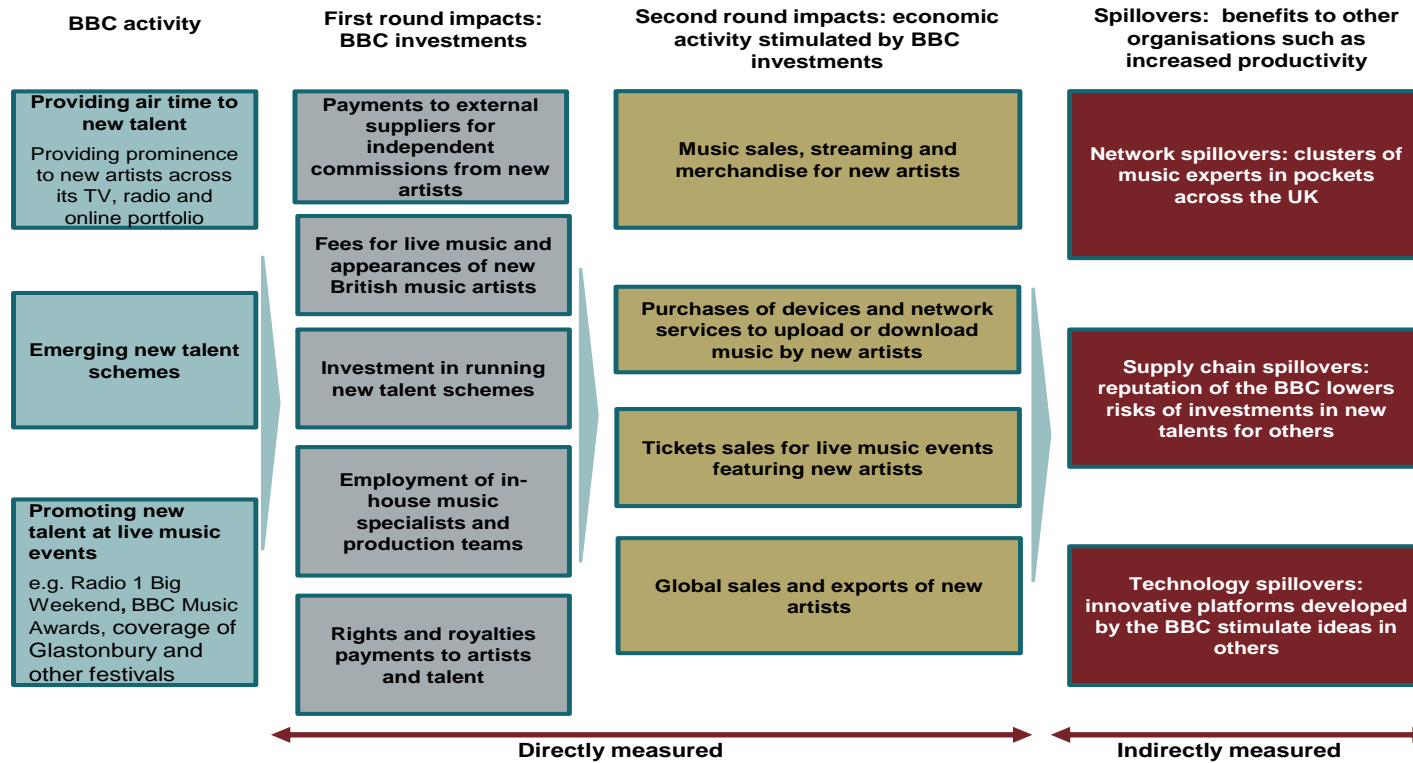
The UK has a world-leading music industry; one of only three net exporters of music globally. The sector generated £3.8 billion of GVA in 2013 creating £2.2 billion of exports and 110,000 jobs. The economic contribution of the sector is based on the value of a number of commercial assets, including musical compositions, recordings, live performances and artists (UK Music, 2014).

The largest contributors to the UK economy from the music industry are musicians, composers, songwriters, lyricists who together contributed £1.7 billion of GVA in 2013. Live music contributed almost £800 million with recorded music and music publishing also accounting for a significant amount of economic activity (UK Music, 2014).

#### 4.1.2 The economic framework

As shown in **Figure 7**, the BBC directly invested around £140 million in the ‘music and the performing and visual arts’ creative industry group in 2013/14. The BBC also plays a substantial role in helping to discover and promote (e.g. via music talent schemes and radio airplay) new artists to audiences and so increase their commercial value. The investments and activities of the BBC to discover and promote new talent (the first-round impacts), and the BBC’s position as the largest single broadcast licensee of music in the UK therefore lead to additional economic activity in the music industry (the second round impacts), as **Figure 9** shows.

**Figure 9.** Transmission mechanism: BBC's promotion of new British music talent



As **Figure 9** shows, first round impacts relate to all the BBC's investments in activities to promote new artists. This stimulates second round impacts in related markets (such as record sales) when those artists gain popularity. Spillovers would also be likely as the BBC's investment in new British artists lowers the risks for others to invest in those artists, for example.

Despite this wide range of activity by the BBC to promote new British music artists, to date, little detailed analysis has been carried out on the impacts of those activities.

### 4.1.3 Objectives of this analysis

The objectives of this analysis are therefore to explore the extent to which the BBC supports and promotes new British music talent. This is considered by exploring a number of channels:

- Airing new British talent on local and national radio and supporting those new artists as their career progresses.
- Taking risks on new British talent by allocating prime daytime slots to those artists.
- Promoting new British music talent across all BBC services, helping to drive record sales and build profile.

For the purpose of this analysis, 'sales' of an artist refers to digital and physical sales. 'BBC activities' include radio play (using data from Radiomonitor), TV appearances, online exposure and live music events. Recognising that a wide range of other factors contribute to the success of artists, it is not possible to quantify the BBC's exact contribution but we can explore whether there is some correlation between BBC radio plays and sales.

### 4.1.4 Evidence used

This analysis draws on a range of evidence from the industry to explore the channels used by the BBC to support new British music talent.

The analysis draws on both quantitative and qualitative data. For the qualitative assessment, we interviewed the record labels of a sample of new music artists, and have also referred to industry statements, compiled by the BBC.

For the quantitative analysis, we have used data on the sales of each artist provided by the record labels, where this was shared with us. We have also used data on radio plays from Radiomonitor, which provides real time radio airplay data for different artists and radio stations for the period January 2012 to October 2014.

The range of activities of the BBC to support new British music talent is broad. Key among these activities are the 17 BBC music talent schemes. These are

described in the box below and aim to discover and support talent in a wide range of music genres. This analysis looks in detail at ‘BBC Introducing’ and ‘BBC Music Sound of...’.

**Figure 10. BBC talent schemes**

1. BBC Young Musician	10. BBC Songs of Praise Choir of the Year
2. BBC Young Jazz Musician	11. BBC Songs of Praise Gospel Choir of the Year
3. BBC Young Scottish Musician	12. BBC Introducing
4. BBC Proms Inspire	13. BBC Music Sound of...
5. Radio 3 New Generation Artists	14. BBC Wales Horizons/ Gorwelion
6. Radio 2 Young Brass	15. BBC Performing Arts Fund
7. Radio 2 Young Chorister	16. BBC Young Dancer
8. Radio 2 Young Folk	17. BBC Radio Ulster's School Choir Of The Year
9. BBC Cardiff Singer of the World	

Source: BBC

BBC Introducing was developed in 2007 to support unsigned, undiscovered and ‘under the radar’ musicians. New artists can upload their tunes on to the website. Recommendations are made by local BBC Introducing shows to the Radio 1 Music Team which then selects the tunes that will feature on the BBC Introducing spot on the Radio 1 daytime playlist. Local shows can also recommend artists to the panel of music producers and presenters to appear live at some of the UK’s major festivals such as Glastonbury, Reading & Leeds, T in the Park and Radio 1's Big Weekend. BBC Introducing alone has discovered 27 artists that have subsequently signed to major and significant indie record labels in the past 12 months.

‘BBC Sound of...’ aims to showcase the best and brightest rising stars. The list has been running annually since 2003. The acts that appear in the Sound Of list are selected by a panel of impartial experts from the music industry including new music presenters and producers and others from newspapers, magazines, blogs and commercial radio & TV. This raises the profile of the artists and demonstrates backing from the BBC which can lower the risks for others of investing in those artists.

*Does the BBC play tracks of new British talent on local and national radio before other comparable commercial stations and does it continue to support those new artists as their careers progress?*

To explore this question, the analysis comprises two aspects:

- **The timing of airplay.** Specifically, we explore whether the BBC was the first to provide airplay for particular songs of a sample of new British music artists compared to commercial radio stations.



- **The number of radio plays before singles are released.** We explore the support provided to the sample of new artists in the form of airplay before a single is released.

The data used for this analysis is from Radiomonitor, an industry-leading airplay monitoring service used by record labels, artists and broadcasters. As BBC radio includes a number of different radio stations, we focus on the BBC's national stations for the purposes of our analysis (BBC Radio 1, Radio 2, Radio 1Xtra and Radio 6 Music).

To derive a comparable set of commercial radio stations, we identified a set of stations with a similar target audience and coverage of music genres to the BBC's national radio stations. The comparator commercial radio stations were Capital London, Absolute Radio, Heart London, Key 103 (Manchester), Kiss Fresh, Magic, and XFM London.

### *Does the BBC take risks on new British talent by allocating prime daytime slots to those artists?*

To explore this, for each of our sample of new British music artists, we investigated the proportion of radio plays that is accounted for by the daytime<sup>9</sup> shows, which have greater audiences. This analysis was carried out for the four national BBC radio stations (BBC Radio 1, Radio 2, Radio 1Xtra and Radio 6 Music), and benchmarked against the results for the comparator set of commercial radio stations listed above.

### *Does the BBC promote new British music talent across all BBC services therefore helping to drive record sales and build artist profile?*

To explore this we undertook the following analysis:

- **Identified the 'pathway' of a sample of new music artists.** This involved identifying the key events in the career of each artist, from when they were signed until October 2014. This included BBC events (such as being added to the BBC Radio 1 playlist or performing at BBC live events such as the Radio 1 Big Weekend), events broadcast by the BBC (for example, performing at commercial festivals such as Glastonbury), and events that were not broadcast by the BBC.

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<sup>9</sup> Day time is defined as 4am to 7pm Monday-Friday, and 6am to 7pm Saturday and Sunday. This is consistent with the BBC definitions (see [here](#)).

- **Explored the extent to which events were associated with particular changes in music sales<sup>10</sup>.** This was done for individual tracks, total sales, and album sales (where data were available). We complemented this analysis with qualitative assessments from the record labels on the impact of BBC exposure and events. This was to account for any ‘intangible’ impact of the event that would translate to an immediate increase in sales in the UK<sup>11</sup>.

#### 4.1.5 Artists included in the analysis

This analysis considers the following sample of new British music artists:

- Clean Bandit
- Ed Sheeran
- George Ezra
- London Grammar
- Royal Blood; and
- Sam Smith.

These artists were chosen based on several criteria: date of breakthrough (post 2012 – the date from which we have data); the spread across major record label and indie label; availability of data on sales; and, spread across genres, for example, rock (Royal Blood), pop (Sam Smith), and electronic (London Grammar).

## 4.2 First round impacts

### 4.2.1 Providing air time to new British music talent early on in the artists’ careers

The tables below show the first few singles of each of our sample of new British music artists and compares whether the BBC or comparable commercial radio stations played them first on the radio, and the time differences between these events. Note that this data refers to ‘first plays’ only and not the extent of plays beyond that.

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<sup>10</sup> There are other metrics that could be used to measure the success of an artist, such as YouTube views, number of followers on social media sights, and the number of Shazam hits. We have used sales and streams because of data availability. Sales and streams also generate direct revenue for the music industry.

<sup>11</sup> For example, a music award may increase the credibility of an artist abroad, which may not translate to sales in the UK.

The 'difference' column shows the number of days' difference between first play on the BBC stations and first play on comparable commercial stations (a positive number means the BBC played it first). As **Figure 11** shows, the BBC played the artists' singles before comparable commercial stations by varying amounts across the different new artists. For George Ezra in particular, the BBC provided support by playing his first two singles notably before the commercial stations (by 73 days and 22 days respectively). Royal Blood's "Figure it Out" is a slight outlier as the single was played first by XFM but the BBC still provided significant support for that single before release, as shown in **Figure 12**.

**Figure 11.** First radio plays for selected new British music artists**Sam Smith**

Song	BBC - Combined	Commercial - Combined	Difference
Latch	7 Sep 2012	11 Sep 2012	4
Lay Me Down	27 Jan 2013	No Plays	-
La La La	20 Mar 2013	14 Apr 2013	25
Money On My Mind	2 Dec 2013	7 Dec 2013	5
Stay With Me	25 Mar 2014	25 Mar 2014	0

*Note: 'Lay Me Down' played on BBC radio but has never been played on the selected commercial radio stations*

**Clean Bandit**

Song	BBC - Combined	Commercial - Combined	Difference
A&E	25 Oct 2012	22 Oct 2012	-3
Mozart's House	23 Feb 2012	3 Mar 2012	9
Dust Clears	19 Jun 2013	26 Jun 2013	7
Rather Be	4 Dec 2013	5 Dec 2013	1
Extraordinary	1 Apr 2014	1 Apr 2014	0

**London Grammar**

Song	BBC - Combined	Commercial - Combined	Difference
Metal & Dust	14 Feb 2013	18 Feb 2013	4
Wasting My Young Years	17 Apr 2013	22 Apr 2013	5
Strong	2 Jul 2013	3 Jul 2013	1
Nightcall	4 Sep 2013	18 Oct 2013	44
Hey Now	15 Dec 2012	27 Dec 2013	377

**Ed Sheeran**

Song	BBC - Combined	Commercial - Combined	Difference
Small Bump	2 May 2012	9 May 2012	7
Give Me Love	9 Oct 2012	10 Oct 2012	1
I See Fire	7 Nov 2013	10 Nov 2013	3
Sing	7 Apr 2014	7 Apr 2014	0
Don't	24 May 2014	12 Jun 2014	19

**George Ezra**

Song	BBC - Combined	Commercial - Combined	Difference
Did You Hear The Rain	21 Sep 2013	3 Dec 2013	73
Budapest	5 Sep 2013	27 Sep 2013	22
Cassy O'	20 Jan 2014	20 Jan 2014	0
Blame It On Me	19 Jun 2014	19 Jun 2014	0
Listen To The Man	29 Jun 2014	No Plays	-

**Royal Blood**

Song	BBC - Combined	Commercial - Combined	Difference
Out Of The Black	23 Sep 2013	23 Sep 2013	0
Come On Over	4 Nov 2013	4 Nov 2013	0
Little Monster	10 Feb 2014	10 Feb 2014	0
Figure It Out	24 Jun 2014	29 Dec 2013	-177
Ten Tonne Skeleton	18 Aug 2014	27 Aug 2014	9

Source: Frontier analysis of Radiomonitor data. 'BBC combined' refers to Radio 1, Radio 2, Radio 1Xtra Radio 6 Music; 'Commercial Combined' refers to Capital London, Absolute Radio, Heart London, Key 103 Manchester, Kiss Fresh, Magic, and XFM London. Note that the period covered by the data is January 2012 to October 2014 – any radio plays before the period would not be reflected.

First play data does not tell the story as it does not indicate what level of support is provided or when. The next piece of analysis therefore explores the number of plays of each singles by the BBC before its release date. This is shown **Figure 12**

**Figure 12.** BBC support for new artists' singles before release

<b>Sam Smith singles</b>	Release Date	BBC Radio Plays Before Release	Peak Chart Position	Date of Peak Position
Latch	08-Oct-12	84	11	10-Nov-12
Lay Me Down	15-Feb-13	17	46	29-Feb-14*
La la la	19-May-13	281	1	01-Jun-13
Money On My Mind	16-Feb-14	350	1	01-Mar-14
Stay With Me	18-May-14	309	1	31-May-14
I'm Not The Only One	31-Aug-14	188	3	20-Sep-14

<b>Clean Bandit singles</b>	Release Date	BBC Radio Plays Before Release	Peak Chart Position	Date of Peak Position
A&E	07-Dec-12	34	100*	22-Dec-12*
Mozart's House	29-Mar-13	40	17	27-Apr-13
Dust Clears	19-Jul-13	30	43	10-Aug-13
Rather Be	17-Jan-14	150	1	01-Feb-14
Extraordinary	18-May-14	229	5	31-May-14

<b>Ed Sheeran singles</b>	Release Date	BBC Radio Plays Before Release	Peak Chart Position	Date of Peak Position
Small Bump	25-May-12	7	25	16-Jun-12
Give Me Love	21-Nov-12	84	18	24-Nov-12
I See Fire	05-Nov-13	1	13	16-Nov-13
Sing	01-Jun-14	374	1	14-Jun-14
Don't	13/06/2014*	4	8	30-Aug-14

<b>London Grammar singles</b>	Release Date	BBC Radio Plays Before Release	Peak Chart Position	Date of Peak Position
Metal & Dust	25-Feb-13	9	-	-
Wasting My Young Years	16-Jun-13	83	31	29-Jun-13
Strong	01-Sep-13	108	16	21-Sep-13
Nightcall	08-Dec-13	121	53	21-Dec-13
Hey Now	16-Mar-14	201	37	29-Mar-13

<b>Royal Blood singles</b>	Release Date	BBC Radio Plays Before Release	Peak Chart Position	Date of Peak Position
Out Of The Black	11-Nov-13	35	78	30-Aug-14
Come On Over	21-Apr-14	27	68	03-May-14
Little Monster	12-Feb-14	18	74	03-May-14
Figure It Out	17-Aug-14	166	43	30-Aug-14

<b>George Ezra singles</b>	Release Date	BBC Radio Plays Before Release	Peak Chart Position	Date of Peak Position
Did You Hear The Rain	11-Apr-14	23	-	-
Budapest	13-Jun-14	118	3	12-Jul-14
Cassy O'	13-Jun-14	57	70	09-Mar-15
Blame It On Me	11-Aug-14	23	6	11-Oct-14
Listen To The Man	28-Oct-14	1	41	22-Nov-14

Source: Frontier analysis of Radiomonitor data; chart position data is from the Official Charts unless indicated by \* in which case the source is Zobbel.

This shows that the BBC has supported the early singles of all artists before the release date. **Figure 12** also shows that the BBC then continued to support the singles of all artists by playing them before the release date, even when the artists were not widely known. For example, Royal Blood is a BBC Introducing artist and the BBC played the band's first single 35 times, even though it didn't reach the charts. Despite this, the BBC continued to increasingly play the subsequent singles before they were released. Significant support for Sam Smith was also

provided by the BBC, with his third, fourth and fifth singles each being played between 281 and 350 times before release – all three reached number 1 in the charts.

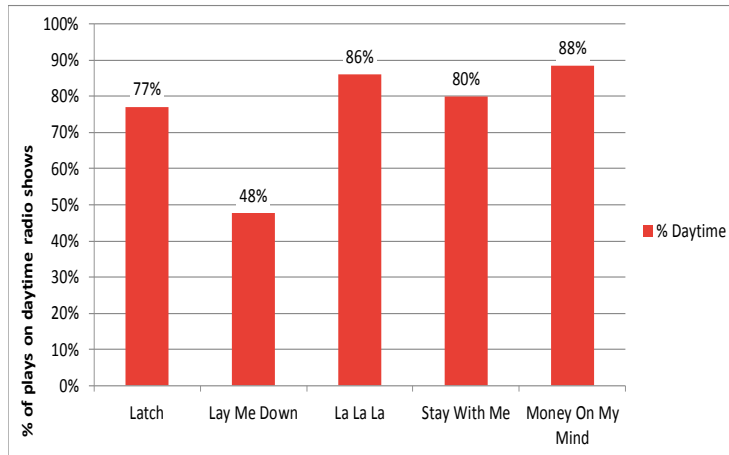
#### **4.2.2 Providing prime radio air time to new British music talent**

The charts in this section show the percentage of radio plays for each single that is on daytime radio (as opposed to evening radio), and is therefore likely to have reached a wider audience per play. This is shown for both the BBC (Radio 1, Radio 2, Radio 1Xtra and Radio 6 Music), and comparable commercial radio stations (Capital London, Absolute Radio, Heart London, Key 103 (Manchester), Kiss Fresh, Magic, and XFM London).

Figure 13. Percentage of radio plays in daytime slots: Sam Smith

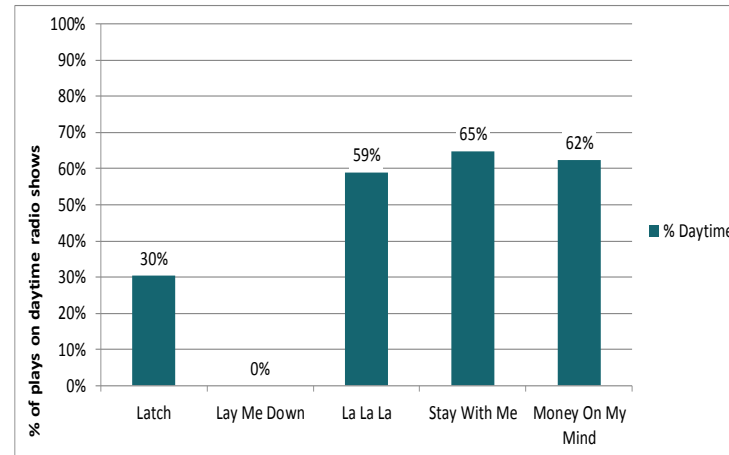
**Sam Smith**

BBC (% Daytime)



Commercial (% daytime)

Note - 'Lay Me Down' did not receive any airplay on any of the selected commercial radio stations



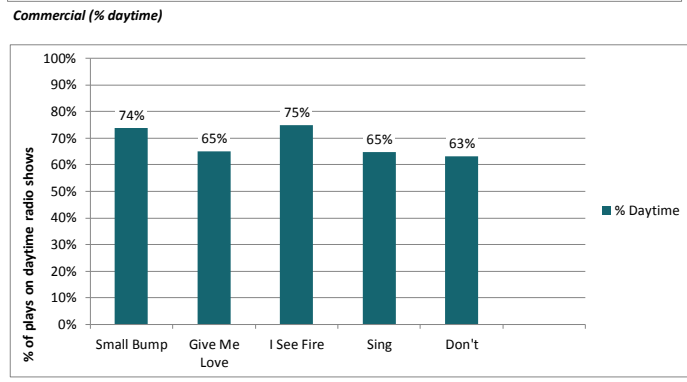
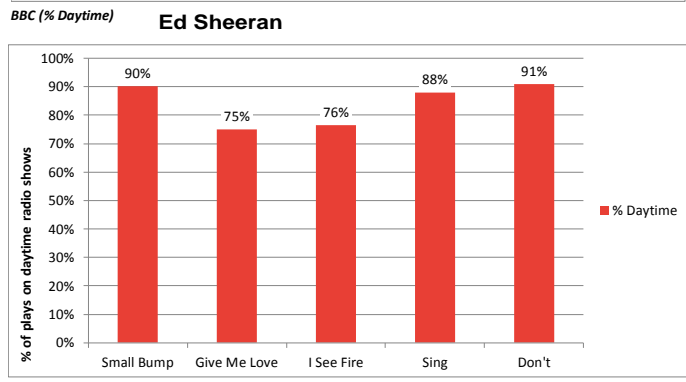
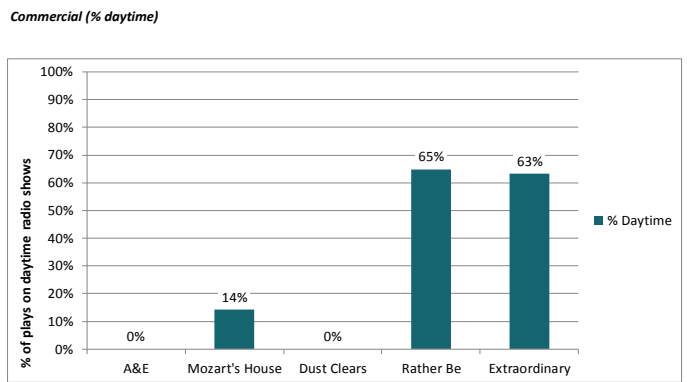
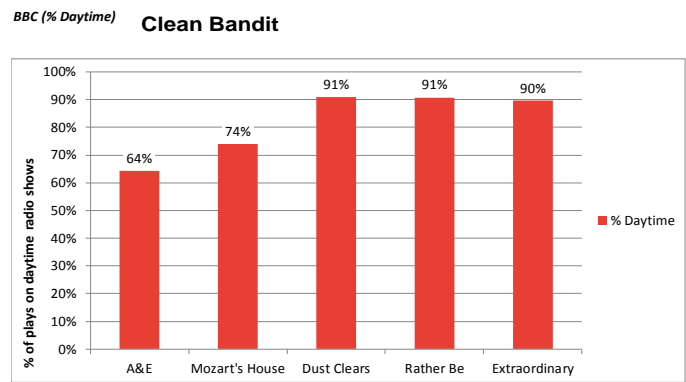
Source: Frontier analysis of Radiomonitor data

In comparing the BBC with commercial radio stations, we can see that for each of Sam Smith's singles, the BBC allocated a higher percentage of its radio plays to daytime slots than were comparable commercial stations. This also holds for other selected new artists, as shown in **Figure 14**.

This shows that a higher percentage of BBC radio plays are on daytime shows reaching larger audiences than is the case for commercial stations.



**Figure 14.** % of radio plays in daytime slots for other new artists



Source: Frontier analysis based on Radiomonitor data

## 4.3 Second round impacts

### 4.3.1 Promoting new British music talent across all BBC services helping to drive record sales and build artist profile

Evidence from secondary sources demonstrates how BBC activity is associated with increases in record sales for new and emerging music artists. This is shown in **Figure 15**.

**Figure 15.** Industry support for BBC platforms in promoting new artists



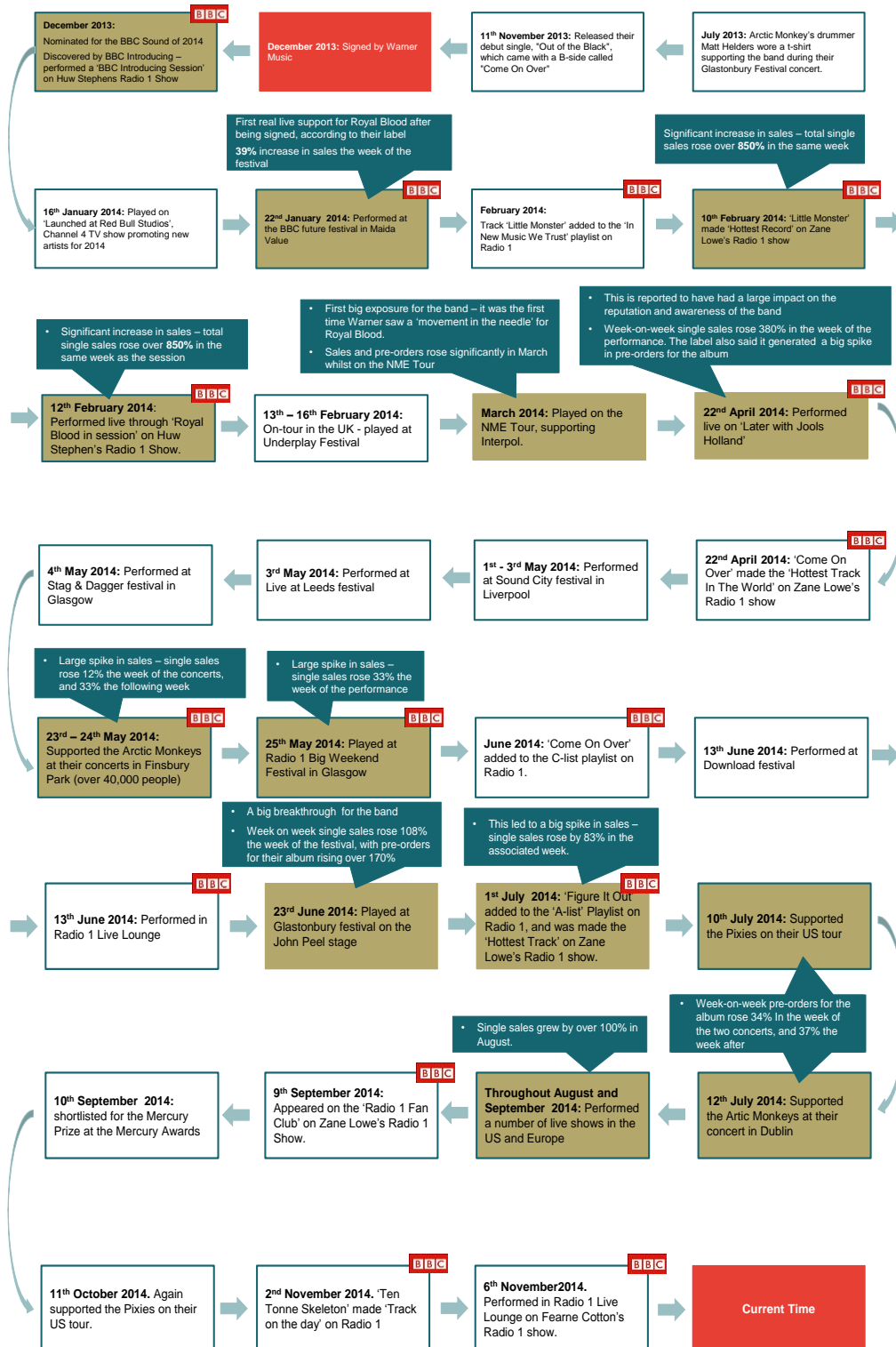
We have plotted out the pathway of three artists to demonstrate the associations between BBC activities and wider events to promote them and their commercial sales.

## *Royal Blood*

The pathway below highlights Royal Blood's 'timeline' to success, which demonstrates the key events in the band's career from the time they were signed to October 2014. It also highlights the impact of each key event, based on the analysis of UK sales and an interview with the Warner Music record label. The analysis shows that:

- BBC activities played a key role in the success of Royal Blood particularly at the beginning of their career and throughout. Royal Blood was a BBC Introducing act, and this was seen as critical in kick-starting the band's career. Radio play by the BBC appears to be associated with significant rises in sales. For example, single sales rose 850% in the same week 'Little Monster' was made 'Hottest Record' on Zane Lowe's Radio 1 show and they performed live on Huw Stephen's Radio 1 Show. Performances and appearances on BBC TV, 'Later With Jools Holland' in particular, are associated with a 380% increase in sales.
- BBC's early support predates many of the band's headline live appearances – e.g. at Electric Brixton, Electowertz and Bestival.
- BBC live events (BBC Future Festival, R1 Big Weekend) are associated with significant spikes in UK single and album sales for Royal Blood. For example, sales increased 39% after their appearance at the BBC Future Festival. Performances at commercial live events, such as their own live tours, the NME Tour, and appearances at commercial festivals such as Glastonbury, are also all associated with spikes in single and album sales in the UK. Acting as the support act for major artists (the Arctic Monkeys and the Pixies) at large concerts in Europe and the US are particularly associated with large increases in sales.

Figure 16. Royal Blood - career pathway



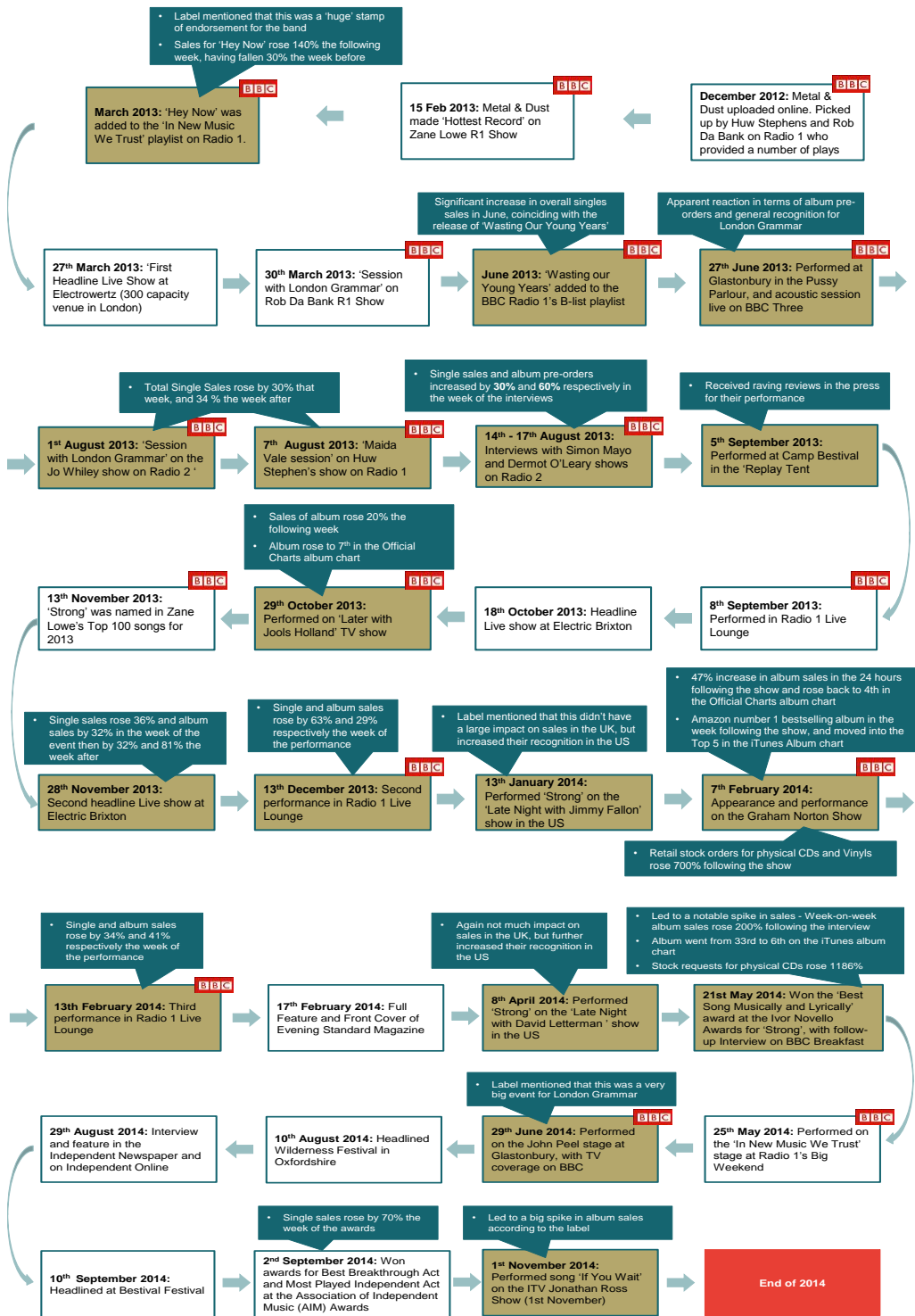
Source: Frontier analysis of data kindly provided by Warner Music. It covers the period to 2014

## *London Grammar*

**Figure 17** highlights London Grammar's 'timeline' to success. It shows the key events in their career from the time they were signed to the present day. It also highlights the impact of each key event, based on analysis of sales and interviews with the Ministry of Sound record label. The analysis shows that:

- The BBC has provided consistent support for London Grammar. Appearing on several BBC platforms appears to be associated with large spikes in sales. BBC Radio, particularly Radio 1, was a notable supporter of London Grammar in the six months after they were signed, through playlists, featuring their tracks, and through live sessions. Interviews and sessions on Radio 2 were also associated with large increases in sales. Performances and appearances on BBC TV such as 'Later with Jools Holland', the Graham Norton Show, and BBC Breakfast all appear to be associated with significant increases in sales.
- Non-BBC events were also large drivers of success. Their own tours, appearances at commercial festivals, and appearances on commercial TV, including Channel 4's Sunday Brunch and ITV's The Jonathan Ross Show, plus airplay and interviews and/or sessions at commercial radio including support from Xfm, Capital FM, Bauer In Demand, Juice FM Brighton and Amazing Radio to name a few were all associated with increases in sales. Appearances on commercial TV in the US in particular were key to raising awareness of London Grammar outside Europe. However many of these appearances at non-BBC events tended to come later on in the band's career path.

Figure 17. London Grammar - career pathway



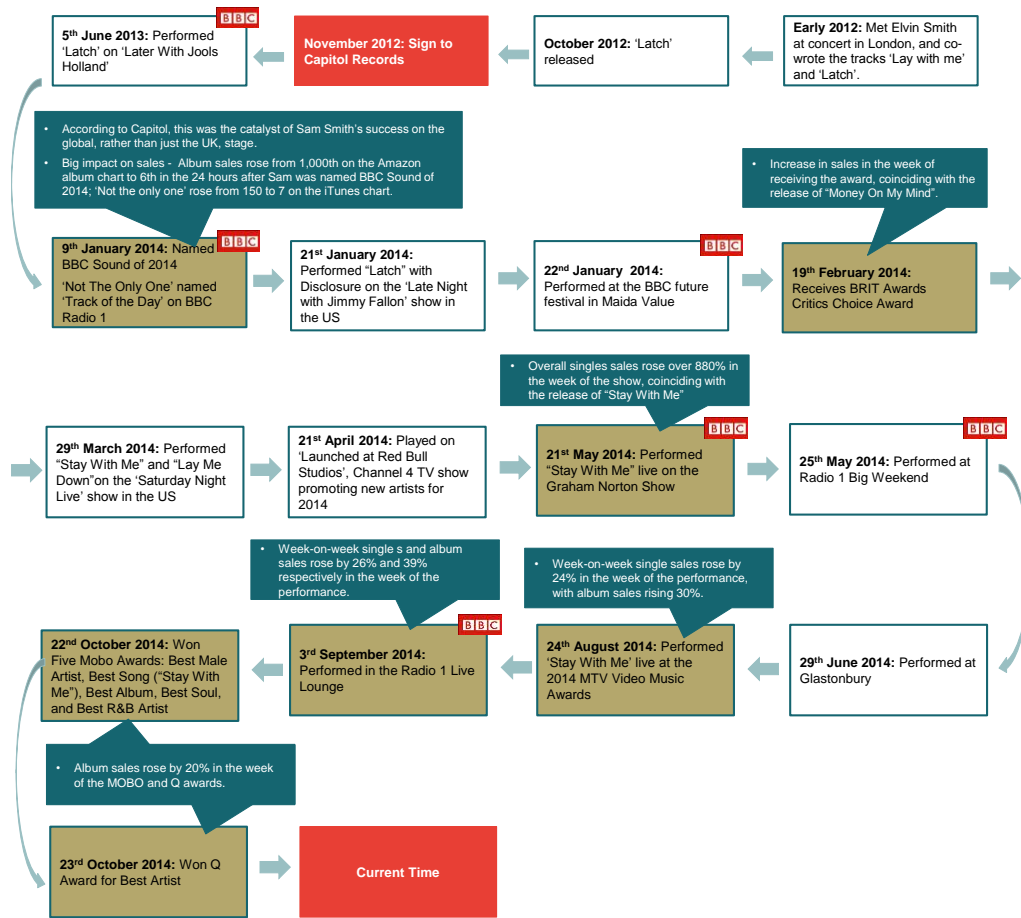
Source: Frontier analysis of data kindly provided by Ministry of Sound

## Sam Smith

**Figure 18** highlights Sam Smith's 'pathway' to success, which demonstrates the key events in his career from the time he was signed to the end of 2014. It also highlights the impact of each key event, based on analysis of UK sales and an interview with his label Capitol Records. Sales data for Sam Smith were only available for 2014, so our sales-based analysis focusses solely on events in that year. The analysis shows that:

- **The BBC has consistently supported Sam Smith such as via BBC Sound of 2014, BBC TV appearances and live performances.** The BBC has supported Sam Smith from the start of his career – 'key events' start from appearing on Jools Holland in June 2013 to performing in the Radio 1 Live Lounge in September 2014. Being named BBC Sound of 2014 was particularly important – sales rose from 1,000th on the Amazon album chart to 6th in the 24 hours after being named. His label noted that this also increased his reputation across Europe and the US. Performances on BBC TV (such as on the Graham Norton Show) and performances in the R1 Live Lounge also appear to be associated with a 26% increases in UK single sales.
- **Receiving commercial awards also seems to have been a big factor in the subsequent success of Sam Smith.** Large increases in sales were seen in the weeks when Sam won the BRIT Awards Critics Choice Award in 2014, and when receiving awards at the MOBO and Q awards, both in October 2014. His performance at the MTV Video Music Awards also appears to be associated with a 24% increase in sales. He has gone on to win 4 Grammys and a further 2 Brit Awards in February 2015.

**Figure 18. Sam Smith - career pathway**



Source: Frontier analysis of data kindly provided by Capitol Records. It covers the period to October 2014.

## 4.4 Spillovers

Although impossible to quantify, it is likely that the BBC's investments to promote new British music talent have contributed towards spillovers. In particular, various record labels have noted how the support of the BBC for an artist, such as through BBC Introducing, lowers the risk for them of also investing in the artist. This is because of the reputation of the BBC in the UK and internationally. This could make them more likely to sign particular new artists than otherwise might have been the case.



## 5 BBC Investment in innovative technology - BBC iPlayer

### Summary of findings

This analysis finds that:

- **The BBC's Public Service mission meant it had a clear mandate to develop BBC iPlayer and ensure that it was made widely available.** This was despite significant market uncertainties and investment costs; and the potential for such investments to take viewers away from its linear services. The investment overcame a co-ordination problem such that jointly it was in the market's interest to invest in these emerging technologies, but individually it may not have been in each market participant's interest at the time.
- **The BBC had a strong content offering.** It is notable that 4OD launched over a year earlier than BBC iPlayer, but the BBC's strong content offering was one of the reasons it quickly became the most popular VoD service in the UK.
- **BBC iPlayer facilitated the development of the market in a number of ways:** it helped to create an audience and shape new business models (e.g. catch up TV); it prompted the development of a new rights framework which supports and incentivises content providers; and it helped develop the software skills needed to shape and develop VoD platforms.
- Out of Europe's top five economies, the UK has both the largest free-to-air (FTA) catch-up viewing and the strongest commercial revenues – more than two-and-a half times greater than the next biggest market<sup>39</sup>.

#### 5.1.1 The emergence of video-on-demand (VoD) technologies

At its core, broadcasting requires high quality content and a means to distribute it. Developments in technology over the last few decades have revolutionised how content is distributed. Video-on-Demand (VoD) services, such as the BBC iPlayer, 4OD and Netflix, are examples of ongoing innovations in how content is distributed.

The emergence of VoD has had a number of impacts on the UK's broadcasting market.

- It has led to market entry with new content providers such as Netflix and Amazon producing new content. This has provided greater choice to consumers (Ofcom reported that half of adults now use VoD<sup>12</sup>).
- It has enhanced competition in TV markets.
- It has led to the emergence of new commercial strategies, such as subscription VoD.
- It has radically changed how we watch TV – we now take for granted that we can watch TV anytime, anywhere.

However, the scale and speed of the observed changes in the market were not inevitable for a number of reasons. First, TV watching habits have been built up over a generation of watching linear TV, which is still by far our most favoured way to watch TV content<sup>13</sup>. Second, introducing new ways to watch TV requires the simultaneous development of related products and services across a number of distinct and different markets: content providers, content aggregators (such as broadcasters), transmission network providers, device manufacturers, as well as consumers. Third, as with any new ‘disruptive’ technology, existing TV broadcasters struggled with how to migrate to the new technology without displacing existing revenues. Finally, introducing new VoD services required VoD providers to invest significant sums on uncertain outcomes.

This leaves us with the question: what role did the investment in BBC iPlayer have in the emergence of this market?

### 5.1.2 Objectives of this analysis

The objective of this analysis is to investigate the role of the BBC iPlayer in boosting innovation and investments in the video on demand (VoD) market and more generally in innovative technologies.

In this analysis we use our economic framework – the transmission mechanism – to show how the BBC’s investment in the BBC iPlayer has generated first round, second round and spillover impacts.

### 5.1.3 The economic framework

BBC iPlayer is an online platform developed by the BBC which allows viewers to watch TV and listen to radio programmes, for example via their personal computer (PC), tablet, console or smart phone.

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<sup>12</sup> Ofcom CMR 2014 figure 2.18

<sup>13</sup> See Ofcom CMR 2014 figure 2.20.

The BBC started to develop BBC iPlayer in 2005, and it was launched on the market as an online platform via PCs in December 2007. In 2008 radio and new discovery features were added. In 2009, the BBC introduced live streaming and upgraded TV programmes to HD quality.

In 2009 and 2010, BBC iPlayer became accessible on other platforms in addition to PCs and new connectivity options were added. Reflecting the boom of tablets and smartphones, in 2011 the BBC designed specific mobile apps for iOS and Android. In 2013 BBC started to publish online programmes on BBC iPlayer either before any linear transmission, or exclusively online<sup>14</sup>. BBC iPlayer is now available on over 1,200 different devices including mobiles, tablets, computers and connected TVs<sup>15</sup>.

The transmission mechanism shows how these BBC investments (first round impacts) can stimulate output in complementary markets (second round impacts) and may also have the effect of increasing the productive capability in the economy (spillovers). These effects are shown in **Figure 19**.

As the figure shows, first round impacts refer to the BBC's significant investment in IT and software development, rights payments to content providers, spend on marketing and ongoing editorial activities. The development of BBC iPlayer may also have had second round impacts in the wider VoD market and related markets. This could be in relation to many different factors which could include: increased network investments made by telecoms and internet network operators to accommodate the increase in data traffic as a result of demand for BBC iPlayer; or by device manufacturers who may see increased demand for their devices as a result of the popularity of BBC iPlayer; or by helping to create commercial opportunities for businesses such as Netflix and Lovefilm.

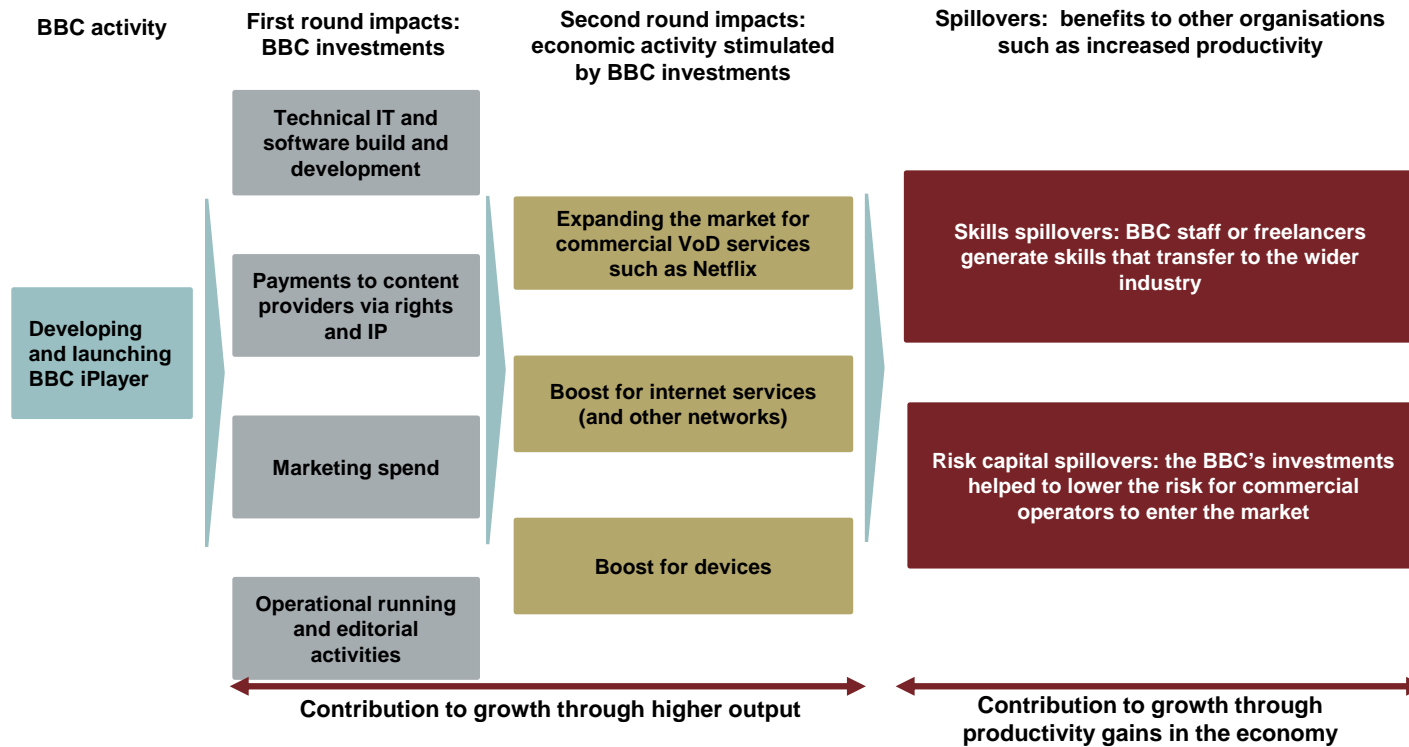
Finally, the BBC iPlayer may have led to a range of spillover impacts such as the skills and knowledge spillovers (where skills and knowledge percolate into the wider creative industries (and beyond) as people move jobs, or otherwise exchange knowledge); or lowering risks of investments as the BBC moved first.

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<sup>14</sup> BBC (2013) BBC commissions BBC Three drama strand exclusively for BBC iPlayer <http://www.bbc.co.uk/mediacentre/latestnews/2013/bbc-three-iplayer-exclusives.html>

<sup>15</sup> As at 4th December 2014. See BBC (2014) BBC iPlayer gets ready for Christmas <http://www.bbc.co.uk/mediacentre/latestnews/2014/bbc-iplayer-christmas>

**Figure 19.** Transmission mechanism: BBC investments in BBC iPlayer

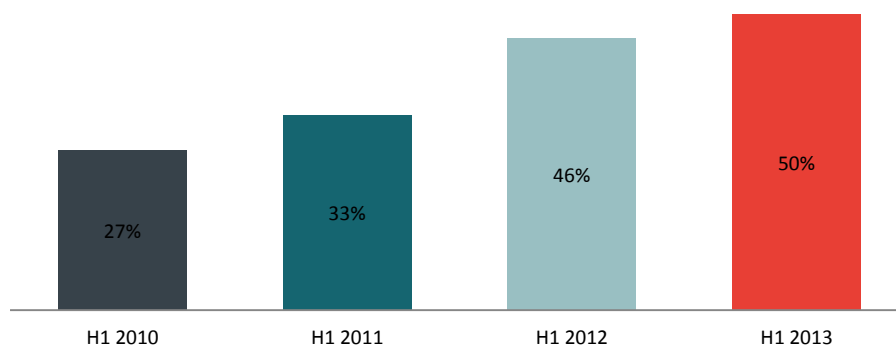


## 5.2 Context to the BBC's investment

### 5.2.1 The development of the VoD market

The VoD market has seen considerable growth over the past years. The percentage of UK adults that used VoD services in the previous 12 months shifted from 27% to 50% between the first quarter of 2010 and the first quarter of 2013 (See **Figure 20**).

**Figure 20.** Use of VOD services (UK adult %)

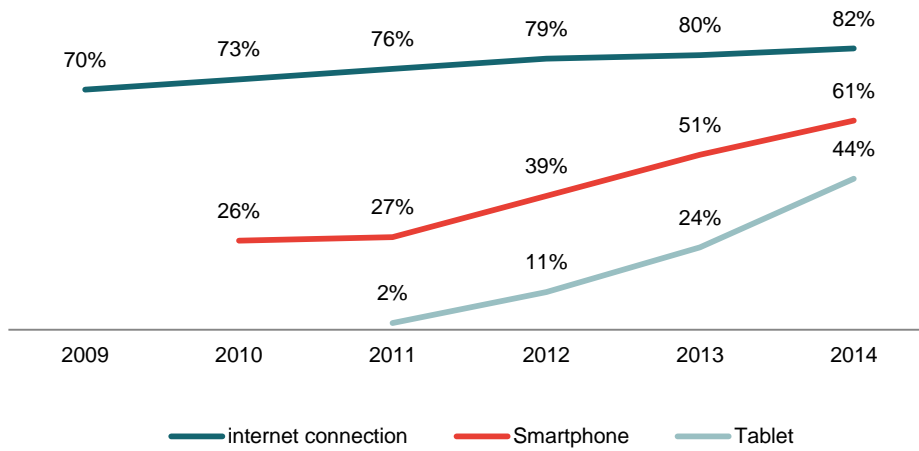


Source: Ofcom, 2014

#### *The growth in use of VoD services*

This growth in the use of VoD may have been encouraged by the increased penetration and capabilities of fixed and mobile broadband services, as well as proliferation of smartphones, tablets and other internet connected devices (see **Figure 21**). Though as demonstrated later in **Figure 24**, the demand for network services and connected devices is likely to be related to demand for applications such as VoD.

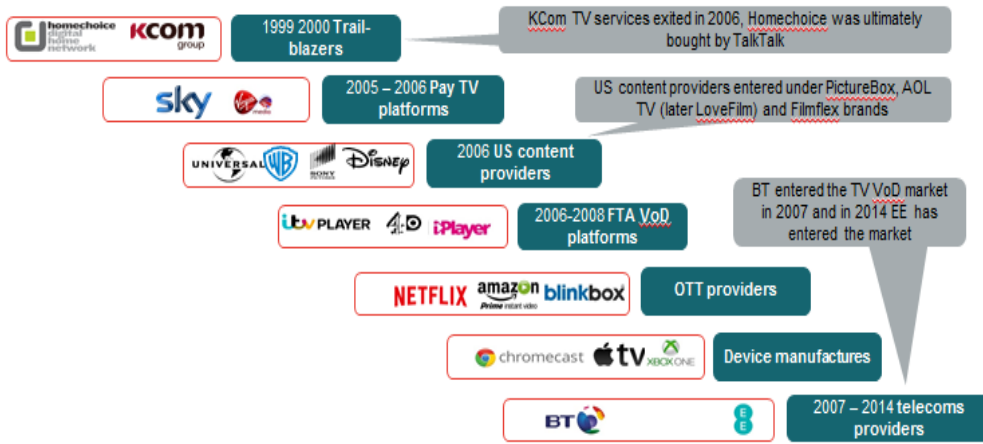
**Figure 21.** Take-up of VOD-related technologies (proportion of UK adults)



Source: Ofcom, 2014

The VoD market has seen successive waves of entrants, each with different strategies (see **Figure 22**).

**Figure 22.** Development of the UK VoD market



Initially VoD was a service offered by early IPTV (Internet Protocol TV) providers, and later a complementary service for Sky and Virgin’s pay TV services. However, these were “closed” platforms in that they were only available to customers willing to sign up for a wider bundle of pay TV or telecoms services.

Public Service Broadcasters' (PSB) VoD services opened up the VoD market, and seeded demand. Channel 4 was the first PSB to launch a VoD service in November 2006, BBC iPlayer launched a year later in December 2007 followed by ITV and Channel Five's service the following year.

As demand grew, VoD has become more widely available: device manufacturers have offered VoD services either to complement existing services (games consoles); and new standalone VoD platforms have launched (Apple TV, Sky Now, Google's Chromecast, or Roku).

More recently, standalone subscription VoD services have rapidly grown in popularity: Netflix has grown to almost 4 million subscribers in less than two years, and Amazon Instant Video has over 1 million subscribers<sup>16</sup>.

### 5.2.2 Barriers to the emergence of VoD in the mid-2000s

The emergence of VoD as a new distribution technology faced three potential barriers. First, consumer demand for the service was uncertain. Second it required the simultaneous development of services in a number of linked, but distinct markets: content providers, content aggregators (such as broadcasters), transmission network providers, device manufacturers, as well as consumers. Third, existing broadcasters could be resistant to introducing new ways to watch TV if it could 'cannibalise' their existing business strategies. Taken together these three forces can act against taking risks investing in new services. This in turn could make it harder to change consumers' viewing habits, which in turn means market entry is more difficult, and new investments more risky.

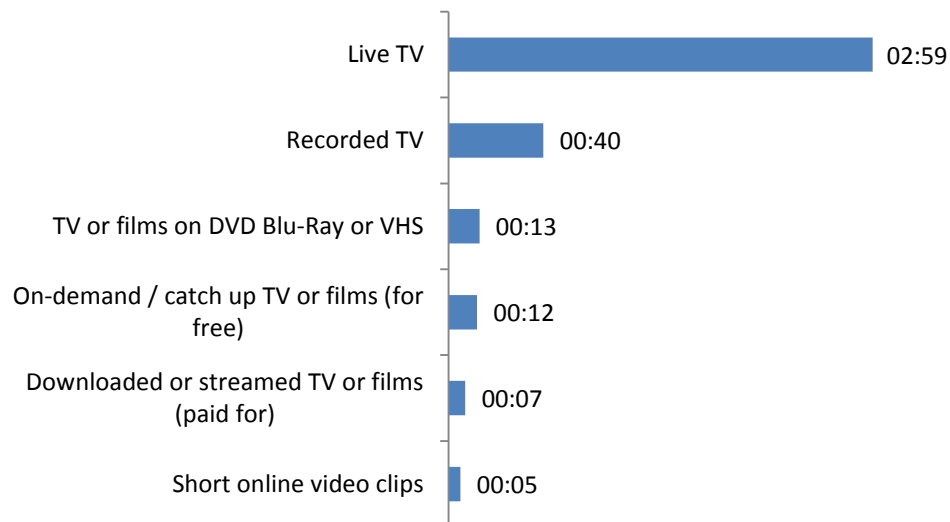
#### *Consumers' TV watching habits*

Consumers' attachment to linear (or scheduled) TV presents a potential barrier to entrants wanting to provide a new way of watching TV. In the mid-2000s when VoD was emerging, the extent to which there would be demand for the service was simply unknown.

Despite the many innovations in distributing audio-visual content (video recorders, DVDs, PVRs (Personal Video Recorder), now VoD), linear TV has had a hold over our TV viewing habits. Some 69% of TV watching is via the linear TV schedule. While VoD is now common place, with 50% of the population using it (see **Figure 20**), it still only occupies around 8% of all TV viewing time (see **Figure 23**).

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<sup>16</sup> Q1 2014. See Hollywood Reporter 8/11/2014: Netflix Has Reached 3 Million U.K. Subscribers, Analyst Estimates <http://www.hollywoodreporter.com/news/netflix-3-million-uk-subscribers-724558>. Amazon Prime Instant Video is bundled with Amazon's delivery services (and other Amazon services)

**Figure 23.** Average time spent on selected watched activities per day

Source: Ofcom CMR 2014 Figure 2.20. Digital Day 7-day diary, April 2014. Base: All adults aged 16+ (1644). Note: Average time is calculated as all time recorded doing an activity divided by all participants in the survey

LoveFilm CEO Nick Morris is reported to have partly attributed the uncertain consumer demand for VoD to its decision to close its standalone VoD service in 2009. He reportedly noted that *“There’s the customer, the supplier and the infrastructure and I don’t think the infrastructure was right. The customer didn’t know what they wanted, whether it was ownership they were after or streaming.”*<sup>17</sup> This implies that it was only when consumers gradually became more accustomed to VoD consumption that subscription VoD services became more viable.

### *Factors facilitating the development of VoD products*

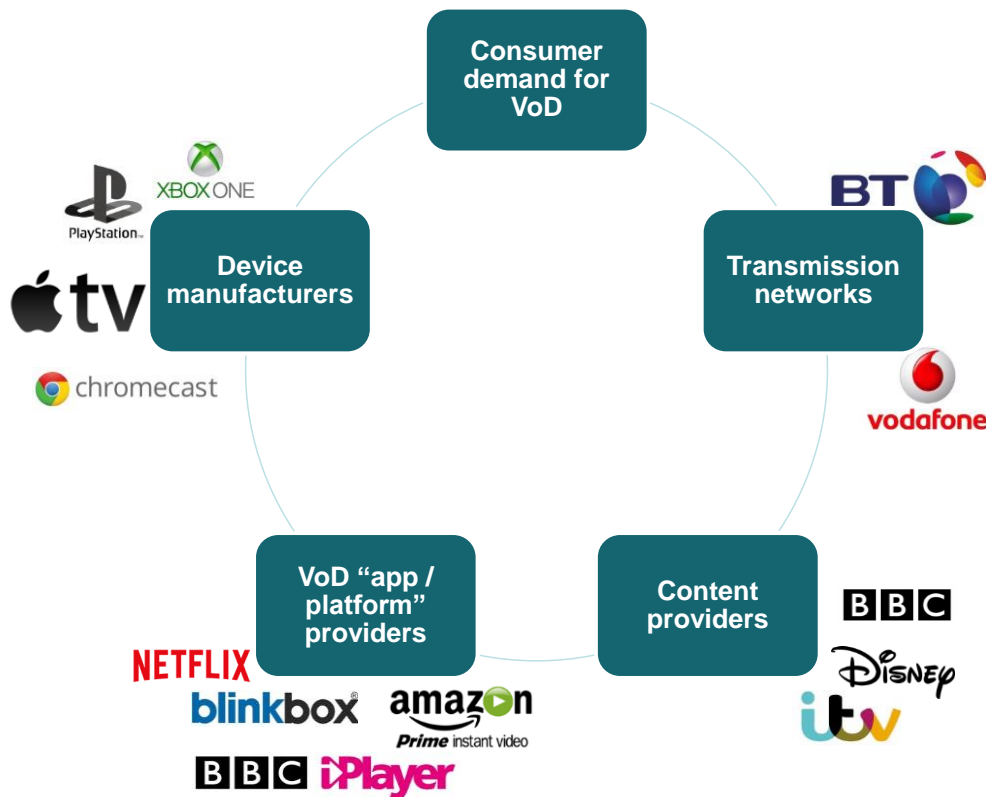
A successful VoD ecosystem requires simultaneous development across a number of different markets. Consumer demand for VoD is a necessary input; however, demand in new markets will depend on the supply of services in a number of related markets.

In new markets, demand takes time to evolve as consumers need to experience a service before being able to value it (“experience goods”). However, their ability to experience VoD in turn depends on the supply of VoD content, apps, devices and transmission networks. This ecosystem is illustrated in **Figure 24**.

<sup>17</sup> See: Techradar 28 November 2011 Lovefilm: iPlayer changed the streaming game <http://www.techradar.com/news/internet/lovefilm-iplayer-changed-the-streaming-game-1043855>



**Figure 24.** Different markets develop to create VoD services



The demand for each market participant's products and services is related to the other market participants'. However, market development can be impeded where each party tries to promote its own interests.

- App providers need content and access to devices;
- Content providers may want to control how content is exploited and avoid cannibalising existing revenues; and
- Transmission networks want to manage capacity on their networks, minimise unnecessary investments and generate incremental revenues from demand for Over the Top ("OTT") services such as VoD.

While jointly it is in the market's interest to invest in VoD, individually it can be in each provider's interest to wait until demand develops. Vertical integration can help solve the difficulties, but this can create "closed" platforms.

### *Constraints on broadcasters' incentives to invest in 'disruptive technologies' such as VoD*

Existing content providers and broadcasters may have established business strategies which do not include new technologies that are not yet commercially mainstream. In considering how to adapt their existing model to new technologies, they are mindful of the potential for those new technologies to cannibalise existing revenues. Investing in risky new ventures which have this potential is a costly strategy<sup>18</sup>. Hence in some cases, this can lead to a degree of inertia in how content suppliers or broadcasters (content aggregators) bring their products to market or only launch products which are unlikely to disrupt existing business models. For example 4OD launched earlier than BBC iPlayer and it was initially launched mainly as a pay TV service (though evolved as a mix of free and pay services)<sup>19</sup> whereas the BBC iPlayer service has consciously been positioned as a complementary (free) way to access all the BBC's services. Furthermore, BBC seeks to maximise the availability of its iPlayer service (the BBC claims it is now available on 1,200 devices) regardless of the impact on its linear service.

#### 5.2.3 Risk associated with VoD investments

BBC iPlayer and other PSB's investments in the mid-2000's were therefore made at a time when the demand in the market was uncertain. The technology and software was not developed; the market demand was not established; and devices and network infrastructure necessary to use VoD was undeveloped.

Furthermore, other commercial broadcasters struggled with how to manage the potentially disruptive and unknown impact that VoD could have on their existing business models.

In particular, there were a number of factors which could have increased the risk of such investments.

- **Consumer demand for VoD was limited.** This was for a number of reasons. First, in the mid-2000s, VoD was only available on "closed platforms" offered by certain pay TV operators and hence was not generally available to non-subscribers of pay TV platforms. Second, VoD sometimes used inferior technologies such as push VoD.<sup>20</sup> Third, FTA (Free to Air) or

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<sup>18</sup> Netflix in the US is a good example of a content supplier business that deliberately overturned its business model (the supply of physical DVDs), in order to embark on a digital only supply strategy.

<sup>19</sup> See for example: VOD Professional 6 June 2012 Interview with Sarah Milton, Head of VOD at 4oD <http://www.vodprofessional.com/features/interview-with-sarah-milton-head-of-vod-at-4od/>

<sup>20</sup> Push VoD describes a situation in which VoD functionality was provided by the TV broadcaster downloading a limited amount of content to the hard drive a viewer's set top box which the consumer could choose to watch at their convenience. The physical constraints of the set top box's memory limited the amount of content that could be offered in this way.

subscription-VoD<sup>21</sup> was limited, and VoD was often only available to consumers on a pay per view (PPV) basis which had limited attractiveness for consumers.

- **There were limited existing technical software and network skills to develop the platform.** The BBC had to create and build the software skills needed to develop the platform.
- **Consumer access to transmission networks was limited.** Consumer access to networks capable of offering VoD was much lower. Furthermore, although mobile operators were continuing to roll out 3G networks and to manage capacity, capacity constraints and the slower broadband connections limited many consumers' ability to access VoD.
- **There were limited devices supporting VoD.** There were limited devices that would support web-based VoD, and in most cases it was not possible to watch web-based VoD services on TV.

## 5.3 First round impacts

### 5.3.1 The BBC's incentives to invest in BBC iPlayer

The BBC was particularly able to overcome the uncertainties and the problems associated with the development of its VoD service in this emerging market. The BBC's Public Purposes meant it had a clear mandate to develop BBC iPlayer, even in the face of significant market uncertainties and investment costs. In particular its decisions were influenced by the following features:

- **Public purpose of promoting technology use.** The development of BBC iPlayer was central to meeting the BBC's core Public Purpose to “*[deliver] to the public the benefit of emerging communications technologies and services [and assist] UK residents to get the best out of emerging media technologies now and in the future*”. Therefore, despite the risks, the BBC was able to see the potential for these technologies and invest since it met its purpose of promoting use of new technology. BBC iPlayer has continued to invest in enhancements such as live restart, downloads, instant programme availability, as well as in its user interface.
- **Stable licence fee funding.** The BBC had a different attitude to making risky technological investments which enable wider distribution of its content than other broadcasters and content providers. Unlike other

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<sup>21</sup> A pay VoD service available on subscription.

commercial broadcasters or content providers, the BBC was not constrained by the potential risk to commercial revenues because it is publically funded. Other PSBs' may not be incentivised in the same way that the BBC was to make its content as widely available on a FTA basis.

- **Commitment to open access.** The BBC's public purposes also mean it is committed to distributing its BBC iPlayer service to a wide audience, and hence to a range of platforms and connected devices. The BBC is constantly investing in meeting the challenge of ensuring that its iPlayer is available in as many different devices as possible. Other broadcasters might not view wide access as a goal in itself and indeed may limit access if this offered revenue opportunities<sup>22 23</sup>.
- **Strong content offering.** The BBC had a strong content offering. It is notable that 4OD launched over a year earlier than BBC iPlayer. However, the BBC's strong content offering was one of the reasons it quickly became the most popular VoD service in the UK. Furthermore the BBC's leading role in the industry meant that it was able to negotiate the necessary contracts with third party rights suppliers to enable them to licence content to the new platform.
- **The BBC has a trusted reputation.** Open VoD has become a mass market service used by all; however in large part it has only been enabled by a significant change in users' viewing habits. This may be partly led by the BBC's reputation. While it may be relatively easy to persuade tech savvy younger demographics to adopt VoD, the BBC's reputation may have had a role in persuading other demographics to adopt this new technology. For example Simon Morris Chief Marketing Officer of Lovefilm is reported to have noted "*The [iPlayer] service went a long way to explaining to middle England that streaming content was normal.*"<sup>24</sup>

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<sup>22</sup> For example ITV provided its iPlayer app to Samsung on a limited exclusivity basis. See: ITV "ITV enters exclusive partnership with Samsung for the ITV Player app on Android" Thu 09 May 2013 <http://www.itv.com/presscentre/press-releases/itv-enters-exclusive-partnership-samsung-itv-player-app-android>.

<sup>23</sup> See the VOD Professional "Our goal is to make VOD as good an experience as watching television." 21 June 2013 So says ITV's Online Product Director, James Micklethwait, who tells us about ITV Player, monetisation and the "long tail" (interview with James Micklethwait, ITV's Online Product Director) <http://www.vodprofessional.com/features/interview-with-james-micklethwait-of-itv/> accessed March 2015.

<sup>24</sup> See: Techradar November 28, 2011 "Lovefilm: iPlayer changed the streaming game" <http://www.techradar.com/news/internet/lovefilm-iplayer-changed-the-streaming-game-1043855>

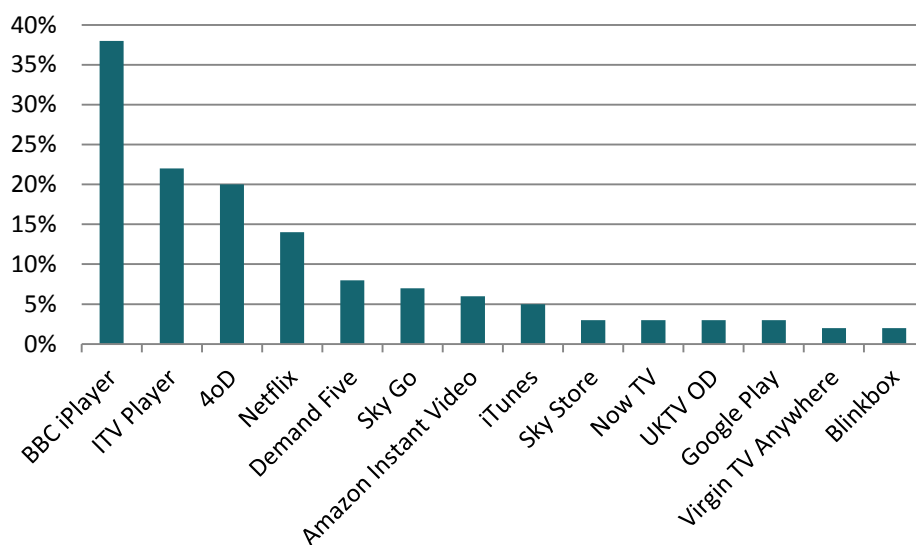
### 5.3.2 BBC iPlayer's position in the VoD market

The BBC iPlayer plays a central role in the VoD market. Looking at VoD services offered by the main broadcasters (ITV Player, 4OD and Demand5) and other on-demand portals, the 38% of users had used BBC iPlayer in 2014 (Ofcom (2014)).

Looking at the dynamics of the VoD market, the increase in the online TV and film streaming service has been remarkable over the last few years. For instance, Netflix saw an increase of the total unique visitors from 2.5 million in April 2013 to 3.9 million in April 2014. SkyGo registered an even larger growth, from 884,000 in April 2013 to 3.9 million in April 2014 (Ofcom 2014).

The presence of more market players is reducing reduced BBC iPlayer's share of requests (see **Figure 25**), though the BBC iPlayer remains the largest single VoD provider (measured by share of requests). According to a survey conducted by Ofcom, in the first quarter of 2014, 38% of respondents claimed to use BBC iPlayer, compared to 22% for ITV Player, 20% for 4oD and 14% for Netflix (see **Figure 25**).

**Figure 25.** Claimed use of selected VOD services



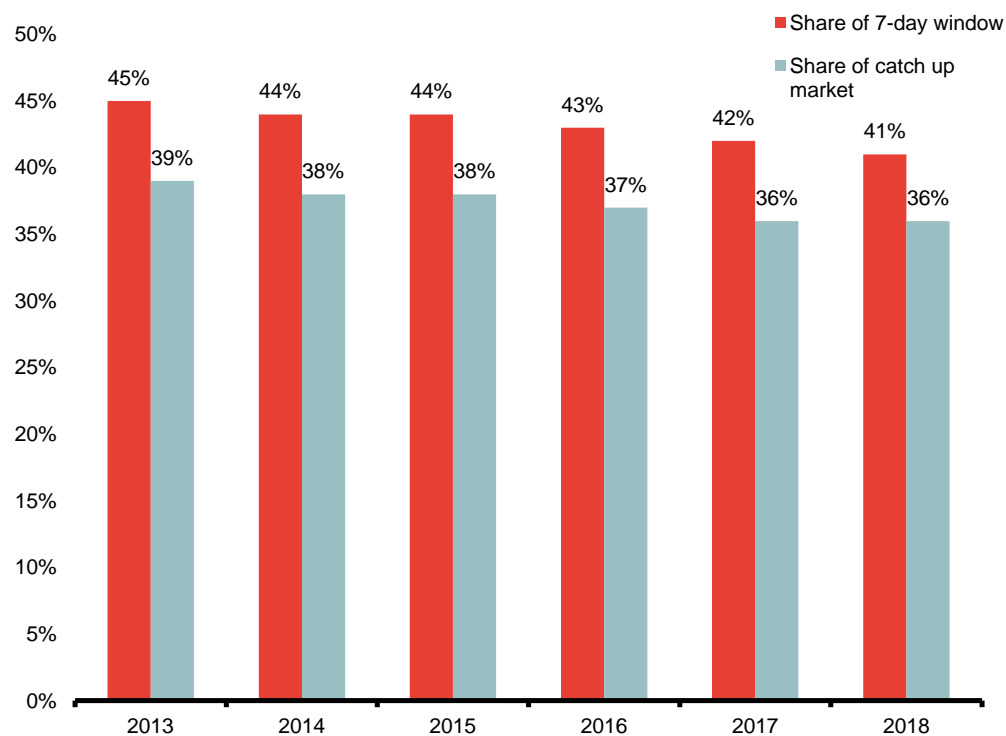
Source: Ofcom, 2014

However, the gradual decline in the BBC's share of requests does not reflect declining popularity, as the number requests to BBC iPlayer is increasing (based on BBC data, from 272 million in January 2013, the number of requests increased to 315 million in January 2014 (+16%)). Rather, it reflects a growing,

vibrant and more diverse VoD sector, characterised by many different suppliers, with different business models, each growing in popularity.

The growing popularity of VoD means that BBC iPlayer's market share is expected to decline as both other VoD platforms and the market grow. Mediatique (2013) project that the BBC iPlayer market share will continue to decline to c35% by 2018 as can be seen in **Figure 26** below.

**Figure 26.** BBC iPlayer market share



Source: Mediatique, 2013

## 5.4 Second round impacts

### 5.4.1 The impacts on complementary markets

The BBC's iPlayer service may have had a number of positive impacts on the VoD market and in related markets. The impact of the BBC iPlayer is seen in how it helped to create a new audience and shaped new business models (e.g. catch up TV); it has helped develop new rights frameworks which support and incentivise content providers to provide online content; and it has helped develop the software and IT skills which shape and develop VoD platforms.

These effects mean that demand for VoD now plays a significant role in the UK's audio visual landscape and in related markets.

There are three ways that BBC iPlayer may have affected wider markets: via increased demand for VoD and associated content; increased demand for broadband (or other mobile network services); and, increased demand for connected devices.

### ***Increased demand for VoD and associated content***

The success of BBC iPlayer in this nascent market increased demand for VoD services to the benefit of all market participants. Some successful VoD entrants have commented on the role of the BBC in generating demand for VoD. For example, Reed Hastings (Netflix Chief Executive and co-founder) is reported to have credited the BBC for the way Netflix was rapidly adopted by audiences when it made its debut in 2012. *“The iPlayer really blazed the trail. That was long before Netflix and really got people used to this idea of on-demand viewing.”*<sup>25</sup> Likewise Simon Morris Chief Marketing Officer of Lovefilm, is reported to have noted that *“With iPlayer, the BBC did a great job of changing consumer behaviour and we have benefited from that – they normalised the idea of catch-up TV.”*<sup>26</sup>

In a recent survey<sup>27</sup>, 43% said that BBC iPlayer was the first online TV or video service that they used, 39% said it was the one that most helped them to feel comfortable using TV or video services and 37% said it was the one that was most influential in making them start to use online or TV video services.

### ***Increased demand for broadband or other mobile network services***

BBC iPlayer had a role in increasing take up of broadband services because of the complementarity of the BBC's content and the BBC iPlayer user interface, and the requirement for network services. According to a BBC survey<sup>28</sup>, 43% of respondents claimed that BBC iPlayer was *“one of the reasons I like having a broadband at home”*, and 13% said that it was *“one of the reasons I got broadband in the first place”*.

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<sup>25</sup> See The Telegraph, Netflix chief Reed Hastings takes on telcos, cinemas and global expansion 5 October 2014,

<http://www.telegraph.co.uk/finance/newsbysector/mediatechnologyandtelecoms/media/11141864/Netflix-chief-Reed-Hastings-takes-on-telcos-cinemas-and-global-expansion.html>

<sup>26</sup> See: Techradar November 28, 2011 “Lovefilm: iPlayer changed the streaming game” <http://www.techradar.com/news/internet/lovefilm-iplayer-changed-the-streaming-game-1043855>

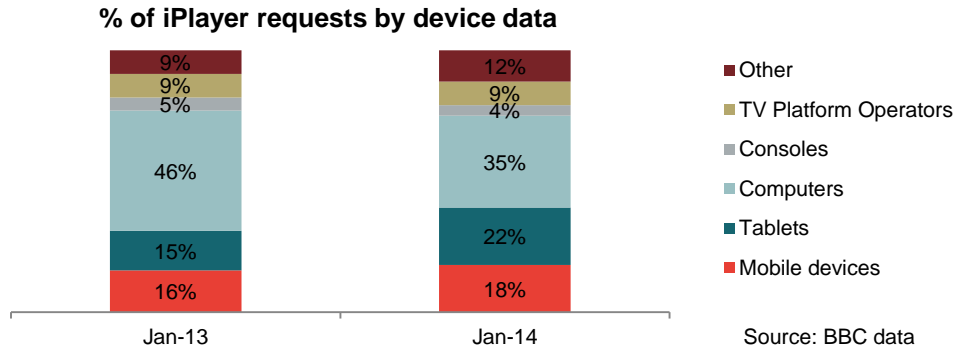
<sup>27</sup> GfK (August 2014) based on an online survey of over 1000 respondents.

<sup>28</sup> Based on a sample 786 nationally representative adults, October 2014

### Increased demand for connected devices

As one of the most popular content apps, BBC iPlayer is likely to have had a role in increasing take up of connected services.

**Figure 27.** Requests for BBC iPlayer by device



Source: BBC data

**Figure 27** above shows the range of devices now used to request BBC iPlayer and in particular, how the advent of smartphones and tablets consumer has changed consumer viewing habits. Looking at the BBC iPlayer requests-by-device data provided by BBC, the share of computer requests decreased from 46% to 35%, and the cumulative share of mobile device and tablet requests increased from 31% to 40% between January 2013 and January 2014.

## 5.5 Spillovers

The BBC investment in BBC iPlayer may have increased productivity in the creative industries and complementary markets in two particular ways.

- The main benefit relates to risk capital spillovers. There is evidence that the BBC's investment in BBC iPlayer contributed to the development of the VoD market and therefore played a role in making it more attractive, and less risky, for competitors to enter. VoD is now a mass market product as 50% of the population used VoD services in 2013 (Ofcom, 2014). VoD is seen as a complementary to existing linear, pay and FTA as well as other telecommunications services particularly among the young. It is not possible to quantify this effect but the evidence suggests that the BBC played some role in facilitating these impacts.



- The second is the skills and knowledge related to the development of VoD software and complementary technology. It is likely that given the investment in IT and software experts, the creative industries and complementary industries will benefit from these skills as labour takes advantage of its mobility and seek wider opportunities across the creative industries and wider economy.

## Annex 1: Methodology for mapping BBC spend within each DCMS creative industry groups

This annex describes in more detail the data used and the approach taken to map the BBC's expenditure to its suppliers and in turn whether those suppliers are within the creative industries.

This analysis drew on three sources of data, as below.

### BBC expenditure data

The data underlying the analysis of first round impacts is consistent with BBC Annual Report and Financial Statements 2013/14. Total expenditure in the UK 2013/14 was £3.7 billion<sup>29</sup> and a breakdown of this total is included in **Table 1**.

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<sup>29</sup> Around £0.1 billion of BBC expenditure was overseas. As the focus of this study is the BBC's impact on the UK creative industries, spending outside of the UK has been excluded from our analysis.

**Table 1.** UK PSB expenditure by group 2013/14

	£m	Proportion of spend
<b>Service licences – direct content spend</b>	2,315	72%
<b>Other direct content spend</b>	91	3%
<b>Distribution</b>	217	7%
<b>Infrastructure &amp; Support - content support costs</b>	301	9%
<b>Infrastructure &amp; Support – professional support</b>	288	9%
<b>Core controllable spend</b>	3,212	100%
<b>Other spend*</b>	566	
<b>Total spend</b>	3,778	

\* Including obligations (broadband, S4C, local TV) and Licence Fee collection.

Source: Figure 19, Driving Efficiency at the BBC, 2014

Table 1 shows, of the BBC's total UK PSB expenditure of £3,778 in 2013/14, around £566 million was on Broadband Rollout, Local TV, Pension deficit reduction payments and Licence Fee Collection cost. Excluding these items leaves 'controllable costs'. Of these controllable costs, over ninety percent is spent on content, distribution and support of those activities (the remaining spend – less than ten percent – is for managing the BBC).

Although the same data has been used in the analysis in this report, we have analysed it in a different way – here we have assessed the extent to which the BBC has purchased goods and services from suppliers in the creative industries.

### Data on BBC suppliers

For the analysis of BBC's external investments, we used data provided by BBC Finance who provided a database of payments by the BBC to external suppliers in 2013/14. This dataset was augmented by data provided on spend on (i) freelancers, (ii) some media rights, and (iii) spend related to external obligations.

## Dunn and Bradstreet data

Data were provided to us by the BBC that had been prepared by Dunn and Bradstreet (D&B) and contains additional information on the majority of the BBC's suppliers. The main piece of data was the 4-digit Standard Industrial Classification (SIC) code, which represents the primary activity of each supplier. As explained in DCMS (2015), SIC Codes can be used to define the nine creative industry groupings in the UK. The full list is provided in **Figure 28**.

**Figure 28.** DCMS definitions of the nine creative industry groups

Creative Industries group	4-digit SIC (2007) Code	Description
Advertising and Marketing	70.21	Public relations and communication activities
	73.11	Advertising agencies
	73.12	Media representation
Architecture	71.11	Architectural activities
Crafts	32.12	Manufacture of jewellery and related articles
Design: product, graphic and fashion design	74.1	Specialised design activities
Film, TV, video, radio and photography	59.11	Motion picture, video and television programme production activities
	59.12	Motion picture, video and television programme post-production
	59.13	Motion picture, video and television programme distribution
	59.14	Motion picture projection activities
	60.1	Radio broadcasting
	60.2	Television programming and broadcasting activities
	74.2	Photographic activities
IT, software and computer services	58.21	Publishing of computer games
	58.29	Other software publishing
	62.01	Computer programming activities
	62.02	Computer consultancy activities
Publishing	58.11	Book publishing
	58.12	Publishing of directories and mailing lists
	58.13	Publishing of newspapers
	58.14	Publishing of journals and periodicals
	58.19	Other publishing activities
Museums, galleries and libraries	74.3	Translation and interpretation activities
	91.01	Library and archive activities
	91.02	Museum activities
Music, performing and visual arts	59.2	Sound recording and music publishing activities
	85.52	Cultural education
	90.01	Performing arts
	90.02	Support activities to performing arts
	90.03	Artistic creation
90.04	Operation of arts facilities	

Source: DCMS, 2015

In addition to SIC codes, the D&B file contained additional information including the number of employees, and the location of business (country, region), though there is some caution around using this additional data and it did not cover all suppliers.

## Mapping methodology

We used two approaches to map the external spend to a creative industry grouping.

### *Approach 1*

This approach is based on the DCMS definition of the creative industries (DCMS, 2015) and was undertaken in **three main steps**:

- **Identified whether each supplier is in the creative industries.** For each BBC supplier in the database provided by BBC Finance, we identified (where possible) the 4-digit 2007 SIC code using the D&B data file. We then mapped each supplier to the creative industries using the list of SICs published by the DCMS. For suppliers sitting outside of the creative industries, we use the SIC description to gauge their primary activity.
- **Identified the size and location of each supplier.** Each supplier was classified as Micro, Small, Medium or Large. This was carried out using the ONS definitions of business size, based on the number of people the supplier employs (see table below). We also identified the country in which the each company operates. Both the size and location of the suppliers was identified using data from D&B.

Size	Number of Employees
Micro	0-9
Small	10-49
Medium	50-249
Large	250+

- **Cleaned the data.** Finally, we cleaned the data to construct the sample of suppliers that we would use for analysis. This involved a number of different steps:
  - **Removed all suppliers based outside of the UK.** This is because the aim of the analysis is to identify the impact of the BBC on the UK economy.
  - **Removed UK-based suppliers where a 4-digit SIC code could not be identified.** The D&B file did not contain SIC codes for 1,407 UK-based suppliers, representing £84m of spend. For the Top 100 spending UK-based suppliers with missing SIC codes we manually identified their SIC codes using the Companies House database, or by using information from their website. These represented £77m of the £84m UK-based missing spend. All other suppliers with missing codes were removed.
  - **Identified the 4-digit 2007 SIC code for suppliers where only two digit codes were provided.** For 364 suppliers, the ‘main’ SIC code provided by D&B was a 2-digit rather than a 4-digit code.<sup>1</sup> We therefore identified a relevant 4-digit code by either (i) using the secondary 4-digit code provided by D&B (where available) (ii) identifying the relevant 4-digit code from the description of the 4-digit 2003 code provided by D&B, or (iii) used information from the supplier’s website.

### *Limitations of Approach 1*

There are two main key limitations to using the DCMS definition of the creative industries for this analysis. These are both likely to lead to the BBCs spend in the creative industries being significantly under-valued.

- **SIC codes do not appropriately capture business activities for diversified organisations.** This is because SIC codes represent the primary (or ‘main’) activity of a given company. They therefore poorly represent the nature of companies who have significant secondary activities. The result is that a SIC code may suggest a supplier does not sit within the creative industries, even if it has a significant ‘creative arm’. In some case, SIC codes also incorrectly represent companies that are subsidiaries of other organisations. For example, a TV production company may be identified as a holding company or subsidiary (which are not defined as creative), even though its activities are purely creative.
- **Some forms of investment are not within the BBC data on suppliers,** as noted above. Where we have augmented the data with additional data for completeness, we have manually assessed whether it is ‘creative’ or not.

### *Approach 2*

To account for these two limitations, we have adapted the analysis based on the DCMS definition of the creative industries. This is to develop a more accurate estimate of the BBCs spend within the creative industries.

Specifically, we have performed the following additional analysis:

- **Re-classified the Top 50 suppliers (in terms of spend) that are identified as ‘non-creative’ based on their SIC code.** This has been done on the basis of analysis of the nature of the services purchased by the BBC from these suppliers, rather than the primary activity of the organisation (as defined by their SIC codes). For those suppliers that were re-classified as creative, we have also made a judgement on the creative industry they would be likely to sit within. Overall, we find that 17 of the top 50 ‘non-creative’ suppliers should be classified as creative.
- **Include the proportion of spend not related to specific suppliers, that sits within the creative industries.** This spend is the external data not covered by the database provided by BBC Finance. This includes the BBCs funding of external obligations for example. We used other BBC sources for this data.

Using this analysis, we have then estimated the amount (and proportion) of the BBC external spend that sits in the creative industries.

As this approach is intended to overcome some of the limitations of the 'pure' DCMS approach – Approach 1 – this modified approach, Approach 2, has been used to underpin the analysis that features in the main report.

## Annex 2: Literature underpinning the economic framework

This annex provides details of the relevant literature and research which has informed the development of the economic framework.

### *Drivers of economic growth*

In 2010, the UK Government published a Strategy for Sustainable Growth (BIS 2010) which presented a framework with three strands:

1. Promoting the efficient operation of markets to support growth;
2. Smarter public and private investment in the economy, including creating a highly skilled workforce; and
3. Encouraging entrepreneurialism and individual engagement in the economy to support growth.

The main report provided examples of how the creative industries align with each, further detail is below.

- Promoting the efficient operation of markets to support growth:
  - In the creative industries, copyright and patents help ensure ‘creators’ make a return on their investments. This is particularly important as many creative products have ‘public good’ qualities (The Work Foundation, 2007).
  - Competition for audiences between the public and private sectors can drive up quality of creative products. For example, this can lead to better quality programmes, more innovation and overall economic growth (BBC, 2013). International data suggests that by exerting competitive pressure on commercial broadcasters, “countries with well-funded PSBs investing in high-quality, diverse new content tend also to have commercial markets which generate strong revenues and levels of investment in high-quality, diverse new content” (BBC, 2013).
- Smarter public and private investment in the economy, including creating a highly skilled workforce:
  - The UK broadcasting market has high investment levels in original UK content. This is primarily due to two funding mechanisms: the licence fee (BBC) and advertising (commercial PSB). Ofcom's on-going PSB review shows that spend on first-run UK original programmes was £2.4 billion in 2013 (Ofcom, 2014).



- Skills impact on the ability to adopt and exploit new technologies (Bresnahan et al., 2002), and to drive innovation more generally (Roberts Report, 2006).
  - Growth in the creative industries is also driven by having a workforce with a range of people with different sets of knowledge. When these interact, they can produce better decisions and outcomes than people with similar skill sets (The Work Foundation, 2007; Blinder & Morgan, 2005; Lakhani et al., 2007).
- Encouraging entrepreneurialism and individual engagement in the economy to support growth:
  - The creative industries are characterised by many small businesses. For example, the ‘film, TV, video, radio and photography’ group of creative industries has just over 28,000 business entities; 95% of these are small (10-49 employees) or micro (0-9 employees) (ONS data UKBBB, 2014).
  - Many small businesses in the creative industries can have highly variable rates of return on their creative products (De Vany, 2004), and there can be high costs to investors of appraising and supporting new firms (HM Treasury, 2003). Evidence suggests that a large proportion of firms in the creative industries are small, and many start-ups (in particular) find it more difficult to gain access to finance, all else equal (The Work Foundation, 2007). Public sector investment therefore can provide finance for firms that have uncertain returns but provide valuable cultural activities (Van der Ploeg, 2002).

### *Spillovers*

Evidence in the literature relating to spillovers is summarised below.

- Network and cluster (agglomeration) spillovers: Networks are common in the creative industries, particularly among creative small and medium-sized enterprises (SMEs). Some 39% of SMEs have participated in a network since they were established (NESTA, 2006). Organisations within the network of creative industries, other organisations could potentially become more productive and efficient as a result of its investments as they are able to share ideas and knowledge, pool complementary skills, share risks, and gain access to new markets (De Beule et al, 2010; Pittaway et.al, 2004; Powel & Grodal, 2005). Working in groups or ‘clusters can create significant advantages, such as risk sharing; gaining access to new markets and technologies, and pooling complementary skills (Pittaway et.al, 2004; Powel & Grodal, 2005).

- The public sector can create the infrastructure to support effective networking, such as the proposed Knowledge Transfer Network (Works Foundation, 2014).
- The growing expectations of consumers are a significant stimulant of innovation (and thus growth) in the creative economy. The more aware and knowledgeable consumers are, the more innovation is spurred. (Works Foundation, 2014; Georghiou, 2007).
- Knowledge and Skills spillovers: Knowledge and skills spillovers could be generated through a number of channels (BIS, 2012)
  - Movement of labour (labour mobility). Knowledge and skills are transferred to other firms and regions when these workers change jobs (BIS, 2012; Balsvik, 2011; Duranton 2004; Görg & Strobl (2002)).
  - Knowledge sharing activities. These could be formal activities (such as conferences or skills sessions) or informal activities (e.g. social interactions) (BIS, 2012; Appleyard, 1996).
  - Public sector investment can correct for under-investment in education and training, caused by market failures creating barriers to investment (Works Foundation, 2014). These barriers include (i) a lack of information on the returns to education and training (ii) the inability of credit constrained individuals to borrow the costs of education and training, and (iii) fear of not reaping the return on their investment in training, because their trained workers may move before returns to training have been realised (Leitch Review; Haveman and Wolfe, 1995).
- Supply chain spillovers: Nesta (2010) acknowledge that creative businesses can make their suppliers more innovative through knowledge embodied in their sophisticated demand.
- Market shaping: Mazzucato (2011) has commented how ‘mission-driven’ public organisations can play a key role in creating and shaping markets.

## Annex 3: References

### Economic framework

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