BBC television, radio and online services: An assessment of market impact and distinctiveness

Prepared by Oliver & Ohlbaum Associates Ltd
and Oxera Consulting LLP for
The Department for Culture, Media and Sport

February 2016

Contents

Table of Figures

Glossary

3P/4P	Triple play/quadruple play. Platform operators offer three or four services in a single bundle – broadband, fixed line, pay TV and mobile. This creates "stickiness" because the consumer is less likely to move to another provider if they purchase multiple services from the same operator.
AI	Appreciation index – used by the BBC to measure how much the audience appreciates and enjoys BBC programmes.
BBC Royal Charter	The constitutional basis for the BBC. The Charter sets out the public purposes of the BBC, guarantees its independence, and outlines the duties of the Trust and the Executive Board. The government is currently reviewing the Charter, which expires at the end of 2016.
BBC Worldwide	A wholly owned subsidiary of the BBC and its main commercial arm.
BESA	British Educational Suppliers Association.
Catch-up TV	Functionality that enables viewers to access programmes that have already been aired and view them at a time of their choosing.
CIP/CIA	Competitive Impact Principle/Competition Impact Assessment. The BBC is required to minimise any negative competitive impacts on the wider market while carrying out its activities.
CMA	Competition and Markets Authority. The CMA is the UK competition authority; previously the Competition Commission and Monopolies and Mergers Commission (MMC).
Commissioned programme	A new programme funded by a broadcaster. Programmes may be commissioned from an internal production arm or an external production company.
CAGR	Compound annual growth rate.
CPT/CPM	Cost per thousand impacts – a measure of the cost of advertising.
Crowding-in	The effect whereby the BBC's overall commitment to content spending in general, and UK content spending in particular, may encourage rivals to spend more of their income on UK content than they otherwise might.
Crowding-out	A negative commercial impact large enough to prevent new entry, create market exit, or significantly lessen overall quality and investment by commercial services.
DAB	Digital audio broadcasting – a terrestrial digital transmission technology for radio services.
DCMS	UK Department for Culture, Media and Sport.
Digital Age	The last decade or so, characterised by widespread consumer access to internet based services instead of analogue communications.
DSAT	Digital satellite transmission.
DTT	Digital terrestrial television.

DTV	Digital television – a generic term covering DSAT, digital cable, DTT and IPTV distribution of television services.
EPG	Electronic programme guide – the screen in DTV services that shows what programmes are available to watch.
Free to air TV	TV channels that can be accessed with suitable reception equipment without paying a subscription. Also shortened to “free TV”.
GDP	Gross domestic product.
GVA	Gross value added – a measurement of the profits (producer surplus) and the wage costs of suppliers.
ICT	Information and communication technology (sector).
IPTV	Internet protocol television – a means of distributing live and on-demand TV content via the internet.
ITV1	ITV1, was renamed ITV in 2013. For clarity we continue to use “ITV1” to distinguish the channel from its parent organisation.
Linear/non-linear viewing	Linear viewing describes live viewing of a broadcast TV channel. Non-linear viewing describes the behaviour of a consumer who records content for future playback and/or uses catch-up or replay technologies to access content in a way that no longer reflects the original linear channel transmission.
MIA	Market Impact Assessment. The MIA is derived from a simple welfare economics framework for establishing the net market impact of any service or activity in the economy. This effectively weighs any displaced consumer surplus (benefits to consumers less the retail price) derived from the commercial services, plus any displaced producer surplus (effectively any commercial profits) from providing the commercial services, against any consumer surplus created by the BBC’s activities.
NMA	News Media Association.
O&O	Oliver & Ohlbaum Associates Limited.
Ofcom	The UK communications regulator for the TV, radio and VoD sectors, fixed line and mobile telecoms, postal services, plus the airwaves over which wireless devices operate. Established by legislation including the Communications Act 2003, Ofcom’s principal duty is to further the interests of citizens and consumers, where appropriate by promoting competition.
On-demand	Audiovisual services available to consumers at a time of their choosing. Examples include SVoD (subscription video on demand).
OTT	“Over the top” audiovisual services provided directly to consumers over broadband networks, bypassing established terrestrial, cable and satellite TV platforms.
Pact	Producers Alliance for Cinema and Television – trade association representing the commercial interests of UK independent television, film, digital, children’s and animation media companies.
Pay TV	Television services for which consumers pay a regular subscription. Channels are encrypted and cannot be accessed without a viewing card.

Paywall	The encryption of newspapers' content online so that it is available only to consumers who pay a subscription.
PSB	Public service broadcasting – a long-established feature of the broadcasting landscape in the UK and elsewhere. PSB broadcasters have certain obligations to provide content that the market might not otherwise deliver (such as impartial news, cultural output and religious programming), in return for certain advantages such as access to scarce spectrum and prominence in EPG listings. The BBC is the UK's main public service broadcaster. The "commercial" PSBs – ITV1, Channel 4 and Channel 5 – have public service obligations in the terms of their Ofcom broadcast licences.
PVA	Public value assessment.
PVR	Personal video recorder.
PVT	Public Value Test – an assessment by the BBC Trust of the broader social and public service benefits of a BBC activity. It is possible that a BBC activity can have a negative gross market impact but that the net market impact (once the consumer surplus from the BBC service is added back in) is positive.
RIA	Regulatory Impact Assessment; an economic analysis of the impact of new regulation on affected parties, prior to its introduction.
ROI	Return on investment.
RQIV	Reach, quality/distinctiveness, impact, and value for money framework – used by the BBC Trust when undertaking a PVA of the BBC service.
Series Stacking	The ability for viewers to go beyond the initial general seven-day window on the iPlayer to see all the episodes of series that together lasted several weeks.
Spin-off channels	Niche channels owned by the public service broadcasters. They include BBC Four and CBeebies, ITVbe and E4.
SVoD	Subscription video on demand – a library of content distributed via a digital TV platform or OTT and available for on-demand viewing.
UKTV	A provider of free TV and pay TV channels in the UK, 50 per cent owned by BBC Worldwide and 50 per cent by Scripps Interactive Networks. UKTV is an important means of commercialising BBC content in the UK. UKTV channels include Dave, UK Gold, Yesterday, Alibi and Watch.
VoD	Video on demand.
WOCC	The window of creative competition, which defines the proportion of BBC content spend that is contested by in-house and external producers. The Communications Act 2003 requires the BBC to commission 25% of its original network and non-network productions from the independent sector each year, as set out in the Ofcom independent production quota. In addition, the BBC's Framework Agreement requires that 50% of BBC television commissioning is reserved for its in-house production teams. The remainder, around 25%, is set aside for competition between the BBC and independent producers. In 2015 the BBC Trust concluded that there is a strong case for extending the WOCC to cover more of the 50% of production currently guaranteed for in-house production, and the BBC Executive has agreed proposals with Pact for how this will be done.

List of Interviews

We spoke to executives from the organisations listed below in putting this report together:

- the BBC
- Global Radio
- Group M
- The Guardian
- ITV
- Ofcom
- The Times
- UBC Media

We also met with Professor Patrick Barwise, Emeritus Professor of Management and Marketing at the London Business School.

Executive Summary

Background

The BBC is governed by Royal Charter. The current Charter expires at the end of 2016. As part of a process of building an information base to allow the Government to make informed choices about the way the BBC should operate over the next ten years, the Department for Culture, Media and Sport (DCMS) commissioned Oliver & Ohlbaum Associates Limited (O&O), supported by Oxera Consulting LLP (Oxera), to produce the current report. Its focus is on the scale and scope of the BBC's public service activities, although it does look at some of the BBC's related commercial activities as well.

Overview

There has been a great deal of analysis on the market impact of the BBC over the last 20 years, focused on either 1) the impact of additional and incremental BBC digital services, or 2) hypothetical assessments of there being no BBC, or a radically reduced BBC, in terms of funding and scope – across all services or within each of radio, TV and online.

Both these approaches have their merits. The former ensures that the BBC does not crowd out commercial activities with its new services. The latter reminds policymakers of the contribution that the BBC makes to the strength and range of the UK media sector. It is also a reminder of the BBC's beneficial impact on consumer choice and public value – even if it is very difficult to predict how exactly the UK media market would develop without a BBC of scale, given that the BBC is such an intrinsic part of the UK media ecology. These past reviews are summarised and assessed in this report.

Less work has been done on the market impact of the BBC's mainstream and high reach services – BBC One, BBC Two, Radio 1, Radio 2, Radio 5 Live, and BBC Online – and, in particular, on how different levels of distinctiveness in these services (as opposed to different levels of funding) can create different levels of market impact.

This report lays out how greater distinctiveness in the BBC's mainstream services than is currently the case could not just have a positive impact on the commercial market but also positive net market impact – once the BBC and commercial offerings to the consumer are assessed in aggregate. More specifically:

- A shift in the positioning of BBC One in terms of the mix of genres, the approach within genres and its commitment to a wide range of titles and a significant number of new titles in its schedule. While decreasing BBC One's audience share to below 20 per cent, this shift could increase commercial advertising-funded rival income by **£33m to £40m a year** (and possibly rising to £50m to £60m a year by the end of the next Charter) and have a positive net market impact;
- A shift in the positioning of the BBC's popular music and news/sport radio services with a greater emphasis on music range and hard news and lower profile sports for the 25 to 44 age group. While reducing the BBC's share of measured radio audiences to below 50 per cent, this shift could increase commercial ad funded rival income by **£22m to £38m a year** (and possibly rising to £28m and £47m a year by the end of the next charter) and have a positive net market impact; and
- A shift in the positioning of the BBC's online news and information services away from "softer" news stories and towards more in-depth analysis and explanation. If this were to affect content currently accounting for around 15 per cent of BBC news page views, the increase in commercial revenue would be likely to amount to between **£3.2m to £8.2m a year**, potentially with a positive net market impact.

In addition to a total of **£58m to £86m** extra commercial ad funded rival revenue per year across TV, radio and online – rising to **£81m to £115m a year** by the end of the next Charter period – a more differentiated BBC strategy could also bolster pay income across TV and online news and information and possibly music and speech audio on demand.

This report also outlines various ways in which a more co-operative approach from the BBC to linking to commercial rivals and the aggregation of third party content could help the commercial sector and the overall net market impact of the BBC still further.

While past market impact assessment processes have recognised the many ways in which proposed and current BBC activities help the commercial sector they have failed to go on to develop recommended ways in which the BBC might increase its positive impact on the UK commercial sector. This will become increasingly important as the trends to convergence, consolidation and globalisation, to which the BBC itself points, begin to challenge the UK's commercial sector still further. This suggests a need for reform in both how and when the BBC's market impact is assessed.

The market impact of continuing mainstream services should be assessed as part of any ongoing service review process. Also, ways in which BBC services and activities could best bolster the commercial sector both directly and along the supply chain should be considered as part of any market impact assessment and public value test process.

Context

The BBC has a sizeable presence in the UK media market, with 33 per cent of the measured TV audience, about 25 per cent of all TV channel/service revenue, 54 per cent of the measured radio audience, and a news and information internet site that is by far the most-used by UK media consumers. Overseas, while smaller than many of its US led international rivals, the BBC is still the largest exploiter of UK originated intellectual property, and the only UK player to come even close to matching the leading US providers of content and content based services. It is also still a major player in global news provision through BBC World Service Radio, bbc.com and BBC World News. Moreover, it remains the best funded public service broadcasting organisation in the world (although the German PSB system as a whole receives more public monies).

But the BBC is a smaller player in the UK media market overall than it was 10 years ago, at the start of the last Charter period. Its share of overall UK media consumption and revenue is lower in 2016 than it was in 2006. Moreover, the last 10 years has also seen the continued growth of global media platforms and leading media content suppliers, alongside a significant degree of convergence between the internet and traditional TV, radio and news and information markets.

This has led to the increasing influence of Google, Apple, Facebook and Amazon; the rise of new players such as Netflix; and the consolidation of traditional platforms and content providers into powerful global groups including Sky Europe, Liberty Global, Comcast/NBC Universal, Discovery, the Walt Disney Company, and 21st Century Fox, all of which have a significant presence in the UK and in the BBC's major overseas markets.

In the next decade these trends are likely to continue, potentially leaving the BBC smaller again in 2026 in terms of its share of overall media consumption and revenue in the UK, and in its main overseas markets, and facing formidable global platform and content groups as both competitors and suppliers/distributors.

Future scenarios

While, going forward, the BBC will face the pressures of globalisation, fragmentation, consolidation and convergence, so will its often smaller UK based commercial rivals in TV, radio and news and information.

Three future scenarios are equally plausible for the UK's commercial media sector. First, an "invasion scenario", where most of the UK's main commercial players end up being owned and operated by global media organisations – mostly from the USA – and whose behaviour is driven more by global interests than UK consumer needs. Second, an "inevitable decline" scenario, where the commercial UK sector remains independent but becomes gradually weaker as it loses audience and revenue to global operators and rivals. Third, a "transformation scenario", where the UK commercial media sector both diversifies and transforms itself in order to survive and then thrive in the global internet age.

The size, scope and behaviour of the BBC are likely to have a significant influence as to whether the third of these scenarios is the most likely. Getting the balance right between the BBC's mix of services, and those provided by the UK commercial sector, will therefore be crucially important to both the future relevance of the BBC and the health and fortunes of the UK's commercial sector.

In some areas, this may mean the BBC has to focus on co-operation with the commercial sector and on generating positive impacts for the commercial market rather than on just avoiding negative commercial market impact.

The focus of the impact assessment

The focus of this report is twofold: first, the market impact of the BBC on the commercial sector; and, second – and more importantly for consumers – the overall net impact on the whole UK sector and on UK consumers once the BBC and UK based commercial TV, radio and online content services are combined. While we do not look specifically at public value impact (the broader benefits to society from BBC activities) or at economic impact, in terms of the UK's total gross value added (GVA), we do cover in the report how these might relate to market impact.

When looking at both the commercial market impact and the net market impact, we reviewed the likely impacts of a lower level of BBC activity and funding or a similar level of activity, but with more distinctiveness and differentiation from the commercial sector. But given that much past analysis (reviewed in this report) has tended to suggest the likely negative net market impact of a much smaller BBC, we have focused more on assessing the likely impact of a repositioning of relevant BBC services, rather than a significant reduction. Moreover, given that much past analysis has focused on the impact of incremental additional BBC services, we have tended to focus this review on changes to the BBC's more mainstream services – BBC One, Radio 1, Radio 2, Radio 5 Live and BBC Online.

The impact of the BBC on the commercial sector has been assessed at three levels: the likely audience and commercial revenue substitution of BBC services; broader market enhancements and market impediments caused by BBC activity; and the impact on other supply chain and adjacent market activities.

The impact of the BBC on the commercial market

Past reviews of additional BBC services and incremental changes to BBC services have all suggested that the BBC takes audience share from the UK commercial TV, radio and online sectors. But, at a broad level, the impact on domestic commercial rivals is limited because:

- audience share loss to the commercial sector is not one-for-one in line with the BBC's gain – especially where the BBC service is distinctive from the commercial offering and/or serves a similar audience to other BBC services;
- the loss of advertising revenue by the commercial sector is not proportionate to any audience share loss because commercial audience losses also increase the market price of advertising to some extent (advertising demand is far from completely "elastic"[1]);
- any loss of advertising revenue is often spread across several rival providers, limiting the proportionate losses on any one provider and making it less likely that the commercial supply will reduce significantly due to the presence of the BBC service; and
- the loss of any subscription income is not directly related to any general loss of audience to the BBC, and is likely to be more related to the specific content priorities of the BBC and how they impact the pay sector.

In terms of likely significant revenue substitution, therefore, the focus should be on the likely impact of the BBC's more mainstream services, which tend to be both larger and have greater overlap with the commercial sector's lead services (These mainstream services have all been covered far less by past analysis.)

[1] When commercial share and advertising impacts reduce, price increases somewhat, making any reduction in revenue less than proportionate to the audience impacts lost.

In terms of disproportionate commercial impact, the focus should be on the BBC's more targeted and differentiated services – past and current – where they are quite close to commercial rivals in content mix and demographic targeting, or where the BBC mainstream services go more head to head with specific broadly based commercial rivals, and so might have a disproportionate impact on these competitors.

The report finds that, for the mainstream services, a lack of distinctiveness is likely to have some impact on the revenues of rival mainstream services. The report maps out the evidence on distinctiveness, audience substitution and revenue substitution.[2]

The report also reviews the targeted BBC services where there appears to be the most overlap with commercial propositions, or where there have been overlaps in the past (e.g. BBC Four and Sky Arts; BBC 4 Extra (BBC 7) and Oneword), and seeks to estimate the scale of any impact.

In terms of direct advertising revenue substitution, we find that:

- the current relatively conservative schedule renewal and schedule mix strategy of BBC One probably reduces commercial PSB TV advertising revenue by **£33m to £40m a year** compared with a more innovative and risk taking strategy[3] (about 0.9 to 1.1 per cent of total commercial TV advertising market income);

- the current positioning and output mix of Radio1, Radio 2 and Radio 5 Live combined probably reduces annual commercial radio advertising revenue by **£22m to £38m a year** compared with a more differentiated output and/or more targeted demographic strategy[4] (about 4.5 to almost 8 per cent of total commercial radio market advertising income); and

- at the margin, it is likely that BBC Online's news provision reduces commercial publishers' revenue. If consumption of the "softer news" type of output usage on the BBC's news website were to reduce, affecting around by 13 per cent of the BBC's online news traffic, it is likely that commercial revenues would increase by **between £3.2m and £8.2m** a year (between 0.8 and 2.1 per cent of current commercial online news revenues based on the estimated size of the commercial market in 2013).

For the most part this substituted income is spread across a number of commercial players and so does not have a significant impact on any one commercial provider. The exception is in TV, where BBC One's positioning probably has the largest impact on ITV1 (and may be reducing ITV1's income by more than £33m to £40m a year by reducing its share versus rivals such as Channel 4 and Channel 5).

The impact of the scale and scope of BBC TV and Online services on pay revenues is less easy to quantify. While it is likely to reduce the commercial pay income available to some degree, perhaps more importantly it will also probably influence the mix of pay services and content offered (this applies to both the BBC's mainstream and more targeted services). With radio and audio, the impact is even less certain because there is no subscription radio market in the UK; the impact is more likely to be on the future potential of subscription based music and spoken word streaming services.

These revenue substitution estimates should not be seen in isolation. Even where the BBC's direct revenue impact on a specific service or group of services is found to be not insignificant, the overall commercial market impact of the BBC on consumer choice and value can still be positive for several main reasons.

BBC activity overall in relevant markets can actually help the commercial sector and/or boost the consumer value from the commercial proposition. The BBC's lead in developing new platforms such as Freeview, DAB and the iPlayer has (1) de-risked these important developments for UK commercial rivals; (2) helped prevent more rapid revenue fragmentation for leading ad funded rivals; and (3) helped seed the future take-up of pay services once free access has established new patterns of consumer behaviour.

---

[2] In general, increased distinctiveness across BBC services will increase commercial rival share. However, some dimensions of distinctiveness – such as service innovation – might actually increase the BBC's share, especially if the commercial sector underinvests and exploits a monopoly or quasi-monopoly position. Care needs to be taken in defining the dimension of distinctiveness that increases both the consumer/public value of the BBC service and the share of the commercial sector.

[3] This could rise to **£50m to £60m** a year by the end of the next charter.

[4] This could rise to **£28m to £47m** a year by the end of the next charter.

This has probably been more the case in TV than in radio and online. Therefore, even if the short term direct revenue impact is negative, the net medium/long term revenue impact can still be positive.

In addition, in some circumstances, the BBC's overall commitment to content spending as a whole and to UK content spending specifically can help encourage rivals to spend more of their income on UK content than they otherwise might – the so called "crowding-in" effect. So, even if commercial revenue is lower in the medium to long term, spending on content might be higher, benefiting consumers more than it harms suppliers.

The BBC can also have positive benefits along the supply chain and in adjacent markets. Its promotion of new UK music helps the UK music sector, its commissioning of UK independent producers helps develop the global appeal and reach of the UK's content creators, and its promotion of a range of TV platforms has helped sustain competition in the TV platform market.

Analysis for this report tends to confirm that the positive BBC impacts on the commercial market still exist, but that: (1) the platform-driving benefits may now be lower than 10 years ago and may reduce even more by the end of the next Charter period as the TV and radio markets complete their transformation to near universal, connected IP delivery; and (2) the "crowding-in" impact (witnessed in the past in TV) may be less than it was 10 years ago, as commercial rivals have had to focus more on preventing excessive commercial revenue fragmentation than on keeping up with the BBC, and this may reduce further in the next decade.

There may also be examples where BBC activity is actually having a negative impact at a broad commercial market level by erecting barriers to entry or commercial market growth, by pushing up input costs/restricting input access, or by imposing uneconomic platform costs on rivals. These are looked at in more detail when reviewing specific markets, but are generally focused on the way in which the BBC approaches secondary and ancillary access to its content by UK commercial third parties and the linking to/aggregation of third-party commercial services with its own services.

The net market impact of the BBC

Even if the BBC's commercial market impact is negative once positive broad commercial market enhancements and supply chain benefits are factored in, the net market impact once commercial services are combined with BBC services can still be positive.

Additional BBC services can add more to overall consumer surplus (and perhaps to the overall creative economy as well) than is lost from commercial services. This is the case because the BBC spends proportionately more on UK content than rivals might (or has a higher multiplier impact on a range of creative sectors – such as the BBC's music content and the UK music sector), and UK content is both more highly valued by consumers and boosts the UK economy more than bought-in content or the impact of an uplift in rivals' commercial profits. This case has been made strongly in the case of the TV market by two recent reviews.[5]

However, care must be taken not to extend this argument too far. It could be used in an unsophisticated way to justify continued expansion of the BBC at the expense of the commercial sector so as to maximise any multiplier effect on the creative sector and the consumer surplus from UK content. But, in the end, too large a publicly funded sector can negate the dynamic benefits of competition with and within the commercial sector, and slow down long term market innovation that the profit motive brings in dynamic and competitive markets.

In addition, added consumer value from BBC services may be lower than 10 years ago, particularly where BBC services lack distinctiveness and/or where the commercial sector is showing an increased appetite for commissioning more UK content – especially across different types of pay TV. Although extra provision by pay TV providers will always, by its nature, exclude some consumers from its content offering – thereby reducing public value and total consumer value – the growth of lower priced pay TV offerings may reduce this impact over time.

[5] Barwise and Picard (2014), and PwC (2015).

Distinctiveness, differentiation and co-operation

The coverage of past reviews and the likely continued net market impact benefits from the overall scale of the BBC for UK consumers have led us to focus on: (1) the distinctiveness of BBC services – especially its more mainstream services; (2) the BBC's future role in driving platforms; (3) the degree to which the BBC service can encourage more UK content investment and risk taking by rivals or might contribute to more revenue fragmentation and higher risks, eventually leading to a crowding-out of commercial investment; and (4) the degree to which the BBC might be pushing up input and platform costs especially in the way it deals with UK commercial rivals in terms of archive access and consumer aggregation.

The report concludes that there are likely to be some areas of ongoing concern in the next 10 years around: the positioning and strategy of BBC One: the positioning and strategy of Radio 1, Radio 2 and the BBC's more mainstream news and sports radio services; BBC Online's more mainstream news and "soft news" content in the UK; and the BBC's general news provision in the largest commercial overseas markets for such material.

In terms of the potential net market impact benefits of a BBC repositioning in all these areas, much depends on (1) the nature of any BBC increased distinctiveness and its impact on the consumer value generated by the BBC service, and (2) how the commercial sector responds to the increased differentiation and distinctiveness of BBC mainstream radio, TV and online services.

Shifts in the distinctiveness of BBC services need to add more to the value of those who remain as consumers than might be lost by those switching their viewing to rival services and/or commercial rivals need to invest some or their increased revenue in innovative new services and/or more quality home grown content.

The likelihood that BBC repositioning might increase net market impact could probably be further strengthened by a collaborative/co-operative attitude from the BBC in terms of future platform and content aggregation and content sharing/licensing with commercial rivals across TV, radio and online activities.

Such developments could be encouraged by applying the Market Impact Assessment (MIA) framework (developed by Ofcom and the BBC Trust for new BBC services) to existing/continuing BBC services – perhaps as part of the BBC Trust's ongoing service review process; and by putting emphasis on promoting positive impacts for rivals within the BBC Trust's overall Public Value Test (PVT) framework, rather than allowing negative impacts on rivals, as long as either the net market impact or the PVT is positive.

Introduction

Background

The BBC is governed by Royal Charter. The current Charter expires at the end of 2016. As part of a process of building an information base to allow the Government to make informed choices about the way the BBC should operate over the next ten years, the Department for Culture, Media and Sport (DCMS) commissioned Oliver & Ohlbaum Associates Limited (O&O), supported by Oxera Consulting LLP (Oxera), to produce the current report. Its focus is on the scale and scope of the BBC's public service activities, although it does look at some of the BBC's related commercial activities as well.

This report has been prepared for consideration by Ministers alongside other sources of evidence and public opinion, to help Ministers make decisions about the way the BBC should operate over the next Charter period. The Government wishes to evaluate the way in which the BBC's services in television, radio and online affect other market participants. The report contributes to that exercise by looking at how the BBC interacts and competes with other providers across its activities.

About the authors

O&O is a leading advisory group on strategy, policy and commercial issues across the media, entertainment and sport sectors. It has an unrivalled understanding of the competitive dynamics of the UK's TV, radio, news and online sectors, as well as a wealth of international experience from which to draw lessons and comparisons. O&O worked on analysis provided to the initial 2003/2004 Market Impact Assessments into BBC Digital TV and Radio services, and provided support work to the BBC across a number of areas during the 2005/2006 Charter Review process and the Burns Panel inquiry. It has worked on a large number of policy projects since 1995 including as lead advisers to the ITC/Ofcom review of the UK TV content supply market in 2002/03, and to the second Ofcom PSB Review in 2008/09.

Beyond O&O's policy work it has advised all the major UK commercial media players and a large number of global media, entertainment, telecoms and tech groups on strategy, acquisitions and policy issues at a UK, European and global market level.

Oxera is a leading European economics consultancy advising on forensic competition case work, general strategy, public policy and regulatory reviews covering a number of sectors including media, telecoms and technology. It has been involved in a large number of media related competition reviews over the last 20 years.

Both organisations have extensive experience of advising policymakers, public bodies and commercial organisations, and of advising on the dynamic interactions between them.

This report was produced by O&O and Oxera, with O&O playing the role of lead author and primary contractor. During the drafting of this report, O&O undertook overall responsibility for the main body of the report, with the exception of chapter 6 (online market impacts) for which Oxera was responsible. This division was agreed with DCMS in view of O&O's role in previous work for industry stakeholders in connection to the current Green Paper. Additionally, Oxera conducted the regression analysis looking at the impact of BBC One scheduling on ITV1, and provided a review of specific parts of O&O's drafting.

This report contains the conclusions of its authors and is independent of the DCMS.

Project scope

This report describes a study of the market impacts of the BBC across relevant sectors, including both aggregate market impacts and the impact of the BBC on specific services. The analysis covers markets in which the BBC is directly active – television, radio and online – and looks at the BBC's impact: along the supply chain, for example in content creation; in distribution, such as the BBC's impact on the take-up of on-demand platforms and services; and in adjacent market sectors, such as music and audio, and newspapers.

The BBC can clearly be a force for good at the aggregate level – for example, if its presence supports a vibrant production sector or drives up the quality of commercial offerings. But it can simultaneously have a negative impact on individual services (the impact of BBC Radio 2 on commercial music radio services, for example) or schedules (BBC One scheduling its top crime dramas and entertainment titles against ITV1's). Overall therefore, the BBC may have a net positive impact on the commercial sector while simultaneously having a negative impact on individual commercial offerings.

The impact on the commercial market is not the same as crowding out – crowding out tends to suggest a negative commercial impact large enough to prevent new entry, create market exit, or, perhaps, simply to significantly lessen the overall quality and investment by commercial services across the board.

Net market impact is also not the same thing as commercial impact or crowding out. A BBC service can crowd out a rival or potential rival, or simply reduce the overall size of the commercial sector, but the net market impact on consumers can still be positive if the BBC service more than replaces the lost value and choice provided by the displaced commercial service. Finally, net market impact is not the same as net public value. It is possible that a BBC service that crowds out a rival and reduces overall choice and direct value to the consumer may still generate net public value if it brings some substantial benefit to society as a whole.

This report examines these trade-offs and draws conclusions based on fresh econometric analysis, the outputs from previous studies, and new material submitted by interested parties in response to the BBC Charter Review Public Consultation held by the DCMS between July and October 2015. The authors also conducted interviews with interested parties (including the BBC) in December 2015 and January 2016.[6]

What this report is not…

The BBC is a significant public intervention in the UK media and broadcasting landscape, and is therefore subject to regulatory frameworks including competition policy, fair trading and state aid. It is also scrutinised by the BBC Trust on behalf of the licence fee payer to answer public interest questions such as whether BBC services represent value for money and what is the BBC's contribution to distinctiveness in broadcasting. Our review does not address these questions directly and serves only to determine the market impact of the BBC.

Where relevant, we identify and make use of market sizing methodologies from these inquiries. But our observations are limited to the methodologies themselves and any conclusions they might reach about market sizing and market impact. We make no comment on the substantive conclusions of previous competition, fair trading or state aid inquiries that we reference in this report.

Overview of the layout of the rest of the report

Part One of this report provides context to the more detailed market-by-market reviews in Part Two. It starts in Chapter 2 with an overview of the BBC's current activities by market, how this compares to other UK and more global commercial players, what has happened over the last 10 to 20 years (covering two Charter periods), and what challenges lie ahead for the BBC's scope and role. It then sets out in Chapter 3 the market impact framework (and supporting quantitative methodologies) as it has been applied to the BBC in the past through a host of specific inquiries, past Charter review panels, as well as more formal Market Impact Assessments (MIAs) and Competition Impact Assessments (CIAs). The findings of each specific review in the UK's core markets are detailed in the market-by-market material in Part Two.

Part Two looks at the BBC's market impact in more detail. Chapter 4 provides a detailed examination of the BBC's market impacts in the television sector. Chapter 5 looks at radio and Chapter 6 at the BBC's market impact online, focusing on news and information provision and on-demand TV content. The BBC's impacts on adjacent markets and the supply chain are covered where relevant and significant within these three chapters. For example, the online market impacts chapter includes a case study on the international online news market, as well as the core UK service market.

[6] The organisations interviewed are listed at the front of this report.

In each of these chapters we use MIA tools and methodologies to address gaps in the existing literature. These gaps might exist because a particular impact has not been evaluated before, or because the existing literature is outdated. We also use case studies, which add colour to the market impact evaluation by describing a particular facet of the BBC's impact as it applies to competitors. In general, case studies are used to illustrate very specific past or present potential impacts of the BBC on specific commercial services. The extra broader MIA work done has been to update the work done on the BBC's new digital services back in the 2003 to 2007 period (at the back end of the previous Charter period). Alternatively, it provides a broad assessment of the BBC's main services in TV and radio that have the highest market share and reach, but which are not subject to any formal process of market impact review and where Charter review debates tend to be the time for such assessments.

In addition to this chapter-by-chapter approach, we set out below the main findings of the whole report.

Findings and conclusions

Main findings – TV

While the BBC is a smaller part of the UK TV market now than it was 10 years ago, in terms of total sector revenue and total audience share, it is still the most significant single aggregator of audiences in the UK – with 33 per cent of measured viewing versus 22 per cent for its nearest rival, ITV plc. Since 2002, its lead channel, BBC One, has been the UK's most popular channel, and has now opened up a 7 percentage point lead over its nearest rival, ITV1. UKTV – BBC Worldwide's joint venture with Scripps Networks Interactive, Inc. – accounts for an additional 5 per cent of viewing share.

The BBC still accounts for around 25 per cent of all channel revenue once platform revenue shares are excluded from pay TV. It also accounts for 40 per cent of all spend on originated UK content and produces in-house 20 per cent of all UK content (excluding news, where its share is higher).

Most studies over the last 20 years have suggested that the BBC has a positive net market impact at a broad TV sector level. Not only does the BBC add directly to the range, quality and UK focus of TV output in the UK, it may also be a major reason why commercial PSB services have traditionally provided more originated, high quality content than their PSB licences require.

- While BBC activity has been shown to cause audience substitution and advertising revenue substitution, the impact on revenue is relatively small and is often spread across many channels. Past studies suggest that for every percentage gain in commercial audience share due to a smaller BBC, advertising revenue would increase by between £18m and £27m. This is equivalent to between one-half and three-quarters of 1 per cent of total TV advertising revenue in 2014.

- Any reduction in the funding, size and scope of the BBC risks not only a smaller value of total TV revenue, but also a much smaller amount of spending on content, and especially originated content. Commercial PSB players would have fewer incentives to spend more on originated content and might spend less.

- Past trends and survey evidence suggest that this shortfall would not be compensated for by the pay TV sector, since any significant extra willingness to subscribe (which studies suggest would only follow a substantial reduction in BBC activity) might be allocated to either higher profits or more fees to sports rights holders or US film and TV studios, and not to significant investment in originated UK TV content.

However, there are indications that past studies of this positive broad net market impact of the BBC (especially on content investment) and the negative impact of a smaller BBC, while still directionally correct, may be overstated when suggesting that every 1 per cent fall in licence fee income going to TV could shrink total UK originated content investment by 0.4 per cent.

Also, given recent changes in the competitive dynamics of the UK and global pay TV market, a smaller and more narrowly defined BBC PSB remit and funding would probably increase both subscription spending and the pay TV sector's propensity to invest in new originated content to attract the reduced BBC spending.

A smaller BBC could also further change the dynamics of the commercial advertising-funded TV sector, where the positive link between BBC spending and ITV spending may have been weakening in recent years and where the commercial PSB sector might well increase its overall investment in original content in response to a reduction in the size and scope of the BBC, although this would partly depend on how the commercial PSB sector is structured and regulated.

While the total UK originated content sector would still shrink with a large scale reduction in BBC activity, it would probably not do so by as much as recent reports have suggested. The greater risk factor would be a more narrowly focused, less creatively innovative, and less national-culture-specific UK content sector outside a repositioned BBC, which itself would have to become more innovative and more differentiated to compensate for changes in the commercial sector, thus probably losing more share and reach.

While reduced funding for BBC TV would lead to a negative net market impact albeit smaller and in perhaps a different way than some recent studies have suggested, there has been much less work done on the net market impact of a more distinctive and differentiated BBC, and in particular a BBC with a greater degree of distinctiveness in its mainstream services, especially BBC One.

On the specific question of whether BBC One's historic and recent strategy has been crowding out more programming investment on ITV1 and/or not maximising the positive impact of its spend on the TV content market and the creative sector, we find that:

- on a number of measures BBC One is still distinctive from ITV1, with a more PSB-orientated schedule and a greater range of output in peak time;
- BBC One has far more news and current affairs in the day time than ITV1;
- crime drama is a key focus for BBC One and ITV1 but counter-scheduling of crime dramas by BBC One against ITV1 has not increased in recent years;
- there are probably many reasons for reduced real programming investment by ITV1 which have little to do with BBC One;
- there are many legitimate reasons why BBC One leads ITV1 by a large share margin (such as higher audiences for national and local news due to brand strength and more cross media resources; a more cannibalistic portfolio of ITV spin off channels; a general commercial market failure in the provision of a range of day time programming; the role of BBC 2 as a support to BBC One; a better creative track record since 2002; and, the absence of advertising on BBC One)

However, we also find that:

- there is evidence to suggest BBC One schedule has become less innovative and less risk taking over the last 10 to 15 years, with fewer new titles and fewer titles in total. This suggests declining distinctiveness (the suggestion from BBC management is that this is about to reverse, partly in response to the 2014 BBC Trust review of BBC One, but there is no indication that this would be a permanent shift);
- BBC One may also have become less distinctive in recent years in terms of a decline in volumes in certain PSB genres in peak time, including specialist factual, arts, classical music, comedy. Although this may to some extent reflect more investment in fewer hours rather than a reduced overall commitment, it still raises issues about the prominence and reach of some PSB genres in the BBC One schedule;
- the day time schedule beyond news and current affairs is largely composed of high volume, heavily formatted and long running factual entertainment, lifestyle and quiz/panel game output;
- based on econometric analysis undertaken by Oxera, BBC One counter-scheduling of crime drama does reduce ITV1 crime drama audiences, by 6 to 8 per cent when episode clashes occur. However, what is not modelled is the impact on total drama audiences or total ITV1 audiences, and thus these impacts are less clear.

Given the above evidence, we have modelled the likely impact of a more distinctive BBC One schedule going forward in terms of more new titles per year, higher proportions of more challenging genres and, as importantly, more challenging programmes within genre (especially in peak time) and less competitive scheduling. We have found that such an approach (with no change in BBC funding) could:

- increase commercial ad funded channel revenue by £33m to £40m per year, which could rise to £50m to £60m by the end of the next Charter;
- reduce BBC One share by between 2.1 and 2.5 percentage points, but increase the consumer and public value of BBC One output;
- lead to broader benefits for the content supply sector and UK consumers especially if the commercial sector invests some of its increase revenue in new UK content; and,

- have knock on benefits to the UK pay TV sector.

In terms of the impact of the BBC's publicly funded digital services (channels and iPlayer) on rivals, there seems to be a broad consensus that these have helped to drive platform take-up and to open up new markets for both free to air and pay TV operators, as well as preserving the commercial PSB business model. Fears that BBC Three, BBC Four, CBBC and CBeebies might crowd out specific rivals such as Artsworld (now Sky Arts), Sky News,[7] commercial children's channels such as Nickelodeon, Nick Junior, Fox Kids and the Cartoon network, or young skewing thematic channels such as MTV, Sky One and E4, have proven to be unfounded.

Nevertheless, how the BBC best exploits its secondary and archive rights in the UK TV market and its impact on the future TV market and rival services probably does remain relevant in both the linear and non-linear TV markets, across which the BBC has so far taken a different approach. The BBC has kept on-demand access as a publicly funded service 30 days beyond transmission, after which it sells the content to third-party SVoD services, or makes it available to own through the BBC Store. In the linear TV market, it chose to set up its own commercially funded joint venture – UKTV – which earns revenues from channel advertising and pay platform carriage fees.

BBC plans for future service development seem to be based on two equally pessimistic visions for commercial TV in the UK: a consolidated, globally controlled sector; or a weak and unsustainable sector; or a mix of the two. There has been less focus on more optimistic visions for the sector and, most importantly for this report, on the ways in which the BBC could help to increase the prospects for a vibrant commercial sector facing many challenges, rather than crowding out the sector's investment or increasing its risks. In this context, the Open BBC initiative currently appears to be focusing on helping UK arts and cultural organisations to achieve reach and impact, rather than on seeking ways to co-operate with the commercial TV market.

Main findings – radio and audio on-demand

The BBC is the largest player in the UK radio and related audio on-demand market. It has 54 per cent of the measured radio audience and spends 50 per cent more on its radio services than the total income of commercial radio, and probably more than twice as much as commercial radio spends.

The BBC's provision of audio on-demand radio programming content via the Radio iPlayer, the audiovisual version of Radio 1 and the Playlister music service probably make the BBC the only significant UK based rival to global services such as Audible (Amazon), Spotify, Pandora and Vevo.[8]

BBC radio provides much output that the current commercial radio sector has no ability or desire to supply, including live concerts, extended playlists, new acts, and documentary and current affairs across its popular music services; expensive genres of new speech output such as comedy, drama, documentaries, investigative current affairs, and extensive news bulletins at a national, local and regional level on Radio 4, Radio 5 Live, Radio 4 Extra, and BBC Local radio and services for the Nations; and the new works, arts and cultural programming and extensive live concert output on Radio 3.

While some of this output might be available increasingly through on-demand commercial audio services over the next 10 years, much of it is likely to be available only at high unit prices, be focused on global rather than UK audiences, and with each individual programme likely to reach only small numbers of individual listeners in the UK.

But the BBC's popular music service audiences do overlap commercial radio's core 25 to 44 year old audience, while its popular speech radio services do compete for the sports, news and chat audiences with the commercial sector. The BBC's strategy of developing its own linear and on-demand outlets for its archive output probably increases the costs of market entry for any UK commercial rival to an Audible or even Spotify.

[7] Although the presence and strength of BBC News Channel may have made some contribution to the closure of the ITV News channel at the end of 2005.
[8] Other UK commercial services do exist – such as 7 Digital.

In the long term, DAB, and eventual digital switchover, might eventually release spectrum. It may also help commercial radio develop a platform that will give it more share and revenue than a complete long-term switch to web-based internet listening via WiFi and mobile. In the short term, however, the BBC's role in driving take-up of DAB leaves the commercial sector with increased costs and limited incremental revenue from DAB, especially for DAB-only services.

The BBC's current DAB proposition takes some audience share and reach away from commercial DAB services (especially DAB-only commercial services), although not on a proportionate basis. Although the revenue substitution is likely to be very small in total and spread across a number of services, its overall impact on the commercial sector's DAB-only offering needs to be taken into account in the medium term, given the still challenging economics of DAB-only commercial broadcasting until DAB penetration moves towards 90 per cent.

The positioning of the BBC's popular music and news and sport radio stations (Radio 1, Radio 2 and Radio 5 Live) with a significant overlap with the core commercial sector 25 to 44 year old listener age group, and their overall broad reach and high share are most probably leaving the commercial radio sector £22m to £38m a year smaller than it might be were the BBC's music led services more closely focused on the under 25s and over 50s, and Radio 5 Live more focused on hard news and tier 2 and tier 3 sports. This could grow to £28m to £47m a year over the next 10 years as radio advertising faces greater competition from the internet and needs scale even more to defend its revenue base.

The commercial sector would be unlikely to use this extra money to provide documentary and built speech programming for the 25 to 44 year old audience. However, it might provide a broader range of music and tracks across an extended range of DAB services, and invest more in star presenters and some live music in order to persuade Radio 1 and Radio 2 listeners to come to commercial radio rather than move to streaming services or other BBC services.

Much would depend on how listener behaviour changes over the next 10 years. If 25 to 44 year old listeners become more willing to mix and match their radio services with DAB and online access, they might obtain a similar music mix as today while sampling built speech and documentaries from the BBC by dipping into other BBC services and/or accessing on-demand content. In such circumstances consumer and public value across radio might remain the same or even increase but with a larger role for the commercial sector.

More open access to BBC archive might also help improve the range of commercial DAB and on-demand audio services in the UK. Furthermore, co-operation between the BBC and the commercial sector on developments such as the Radioplayer and Playlister could enhance UK commercial radio's chances of transitioning to the fully digital and web dominated age in the longer term.

Main findings – online

The BBC is a key player – by some measures, the main player – in the UK's online space. Although there is a degree of consensus that it has helped drive the sector to its current world-leading position (particularly in the case of online video), the BBC's position as an industry leader also means that it has a large footprint which is bound to have an effect on the commercial sector.

The analysis in this report focuses on one specific aspect of this effect: the extent to which consumers may be using BBC online services *at the expense of* commercial services, and how commercial revenues are likely to be affected as a result. We note that is only one of several elements that should be weighed when assessing the BBC's overall impact on the market, especially in the context of conducting public value tests. Other criteria should include the BBC's role in market creation and the value that accrues to consumers and citizens from the BBC's output. However, the analysis in this report has not directly considered these issues.

For the specific case of advertising in online news, the analysis presents a "static" comparison between the status quo and hypothetical "output reduction" scenarios, in which the BBC's news output is more limited than today, estimating the likely revenue uplift that could accrue to UK commercial online publishers under each scenario. The use of these counterfactual scenarios does not imply that any of them are either realistic or desirable; it is simply a methodological device that allows us to consider the

BBC's market footprint in a definite way. In the context of these scenarios, our analysis shows that the BBC's impact on commercial revenues is likely to depend on a variety of factors, including: (1) the type and scope of the output reduction in question, and how many website page views ("traffic") are affected by this; (2) how much of the affected traffic transfers to the commercial sector; and (3) the ability of the commercial sector to monetise this additional traffic.

The analysis suggests that a reduction in the BBC's output affecting 10 per cent of its current online traffic would be likely to lead to UK commercial revenues increasing by between 0.2 per cent and 1.9 per cent (or between £0.8m and £7.3m per annum, based on existing estimates for UK publishers' 2013 online revenues). Under the extreme assumption of a closure of the BBC's news website, we estimate an uplift in commercial revenues of between 12 per cent and 23 per cent (or between £46m and £89m per annum). However, as our methodology is designed for small changes, it is likely to overestimate the impact under such a radical change. We also stress that our estimates are based on a "static" analysis that might be challenged if commercial providers were to evolve their offering in the future.

We have also considered stakeholders' concerns about a perceived expansion in the editorial scope of the BBC's online news service into "soft news" (or news items of purely entertainment value). We have considered stakeholders' general objections to the BBC producing such content, particularly in connection to news consumption via social media, whereby audiences may dip in and out of news websites to read articles in isolation. In those contexts, we have found that audiences are unlikely to consume additional content (in particular, public service content), suggesting that little or no public value may be delivered. On a related note, some stakeholders have suggested that the BBC's arrangements with social media providers (particularly in connection to the syndication of content) may have an adverse effect on commercial publishers' ability to negotiate commercial terms with such providers or other intermediaries. While we have not examined this issue in our report, we consider that it may be important in future as mediated consumption of news continues to grow and becomes an increasingly large source of traffic for commercial publishers.

Nonetheless, at least on the specific point of consumption of soft news on the BBC's website (including consumption mediated by links in social media), the evidence suggests that the *scale* of this issue is relatively small. Depending on questions of judgement on the exact definition of soft news, as well as on assumptions about the prevalence of this type of content, the proportion of affected traffic can vary significantly. For example, the sections of the BBC News website where soft news might be more commonly expected to reside (the Magazine, Entertainment & Arts and Newsbeat sections) account for only around 5 per cent of all BBC news traffic.[9] Our analysis suggests that even the outright removal of these sections would have an impact of only between 0.4 per cent and 0.9 per cent on commercial revenues, or between £1.3m and £3.4m per annum.

If the definition of soft news were extended to capture some of the content residing in other sections of the BBC News website, the proportion of news traffic affected if such content were removed could potentially rise to around 13 per cent.[10] This could have an impact of between 0.8 per cent and 2.1 per cent on commercial revenues, or between £3.2m and £8.2m per annum. The impact could be higher if the definition of soft news were extended further to include some non-news BBC online content. In any case, we stress that these are indicative estimates as they involve indicative assumptions about the proportion of traffic that could be categorised as soft news.

With respect to international advertising in online news, our analysis suggests that the BBC's impact on UK commercial publishers may be far smaller than the case of UK advertising in online news. However, this conclusion relies on assumptions about the market in which the BBC's international news website operates, particularly in relation to who its main competitors are in that market. If, as we have assumed, the BBC primarily competes against the world's main English language global news players (e.g. CNN, MSNBC, Yahoo, US and UK newspapers), the impact on UK publishers is likely to be small. However, if international audiences see other UK services (particularly *The Guardian* and *Mail Online*) as close substitutes for the BBC, the impact might be more comparable to what we find in the case of UK

---

[9] These sections currently account for around 7 per cent of the page views measured within the BBC's news website. However, for the purposes of our analysis, we have also considered some of the BBC online traffic residing outside the BBC news website as part of the BBC's provision of online news, in order to facilitate comparison with the commercial sector. On this wider basis, the proportion of page views corresponding to these sections amounts to 5 per cent. For details see section 6.7.6.

[10] After re-scaling; see previous footnote.

audiences. We have not had access to data that might allow us to ascertain which of these scenarios applies.

We have also considered the BBC's likely impact on publishers' ability to raise revenues through paywalls. Our analysis suggests that a degree of demand substitution may be present, so that, in the absence of the BBC, paywall revenues would be likely to be higher than they are today. However, the evidence here is too limited to allow for quantitative estimations. On the other hand, if the BBC were to simply offer a (marginally) reduced choice of news content, our analysis suggests that this would have virtually no impact on paywall revenues.

Finally, in the case of online video, our analysis suggests that the iPlayer is likely to have played a pivotal role in establishing the UK VoD industry as a European leader. Nonetheless, our analysis also suggests that, today, consumers' use of commercial players' VoD services might be higher if the iPlayer were not in the market, possibly by as much as around 30 per cent. Estimating the degree to which this would translate into additional revenues has not formed part of this report.

None of the above appears particularly surprising given the scale of the audiences of the BBC's online operations. We have not found clear evidence that the effect we have considered – i.e. demand substitution – has prevented market entry or forced market exit, at least not in the markets we have examined more closely (national online news and online video). However, we do review in this report cases in which the BBC Trust has intervened to prevent such an effect. In any case, as noted, demand substitution is only one of several elements that should be weighed when assessing the BBC's overall impact on the market. Other criteria should include the BBC's role in market creation and the impact on consumers and citizens. These are complex questions, and are outside the scope of this report.

Considering the future, we make two suggestions. First, we consider that there is scope for the BBC to explore a more radical approach to aggregating other news publishers' content, relying on links to other publishers for content that audiences might not necessarily associate with the BBC. This would address the concerns raised about soft news – particularly in connection to news consumption mediated by social media – while the BBC would continue providing a "balanced news diet" to its regular visitors.

Second, the BBC's current focus on reach as a measure of performance, which may be adequate in broadcast media, is blind to key aspects of audience behaviour that influence public value and commercial impact. There is potentially a large difference in "public value" delivered in the case of an online visitor whose only contact with the BBC over a month is to read a few soft news articles after following links in social media, and another who regularly skims the news front page for the day's news. Nevertheless, today both cases count equally towards the BBC's reach. In this regard, we consider there is scope for more nuanced measures of reach to be developed – for example, by tracking the number of times when audiences were offered different types of content, as well as the times when audiences "clicked" on the relevant links. Such "conversion" metrics are widely used in the commercial online world.

PART ONE – SCOPE, FRAMEWORK AND PAST FINDINGS

1 BBC activities and markets – an overview

1.1 An overview of activities in 2014/2015

1.1.1 A provider of publicly funded services in the UK TV, radio and online markets

The BBC's core activity is the provision of publicly funded TV, radio and online services to the UK consumer/household that are free at the point of consumption. This is funded primarily by £3.74bn of licence fee income raised from a TV household charge of £145.50 a year.

The BBC currently spends £2.37bn per year (including allocated overheads) on services and content for the UK TV market, £653m on radio services and content, and about £200m on online and interactive activities.[11] For the £2.37bn, the BBC provides eight UK wide publicly funded TV channels (BBC One, BBC Two, BBC Three,[12] BBC Four, BBC News Channel, BBC Parliament, CBBC and CBeebies); local opt out news, current affairs and sports output across 15 English regions; a broader range of opt out programming for each of the 3 nations of Scotland, Wales and Northern Ireland; and two local language channels in Wales (S4C) and Scotland (BBC Alba).

For the £653m spent on UK radio services, the BBC provides: 11 UK-wide radio networks – 5 in analogue and digital versions (Radio 1, Radio 2, Radio 3, Radio 4 and Radio 5 Live) and five digital-only channels (1Xtra, Radio 4 Extra, Radio 5 Live Sports Extra, BBC 6 Music and the Asian Network). It also provides 40 English local radio stations, two services for Wales (BBC Wales and BBC Cymru), BBC Radio Scotland, plus 3 local opt out stations in Scotland (Shetland, Orkney and nan Gàidheal), and BBC Radio Ulster and BBC Radio Foyle in Northern Ireland. In addition, the BBC spent £254m on BBC World Service.

For the UK online consumer, the BBC provides: a news focused text led content portal (with added pictures, audio and video clips), with additional sports, travel, weather, lifestyle, cultural and learning material – www.bbc.co.uk; a TV catch-up on-demand service – the iPlayer; an audio programming on-demand catch-up service – the radio iPlayer; and a personalised music playlist on-demand service – the Playlister. In addition, the BBC's online service includes simulcasts of all its TV and radio channels, and a video rich version of Radio 1. Alongside its online service, the BBC also provides red button interactive services for digital TV (DTV) households, including text information and extra video material and items.

1.1.2 Adjacent and supply chain UK market activities – some run commercially

For its UK-wide and regional/nations' radio and online services, the BBC both provides its own activities along the supply chain and engages with third-party providers. In terms of third parties, the BBC makes its TV channels available to all major DTV platforms – cable, digital terrestrial television (DTT), IPTV, and digital satellite (DSAT), and its on-demand TV content to all connected TV platforms (either connected TV sets or specific set top boxes such as YouView, Freeview Play, TiVo, Sky and Freesat Connect). For its radio services, the BBC transmits on both the FM and AM analogue terrestrial systems and the DAB terrestrial system owned and operated by Arqiva (having sold off BBC Transmission in the mid-1990s).

The BBC is also the second largest commissioner of external TV originations in the UK, spending £409m in 2014 on commissions from external TV producers[13] – both independents and those linked to other broadcasting groups such as ITV Studios (ITV plc), Fremantlemedia (RTL Group) and Shine Endemol (21st Century Fox). The BBC now also commissions about 10 per cent of its radio programming from external audio producers and a similar proportion of its originated online content.

---

[11] (BBC 2015b). Ofcom (2015d) has a higher estimated BBC spend on radio (£725m in 2014) based on its own analysis of BBC financial statements.
[12] BBC Three became an online-only service in February 2016.
[13] Ofcom (2015a), Channel 4 (2015a). Figure 56 of the Ofcom *PSB Annual Report Output and Spend Annex* displays BBC spend on first run commissions across BBC One, BBC Two and BBC portfolio which together sum to £409m; Channel 4's spend is stated as £377m. Channel 4's 2014 Annual Report states spend on originated content of £422m – £382m on Channel 4 and £40m on its spin-off channels – together higher than the BBC.

Internal activities include the BBC's own TV production division and the BBC News division. Most of its production division has recently been rebadged as BBC Studios and is in the process of becoming a commercial subsidiary providing drama, entertainment and factual programming (operating mainly out of London, Salford, Cardiff and Glasgow). Its news division covers both the BBC's extensive newsgathering network across the UK and the globe, and the production of all the BBC News output across TV, Radio and Online, in the UK and overseas.

The BBC also part-owns specific TV platforms – Freeview, Freesat and YouView – as well as providing/co-ordinating much of the platform and user interface that underpins the iPlayer and the Playlister. The BBC provides some of its own production facilities (which are run as a commercial subsidiary) – TV and radio studios, post production capacity, set design and costume, but also makes extensive use of the outside market across the country.

Ancillary and adjacent commercial activities in the UK operated by the BBC or its wholly owned subsidiary, BBC Worldwide, include programme sales and licensing to third-party commercial channels. Most deals are done through UKTV, the leading supplier of thematic channels (e.g. Dave, UK Gold, Yesterday, Alibi, Watch) to the UK multichannel platform market. UKTV is 50 per cent owned by BBC Worldwide and the other 50 per cent is owned by Scripps Interactive Networks Inc. Other ventures include UK Entertainment, the leading DVD publisher/wholesaler in the UK, and the recently launched BBC Store, a download to own service in the UK. The BBC also distributes its secondary on-demand rights to its in-house producer and some external producer content through third parties such as Apple Store, Amazon and Amazon Prime, and Netflix.

The BBC used to own and operate UK focused commercial magazine and book publishing operations, but in 2011 the magazine operation was sold to private equity investors (which still pay an annual royalty for the use of BBC titles such as Top Gear, Radio Times and Good Food). BBC Books, which publishes a range of books connected to BBC TV and radio programmes, is a joint venture between BBC Worldwide and Penguin Random House. BBC-branded educational products and services are published under a partnership between BBC Worldwide and Pearson Education.

1.1.3 An international provider of content and services

Outside the UK the BBC's main publicly funded activity is World Service radio, which since 2012 has been funded from the licence fee – both the English language and vernacular language services – with the newsgathering operation that underpins it now fully integrated with the UK focused operations.[14]

Commercial operations include: overseas programme sales and licensing (including co-production finance); overseas TV production (e.g. Dancing with Stars/Strictly Come Dancing, Top Gear, Angels and Demons); international entertainment and factual TV channels (with BBC First, BBC Earth and BBC Brit gradually replacing BBC Entertainment and BBC Knowledge across the globe, plus specific national market channels in markets with scale demand for BBC output – BBC America and UKTV Australia); an international news TV channel – BBC World, and the international version of the BBC website – www.bbc.com. BBC World and the international website are both funded through advertising, while the global entertainment and factual channels are funded from a combination of platform carriage fees and advertising. The BBC's channel activities in the US are undertaken as part of a JV with AMC Inc.

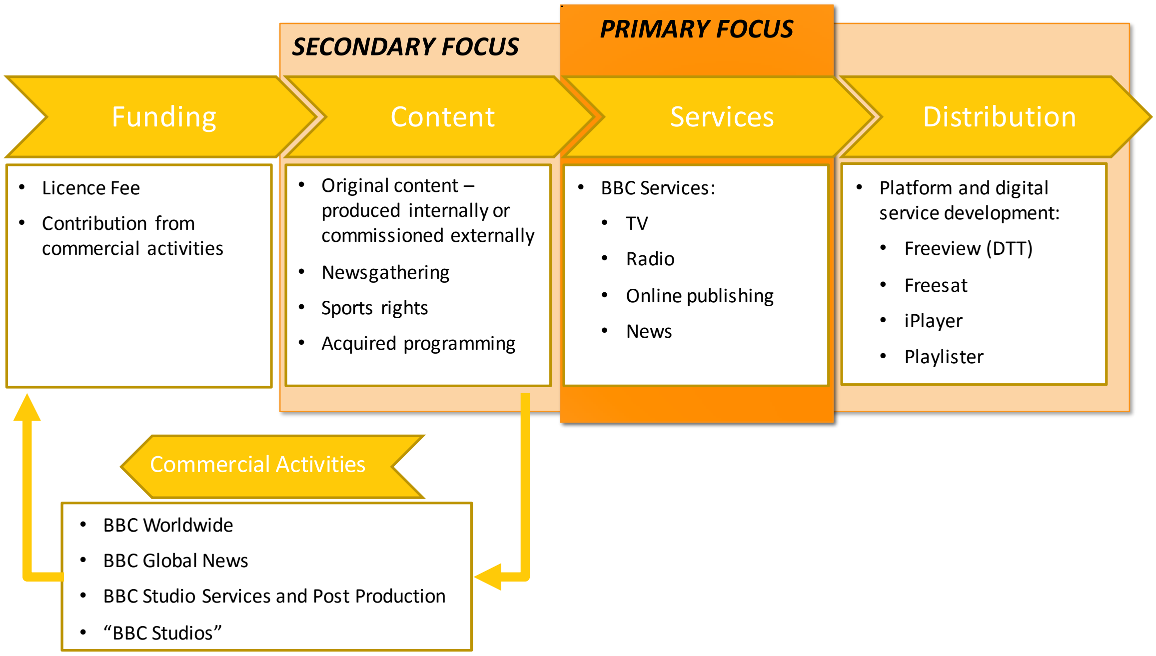
BBC Worldwide also carries out merchandising and live event activities, although largely operating with third-party companies. Its total turnover in 2014/2015 was £1.0bn and it returned £226.5m to the BBC in programme investment, payments for shared overheads, and costs and dividends.[15] The cross-charging of costs to BBC Worldwide from the main BBC activities and the investment process into BBC programming are subject to BBC Fair Trading rules enforced by the BBC Trust with reference to its Competitive Impact Assessment duties.

---

[14] The BBC World Service used to be funded by the Foreign Office, which still sets World Service investment priorities and provides top up funding, such as for the recent expansion in the North Korean service. The BBC also now runs BBC Monitoring, which monitors overseas broadcaster output, but this is largely paid for by the sponsoring Government departments and intelligence services.

[15] www.bbcworldwide.com/annual-review/annual-review-2015.aspx/

Figure 1: Map of BBC activities across service markets, supply chain and adjacent markets



Source: BBC Annual Report 2014/15, O&O analysis

DTT = Digital Terrestrial Television

1.2 BBC overall scale and impact – a matter of perspective

The BBC is a sizeable and deliberate intervention in the UK’s audiovisual and related consumer media services markets. It is based on a widespread belief and long-standing (60 years plus) belief among UK media policymakers and Governments led by different parties that, left to themselves, commercial media markets will provide a narrower range, a lower quality, less UK focused and a smaller volume of output than UK consumers and/or citizens want and/or need.

The introduction and growth of multichannel TV in the UK since 1988, led by pay TV, and the arrival of professional quality on-demand web delivered video, audio and journalistic content in the early 21st century, has vastly expanded the range and volume of what the commercial market can deliver. However, these developments have also helped fragment and globalise the UK’s audiovisual sector, which may continue to threaten investment in high quality UK focused and culturally based content. (Some would go further and maintain that it exacerbates this threat.)

Furthermore, even where the commercial pay sector does provide increased levels of high quality UK focused output, it might only be able to do so at a relatively high consumer price, thus excluding many with a high demand and/or need for such content, and undermining the social benefits of a universally shared media experience and culture for the UK.

From one perspective, the BBC remains a very large and influential player in the UK markets it operates within, with perhaps negative consequences for the size and strength of the UK’s commercial operators and activities. From another perspective, the BBC is just about the only UK organisation with the scale and brand resonance to counter the potentially negative consequences of the forces of globalisation and convergence in the UK – in terms of both its own activities and how it influences the activities of rival commercial providers. Furthermore, the BBC is the only UK media brand with any hope of gaining traction and influence overseas, and fighting the globalisation battle for “UK plc” abroad.

Which overall perspective is taken often colours any view of the specific market impact of the BBC and its individual services on the commercial market and its main providers. Set out below is (1) a summary of the current strong performance of the BBC in the UK market; (2) an examination of its decreasing relative size and performance in a globalising and converging media market; (3) an overview of three main perspectives on the BBC's scale and impact; and (4) a potential new consensus (emerging from several submissions to the Green Paper consultation) that can possibly reconcile all three perspectives.

1.2.1 A sizeable and significant presence in its UK core markets

The individual market chapters later in this report have more detail on the BBC's historic and current performance. Here we provide a brief overview of the BBC's services across several markets from two perspectives: as still a sizeable and significant player in the UK market; and as one diminishing in size and scale as media markets become more global and converge with connectivity and device markets.

1.2.1.1 A large expansion in services and spending between 1998 and 2006

BBC income and spending grew rapidly in the 1970s and the early 1980s due to the switch to colour TV licences (which were much higher priced than the pre-existing black and white licence). This helped fund the full development of BBC Two as a new network, extra investment in BBC One, and the roll out of local radio across England.

As the switch to colour came to an end, BBC income growth slowed significantly from the late 1980s to the end of the 1990s, with licence fee rises tied to the retail prices index (and sometimes held below RPI in years of rapid inflation, such as 1991). Over this period the only new publicly funded activities from the BBC were Radio 5 in 1990 (becoming Radio 5 Live in 1994) using Radio 2's old AM frequency (which otherwise would have been reallocated to the commercial sector, as Radio 1 and Radio 3's AM frequencies had been) and the BBC News channel. This period of relatively low growth and development coincided with the launch and growth of pay TV in the UK through DSAT and cable, and a TV advertising revenue boom that even allowed for the launch of a third terrestrial analogue network – Channel 5 – in 1997.

However, following a licence review in 1999 (the Davies Panel review[16]), the BBC licence fee was uplifted significantly from 2000 to 2005 in order to pay for (1) a full portfolio of new publicly funded DTV and DAB stations, developed in part to help push the switch from analogue TV and radio to DTT and DAB which would release valuable spectrum; (2) a larger internet service from the BBC; and (3) extra funding for the BBC's existing TV and radio services (which were now declining relative to the rapidly growing advertising funded and pay TV sectors).

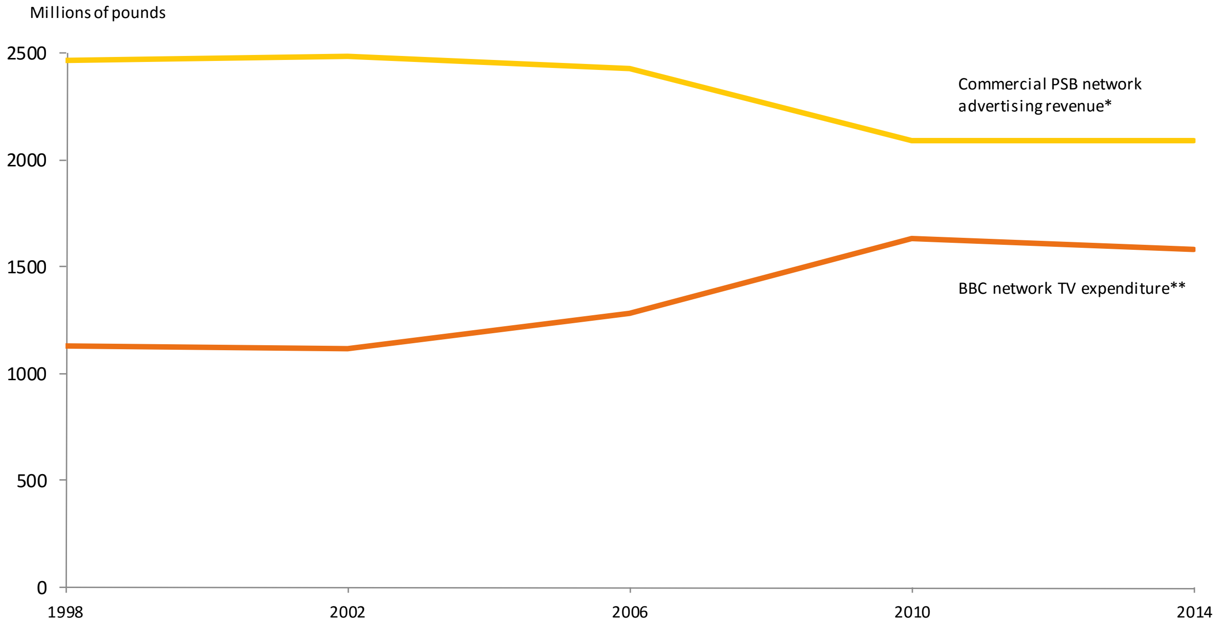
The impact of this expansion in the size of the publicly funded BBC relative to its traditional TV rivals was then exacerbated by two factors: (1) a recession in TV advertising from 2001 to 2003, followed by years of slower TV advertising growth (due in part to growing competition from the internet); (2) the successful launch and growth of UKTV as a major supplier of thematic TV channels to the UK's pay TV platforms using BBC archive material. BBC licence income grew from £2bn in 1998 to £3.1bn in 2006, an increase of 5.4 per cent a year, much higher than TV advertising growth over the period, although still lower than pay TV growth.

Although TV advertising growth since 2006 has been higher on average than licence fee income growth (despite the 2008 to 2010 advertising recession), the traditional PSB commercial operators – ITV, Channel 4 and Channel 5 – have had to compete more with thematic TV services. Therefore, the combined income growth for commercial PSB channel operators since 2006 has not significantly clawed back the changes in relative income in the BBC's favour between 2000 and 2006.

For commercial radio the financial gap is even greater, as its revenue has remained largely stagnant since 2002. This has been due in some measure to its weakness in the face of internet competition relative to TV. However, commercial radio has dealt with this issue in part by restructuring its operations, with the permission of Ofcom (and facilitated by reforms in the Digital Economy Act of 2010), to create a series of quasi-national brands and thereby increase its cost effectiveness.

[16] DCMS (1999).

Figure 2: BBC network TV expenditure versus PSB commercial network income, 1998 to 2014



*Commercial PSB network advertising revenue *is ITV1, Channel 4 and Channel 5. Starting from 2010 ITV includes: ITV plc, STV, UTV, Channel Television; starting from 2010 Channel 4 includes S4C. Spin-off channels are excluded.*
*** BBC network TV expenditure shows expenditure on BBC One and BBC Two including a contribution to news gathering. Spin-off channels are excluded.*
Source: Ofcom communications report; BBC Annual Reports; ITC; O&O analysis

1.2.1.2 The highest measured audience share provider in the UK TV and radio markets

The BBC portfolio currently accounts for 33 per cent of measured TV viewing, 11 percentage points higher than the portfolio of its nearest rival, ITV, at 22 per cent. BBC One became the UK's most popular channel, passing ITV1 in 2002, and has now opened up a 7 percentage point gap with ITV: with a 22 per cent share versus ITV1's 15 per cent share. While much of this lead is in the less commercially attractive day time segment, BBC One does have a 2 percentage point lead in the share of peak time viewing.

BBC radio now accounts for 54 per cent of the measured radio audience, higher than in 2000, with four out of the top five national radio networks and/or brands in terms of UK-wide audience share.

1.2.1.3 The largest player in the UK free to air and non-premium TV channel markets

Measured TV and radio audiences are now in decline, partly because the measurement systems have not been able to capture consumption on new devices, with services such as YouTube, Netflix and Spotify beginning to eat into traditional TV and radio consumption time (especially among the under 25s). However, the BBC is still doing better than its main rivals in its core market and (as covered below) is probably doing better than its traditional rivals in the unmeasured TV and audio consumption market.

BBC TV services now account for 45 per cent of all viewing to PSB channels and their related portfolios of spin off channels, about the same share as in 1995, and over 40 per cent of all viewing to all free TV channels (which include services such as Dave, Quest, and Sky News, as well as the ITV, Channel 4 and Channel 5 services).

The BBC's part-owned UKTV thematic channel subsidiary also accounts for about 5 per cent of all viewing. This is the largest share of any thematic channel group outside Sky's wholly owned channel portfolio, and is ahead of Discovery, Viacom, NBC Universal and Disney in the UK market.

1.2.1.4 The largest commissioner[17] of originated UK content in TV, radio and online

The BBC still accounts for 45 per cent (including news) of all spending on originated UK TV commissions, approximately 70 per cent of all radio programming spending, and over 90 per cent of all speech radio spending in the UK per year. Its spending on online news and information has been estimated to almost match the total online content spending of all the UK national and local newspaper groups combined.[18]

1.2.1.5 The most visited UK focused content provider in the UK online market

While major search and social media web players such as Google and Facebook generate more weekly users and hits than the BBC in the UK, the BBC's online portal – bbc.co.uk – is still the most used online content portal in the UK. BBC online news reaches 59 per cent of all adults using the internet for news. This compares with just 18 per cent for the second place Google News and 17 per cent for the third place Sky News websites and apps. Across major European markets and the USA, the BBC news service is the only broadcaster related news site that is ranked as the top news destination.

In terms of on-demand and catch-up TV, the BBC iPlayer service gets twice as many views as its nearest free TV related rivals – the ITV Hub and All4. It also still reaches more people every week than Sky's combined on-demand offerings through its set top box on-demand services, Sky Go and Now TV services, and more than Google's YouTube service (which is still largely focused on short form content).

1.2.1.6 A significant provider in many supply chain and adjacent activities

The BBC is a significant user and supplier to other participants along the supply chain, including content producers and platform owners. It is also itself a leading provider in the supply chain. BBC in-house production supplies about 20 per cent of all originated non-news TV content in the UK and about two-thirds of all new radio content. Moreover, it probably has the largest global newsgathering operation in the world.[19] It part-owns three distribution platforms – Freeview, Freesat and YouView – and operates and co-ordinates its own user interface and content distribution system underlying its iPlayer, Playlister and BBC Store services.

Across adjacent areas, the BBC (through BBC Worldwide and additional archive activities) is the largest distributor of secondary and ancillary TV and audio rights operating from the UK. It is also probably the largest in Europe and the largest outside the US studio system (which operates across TV and film content). Its sales and distribution activity is almost three times the size of ITV plc's, for instance. The BBC also has a significant global TV production presence in the USA, France, India and Australia.

However, the BBC has withdrawn from a number of supply chain activities over the last 20 years, selling BBC Transmission (across TV and radio) in 1997 to Crown Castle (now owned by Arqiva), and BBC Broadcast[20] (which became Red Bee Media) in 2005 to Macquarie Capital (which later sold it on to Ericsson). In 2014 the BBC reduced its financial commitment in YouView, a jointly owned IP enabled TV platform. In 2011 BBC Worldwide sold its commercial magazines business to Exponent Private Equity.

Finally, the BBC still occupies mostly freehold properties in its major activity centres in central London, Cardiff, Salford and Glasgow, having gone through a period of property rationalisation from 2000 to 2013. During this time, it withdrew from several sites and entered into a series of leasehold deals to manage the transition to fewer owned sites.[21]

---

[17] The term "commissioner" refers to the purchase of originated material for first UK transmissions from both independent/external producers and BBC in-house production divisions.
[18] Mediatique (2014a).
[19] Studies by O&O for the BBC and other news organisations suggest the BBC has the largest newsgathering resource across domestic and international news services among B2C news broadcasting organisation such as CNN, Fox News, the US networks, and European and Asian public service broadcasters such as ZDF/ARD with Deutsche Well, France Television/France News 24, and NHK. However, in specific areas, such as local news, local newspaper groups probably still employ more newsgathering resource in total than the BBC, and in areas, such as business news, organisations such as the Wall Street Journal, Bloomberg and CNBC deploy more resources.
[20] BBC Broadcast provided playout, storage and presentation services for BBC TV channels.
[21] National Audit Office (2014).

1.2.2 A smaller player in the converging and globalising Digital Age

While the BBC is still a sizeable – and by many measures, the largest player in much of its core UK market – at a global or converged UK content, services and communications platform market level, it has been losing ground to a number of large global and regional players.

A squeeze from 2007, a double squeeze since 2012

Following the period of expansion in the second half of its ten-year Charter from 1996/1997 to 2006/2007, the BBC licence fee was held constant in nominal terms from 2007 to 2012. The BBC still saw some income growth through TV household growth in the UK (UK households have grown by about 12 per cent since 2001) and increased investment and contribution from BBC Worldwide. (Indirectly it has also seen income growth from independent producers which have owned secondary rights since 2003 and which therefore can keep commission price inflation low through co-funding). However, the BBC's overall level of income growth fell to about 1 to 2 per cent a year in nominal terms, a decline in real terms when general inflation is taken into account.

In addition, part of the licence fee was earmarked to manage the costs of the final stages of TV digital switchover from 2008 to 2012 for all terrestrial TV services, with analogue transmission being switched off region by region across the country. The public information campaign and helpline services were to be entirely funded by the BBC. This meant flat nominal net income for BBC services and related activities, and a 2 to 3 per cent annual decline in real terms adjusting for inflation. However, content spending growth was maintained slightly above this level through to 2012 as the BBC also switched spending away from building developments and overheads to services and content.

Since 2012 (following the 2010 licence fee settlement with the Coalition Government), the BBC licence fee has remained fixed in nominal terms up to the end of the current Charter period in 2016/2017. As part of this settlement, the BBC was also given three added responsibilities: the operation and funding of S4C (previously funded mostly by DCMS); the BBC World Service Radio and online output (previously funded by the Foreign Office); and the part of the costs of funding universal broadband roll out across the UK to the final 5 per cent of the population not likely to be covered by the current infrastructure (which effectively replaced the digital switchover obligation).

This has effectively put a double squeeze on the BBC[22]: low nominal income growth combined with extra obligations. The net effect of this squeeze is mitigated slightly by: (1) cost synergies between BBC World Service and BBC News; (2) operational synergies between S4C and BBC Wales; (3) increased efficiency across all its operations in part due to new technology adoption; and (4) increasing contributions from BBC Worldwide and indirectly from independent producers accepting lower margins on commissions in return for retaining their increasingly valuable secondary, ancillary and format rights. Nevertheless, there has undoubtedly been a double squeeze on BBC service spending since 2012.

A reducing share of total TV revenue in the UK

The squeeze on the BBC since 2007 has coincided with continued growth of pay TV, both the number of subscribers and the average revenue per subscriber. Pay TV penetration has grown from just under 44 per cent of UK households in 2005 to just under 56 per cent in 2015. TV advertising revenue has been through a less buoyant period, experiencing a significant downturn in the 2008 to 2010 post financial crisis recession, but picking up well over the last 3 years. While total TV advertising is still lower in real terms in 2015 than 1999, with two major advertising recessions and competition from the internet each playing their part over the period, growth since 2010 has been healthy. TV has been holding its share of display advertising since 2010 (with press still losing out to the internet). Of equal importance, the switch of marketing spending from all display advertising to search based internet advertising has slowed rapidly since 2010.

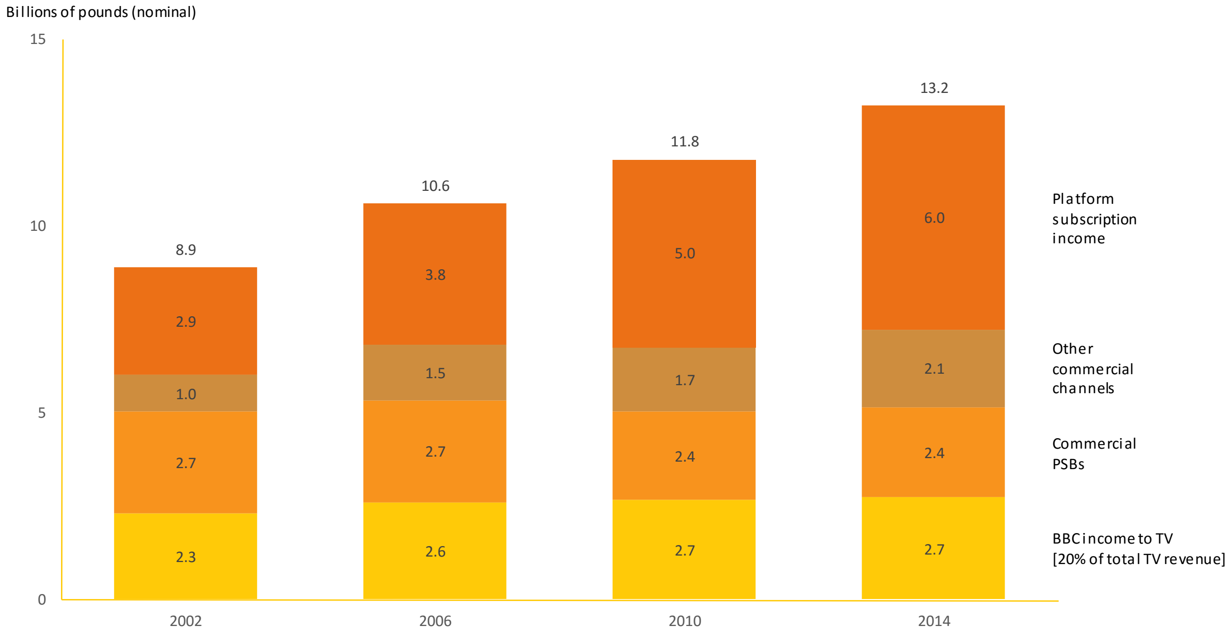
The growth in pay TV over the last 20 years and a rebound in TV advertising since 2010 have combined to leave licence fee income (that allocated to TV services) with a smaller proportion of total TV sector funding – declining from about 25 per cent in 2000, to 20 per cent in 2015, with a further significant decline likely over the next 5 to 10 years.

---

[22] Although this squeeze has been largely in line with the overall squeeze in the UK in public spending since 2010.

However, a significant part of pay TV income, the largest factor in the relative decline of licence fee funding, still goes to paying for the delivery platform infrastructure, subscriber acquisition costs and subscription management systems. About 40 per cent of all pay TV income goes on these operations across cable, DSAT and IPTV – a much larger proportion than the transmission and delivery costs of free TV services. This means that the BBC's share of TV channel and on-demand service income – which determines the money available for content and programming – is probably still at least 25 per cent.

Figure 3: TV revenue trends, 2002 to 2014



Source: Ofcom Communications Report 2015
Advertising revenue is net of agency commission

Small compared with leading convergence platforms

Perhaps more important for the BBC's future across all its TV, radio and online operations is the increasing convergence of the broadcasting and online content sectors with the larger and more global communications, connectivity and devices sectors.

TV and online content services are now a key component in the triple play (3P) (TV, broadband and telephony) and quad play (4P) (TV, broadband, telephony and mobile) battle between Sky, BT, Virgin Media, TalkTalk, Vodafone, 3 and O2. Content investment decisions – especially premium content sports, TV series and movies – are now determined by the strategies and pay back calculations of a £56bn UK communications sector, not just a £13bn TV sector.[23]

The 3P and 4P platform battles are combining with the growth in over the top (OTT) content services such as Netflix, Amazon Prime, Apple and Spotify to create a very competitive environment for premium content and, to a lesser extent, other more basic TV content that can help sell a package of products and services. These OTT providers are themselves threatening the national platform providers.

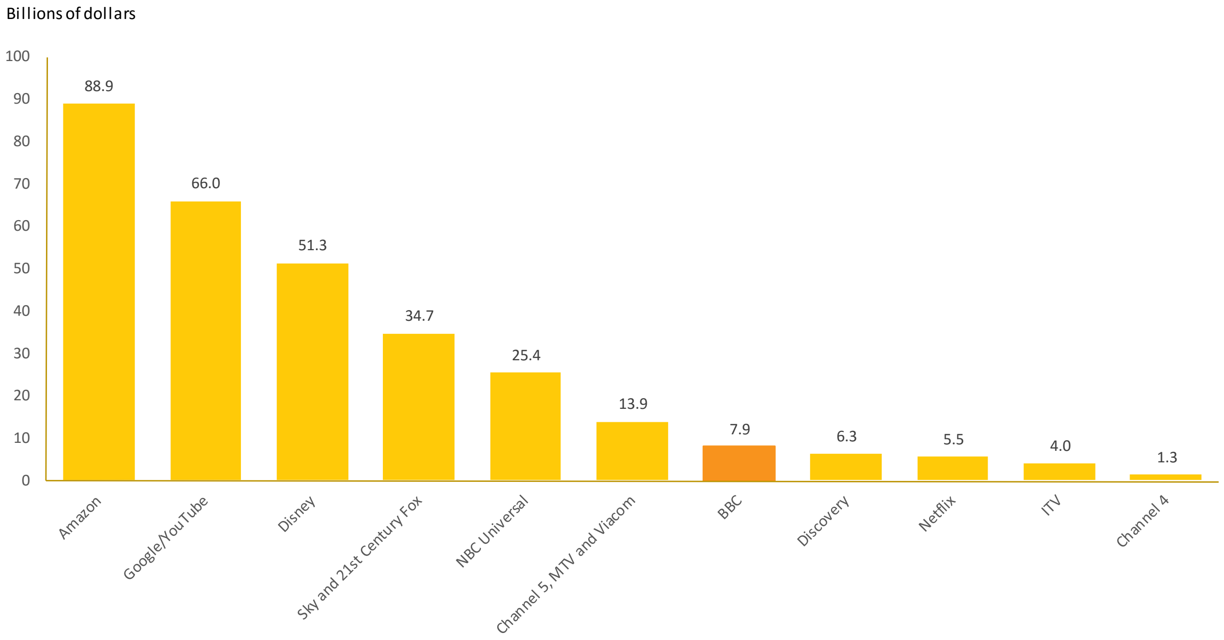
While this might increase the commercial secondary and ancillary value of the BBC's content, and the contribution expected from BBC Worldwide and external producers, it will also provide a major battle for viewers, listeners and on-demand traffic for the BBC. It may well also push up the costs and/or audience expectations of viewers in areas such as top sports events, TV drama series, landmark documentaries. As importantly, it may put significant pressure on commercial free to air TV and its remaining PSB obligations.

[23] Ofcom (2015d).

Small compared with global content/service providers and web aggregators
The UK platform and OTT battles are each part of a global battle for consumer time and money, with many of the OTT players such as Netflix and Amazon Prime building global businesses, and many of the platform operators such as Sky, Virgin Media, Vodafone being part of international platform groups.

Media content creation and business to consumer service provision is operating in much more of a global sector, led primarily by US owned media, web and platform groups. Europe does have some sizeable and international commercial groups across media and telecoms, including Vivendi, Bertelsmann, Axel Springer, Vodafone, Telefonica, Lagardère. However, in terms of delivering a sizeable global web aggregator or platform player, Europe is way behind. Its main strengths are in second tier e-commerce and technology plays. The UK has its own undoubted strengths in terms of content creation across TV, audio, news and information, and ecommerce/technology activities. But its core commercial media sector – free to air TV groups, radio groups, national telecoms companies, national and local newspaper groups – are small by global standards, with Sky Europe being the only independent UK media company of scale, and even Sky has 21st Century Fox as a significant shareholder.

Figure 4: Annual sales of large global web, platform and media organisations, 2014



Source: BT response to DCMS consultation on BBC Charter Review

1.3 Three market scenarios going forward; three perspectives on the BBC

Three market scenarios for the UK commercial sector
The challenge to the UK's successful but relatively small scale commercial media sector comes from four main trends: (1) convergence between media and 3P/4P platform delivery; (2) fragmentation of demand and revenues (accompanied by probable polarisation between the leading players and the rest); (3) globalisation of delivery, services and content provision; and (4) a likely consolidation of ownership (driven by a response to the first three factors).[24]

No one knows the exact implications for the UK commercial media sector, but three main scenarios tend to present themselves in the relevant literature and commentary by industry leaders and leading commentators. First, an "invasion scenario", where most of the UK media sector ends up being owned by global media groups, largely from the USA, with their strategies and priorities set at a global level.

[24] These themes are reflected in the BBC's own strategy documents and Ofcom's annual Communications Market Review (UK and International), as well as Ofcom's more forward looking reviews, such as its PSB reviews.

Second, an “inevitable decline” scenario, where the UK’s commercial media groups remain independent, but become a less and less important component of both the global and UK media markets, as global aggregators such as Spotify, YouTube, Facebook, Netflix and Amazon take more service market share, and global platforms and device providers such as Sky Europe/21st Century Fox, Liberty Global, Vodafone and Apple use access to global content and services to improve their position across the whole supply chain.

Third, a “transformation scenario”, where UK commercial service providers have to reinvent themselves to compete more effectively in the UK and globally, by diversifying their business activities or scaling up in specific core activities, but effectively find a way through to long term viability and independence. At the same time the UK content sector that powers these services, while part of a global content ecology, remains a vibrant and independent force within it.

These three scenarios, and a view of which is most likely, will influence any view of the future role and scale of the BBC in the UK and overseas. These three broad views have been offered by the BBC and in third-party submissions to the Green Paper consultation. Each has its own rationale, but they are not mutually exclusive and could all be accurate in parts. These visions in turn drive three alternative views of the role of the BBC within the broader media markets across which it operates.

Bulwark against the downsides of globalisation and convergence in the UK – direct and indirect
Driven by a belief in the “invasion” or “inevitable decline” scenarios, the BBC can be seen as the only realistic hope of preserving a UK media sector that can resist and respond to the challenges ahead. It becomes a bulwark against fragmentation, globalisation, convergence and consolidation, in terms of both its economic and cultural contribution and across its publicly funded and commercial operations. While the UK commercial sector may survive in some form, it will either be weakened or owned by global players with global perspectives.

Squeezing UK commercial media activity – in the UK and overseas
Alternatively, and largely driven by a belief in the “transformation” scenario, the BBC becomes one of the main constraints on the UK’s commercial sector’s ability to respond to the challenges and reinvent itself. By squeezing these organisations’ core activities, and pre-empting their new business initiatives, the BBC becomes a main contributor to the UK commercial sector’s woes, and the “invasion” or “inevitable decline” scenarios become self-fulfilling prophecies.

The UK’s only potential global media consumer brand in the Digital Age
Whatever the prospects for the UK commercial media sector in the UK, the enormous challenges ahead, mean that the BBC is the only UK media organisation and brand that has the global resonance and appeal to take on the global commercial players across content, services, platforms and aggregation. While some UK commercial groups might try to transform themselves into more global players, they are unlikely to challenge a Comcast/NBC Universal, Google, Amazon or Disney – great British content brands may remain, but they will become outposts for these global organisations. Only the BBC has the potential to remain independent and globally resonant in this new age.

1.4 Co-operation and partnership – a potential consensus?

The choice between a large and significant BBC – helping UK economic and cultural values in the UK and overseas – or a smaller BBC – making way to help a potentially fragmenting and declining UK commercial media sector transform itself – may well be a false one.

The interconnected way in which the web led media market of the next 10 years operates may well allow for the BBC and commercial sector to combine more to their mutual benefit in new, adjacent and global activities, while preserving a level of healthy competition in the core UK markets.

The BBC as a UK multimedia aggregator/platform
The BBC’s lead role across TV, radio, online news and information, and on-demand video and audio material could link with the commercial TV, radio, and news and information sectors to ensure the UK has an effective media aggregator and platform to rival the overseas platforms and aggregators. This approach is already partly recognised in the Open BBC vision presented in September 2015, but would go beyond co-operation with cultural, educational and arts organisations, to co-operation with the UK’s commercial media organisations.

The BBC as global catalyst
Similarly, overseas the BBC's resonance and recognition plus its scale in some activities could become the catalyst for helping the UK's commercial sector respond to the globalisation challenge – everything from JVs to linking with other providers to co-ordinated investment.

Therefore, a third alternative may present itself to either a larger BBC as national champion at home and overseas, or a smaller BBC making way to help UK commercial operators transform themselves: a BBC co-operating with the commercial sector and increasing the positive market impact of its current activities.

2 An established approach to market impact assessment

This chapter provides an overview of the BBC Market Impact Assessment (MIA) framework established largely by Ofcom[25] and the BBC Trust, which has formed the basic template for the approach in the rest of this report. It reviews how market impact is formally defined and how it compares with other ways of viewing the impact and influence of the BBC, including "crowding out"; how it has been assessed and measured; and what some of the outstanding issues might be both on the substance of the work and the review process undertaken.

2.1 How is market impact defined?

The assessment of the market impact of BBC services and activities outlined by Ofcom is derived from a simple welfare economics framework for establishing the net market impact of any service or activity in the economy. This effectively weighs any displaced consumer surplus (benefits to consumers less the retail price) derived from the commercial services, plus any displaced producer surplus (effectively any commercial profits) from providing the commercial services, against any consumer surplus created by the BBC's activities.

The displaced commercial services consumer and producer surplus component of this equation is usually referred to as the (gross) market impact or the commercial market impact. It can in turn be broken down into direct substitution effects (which tend for the most part to be zero or negative[26]) and broader market effects (that can be either positive or negative). If the negative substitution effects are very strong, and/or the broader market effects are also negative, the BBC services may actually lead to a cessation of an existing commercial service, the aborted launch of new commercial services, or a significant reduction in investment and activity across the commercial sector. These more extreme cases are what is most often referred to as "crowding out".

In other, less extreme, cases, all the commercial rivals may lose out to a small degree, causing a negative market impact. But no specific service is closed or aborted and there is no significant impact on investment and activity across the whole commercial market.

It is quite possible for the gross market impact – or commercial market impact – to be negative, but the net market impact (once the consumer surplus from the BBC service is added back in) to be positive. Over and above this, the Ofcom MIA process feeds into BBC Trust led Public Value Tests (PVTs), which adds an assessment of the broader social and public service benefits of the BBC activity. So it is possible that a BBC activity can have a negative net market impact but still be approved if it creates significant social benefits over and above those captured by individual consumer benefits.

The fact that the PVT assessment process allows for approval both if total consumer surplus and producer surplus are increased and if they decrease but public value is increased allows the PVT to capture both the main reasons for market intervention. Markets are not working either if the market does not provide all that consumers need, want and are willing to pay for – in volume, quality or type – or if it does provide what consumers want, but does not provide the extra social and public value to society that broadcasting services can bring.

In practice, the BBC Trust PVT process often conflates the consumer value and public value of the BBC service into one assessment of public value (the PVA), based on its reach, quality/distinctiveness, impact, and value for money (RQIV) framework.[27]

2.2 How is market impact assessed?

The main focus of the MIA within the overall PVT and net market impact calculation is to measure and then weigh substitution effects against broader market impacts. Below we separate the broader market

[25] Ofcom (2007a).
[26] If advertising demand is inelastic, there can be circumstances in which increased BBC audience at the expense of commercial rivals can increase commercial revenue. (The BBC makes commercial impacts scarcer and drives up the price.). Similarly, there might be "Freemium" type pay models, whereby the BBC's introduction of a free service seeds the market for higher pay TV take-up. (The first of these is directly addressed in the substitution analysis in this report. The second of these sits somewhere between direct pay TV substitution and broader platform building impacts, and is also addressed in the report.)
[27] BBC Trust (2012c).

impacts into two sub categories: market structure/dynamics of the relevant service/activity market, and adjacent/supply chain effects.

2.2.1 Audience and revenue substitution

Audience and revenue substitution effects often attract the most detailed analysis, and cover:

- the degree of consumption substitution – TV viewing, radio listening, online views, or hits/page views;
- the extent to which consumption substitution converts into lost advertising revenue at a market and/or individual participant level for commercial providers; and
- the degree to which consumption substitution converts into a lower level of subscriptions and/or a lower market clearing subscription price for pay TV services.

These effects are likely to be zero or negative in revenue terms for the commercial sector.

2.2.2 Broader market impacts – structure and dynamics

Broader impacts on the structure and dynamics of the service/activity market often include:

- a reduction in revenue fragmentation, an increase in revenue aggregation and/or polarisation in markets with largely finite income and high fixed costs, such as free to air advertising funded TV and radio. Excessive market entry in these markets and/or a lack of asymmetry in market access can reduce consumer and producer surplus. This can bring benefits from platforms that help to aggregate or polarise consumption. In some circumstances, it may even make some barriers to entry or increased costs of market entry a positive thing for consumers overall;
- the extent to which the BBC service stimulates content investment by commercial rivals, increasing consumer surplus by more than any lost producer surplus;
- the extent to which the BBC helps drive and underwrites the risk of new platform adoption, allowing the commercial sector to build new businesses based on this new platform; and
- the extent to which the BBC tends to stimulate innovation within services and activities over and above platform building.

Although generally positive, these effects can be negative if: (1) the barriers to entry or higher costs of scarce assets/inputs caused by BBC activity (e.g. talent, sports rights) are seen to be harmful to consumers and/or producers; (2) a new platform might threaten to undermine commercial rivals rather than enhance them, for example by increasing costs but not revenues (e.g. early adoption of DAB for small radio markets); (3) the BBC's investment is seen to increase the risks/reduce the returns to new commercial investment and so "crowd out" commercial investment (e.g. BBC initiatives in online education resources); (4) BBC developments drive innovation in a different direction than subsequently transpires to be the optimal direction for the market as a whole (e.g. adopting the wrong standards, or pre-empting broader sector innovations) – e.g. the move into YouView in advance of global developments in WiFi connected TVs and dongles.

Overall, these factors can be divided broadly into "market enhancement" and "market impediment" impacts. Past reviews have found these factors to be largely positive.

2.2.3 Broader market impacts – supply chain and adjacent markets

Broader impacts on supply chain and/or adjacent market activities can include the impact on:

- competition, innovation and investment in the content supply, underlying rights or talent sectors;
- competition, functionality and innovation across the platform/device sector;
- the market for secondary rights and the knock on effect on market entry into the core service market or other adjacent markets;
- adjacent print publishing, performance arts, music, ICT, creative or educational sectors.

These impacts can be positive or negative (albeit for the most part they have been assessed as positive). Their relevance also varies considerably by type of activity.

In practice (as covered later in this report), both the broader market impact and the adjacent/supply chain impacts tend to be reviewed at a general indicative level, attracting more scrutiny should the audience/substitution impact prove to be strongly negative.

2.3 What has been the main focus of reviews?

In formal MIAs, there has tended to be a specific analytical and quantitative focus on the audience and revenue substitution effect as the most measurable and direct impact, which is also likely to be the most negative. There has been particular emphasis on the disproportionate effects on specific rivals or groups of rivals, or at early stages of new activity development.

Positive broader service market impacts such as platform building and content investment tend to get more attention at times of Charter Review and Licence Fee settlements, or when Ofcom conducts its PSB reviews, while potentially negative broader service market impacts tend to get more focus within Fair Trading and Competitive Impact Assessments.

Broader adjacent and supply chain impacts also get attention at times of Charter Review and Licence Fee settlement, but often also tend to be sparked off by specific competition or fair trading concerns, or tangential market reviews such as the working of the TV content supply market, or the future of UK spectrum, broadband roll out and TV platform markets.

This difference in emphasis means that there is often more detailed quantitative evidence on the issues of audience and revenue substitution, while the broader impacts are assessed on a qualitative basis or in a tangential way (i.e. the evidence provided was gathered for a different purpose than quantifying the specific market impact of the BBC on a rival or groups of rivals).

2.4 To what kind of services is the market impact assessment applied?

In practice the formal Ofcom MIA process (within a formal PVT) applies only to new BBC services or significant changes to existing services. This means that the full framework has been focused largely on new digital services, not the core traditional analogue (now increasingly digital) services. As such, it has largely concerned new and smaller scale BBC activities.

In theory, the same framework can be applied to any BBC service no matter how large and long standing. It can also be applied to the whole portfolio of BBC services in a given market at a very macro level, at a service-by-service level – new or existing – or at the level of specific behaviours, such as scheduling changes or cross-promotion activity. However, assessing the impact of large scale changes to core services that account for 10 to 20 per cent market share and have been part of the basic media ecology of the UK for 50 years can be more problematic than the assessment of a new niche TV and radio service that might achieve perhaps 1 per cent market share.

2.5 How is market impact measured and quantified?

The review of past MIAs and other related processes and studies contained in Chapter 3 has suggested nine typical methodologies that have been applied to the assessment of market impact and crowding out (some very quantitative; others more qualitative). These nine methodologies fall broadly into 4 categories.

2.5.1 Trend correlation and causation assessments

Three methods involve trying to find direct historic time trend or cross-sectional evidence to support a link between BBC size and activity or events and commercial sector activity or events. Historic time series data of BBC performance versus commercial sector performance at the audience, output, revenue or content investment level can be reviewed to test for any evidence of audience or revenue substitution or positive/negative feedback of BBC investment levels on sector investment levels in terms of content or platforms. Cross-sectional data between national media markets or between regional markets in the UK can be used for the same purpose, to test for a link between the size, funding or output mix of publicly funded BBC activity and commercial sector activity in one geographic market versus another. Cross-sectional data between different BBC genre output and performance versus commercial rivals' output and performance can also be used to test whether the BBC is squeezing the commercial sector out of specific areas of output.

In all these cases, however, the problem will be adjusting for other non-BBC factors over time or between markets so as to isolate the impact of the BBC from other macroeconomic or competitive environment differences – and so move from simple correlation to a better understanding of attributable causation. In order to obtain meaningful results, this often calls for more in-depth econometric work, which needs a robust theoretical approach, a clear set of hypotheses to be tested, and a very good data set (with a relatively large degree of variability in all the likely explanatory variables).

Many studies, including a recent study by KPMG for the BBC Trust,[28] have shown that there is no simple inverse correlation between the scale of BBC activity measured and the scale of commercial outcomes when including other market factors. This does not necessarily show that there is no relationship, however, just that any such relationship is difficult to isolate or quantify. Chapter 4 discusses the KPMG analysis further, including its limitations.

Other studies, such as the Inflection Point analysis for the BBC,[29] do show a positive cross-sectional relationship between the size of publicly funded TV in national markets and the size and PSB focus of the commercial TV sector. But again this may be due to other factors, such as policymakers in more developed commercial TV markets being more comfortable about having larger publicly funded organisations as well. Again, even if the correlation is clear, the causality may not be.

The main market impact factor where detailed time series has been used relatively successfully is in testing the relationship between commercial audience loss and advertising revenue loss. Such advertising "demand elasticity" regressions have been attempted several times by Ofcom and others in the UK TV sector (most recently the Analysys Mason Study in 2010). These provide some degree of certainty in converting audience loss or gain into commercial advertising revenue impact. But even these studies have had their conclusions questioned by market participants and have used data sets with quite small changes in audiences and impacts over time. How applicable such regressions might be to the large scale changes that might result from significant alterations to BBC services remains in doubt. (This is covered in more detail in the TV section and relevant appendices). Advertising elasticity assumptions and estimates are a crucial part of the quantification of any direct substitution effect.

The problems with time series and cross-sectional trend analysis have often led to the third way of using historic or geographic patterns to discern impact and causality: event analysis. Picking a short period of large scale change to either BBC or commercial services, during which other factors either did not change or changed in a predictable way, can help isolate the impact without the need for time series data over a long horizon, or large amounts of cross-sectional data on all potentially explanatory variables. The large scale expansion in BBC services and investment between 2000 and 2005 might provide such a period, were it not for the fact that commercial advertising funded TV and radio went through a recession from late 2001 to 2003, and then faced the growing internet presence in advertising. The only way to untangle these factors is to go back to long term time series with all the issues and problems described above.

2.5.2 Detailed output and audience behaviour analysis

A further three sources of information are often used as being broadly indicative of likely levels of audience substitution: output distinctiveness, socio-demographic differentiation, and market behaviour segmentation. Output distinctiveness measures, which are often gathered initially to support the case for public value of any BBC service, are also used to suggest limited likely audience overlap between the BBC and rival services, and therefore limited audience substitution. Similarly, demographic segmentation is used to suggest limited audience overlap between the services. For example, if the BBC closes a service for AB socio-demographic group males aged 55+, why would many of them start to view commercial services aimed largely at C1C2 females aged 25 to 45?

Lastly, more detailed analysis of consumer behaviour segments – for instance, between loyal channel viewers and more promiscuous viewers, or viewers who came to a service for particular programmes and those who tend to look for something new to watch each night – can help suggest different levels of likely substitution by different segments of the audience. In doing so, the likely switching levels should a BBC service happen or not can be narrowed down. (As a good example of this is given in the chapter on online

[28] KPMG (2015).
[29] Inflection Point (2013).

market impacts which looks at the division of online news consumption between unmediated and mediated access, and on-demand TV consumption between directed and undirected consumption.)

These assessments can only be broadly indicative of substitution, as they do not take into account potential changes to the commercial services in reaction to a BBC change (so called “dynamic responses”), nor do they directly predict behaviour should a service reduce or close. Radio 1 may have a broader music mix than commercial radio, but, should Radio 1 cease, an assessment can only indicate that some Radio 1 listeners might increase their use of Spotify or shift to 1Xtra or Radio 6 Music, rather than shift to the current mix of commercial radio services or to other BBC services. This form of assessment cannot be more precise than that, and cannot deal with a possible responding shift of commercial radio to a slightly broader mix to capture some of this listening – the dynamic scenario modelling covered below.

2.5.3 Commissioned consumer or industry surveys

A very direct way of assessing a consumer or industry rival response to changes in BBC services is to ask consumers and industry participants. This can allow for testing of the claimed impact of current BBC activities on consumer and sector rival/supplier behaviour and the impact of future planned changes. Consumer surveys have informed specific MIAs, such as asking parents how important an extension of CBBC transmission hours might be, and broader Charter discussions, such as the willingness to pay for the BBC surveys by Human Capital and The Work Foundation in 2004 and 2006, or Ofcom’s PSB review surveys on the consumer and citizen value of different types of content, and UK content versus imported content.

Given the interests of those surveyed, industry surveys can be more problematic. But clearly asking advertisers how they might react to a decline in impacts or a price rise (as is often asked by the UK Competition and Markets Authority during inquiries into media mergers) can help to tease out advertising demand elasticities when time trend analysis is problematic or not relevant.

Overall, it is perhaps somewhat surprising that not more specific consumer surveying is done in MIAs. Often the consumer methods used in the surveys have not taken advantage of the conjoint type methodologies favoured by leading consumer brands and retailers – no doubt, on the grounds of cost. This approach to surveys is seen as providing far better and more reliable results than direct questionnaires. Many of the consumer surveys undertaken to date have used simple stated preference responses, rather than the more reliable revealed preference methods used by many leading FMCG brand and retailers.

2.5.4 Competitive response and dynamic scenario modelling

When MIAs come to review likely broader market impacts, and sometimes when they review supply chain impacts, they implicitly or explicitly develop models of commercial optimisation behaviour in response to BBC changes. These can be backed up by interviews and formal models, but are often presented as scenarios of response, often with no specific view as to which scenario is more likely. Instead, they present a range of outcomes or a simple average of outcomes as the most likely view.

Again this approach may not always reflect the developed methodologies to scenario design adopted by leading strategy houses and internal strategy teams within large media organisations. These methodologies include optionality appraisal, dynamic systems and path dependency tracking. When looking at changes to the BBC’s main services with high share and reach, the responses of rivals to such changes are particularly important. Furthermore, such changes are likely to disturb overall market equilibrium between the BBC and rivals in a way that the introduction and development of incremental and niche services might not. With incremental services, the main issue tends to be the likely impact on the most direct niche equivalent on broader issues such as platform take-up.

2.6 Some other outstanding issues

The review of past MIA approaches has raised a few other outstanding issues, as set out below.

2.6.1 The use of forward projections/market scenarios

Any assessment of the impact of large scale changes needs to take a view of what the future holds for the commercial market. The immediate impact of BBC withdrawal in an environment of still fairly limited choice, multi-channel, largely national market platforms may be very different than the future impact of that same BBC withdrawal in a globalised, on-demand future in, say, 5 to 10 years' time.

Several Charter Review submissions by the BBC in the past, and the associated public debates, have placed the impact of the BBC's activity in the context of even more competitive, fragmented and globalised future scenarios for UK commercial activity in TV, radio and online (the most recent BBC submission/vision statement *British Bold Creative – the BBC's programmes and services in the next Charter* period – being no exception). This can significantly change the likely counterfactual to BBC continued provision at a given scope and scale.

A vision of further revenue fragmentation, a threat to quality standards across commercial UK operators, and an increasing domination of global – often US led – providers and platforms, can more or less determine the future net market impact of a UK based, quality content provider such as the BBC. This is not to say these future visions of the market context are not realistic or possible. Rather, they (1) should be recognised as only one potential scenario; (2) may ignore the fact that policymakers might have alternative ways of countering these market trends through commercial market reform; and (3) might not adequately reflect the extent to which current commercial market behaviour is conditioned by the presence of a large and significant BBC.[30]

2.6.2 The treatment of advertiser benefits and costs

Much of TV is a two sided market: commercial TV and radio services provide programmes to audiences, and audiences to advertisers. Where this is the case, a full assessment of the sum of producer and consumer benefits should take account of the impact both on advertisers' costs of changes in the BBC and commercial market mix, and on viewers' consumer surplus of any change in their exposure to advertising messages.

However, consideration of the impact on the advertising market and advertisers has not formed any part of specific BBC MIAs or recent Charter review debates. This is despite submissions to such debates by ISBA and the IPA, the representatives of advertising interest groups. The main exception to this is the Peacock Committee 1986 report into the future funding of the BBC,[31] which did assess the issue at some length, spurred on by the rapidly increasing price of advertising on ITV in the 1980s. But this was also put in the context of the benefits to viewers of having the BBC and ITV not competing for, and fragmenting, the available revenue.

Outside of BBC Charter and PSB related reviews, the advertiser benefit issue has most often been raised by formal Competition and Merger Authority (CMA) reviews when the impact of changes in commercial market structure on advertiser prices/costs are explicitly examined as the key component. This has led to decisions that may have put protection of the benefits to advertisers (and then the consumers of their products) above those of the benefits to viewers and listeners.[32] While competition for advertisers through competition for audiences might align advertisers' and consumers' interests, a basic rationale for commercial PSB intervention – even in the multichannel world – has been that competition for advertisers does not always increase the benefits to viewers, with an over-supply of lowest common denominator programming ad funded networks being a possible result.

2.6.3 The relationship between the volume and value of consumption – a question of quality

Any calculation of consumer benefit from changes to BBC services should take into account not just the amount of consumption but the value created by that consumption – or the intensity of preference. The BBC often presents survey evidence on how much consumers want a given service change or service, and how much they value the programming – the BBC has an "appreciation index" (AI) for all its main programming strands which is similar to the "net promoter score" used by many consumer brands. However, the analysis of the lost consumer surplus from any substitution of commercial services due to

---

[30] The theme of how competitive dynamic modelling feeds into any MIA is explored later in this section and within the specific sections on TV, Radio and Online.
[31] Peacock Committee (1986).
[32] Most notably the review of mergers in the commercial TV and radio sectors, such as the merger of Carlton Communications and Granada Media plc to form ITV plc in 2003 (2003a). This review resulted in the Contract Rights Renewal remedy to protect ITV advertisers, but the Competition Commission (the CMA's predecessor') explicitly stated that the impact on advertisers was its only concern, as this was the relevant economic market – the market for viewers being a much lesser consideration.

the reduction in a BBC service is often based on the volume of consumption only – i.e. the lost audience – and not on how much each audience member valued that service – the lost consumer surplus.[33]

Across much Ofcom PSB review analysis and some BBC market impact and Charter Review evidence, there is a general assumption that UK originated content within any given genre or activity generates more consumer value than imported, usually US sourced, content. This goes beyond the fact that UK made programmes tend to get higher audiences. Rather, it is based on survey evidence in various PSB reviews, including the three conducted by Ofcom since it was formed in 2003, where respondents say they prefer UK sourced content within each main genre. The same survey evidence also suggests that consumers prefer higher quality programmes, although how higher quality is defined by genre has varied over time.

The fact that UK content is seen as generating higher consumer surplus is often a major factor in assessing the net market impact of BBC services, especially where these new services are judged to be taking audience from thematic cable and satellite channels, rather than from the commercial PSBs.[34] In so far as viewers are switching from imported programming on commercial thematic channels to UK programming on the BBC, the proposed service is seen to be enhancing consumer surplus considerably (and often public value as well), even if it is reducing the producer surplus of the owners of those commercial channels.

2.6.4 A potential confusion of consumer value and public value – another question of quality

Consumer value and public value – or citizen value – are not the same thing, but any programme or service can generate both. Consumer value is consumer surplus generated by the activity; public value refers to the positive benefits to society as a whole beyond the consumer surplus.

The PVT conducted by the BBC Trust does explicitly separate the two, but it can be difficult to quantify the differences from simple surveys. The methodology most often used is to ask respondents how much they want/like a specific area of programming or service for their own needs, versus how much they think the content should be available for the benefit of society as a whole. [35] The scores for each are then compared. In some areas, such as UK children's programming, the difference is quite large – only households with children are likely to assign consumer value to the output, but a much larger proportion of the respondents are likely to assign public value.

But should public value be measured as the difference between the two responses, or the entire response to the "benefit to society" question. If the latter, there might be a risk that consumer value is double-counted, exaggerating the total consumer and public value generated. If the former, it might under-value the public value, as it misses out on those people who assign both values to the output.

Within any market impact test, care should be taken to explicitly separate the quantification of public and consumer value. This requires quite sophisticated survey techniques.

2.7 What a market impact assessment is not

2.7.1 Economic impact assessment

Economic impact assessments of the BBC and the commercial media sector have been conducted over the last 10 years. These try to quantify the gross value added (GVA) of the BBC or the commercial sector by reviewing the direct value added created, the indirect value added through suppliers, the knock on value added created by associated activities, and the general ripple effect on the broader economy created when those employed by the BBC, or the commercial sector and their suppliers, spend their earnings.

Such measures are supposed to reflect how much smaller the economy might be without them; whereas, if done rigorously, they should also address the counterfactual and assess what alternative economic activity might emerge if the resources were used elsewhere.

[33] The use and quality of consumer surveys are addressed later in this section.
[34] O&O (2004b).
[35] Ofcom has conducted such surveys for its PSB reviews.

But economic assessment tests are not the same as market impact tests, even though some of the factors measured are common to both. Most notably, consumer surplus does not appear anywhere in the GVA calculation. Consumer surplus is the value created for consumers over and above what they pay to providers for the service or product. GVA measures only what is paid for the product/service. Conversely, GVA measures the profits (producer surplus) and the wage costs of suppliers, while market impact measures only the producer surplus generated.

In terms of knock on effects of an individual organisation such as the BBC, the GVA assessment measures only BBC activities and those of associated suppliers, while the net market impact test includes the displacement of rival company activity. Nevertheless, a rigorous GVA assessment should take into account potential GVA growth if the BBC did not exist, and thus be a net GVA test.

The BBC is a high GVA contribution organisation that employs lots of people in the UK, and creates programming content largely out of people's efforts, not by large scale use of other inputs. Even when it uses other inputs, it often uses UK inputs that also require lots of labour. That said, its net contribution to GVA – i.e. what might replace BBC activity if consumers were given back the licence fee – is less clear.

In general, since the BBC is a high GVA activity, if people spent licence fee income on their general household budget, UK GVA would be reduced (e.g. the general economy imports more from other countries than the BBC). Moreover, if they spent it across other media activities, GVA would also be reduced – other media activities are not all as labour intensive and will also import more than the BBC on average.

But this may all underestimate the beneficial impact to the economy of a shift from non-profit making organisation to a profit making ones. An initial shift from the BBC to the commercial sector is in itself probably GVA negative – the BBC does not make profits, but it does spend large proportions of its income on UK staff and UK suppliers. However, profit generation by the commercial sector can and should attract more investment, which in turn helps grow the UK economy and total GVA over time – probably more than if the BBC were to still provide all its activities. (The reason for letting the BBC do this then remains either more consumer surplus and/or more public value, not more GVA.)

While GVA estimates do help give an idea of how important the BBC or the commercial sector is as a contributor to the UK economy, such measures give little insight into the BBC's market impact – positive or negative. This is especially so if the measures are not net GVA (GVA contribution over and above alternative use of the resources) but gross GVA. Even a net GVA calculation might not come close to giving an indication of net market impact of the BBC, as it would still not measure the extra consumer surplus generated, which is probably the most important factor in the MIA framework.

2.7.2 Formal competition, state aid or fair trading tests

Although MIAs have similar issues to address as approaches to formal competition inquiries, state aid investigation, and Fair Trading or Competitive Impact Assessments, they are not the same.

Competition inquiries focus on the market power implications of mergers or anti-competitive practices. They are therefore looking specifically at barriers to entry and practices that restrict consumer choice or push up prices/reduce quality in favour of a supplier or suppliers and against the interest of consumers. There is much less attention on revenue substitution effects or positive market impact effects of public intervention.

State aid tests are about the proportionality of state funded/publicly funded activities and ways in which they might distort markets. In so far as they look at crowding out effects, they have adopted a methodology similar to that used in market impact tests – European Commission guidelines on the state aid test for publicly funded broadcasters suggest the BBC/Ofcom PVT and MIA methodology as the proper approach.[36]

Fair trading and competitive impact assessments tend to focus on specific behaviours likely to create barriers to entry or distort markets. Such assessments have been applied in the case of the BBC to sports

[36] European Commission (2009a).

rights bidding, cross-promotion and the relationship with BBC Worldwide. However, they do not address the broader market impact and net market impact issues covered in this report.

2.7.3 Public Value Test

As has been noted, an MIA is not the same as a PVT, but a component of it – potentially to be netted against the positive public value measured by the PVA, which looks at reach, quality/distinctiveness, impact, and value (for money). The quality/distinctiveness aspect is measured by the extent to which a BBC service achieves the BBC's Public Purposes as set out in the Charter.

3 Past assessments and Green Paper submissions

3.1 Past assessments and conclusions – a broad overview

This chapter is not a substitute for the more detailed assessments in the sector-by-sector reviews in Part II of this report. It aims to summarise all the relevant work done on the issue of BBC market impact – specifically in formal MIAs, more generally at times of Charter Review and licence fee settlements, and more tangentially in BBC Trust service reviews, and competition inquiries. It then pulls out, at the aggregate level, the overall direction of findings across the three main areas of MIAs: direct audience and revenue substitution; broader service market effects; and adjacent/supply chain market effects. Over and above a factual summary of findings, it aims to give a flavour of the whole assessment process and the role of judgement, approach and interpretation.

3.1.1 A short history of direct and indirect assessments

Set out below is a brief overview of the main forums and processes providing either direct or tangential assessments of the BBC's market impact in the last 20 years or so.

3.1.1.1 Formal Market Impact Assessments

Formal MIAs of new and significantly changed BBC services began in 2003/2004. At that point the BBC moved into providing new DTV channels, new digital radio services, and an expanded online presence that was effectively mandated by the Davies Panel review of 1999, which took up many of themes of the 1995/96 Charter Review process, and which was funded by the year 2000 licence fee settlement and planned uplift from 2001/2002 onwards.

The objective was that the MIAs would provide a guarantee that the BBC's extra funding and expanded role would have regard to the impact on the commercial market, and would seek to add to choice and consumer benefit, not replace market activities. There have since been 8 formal MIAs. The first three (covering the BBC's digital TV, radio and online service expansion) pre-dated Ofcom's responsibility for carrying them out, and so were handed to DCMS appointed experts to conduct. Ofcom provided evidence to these reviews: The Barwise Review of the BBC's Digital TV services (2004), the Gardam Review of the BBC's Digital Radio services (2004), the Graf Review of BBC Online (2004).

Since then, Ofcom has carried out 5 specific MIAs, on BBC HDTV proposals; BBC Digital Gaelic proposals (BBC Alba); the BBC's on-demand service proposals (iPlayer for TV and radio on-demand and podcasting services); the BBC's ultra-local video proposals (mainly online news and information services); the BBC's changes to BBC Three and CBBC; and the introduction of a BBC One plus 1 service proposal.

These MIAs, when added to the PVT they fall within, have led to the blocking of two main proposals: the ultra-local video proposals, owing to concerns about value for money and market impact (on local media groups and new entrants); and the BBC One +1 proposal, owing to concerns about market impact (on ITV and C4) and insufficient public value/impact.

3.1.1.2 Charter and Licence Fee reviews and consultations

Charter Reviews and licence fee reviews are the main times when the BBC's broader market impact across new and core activities is discussed. The Peacock Committee report (1986), the Davies Panel report (1999) and the Burns Panel report (2005) and the submissions to these reports and work commissioned by them, are the most important evidence provided. In contrast to the MIAs, these reviews tend to be broad and strategic, although some have involved trying to estimate specific substitution effects. Indeed, the Peacock Committee commissioned the first formal reviews of TV advertising elasticity in the UK from NERA and Cave and Swann.

3.1.1.3 BBC Trust service, value for money, competitive impact assessments/fair trading reviews

While much of the BBC Trust's work does not cover PVTs and the assessment of MIA evidence within them, its work on service reviews (focused on its RQIV framework – specifically distinctiveness and value for money) does raise issues relevant to market impact. (The distinctiveness of BBC services such as BBC One and Radio 2 will affect the degree of likely audience substitution with commercial rivals.)

In so far as Competitive Impact Assessments and Fair Trading reviews look at barriers to entry and market distortion, they do cover one part of the MIA agenda, and are relevant and cited in our work in Part II, as are the BBC Trust service reviews.

3.1.1.4 Ofcom public service broadcasting, market and competition reviews

Ofcom has conducted three formal PSB reviews between 2003 and 2014. While the focus is on the sustainability and value of commercial PSB activity, they assess this within the overall PSB provision across the UK market, including the provision by the BBC. They tend to take the BBC's provision as a given at the time, rather than recommending BBC Charter or licence fee changes. (However, the first PSB review did suggest consideration be given to allocating some licence fee monies to a public service content provider which would have market impact in some areas – especially online – to complement that of the BBC.)

Much of the research on the consumer and citizen value of different types and sources of content comes from Ofcom's PSB reviews, and they are often cited in discussions of the BBC's market impact.

Ofcom has also conducted reviews of TV content market supply and specific sectors (e.g. the radio sector review in 2007). Also, its own competition reviews, for example of the pay TV market and premium content, provide evidence about how the commercial market operates. This has a bearing on MIAs. So, for instance, Ofcom reviews suggesting that Sky had been earning excessive returns or has significant market power, will influence the likely impact of BBC services, and any decisions, on the platform and pay TV markets.

3.1.1.5 Other competition, state aid and fair trading inquiries

There have been a range of inquiries relevant to the BBC, from ITV merger reviews (for example, the Carlton/Granada media merger, the review of CRR undertakings, and the ITV network arrangement review) and radio group mergers. These reviews have informed analysis of media markets relevant to BBC MIAs. But there have only been 5 specific external competition/fair trading and state aid inquiries into the BBC's activities.

In terms of fair trading reviews, there have been three specific inquiries: the OFT's review of the workings of the independent producer quota system; the Sadler inquiry into the BBC's cross-promotion of magazines (while old); and the subsequent Monopolies and Mergers Commission review of the same issue that looked at supply chain and adjacent market issues in some detail. In terms of a formal competition inquiry, there has been the investigation into Project Kangaroo – a plan by BBC Worldwide, ITV and Channel 4 to jointly launch a commercial video on-demand service (a bit like Hulu in the USA). The Competition Commission (CC) blocked this project on the grounds that it would reduce competition in a potentially new TV market, as well as having potentially negative implications for the UK's secondary rights market. The state aid case brought by the British Educational Suppliers Association against BBC Jam – the BBC's publicly funded online education service – also addressed issues of BBC market impact, and led to the BBC revising the scale and scope of its planned activities[37].

3.1.2 The audience and direct revenue impact: an overview of past coverage and findings

Detailed evidence on audience and revenue impact has focused on additional services over the last 10 years or so, or incremental changes to existing services, rather than on the BBC's core services as a whole. Nevertheless, there has been some assessment of audience impact across all BBC TV services through submissions to the current Charter review and the previous review.

Overall, the conclusions/assessments on audience and advertising income are as follows:

- BBC services do take audience from rival services;
- this audience substitution is not on a one-for-one basis – especially when the BBC service is highly differentiated from rivals and/or similar to other BBC portfolio services in terms of output mix and/or demographic focus. (In these cases a significant proportion of consumption either disappears from the relevant market or is transferred to other remaining BBC services);

---

[37] BBC Trust (2008a).

- the audience substitution does not disproportionately impact a rival or specific group of rivals in most cases (except, notably, in the areas of the BBC's ultra-local video plans and BBC One plus 1, both of which were rejected by the relevant MIA/PVT process);
- any reduction in whole market advertising revenue is not one for one with the reduction in audience, as market advertising prices will increase somewhat when commercial impacts fall due to the BBC service. This measured/estimated advertising demand elasticity is generally put at between -1.5 and -2.5, and most often at -2 across TV, radio and online. (An elasticity of -2 implies that for every 1 per cent drop in commercial impacts, revenue declines by 0.5 per cent);
- the absolute value of this revenue loss depends on the baseline share of the commercial market before the BBC change and the size of the relevant ad market;
- where the BBC has a disproportionate impact on specific rivals or group of rivals, it can impact their share of the commercial audience and the advertising market. This can cause much larger shifts in the revenues of these providers and is therefore of particular concern; and
- the eventual impact of these revenue changes on profits and or spending depends on current profit margins within the rivals and their optimal dynamic response. (Optimal dynamic responses are generally covered in broader MIAs, which means a revenue and profit loss before the response is quantified, with a broader discussion of how a dynamic response might alter the conclusion).

There is far less existing detailed direct analysis of the impact of BBC changes on pay TV revenue and profitability. The main points to emerge from previous work are:

- the impact does depend on whether the BBC is just shifting spending around or is actually increasing/reducing the licence fee (in the latter case – if the BBC licence fee were to be reduced – there might be some generalised increase in pay spending for the commercial sector as a whole. But some monies will also be diverted to general household consumption and out of the media sector);
- where the BBC is shifting spending across services with no increase/decrease in the licence fee, the expansion of a BBC free of charge service can sometimes boost pay TV income in the medium term. It does this by introducing a new type of consumption to viewers and listeners, and therefore helping seed the market for commercial pay providers;
- in some circumstances the BBC free of charge service can reduce elements of monopoly pricing power in pay markets and/or the leverage of platforms over commercial channel and content providers. (The implications of this are covered more in the broader market impacts chapter below);
- where the BBC service does substitute some pay spending from commercial providers, this is often spread across several providers/channels; and
- sometimes this income substitution is from providers with a degree of monopoly power – which is not reduced by the BBC action – so it may reduce profits but not content spend. (This effect is covered in the broader market impacts below).

Overall, the lack of assessment of the income of what is now the largest TV segment in the UK is perhaps somewhat surprising, and comes in part as the BBC's relevant market is often defined as the free to air TV services market, and does not include the pay TV market.

3.1.3 The market structure/competitive dynamic impact – previous findings

The market structure/competitive dynamic impact has been addressed in formal MIAs and specific inquiries, but tends to get more attention at Charter review and PSB reviews. This is because formal MIAs tend to focus on what can be measured and what might be unambiguously negative. Broader market structure and dynamic effects are often seen as both complex to model and largely positive, so are of less concern. (Where there are obvious exceptions pointed out by rivals, these are reviewed in some more detail.) This also reflects the MIA process focus on potential negative impacts, as the BBC Trust often takes account of some of the positive impact in the PVT process overall.

From Charter reviews and some MIAs – especially the panels set up in 2003 to review the BBC's digital TV, radio and online service additional service plans – the main positive broader and dynamic service market impacts can be summarised as follows:

- the BBC's new services and cross-promotion can help drive new platform take-up (digital TV, DAB and broadband), thereby releasing spectrum and de-risking this opportunity for commercial rivals;
- in some cases, the pattern of platform distribution and take-up brought about by BBC involvement can actually help support rivals' business models. For example, significant Freeview/Freesat unique reach helps support ad premiums and ad share of commercial PSB channels and their portfolios. Significant DAB reach can prevent excessive fragmentation by a larger switch to the internet if DAB did not grow;
- in some cases, the level of spending and activity of the BBC can raise general barriers to entry in high fixed cost, finite income markets– e.g. in the network TV market – which can be potentially advantageous to incumbents. Furthermore, if there is sufficient competition from the BBC to these services, it can then increase their commitment to invest in content, and therefore benefit the consumer;
- more generally, BBC activity can help force those incumbents to spend more on content or follow it into new services markets – all to the benefit of the consumer; and
- the BBC spends more of its income on content than all its rivals. Thus, whether it forces up rival content investment or not, BBC expansion and rival contraction can leave the consumer better off – as long as this does not crowd out commercial rival investment too much.

The main potentially negative broader and dynamic service market impacts highlighted have been as follows:

- BBC activity targeted at new markets without a specific and large platform building effect can increase the risks to new commercial investment – especially in new and challenging areas;
- BBC activity that creates barriers to entry in markets where choice and innovation are more important factors than revenue fragmentation and/or fixed costs can reduce the range and value of the commercial proposition;
- BBC support for new platforms that increase rivals' costs more than their income can cause the commercial sector to reduce its spending on content and services;
- BBC activity can force up commercial rivals' costs – especially for scarce resources – and therefore act as a barrier to entry and result in less investment in content and services;
- where monopoly elements do not exist, forcing up rivals' short term content and service spending could lead to a lack of reinvestment and less diversification in the long term.

The balance of evidence submitted by third parties and by the BBC in past Charter and licence reviews has often favoured the positive broader MIA, especially among rival free to air TV and radio operators.

3.1.4 The adjacent market/supply chain impact: an overview of past coverage and findings

These factors gain some attention at Charter review and licence fee settlements, and within MIA reviews. But when they arise, they tend to be driven by specific fair trading and competition issues. These issues can also be raised by value for money reviews, which often look at BBC in-house provision and third-party provision, and can factor in supply chain market effects of BBC actions. The most notable areas have been:

- the BBC's role in the TV content supply market as major buyer and supplier (alongside ITV), and the implications for terms of trade with independent suppliers and the availability of secondary TV rights to third-party broadcasters in the UK TV market;
- the BBC's role in developing the content supply sector outside of London;

- the BBC's plans for aggregating commercial on-demand rights exploitation into an industry-wide service (Project Kangaroo), and the implications for the online content aggregation and distribution market and the content supply market;
- the BBC's role in the UK on screen and on air talent market (also covering increasing costs in the service market, but addressing issues of talent development as well);
- the BBC's role in the UK platform/aggregator market, and especially whether the BBC is favouring some providers over others and potentially distorting the market;
- the BBC's role in the overseas exploitation of UK originated IP and brands, and, in particular, the terms of trade/access to asset terms between the BBC and BBC Worldwide;
- the BBC's role in ancillary UK IP markets such as magazines and BBC Worldwide's terms for access to BBC brand or cross-promotion.

In most areas the positive impact of the BBC's commitment and involvement for the BBC core services and the commercial sector is assessed against the negative impacts that rivals in either the ancillary or supply chain markets or sometimes the core market often claim (i.e. that BBC involvement in the supply chain has negative impacts in the core market).

These assessments have led to specific interventions, such as the terms of trade and WOCC (Window of Creative Competition) interventions in the TV content supply market; the application of independent content quotas to BBC audio and online content production; rules on BBC cross-promotion of its magazines and commercial products; and fair trading rules and processes between BBC Worldwide and the BBC.

Equally, in many areas the BBC's commitment and activity is welcomed because it helps to create critical mass in supply chain activities or ancillary activities in the UK and overseas – e.g. UK TV IP exploitation or the promotion of the UK music sector.

3.1.5 The review process and the construction of the counterfactual

Part of any MIA at a detailed or broad level is to determine the counterfactual. With additional BBC services, this has often simply been a question of having the new service or not. When assessing the BBC's core services – which are both rare and more general – the counterfactual has been either a scaled down BBC service (usually across the board, rather than a change in mix) or the cessation of BBC activity. This has also often been associated with a reduction in BBC licence fee funding, not a different allocation of that funding.

There has been far less assessment of more complicated but often more realistic alternatives. These alternatives might include licensing the content to third-party commercial providers, rather than developing its own secondary outlets and services, or changing the mix and/or positioning of core BBC services (with no change in overall funding) rather than closing them down or scaling them back across the board.

Given the MIA's formal role in assessing new BBC services and checking whether there is a direct and measurable revenue substitution effect, it is not surprising that this process in particular has used straightforward counterfactuals. It may be somewhat more surprising that Charter, licence fee and broader PSB reviews have not considered in more depth alternative counterfactuals, such as re-deployed funding or changes in service mix and positioning.

3.2 Issues arising from submissions to the Green Paper

There have been a large number of market impact issues raised by the submissions by BBC rivals and suppliers/distributors to the Green Paper consultation process. Many are largely supportive of the BBC's positive role across the market and in helping the sector respond to challenges and opportunities (e.g. UK Music, Channel 4, Professor Barwise, Professor Barnett). Some, while making positive observations, have also raised specific negative market impact concerns. Most notably:

- the Newspaper Media Association (NMA) submission questions the BBC's impact on the local and national newspaper provider's ability to develop successful online news and information services in the

UK and overseas. It proposed a new approach by the BBC which might be more complementary to the commercial sector;

- the ITV submission questions the specific positioning and strategy of BBC One, and its impact on the commercial PSB sector and, in particular, ITV's main channel (as well as questioning the public value and creative sector benefits of a claimed "conservative" BBC One schedule);
- the Global Radio and Radiocentre submissions question the positioning and strategies of the BBC's popular music services, especially its FM networks – Radio 1 and Radio 2 – as well as some of the more popular programming elements of Radio 3 and Radio 5 Live (as well as questioning whether the public value generated by these services is as great as has been claimed);
- UTV (owner of talkRADIO) questions the market impact of the BBC's approach to audio sports rights and coverage and news and chat, through Radio 5 Live and 5 Live Sports Extra;
- the Commercial Broadcasters Association and Viacom submissions question the market impact of the BBC on thematic channels – in particular, commercial children's channels;
- Sky questions the BBC's platform distribution and aggregation strategy and its impact on that part of the supply chain;
- the Virgin Media submission questions the market impact of the BBC's approach to secondary outlets for its content in the UK across on-demand and linear TV, and the seemingly inconsistent approach across linear and on-demand markets in terms of publicly funded, commercial, and delivery platform provision, and OTT service providers in the UK;
- PACT's submission questions the impact of the creation of BBC Studios as a commercial production subsidiary on the TV content supply market. (ITV's submission raises the same question); and
- the Radio Independents Group calls for an opening up of more BBC radio output to third-party producers in order to help stimulate the sector. There is a similar appeal from PACT concerning online audiovisual content.

As intimated, many of these submissions make specific claims about the BBC's impact on the commercial market, as well as questioning the added consumer value and public value generated by the BBC services. Often specific issues, such as BBC One positioning and strategy, are criticised at the commercial impact level – they may be taking revenue from ITV and crowding out ITV investment in high end content; at the net market impact level – BBC One is not providing the mix of output itself that improves the overall level of consumer surplus or boosts the creative sectors more generally; and at the public value level – BBC One is not giving enough peak time exposure to the types of programming that create the most public value.

The main interest of this report is, in the first instance, the commercial impact, and in the second instance the net market impact. We do not focus on broader issues of economic value (GVA) or public value.

3.3 Implications for approach and coverage of Part II

3.3.1 What new work is needed?

The coverage and conclusions of previous MIAs – specific and broad, the age of some of these assessments in some fast-developing markets, and the specific issues raised by the submissions to the Green Paper suggest a certain focus to the work of this report, given the time and resources available.

The areas of focus are:

- providing complete, albeit brief, MIAs for the BBC's core services in TV and radio – most notably, BBC One/BBC Two, Radio 1 and Radio 2;
- updating some older reviews of new/additional services – in particular the BBC's UK Online news and information services (national and local) that have not been looked at since 2004/2006 when the marketplace was very different;

- updating the impact of the BBC's digital radio strategy given the switch of digital audio from a DAB dominated future to a mixed ecology, and a much larger role for web based radio and audio services than envisaged back in 2003/2004;
- addressing specific issues raised by the submissions, which include:
  - the BBC's approach to on-demand content aggregation and distribution;
  - BBC One's programming mix and scheduling, and its impact on ITV; and
  - BBC Online's impact overseas on rival UK providers of news and information;
- undertaking a quick review of what happened to some of the commercial digital radio and TV services thought to be most threatened by the BBC's digital portfolios back in 2003/2004.

Time and resource constraints have meant we have been able to give rather less attention to the impact on the broader local media market beyond the specific online issues, and to the TV, radio and online content supply markets and the impact on commercial children's services.

3.3.2 How we have covered it?

We have assessed all the past and most recent submission evidence on the list of issues provided broadly within the TV, radio and online market silos. We have added in some new market data and analysis by O&O and Oxera. We have interviewed the BBC, Ofcom and a range of organisations and individuals who have submitted to the Green Paper, especially those in our focus areas above.

In a few cases we have conducted or attempted to conduct new time series and cross-sectional regression analysis where we think there may be a gap in the existing analysis and the data was available to have a reasonable attempt at measuring correlation and causality.

More broadly, while we focused any new quantitative assessments on the audience/revenue substitution effects (as Ofcom does), we have also – especially when looking at the broad range of core BBC services in the markets – covered the broader market structure and dynamics issues and the supply chain/adjacent market impacts, as far as the evidence allows.

PART TWO – SERVICE MARKET REVIEWS

4 TV market impacts

4.1 Main findings

While the BBC is a smaller part of the UK TV market now than it was 10 years ago, in terms of total sector revenue and total audience share, it is still the most significant single aggregator of audiences in the UK – with 33 per cent of measured viewing versus 22 per cent for its nearest rival, ITV plc. Since 2002, its lead channel, BBC One, has been the UK's most popular channel, and has now opened up a 7 percentage point lead over its nearest rival, ITV1. UKTV – BBC Worldwide's joint venture with Scripps Networks Interactive, Inc. – accounts for an additional 5 per cent of viewing share.

The BBC still accounts for around 25 per cent of all channel revenue, once platform revenue shares are excluded from pay TV. It also accounts for 40 per cent of all spend on originated UK content and produces in-house 20 per cent of all UK content (excluding news, where its share is higher).

Most studies over the last 20 years have suggested that the BBC has a positive net market impact at a broad TV sector level. Not only does the BBC add directly to the range, quality and UK focus of TV output in the UK, it may also be a major reason why commercial PSB services have traditionally provided more originated, high quality content than their PSB licences require.

- Whilst BBC activity has been shown to cause audience substitution and advertising revenue substitution, the impact on revenue is relatively small and is often spread across many channels. Past studies suggest that for every percentage gain in commercial audience share due to a smaller BBC, advertising revenue would increase by between £18m and £27m - equivalent to between a half and three quarters of one per cent of total TV advertising revenue in 2014.

- Any reduction in the funding, size and scope of the BBC risks not only a smaller value of total TV revenue, but also a much smaller amount of spending on content, and especially originated content. Commercial PSB players would have fewer incentives to spend more on originated content and might spend less.

- Past trends and survey evidence suggest that this shortfall would not be compensated for by the pay TV sector, since any significant extra willingness to subscribe (which studies suggest would only follow a substantial reduction in BBC activity) might be allocated to either higher profits or more fees to sports rights holders or US film and TV studios, and not to significant investment in originated UK TV content.

However, there are indications that past studies of this positive broad net market impact of the BBC (especially on content investment) and the negative impact of a smaller BBC, while still directionally correct, may be overstated when suggesting that every 1 per cent fall in licence fee income going to TV could shrink total UK originated content investment by 0.4 per cent.

Also, given recent changes in the competitive dynamics of the UK and global pay TV market, a smaller and more narrowly defined BBC PSB remit and funding would probably increase both subscription spending and the pay TV sector's propensity to invest in new originated content to attract the reduced BBC spending.

A smaller BBC could also further change the dynamics of the commercial advertising-funded TV sector, where the positive link between BBC spending and ITV spending may have been weakening in recent years and where the commercial PSB sector might well increase its overall investment in original content in response to a reduction in the size and scope of the BBC, although this would partly depend on how the commercial PSB sector is structured and regulated.

While the total UK originated content sector would still shrink with a large-scale reduction in BBC activity, it would probably not do so by as much as recent reports have suggested. The greater risk factor would be a more narrowly focused, less creatively innovative, and less national-culture-specific UK content sector outside a repositioned BBC, which itself would have to become more innovative and more differentiated to compensate for changes in the commercial sector, thus probably losing more share and reach.

While reduced funding for BBC TV would lead to a negative net market impact albeit smaller and in perhaps a different way than some recent studies have suggested, there has been much less work done on the net market impact of a more distinctive and differentiated BBC, and in particular a BBC with a greater degree of distinctiveness in its mainstream services, especially BBC One.

On the specific question of whether BBC One's historic and recent strategy has been crowding out more programming investment on ITV1 and/or not maximising the positive impact of its spend on the TV content market and the creative sector, we find that:

- on a number of measures BBC One is still distinctive from ITV1, with a more PSB-orientated schedule and a greater range of output in peak time;
- BBC One has far more news and current affairs in day time than ITV1;
- crime drama is a key focus for BBC One and ITV1 but counter-scheduling of crime dramas by BBC One against ITV1 has not increased in recent years;
- there are probably many reasons for reduced real programming investment by ITV1 which have little to do with BBC One;
- there are many legitimate reasons why BBC One leads ITV1 by a large share margin (such as higher audiences for national and local news due to brand strength and more cross media resources; a more cannibalistic portfolio of ITV spin off channels; a general commercial market failure in the provision of a range of day time programming; the role of BBC 2 as a support to BBC One; a better creative track record since 2002; and, the absence of advertising on BBC One).

However, we also find that:

- there is evidence to suggest BBC One schedule has become less innovative and less risk taking over the last 10 to 15 years, with fewer new titles and fewer titles in total. This suggests declining distinctiveness (the suggestion from BBC management is that this is about to reverse, partly in response to the 2014 BBC Trust review of BBC One, but there is no indication that this would be a permanent shift);
- BBC One may also have become less distinctive in recent years in terms of a decline in volumes in certain PSB genres in peak time, including specialist factual, arts, classical music, comedy. Although this may to some extent reflect more investment in fewer hours rather than a reduced overall commitment, it still raises issues about the prominence and reach of some PSB genres in the BBC One schedule;
- The day time schedule beyond news and current affairs is largely composed of high volume, heavily formatted and long running factual entertainment, lifestyle and quiz/panel game output;
- based on econometric analysis undertaken by Oxera, BBC One counter-scheduling of crime drama does reduce ITV1 crime drama audiences, by 6 to 8 per cent when episode clashes occur. However, what is not modelled is the impact on total drama audiences or total ITV1 audiences, and thus these impacts are less clear.

Given the above evidence, we have modelled the likely impact of a more distinctive BBC One schedule going forward in terms of more new titles per year, higher proportions of more challenging genres and, as importantly, more challenging programmes within genre (especially in peak time) and less competitive scheduling. We have found that such an approach (with no change in BBC funding) could:

- increase commercial ad funded channel revenue by £33m to £40m per year, which could rise to £50m to £60m by the end of the next Charter;
- reduce BBC One share by between 2.1 and 2.5 percentage points, but increase the consumer and public value of BBC One output;
- lead to broader benefits for the content supply sector and UK consumers especially if the commercial sector invests some of its increase revenue in new UK content; and,

- have knock on benefits to the UK pay TV sector.

In terms of the impact of the BBC's publicly funded digital services (channels and iPlayer) on rivals, there seems to be a broad consensus that these have helped to drive platform take-up and to open up new markets for both free to air and pay TV operators, as well as preserving the commercial PSB business model. Fears that BBC Three, BBC Four, CBBC and CBeebies might crowd out specific rivals such as Artsworld (now Sky Arts), Sky News,[38] commercial children's channels such as Nickelodeon, Nick Junior, Fox Kids and the Cartoon network, or young skewing thematic channels such as MTV, Sky One and E4, have proven to be unfounded.

Nevertheless, how the BBC best exploits its secondary and archive rights in the UK TV market and its impact on the future TV market and rival services probably does remain relevant in both the linear and non-linear TV markets, across which the BBC has so far taken a different approach. The BBC has kept on-demand access as a publicly funded service 30 days beyond transmission, after which it sells the content to third-party SVoD services, or makes it available to own through the BBC Store. In the linear TV market, it chose to set up its own commercially funded joint venture – UKTV – which earns revenues from channel advertising and pay platform carriage fees.

BBC plans for future service development seem to be based on two equally pessimistic visions for commercial TV in the UK: a consolidated, globally controlled sector; or a weak and unsustainable sector;

or a mix of the two. There has been less focus on more optimistic visions for the sector and, most importantly for this report, on the ways in which the BBC could help to increase the prospects for a vibrant commercial sector facing many challenges, rather than crowding out the sector's investment or increasing its risks. In this context, the Open BBC initiative currently appears to be focusing on helping UK arts and cultural organisations to achieve reach and impact, rather than on seeking ways to co-operate with the commercial TV market.

4.2 Introduction

This section reviews the BBC's market impact on the UK TV sector – across both linear and on-demand TV.[39] It describes the BBC's current positioning and performance across both the whole TV market and in important sub-segments of that market, and includes a brief history of developments over the last 20 years – two Charter periods – that have seen rapid and radical changes in the TV sector.

It then summarises the large number of current and past studies of BBC market impact, and broader reviews of aspects of the TV market that have relevance to the BBC's market impact as well as the issues raised, plus significant new evidence provided by the main submissions to the recent Green Paper consultation – in particular, the BBC, BBC Trust and ITV plc submissions and commissioned reports supporting these submissions. Lastly, the main outstanding market impact issues emerging from these past reviews and recent submissions are identified in this section, before addressing some of the gaps and issues by means of:

- a broad assessment of the impact of the BBC on the whole UK TV market, in light of recent independent studies on this issue by PwC and the Reuters Institute/Enders Analysis, and the ongoing rapid changes in TV market demand and supply;
- an additional market impact assessment and analyses focused on the impact of BBC One's positioning and strategy on the commercial PSB market and in particular ITV1; and,
- a case study on the impact of BBC Four on pay TV provision of arts and cultural programming, and– an issue raised by the initial review of BBC Digital TV services in 2004 - providing an analysis of what happened subsequently

[38] Although the presence and strength of BBC News Channel may have made some contribution to the closure of the ITV News channel at the end of 2005.
[39] On-demand TV is also looked at in Chapter 6 covering the online market.

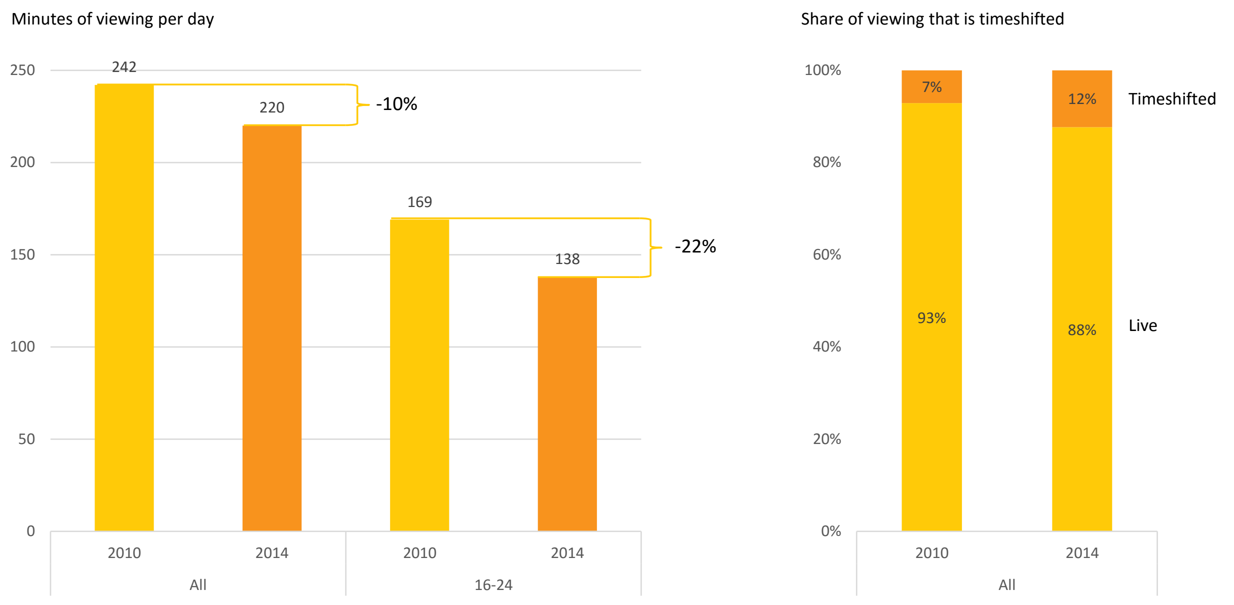
4.3 Market trends and future prospects

4.3.1 The changing UK TV market – the story so far

The UK TV sector is characterised by high levels of reach and consumption
Over 90 per cent of the UK population watches TV each week, with the average viewer consuming about 220 minutes per day in 2014 (just over 25.5 hours per week). This is roughly the same as 10 years ago (although about 10 per cent down on 2010, as shown in Figure 5). In this total, there has been some switching from live TV to playback and on-demand, and a significant decline in measured TV viewing among the under 25s, although live viewing still accounts for almost 90 per cent of measured TV viewing.

Over and above measured TV viewing there is an additional amount of TV type viewing to both short form YouTube type content, and Netflix SVoD type long form content, which is not included in the measured viewing total.[40] Research suggests that total audiovisual screen time is still on the increase, even among the under 25s once short form, SVoD and video game playing are added to the officially measured TV viewing that provides the basic currency for TV advertisers and broadcasters.

Figure 5: Measured UK minutes per day of TV consumption, 2010 and 2014



Source: BARB, reproduced in Ofcom communications Market Report 2015

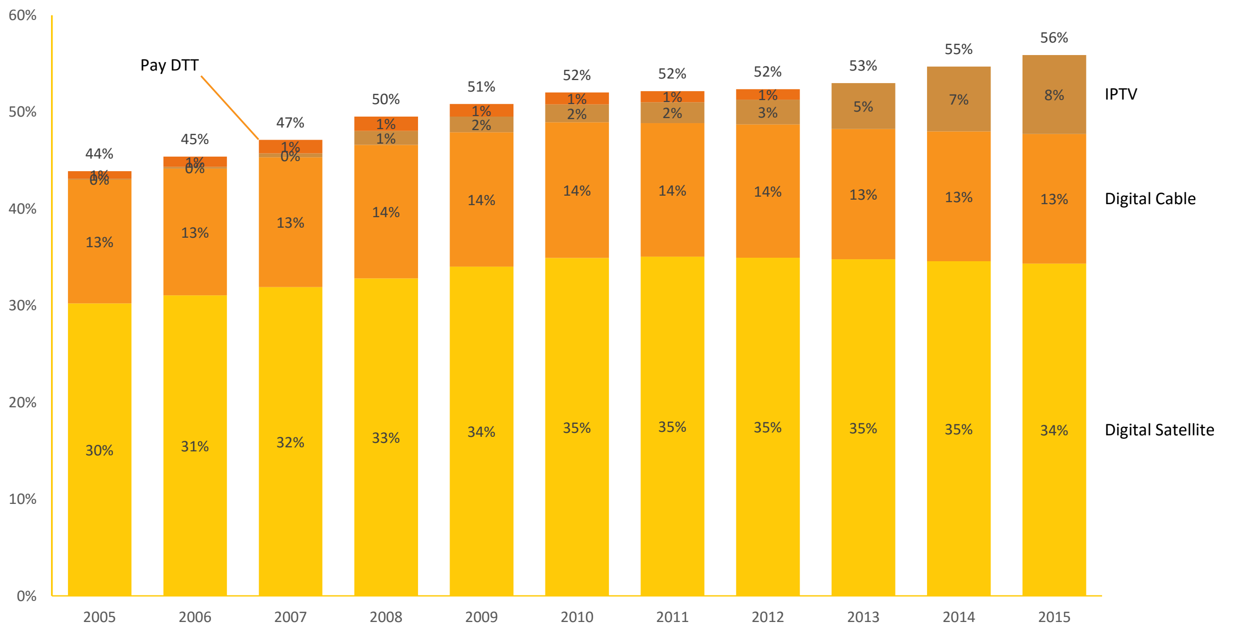
The number of platforms and devices used to view TV content is multiplying, although the main household TV set still dominates
TV reception in the UK is now a mix of digital terrestrial (DTT), digital satellite, and IPTV access via the existing telecoms network. Many households have multiple types of connection for different TV sets in the same household. Beyond the TV set, viewers can stream TV channels to PCs, tablets and smartphones as well as gain access to on-demand long and short form content. However, the shift to these devices from the TV set has been lessened by the upgrading of TV sets to large flatscreen high definition devices, and the increasing penetration of smart connected TVs, which can access a range of internet content delivered directly to the TV set through a central TV screen user interface.

[40] The BARB audience measurement system is currently being modified to capture this multi-platform, multi-device consumption. Enders Analysis has estimated that this unmeasured TV viewing probably adds another 15 per cent to current viewing times, and 30 per cent for the under 25s. Equity market analysts, Redburn, have estimated this uplift to be much lower, by including long form consumption on mobile and other devices only – at 3.3 percent across all UK adults and 7.5 percent for the under 25s.

Paying for TV services is now commonplace, with many more access options and price points available, but a significant proportion of the UK population only accesses free TV services
Total pay TV penetration is currently 56 per cent, up from 44 per cent 10 years ago, with many of these additional homes taking so called “pay-lite” options. These can be OTT (over the top) services such as Netflix and Amazon Prime; or small bundles of pay TV operator delivered channels, with perhaps only one or two premium sports and movie offerings costing around £10 to £20 per month, such as Now TV, as opposed to the whole package of up to 400 hundred channels costing £50 per month upwards.

However, a significant number of UK households – about 44 per cent – still rely on free to air DTT or satellite offerings with more limited channel choice. DTT in particular, which offers 40 and 50 channels and is the only source of reception for 40 per cent of TV households (10.5m homes), is still dominated by the main PSB networks and their spin-off channels (BBC Three, BBC Four, ITV2, ITV4, ITVBe, E4, More4, etc.).

Figure 6: Pay TV penetration in the UK, 2005 to 2015



Source: Ovum

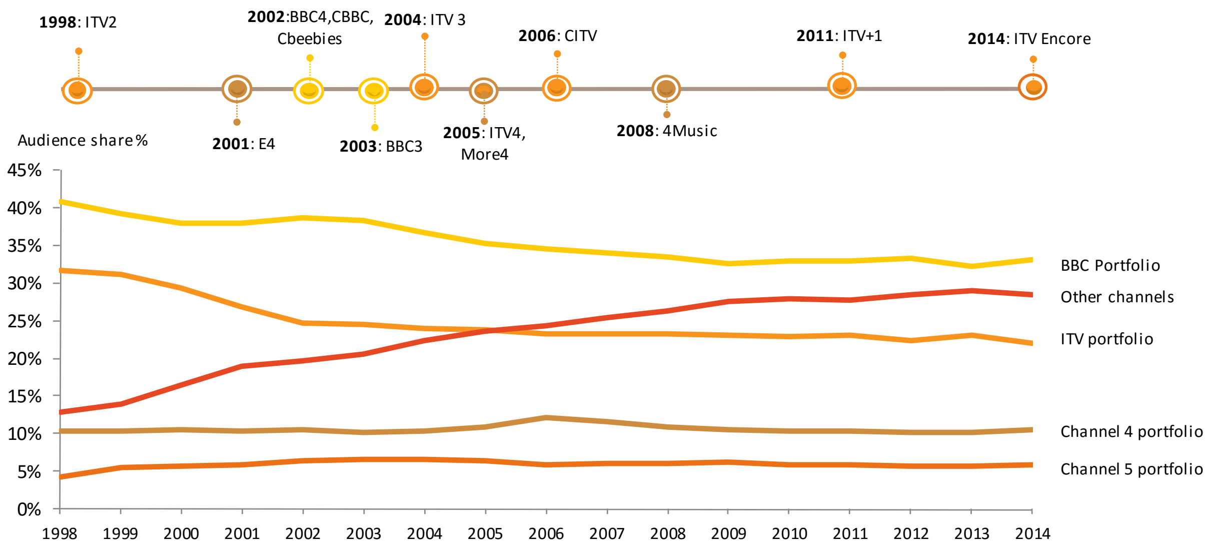
An increasing number of free TV households also have on-demand access
DTT households with good broadband connection speeds can start to connect their TVs to the internet with either bespoke set top boxes such as YouView or Freeview Play, or even with a small dongle to plug into the back of their TV set through providers such as Roku and Google Chromecast. This gives these houses direct access to the PSB channels’ catch-up services – iPlayer, the ITV Hub, All4 – as well as free web portals such as YouTube.

TV viewing tends to fragment and polarise with increasing channel choice rather than segment
Despite the rapid increase in TV channel choice, most households only watch about 20 different channels in an average week and among those 20 channels usually 4 to 8 account for the vast majority of their TV viewing. The net result is a general fragmentation of TV viewing, with hundreds of channels getting less than 0.2 per cent of all viewing, but also a polarisation of viewing, with a very small number of channels getting more than 5 per cent viewing share, a slightly larger number getting between 1 and 5 per cent, an even larger number getting between 0.2 and 1 per cent, and the remainder getting less than 0.2 per cent.

Viewing is still dominated by the traditional free to air PSB networks and their spin-off channels
It is the traditional PSB networks that provide all the channels with more than 5 per cent share, and the PSB portfolio spin-off channels that provide a majority of the channels with a share of between 1 and 5 per cent. This is driven by the PSB networks’ universal free to air availability on all TV platforms, but also by their traditionally larger programme budgets and focus on more mass audience tastes and UK originated content. It is difficult for channels with only pay TV distribution to gain much more than a 2 per

cent audience share; however, it is equally difficult for a free to air channel without access to PSB programming (including PSB repeat programming) to achieve above a 1 per cent share.

Figure 7: TV audience share by type of broadcaster, 1998 to 2014



Note: All day viewing. ITV+1, C4+1, C5+1 are included in Spin Offs

Source: BARB

Viewers still express a strong preference for UK originated content. The main issue is the comparative cost of that content versus acquisitions – but the market has found some solutions to this apparent dilemma

Despite a growing appetite for viewing US TV series across pay TV services and new OTT services such as Netflix, surveys suggest that UK viewers still prefer UK originated content in any given genre. This preference applies to their own consumption habits and in terms of what they think would be good for society as a whole. However, while producers of overseas content (mostly from the USA) have no need to recover their production costs through UK sales,[41] UK originated content prices to the TV network are still largely based on the full costs of production, but with an increasing contribution from secondary and global exploitation. This makes UK content that is of a similar genre to imported content more expensive to TV channels and riskier (the US content has already been tested with audiences in the USA), even if it is potentially much more popular.

UK regulation requires the PSBs to show a high proportion of UK content, especially in peak time, due to the consumer and public benefits produced – much higher than the effective minimum EU requirement of 50 per cent. But both ITV1 and Channel 4 show more than this minimum requirement, suggesting that, at least for ITV1, it is profit maximising to show very high amounts of UK content.[42] This preference for commissioning UK content has often been put down to the presence of the BBC as a rival (an issue dealt with below), but over the last 15 or so years it probably has had as much to do with how the global market for TV has changed and helped solve the broadcasters' dilemma in showing more popular but more expensive and risky UK content.

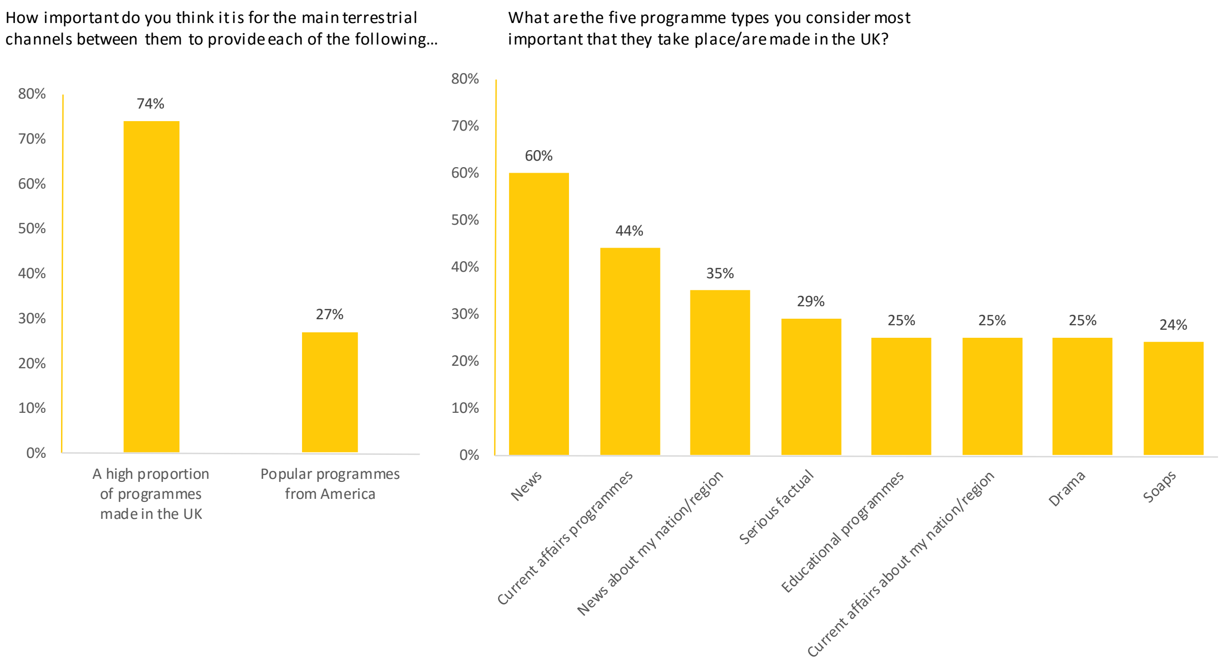
Market solutions include the use of international formats (remakes of US shows in the UK) largely in non-scripted programming, which reduces the risk if not the cost; and US/UK co-productions in scripted programming, which are effectively programmes made with both markets in mind. These often have UK actors and UK stories and themes, but also have strong appeal to the US market. Period and fantasy world dramas (*Downton Abbey*, *Game of Thrones*, *War and Peace*) are an example of this type of output.

[41] The content is largely paid for in the US market, and is sold into other markets such as the UK with near zero marginal cost, so the price is set by the value to the channels.
[42] This is often attributed to ITV's need to compete with BBC One and the very high levels of UK content on the BBC channels.

The third and perhaps most important solution to the home grown popularity versus its cost and risk dilemma has emerged from a symbiosis between UK broadcasters and the UK's independent production sector – whereby PSBs maintain high rates of new idea commissioning to help find the next successful global format, while the production sector accepts lower margins on these commissions in return for the global rights to the formats and the potential profits from a global hit.

UK independent producer margins on UK commissions are very low by international and historical standards, but their rights income and global non-UK commission income growth has been rapid. Both sides gain – broadcasters get lower priced programming and a high rate of innovation, producers get the chance of creating a global hit and owning it. In turn, this is what has attracted so many international media groups to buy into UK-led independent production groups.

Figure 8: Viewer preferences for UK originated content



Sources Ofcom review of public service television broadcasting – phase 1 (2004); Ofcom second public service broadcasting review – phase 1 (2008)

The switch to on-demand TV viewing from linear live viewing continues to gather pace, especially among the under-35s and ABC1s, but live linear viewing still accounts for the vast majority of all viewing time, and the PSB catch-up services capture a high proportion of the on-demand viewing

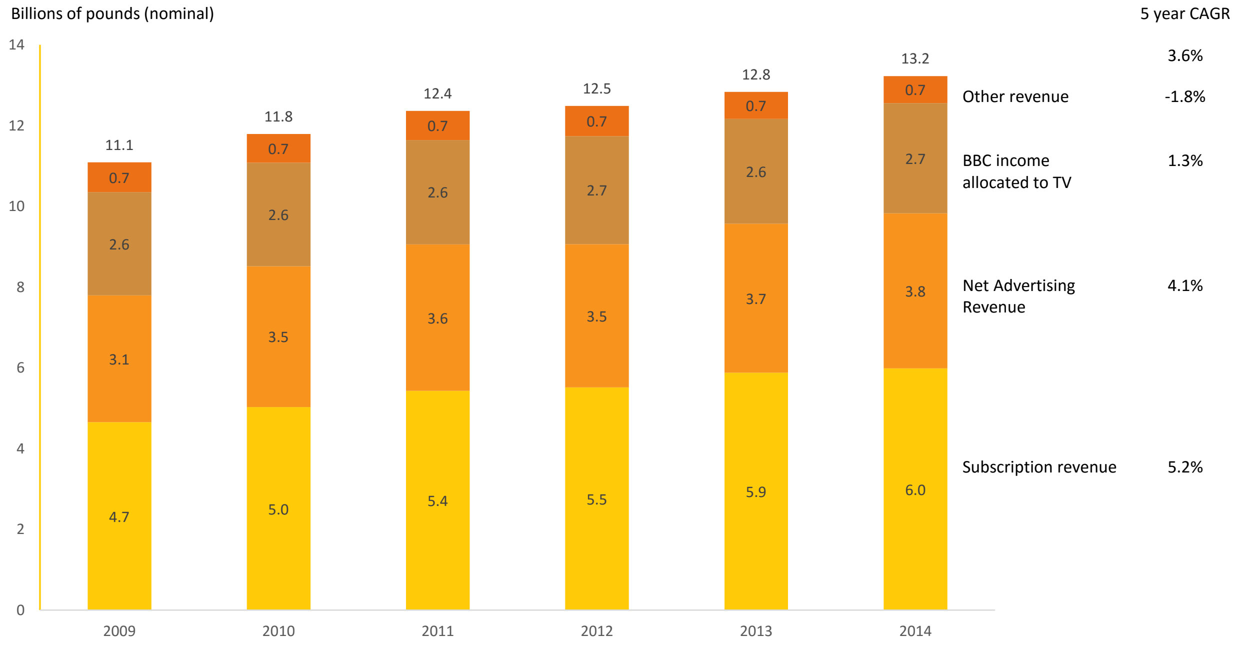
While there has been a significant shift to on-demand viewing over the last 10 years, both through record and playback digital PVRs and specific IP delivered on-demand and catch-up services, the vast majority of viewing, even in homes with a PVR and IP connectivity, is live TV. High-end entertainment shows and sports events often account for the highest proportion of live viewing, and drama series the highest proportion of on-demand viewing.

In addition, a significant proportion of this on-demand viewing is to the PSB network programming – either through the PVR or the PSB-operated TV catch-up services. However, the switch to on-demand viewing and the switch away from PSB content within on-demand viewing is higher among the under-35s and ABC1s than the rest of the population – i.e. two of the most valuable demographics to advertisers.

Total TV revenue continues to grow, although the mix of revenue is shifting towards pay TV

Total TV revenue (licence fees, subscriptions, advertising/sponsorship and interactive) grew by 3.6 per cent a year between 2009 and 2014, and commercial revenues by almost 5 per cent a year excluding the licence fee. Within commercial revenues, total advertising/sponsorship revenue grew by about 4 per cent a year and pay TV by approximately 5 per cent a year. This continues a long-term shift in total TV revenue away from advertising and licence fees, towards subscription payments.

Figure 9: UK TV revenue by source, 2009 to 2014



Source: Ofcom; The Communications Market Report 2015

TV advertising has held its share of total display advertising

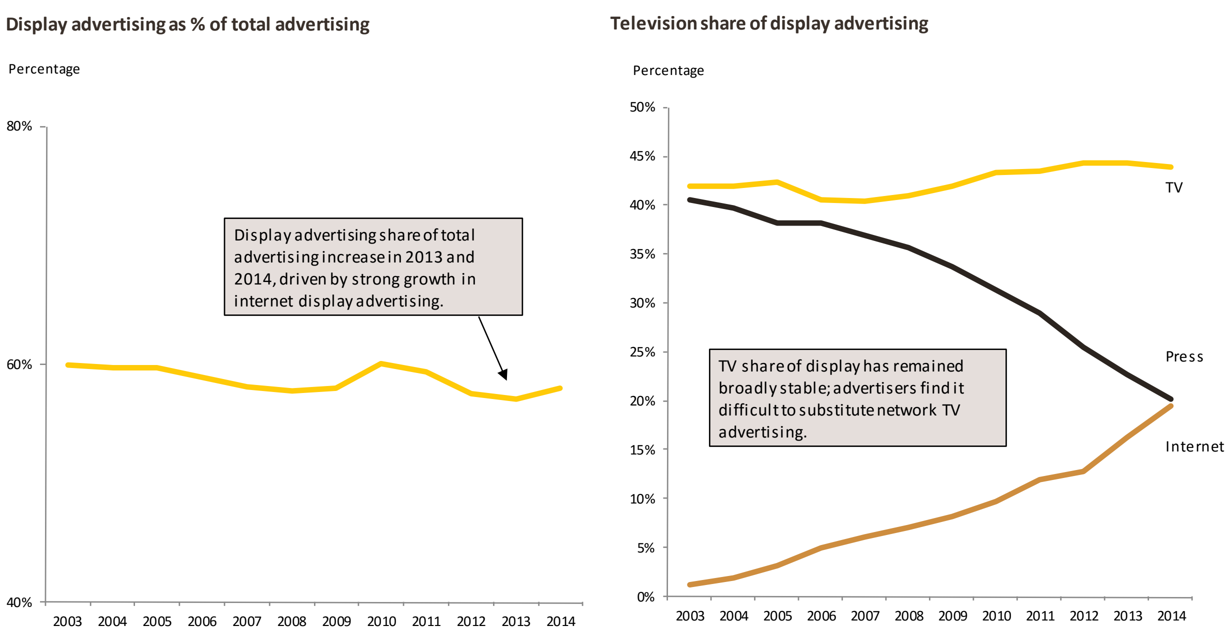
Despite the relative growth of pay TV, advertising and sponsorship growth is still healthy. TV has managed to keep its share of display advertising[43] in the UK (in fact, its share has increased marginally in recent years), while the internet has taken share from the press first and foremost, and radio to a lesser extent.

What has been more of a challenge for TV has been the shift within marketing budgets from display advertising towards more classified/search type advertising offered by and through Google. From 2003 to 2010 this led to a relatively low growth of display advertising, despite TV's share of display being strong.

In the last few years, however, this switch from display to transaction spending has largely stopped, leading to higher growth for both display advertising and TV within it. There are even signs that some advertisers are polarising spend between search, to drive transactions, and TV, to build the brand, which may help increase TV's share of display going forward.

[43] Display advertising includes TV, radio, print run of page picture adverts, outdoor, cinema and internet banner/video ads.

Figure 10: Display advertising share and television share of display advertising



Source: Zenith Optimedia, ONS, IAB, O&O

Advertisers pay a significant price premium for high reach TV and are fairly price-insensitive

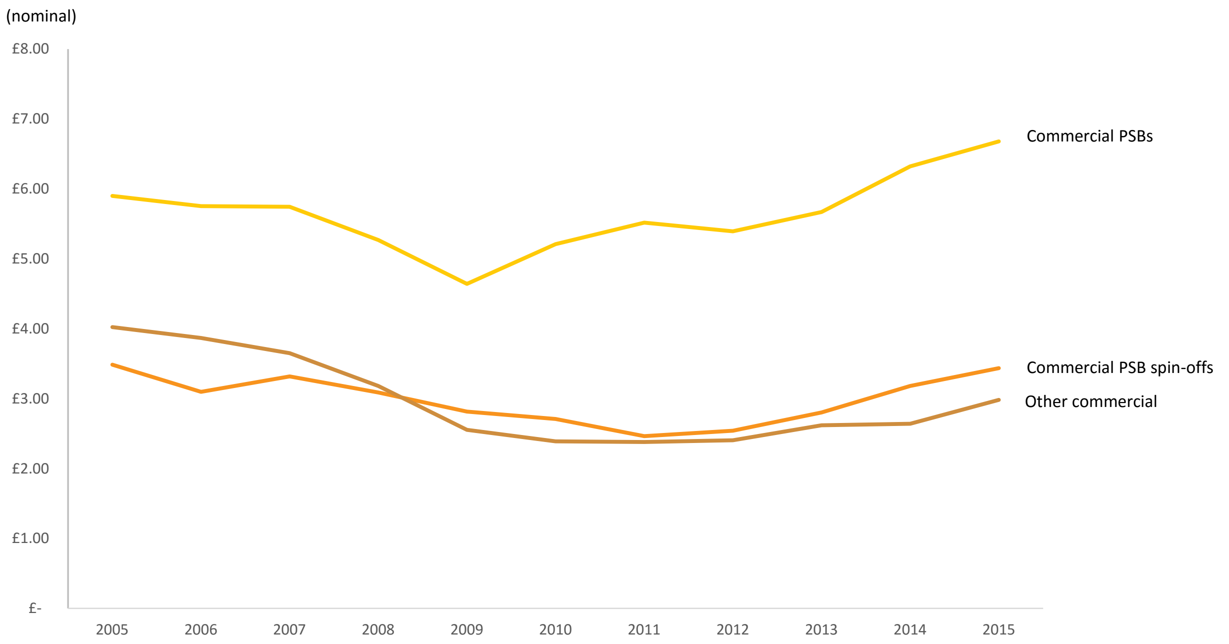
Within the TV advertising market, advertisers place a price premium (in terms of the cost per thousand impacts paid – CPM) on the highest reach networks and channel portfolios. This premium to the market price seems to increase even while total market impacts grow and the lead networks still lose share. This has helped both ITV and Channel 4; in particular, ITV1 and the main Channel 4 service make up for audience share loss with increased advertising prices.

This trend, combined with their strong digital spin-off channels offering higher reach than many of the other thematic channels and the strong performance of their on-demand catch-up services, has allowed ITV and, to a lesser extent, Channel 4, to grow their share of net advertising revenue recently. This is in spite of the fact that their main channels have lost considerable share, and even their portfolios taken as a whole have lost some share in recent years.[44]

The last three years in particular have seen the price of advertising on ITV1 increase markedly, even while its share has continued to fall. Channel 4 – which for many advertisers is a complement to ITV1 advertising, as Channel 4's younger audience helps weight its broad campaigns back towards the UK average age profile given ITV1's older profile – tends to see its price rise in line with ITV1's price. This suggests that demand for high reach network advertising is not very elastic, indeed some estimates suggest that demand for the lead networks in the portfolios may be inelastic – if only in the short term – even if demand for the portfolios as a whole remains elastic.[45]

[44] Channel 4 also sells UKTV's advertising inventory, which has helped Channel 4 increase its share of the advertising market – although the benefits of this to Channel 4 itself depend on the commission margin it has negotiated with UKTV.
[45] See later analysis of TV advertising demand elasticity.

Figure 11: UK CPMs by type of broadcaster, 2005 to 2015



Source: Ofcom, company annual reports, O&O analysis

ITV's broadcasting activities have become highly profitable again, Channel 5 is profitable and Channel 4 is able to sustain increased content spending and maintain its reserves

The factors listed below have all helped to drive increasing broadcasting activity profitability at ITV plc;[46] helped Channel 5 to sustain a profitable position after 15 years of almost consistent losses; and helped Channel 4 to maintain its overall share of the UK TV market across its portfolio, fulfil its remit and maintain its financial reserves.

- Growth in demand for TV advertising.
- Successful spin-off channel portfolios helped by the unique reach of Freeview.
- The increasing premium advertising prices paid for the highest reach networks despite audience share losses.
- The ability to share the risks and some of the costs of their originated programming with a globalising UK production sector.

Declining shares of the lead commercial PSB networks – ITV1, Channel 4 and Channel 5 – are partly due to a deliberate switch to their spin-off channels

Increasing advertising prices for high reach main networks plus an overall need to keep their share of all commercial impacts high to attract a significant share of all advertising spend, have encouraged the commercial PSBs to adopt strategies that accept declining main network shares – if not reach – while building the shares of their spin-off channels. ITV spin-off channels account for about one third of all ITV portfolio viewing and Channel 4 spin-offs about 45 per cent of all viewing (this compares with BBC spin-off channels accounting for about 15 per cent of all viewing – although the BBC does have two lead networks, with BBC Two plus spin-off channels accounting for about 30 per cent of all BBC viewing).

[46] ITV plc also derives significant profits from its expanded studios division, which has been acquiring independent producers in the UK and USA over the last 5 years. This in turn is likely to make ITV plc less vulnerable to any future advertising downturn due to the economic cycle which in the past has damaged ITV's share price and brought it close to breaching debt covenants.

TV advertising is still very cyclical, and doubts remain over the long-term sustainability of ever higher network CPMs as their audiences continue to decline

Advertising revenue remains cyclical, and network TV advertising perhaps more than other forms of advertising, given its relatively high price – with both drops in consumer spending and, more importantly, falls in corporate advertiser profit margins, that accompany a recession, quickly feeding through to reduced advertising spend by brands. The last TV advertising recession was from 2008 to 2010, in line with the financial credit crisis, and over the last 30 years there has been an advertising recession every 7 to 9 years.

Perhaps more importantly, recent trends in the USA, where leading network advertising prices had increased steadily for over 30 years as cable channels took more share from them (the 4 networks now account for only about 40 per cent of all peak time viewing), have suggested that the advertising pricing power of network TV, and leading cablenets, may be weakening. At a very macro level, advertisers are beginning to look for mass reach by relying less on network TV and more on social media. While it is uncertain if the trends of the last 2 years are a turning point or simply a pause, there will come a point where high reach on TV becomes so expensive that advertisers look to alternative ways to reach large numbers of their target demographics rapidly.

The pay TV market has become more competitive in recent years with the arrival of both triple play/quadruple play (3P/4P) offerings from platforms and the growth of OTT services

As network TV advertising has proven quite robust in recent years and performed better than many had projected, the pay TV market has become more competitive at both a platform connectivity level and a retail service level. Faster broadband speeds and better compression, network traffic and content management software have allowed both telecoms providers and OTT TV services using open system telecoms distribution to offer pay TV alternatives to consumers.

This has transferred the pay TV competitive dynamic from one involving just rival TV distribution systems (Sky using DSAT versus Virgin Media using cable, versus ITV Digital (now closed) using DTT) to one where providers are competing on the same distribution system – BT retailing BT Sport in digital satellite homes; Netflix selling across all systems to Sky, Virgin Media, BT and TalkTalk connected homes; and Sky using Now TV to gain customers in Freeview, cable, IPTV and Freesat homes.

For connectivity providers offering TV, telephony and broadband (so-called “triple play or 3P” providers), pay TV has become a very important component of customer acquisition and churn reduction increasing the strategic value of providing pay TV packages. The addition of mobile to these services (to create so-called “quadruple play or 4P” services) may increase still further the strategic value of pay TV, as in a market where all providers can offer similar connection speeds and functionality (which we are moving towards with the build out of fibre networks) the main differentiator becomes the entertainment package offered.

Figure 12: Pay TV offerings in the UK – summary table

	BROADBAND (top tier)	TV (top tier)	PREMIUM TV				PREMIUM TRIPLE PLAY BUNDLE
sky	£20	£33	Sky Sports £25.50	Sky Movies £17	Sky Sport & Movies £34.50	BT Sports £13.50	£79.40
BT	£25	£5 for 6 mths then £7.45	Sky Sports 1&2 £22 (£16.50each)	Sky Movies £13.50	Sky Sports & Movies £35.50	BT Sports FREE	£46.99 for 6mths then £49.44
Virgin media	£41	£45.49 for 6 mths then £49.99	Sky Sports £27.25 - £17 for 1 channel	Sky Movies £16.50	Sky Sports & Movies £34.25	BT Sports £15	£100.99 for 12mths then £115.99
TalkTalk	£26.20 for 6 mths then £45.20	£25.95 for 12 mths than £35.20	Sky Sports £30	Sky Movies £15	Sky Sports & Movies £45	✗	£25.95 for 12 mths than £35.20

*With the exception of BT Sport on TalkTalk
Source: Company websites, Oliver & Ohlbaum analysis: Correct at July 2015

Pay TV is beginning to invest more in originated content, although it is still heavily dependent on live sports, movies and acquired US TV series

This extra 3P/4P competition is leading to increased investment in content. In the first instance, it has bid up the price for top sports events and competitions, especially lead football properties, which could be seen as a straight transfer from consumer surplus to producer surplus (the producers in this case being football teams and their players). However, as sport has become more expensive, and top sport remains scarce, platforms are looking for alternative ways to attract customers, leading to both additional direct investment in new UK content by Sky, Netflix and Amazon Prime and the increased provision of co-produced or US-acquired content to UK consumers.

UK pay TV is more heavily invested in live sports proportionately than either in the USA or major European markets – which may reflect both the relative appeal of sport in the UK, and the strength and range of the free to air UK content offering compared with other markets

The high levels of spending on sports rights by pay TV operators in the UK (currently over £2.5bn a year, equivalent to the BBC's entire annual TV spend) reflects the relatively high value that UK consumers attribute to live sport. Another reason why the spending per head of the population is so high, and much higher than pay TV spending on sports rights per head in the USA or other major European countries, might be the strength of UK content provision on free to air TV. This may make UK commissions a poorer alternative route for the UK pay sector to gain subscribers, while US series still largely appeal only to a subsection of the UK market.

The pay TV offering in the UK is benefiting from a surge in fiction content investment globally, especially from the USA

Greater pay TV competition is a global trend and not just a UK trend. Its impact in the USA has been a surge in the number of drama series commissioned, especially outside the 4 network free to air system. In 1999, the US TV system was producing 29 new TV drama series a year; in 2010 this had risen to 250, and in 2015 it was 400.[47]

While there are some fears that this represents an investment bubble, there is little doubt that the system can sustain a higher level of investment than 10 or even 5 years ago, given the strategic value to 3P/4P providers, and that this increased supply of content is helping fuel more competition in the UK as providers have more US output with which to break into the UK market. At the same time, UK pay TV and free to air TV providers have more co-production partners to choose from in order to provide more UK orientated content, but with US and international appeal.

[47] Speech by CEO of Fox International channels.

The UK originated content sector continues to grow, but is more dependent on IP exploitation overseas in all its forms for that growth

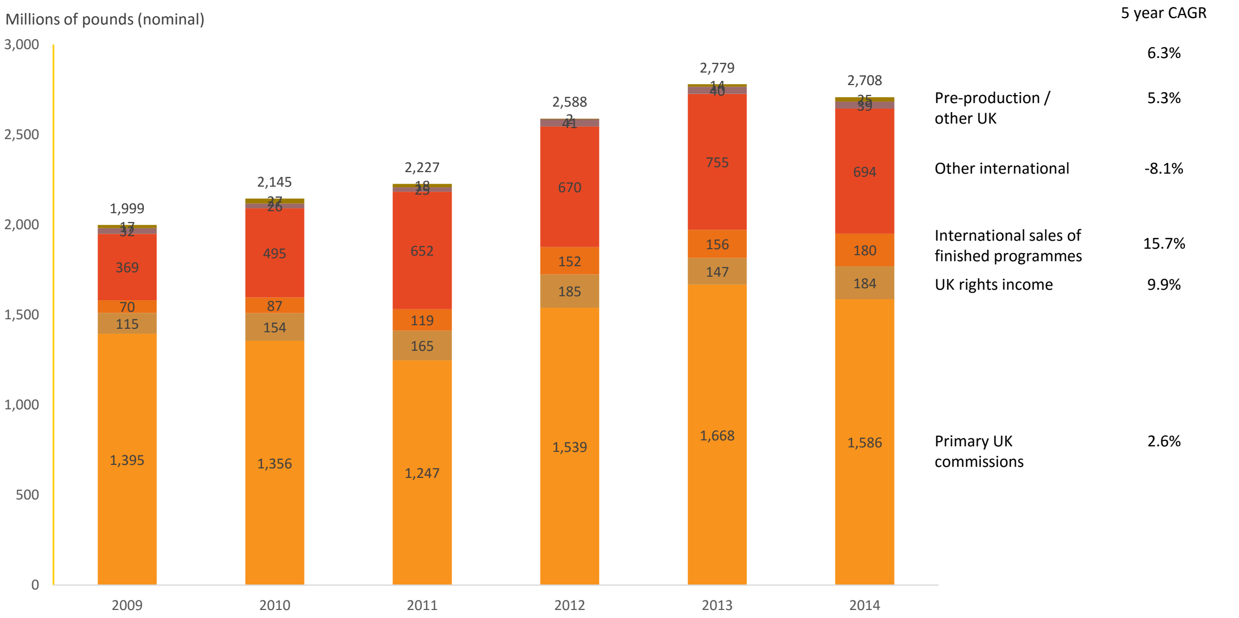
The recent growth in demand for fiction content with global appeal has added to a 15-year trend across global TV markets to look to commission local remakes of existing formatted entertainment and factual entertainment shows to create a buoyant market for UK based TV producers. UK producers are the leading providers of formatted shows into the global market, helped by a PSB system that probably commissions more new titles every year than any other TV system in the world[48]. The position of the UK based TV producer in the fiction market is still a long way behind the USA, but the UK often plays a pivotal role in the international co-production market for high-end drama output, recently helped by tax credits for all TV shows with a budget over £1m an hour.

The UK has become a major hub for the fast-globalising TV content sector, with the independent TV production sector growing at about 4 per cent a year since 2004 – the year when terms of trade first came into effect. This growth is thanks to the UK's supply of international acting and writing talent, as well as terms of trade intervention to help UK TV producers retain all the rights to their shows, and the introduction of recent tax credits for high-end TV content made in the UK.

The boundaries between what is UK content and what is non-UK content, and what is a UK content producer and what is not, are becoming more blurred

The net result of this is a large amount of TV content in addition to fully originated UK content that is either: based on original IP developed in the UK; or involves significant levels of UK on screen and off screen talent, and that reflects, at least in part, UK tastes and storytelling traditions.

Figure 13: UK independent production sector revenue – 2004 to 2014



Source: Ofcom; The Communications Market Report 2015

Recent consolidation in the independent production sector has also left many of the largest suppliers owned by global media groups such as 21st Century Fox and Discovery. However, together they still only account for 21 per cent of programme hours commissioned by the BBC and the commercial PSBs, with qualifying independent production companies still accounting for 36 per cent of commissioned hours.[49]

ITV has used the improved financial position of its broadcasting business in recent years to add acquired US and UK production businesses to its existing in-house production. Consequently, it now owns one of the largest TV production businesses globally outside the US studio system, and accounts for

[48] See later analysis of proportions of new commissions on PSB networks in the UK as a source of public value and creative sector multiplier.
[49] O&O analysis (unpublished).

approaching 25 per cent of the UK market. BBC in-house production accounts for the remaining 20 per cent.

A growing TV market, with healthy advertising revenues despite the rise of the internet, a more competitive and varied pay TV offer, and a growing and globally attractive UK content sector have led some to call this the new Golden Age of TV

While many feared that the growth of TV content on the internet (as broadband speeds and compression technology improved) would have a similarly disruptive effect on the TV sector as it did on the music sector (where the value of the recorded music market in the USA and the UK halved in 10 years), so far the internet has only helped boost the TV market. Connectivity competition in the 3P/4P market, the increased ability of consumers to watch TV at any time and in any place, the addition of new OTT services, and the robustness of TV advertising as a means to build mass brands in a fragmented media world, have all helped create a growth spurt for TV.

Many analysts have dubbed the current TV market as a new Golden Age of TV.[50]

The TV market is not one market but several market segments, all of which are experiencing slightly different dynamics

In terms of revenue models, the TV market clearly splits into: (1) the free to air market, dominated by advertiser-funded networks and, in Europe, publicly funded PSB organisations such as the BBC; (2) the pay TV market, providing a large number of entertainment, specialist and premium sport and movie channels and on-demand content; and (3) the "pay-lite" market supplied both by pay TV operators with scaled down offerings such as Now TV, and by OTT providers such as Netflix and Amazon Prime. Across the TV market, it is the last of these categories that is seeing the greatest growth at the moment.

Figure 14: TV and cinema video streaming services

	LAUNCH DATE	No. of COUNTRIES	No. of ACTIVE USERS	PRICE	LIBRARY	CONTENT
amazon instant video	2011	5	40 million [primer users]	Prime £79 Instant video £5.99	17.000 movies and shows	Amazon, Majors, Indies
NETFLIX	1997	50+	65 million	£5.99 £7.49 £8.99 1month free	100k+ Films/shows	Netflix, most major studios
NOW TV Powered by sky	2012	3		Sky Movies £16.50	Sky Library, and sports portfolio, linear channels	Sky rights

Source: Company websites, Oliver & Ohlbaum analysis: Correct at October 2015

In terms of channel business models, the market splits into 4 types: (1) the commercial network providers such as ITV1, RTL, TF1, ProseibenSat1 and CBS; (2) the publicly funded network providers such as the BBC, ARD/ZDF, FRTV and RAI; (3) thematic channel providers – either advertiser-funded only or a combination of advertiser funding and pay TV carriage fees such as Discovery, MTV, UKTV, AB Group and AMC; and (4) the premium sports, movies and TV series providers such as Sky Sports, BT Sports, HBO, Canal+ and Netflix.

[50] First coined in the longer term by French academic Alexis Pichard, and reflected in Kevin Spacey's MacTaggart Lecture at the Edinburgh Festival in 2013.

The premium end of the market is growing fast but becoming more competitive and more global. The commercial network part of the market has lower growth but remains important and is still a significant commissioner of new home grown programming in each market, especially larger and/or heavily regulated markets. The publicly funded broadcasters have low or negative growth, but remain large in their national markets and are the most important commissioners of home grown content in most markets where they have a sizeable presence – Europe and parts of Asia Pacific.

The thematic channel providers are probably facing the most challenging future with the growth of "pay-lite" and OTT (especially those channels not owned by platforms or leading content providers). Their future prospects are polarising between high-end, often global, channels that can afford to improve their content offering and demand a higher price from platforms or to go directly to the consumer (Disney recently launched its own OTT offering in the USA); and "cheap and cheerful" repeat/archive-filled channels that exist mostly on advertising and high platform reach.

Given these challenges, some organisations in this part of the market are also choosing to move into the other two commercial business models, buying national commercial networks and moving towards premium offerings (e.g. Discovery's acquisition of commercial networks in the Nordics and Italy, and its purchase of Eurosport) as well as trying to enhance their link with either content providers or platforms, e.g. Discovery's 50 per cent acquisition of All3media in partnership with platform owner – Liberty Global.

In some areas leading commercial broadcasters with production assets have also moved into pay basic channel provision given their access to a good pipeline of content – something the BBC did almost 20 years ago when it set up UKTV as a joint venture.

4.3.2 Future challenges and opportunities

Change is likely to continue apace in the UK market, as multichannel TV, on-demand TV, and, even more importantly, connected IP based TV, become universal or near-universal. This will continue to challenge those involved in the traditional TV sector and the main pillars that underpin their business models and performance.

In many ways the next 10 years will see an extension and perhaps acceleration of current trends – in particular, the move from linear TV set viewing to multi-device on-demand viewing with an increased convergence between traditional TV and new forms of short-form TV provision. This potentially more fragmented viewing environment will extend beyond the under-25s, as that cohort (the internet generation) becomes older and does not behave exactly like the previous cohort.[51]

But TV viewing and advertising/pay revenue, while fragmenting, is also likely to continue to polarise – thereby preserving the position of the leading players – or, if it does not polarise, lead to significant sector consolidation in order to re-aggregate consumption and profitability (or probably a bit of both). This consolidation and re-aggregation is likely to take place both internationally and within national markets, although this may be limited by national competition authority concerns.

International consolidation to re-aggregate service revenue and profits will be reinforced by increased global links between media markets – especially between the USA and other major national TV markets – where fiction co-production and global formats are likely to be increasingly rolled out, and where new OTT players such as Netflix are trying to build global consumer brands.

Global consolidation in the TV market is likely to converge, with increasing interest in the TV market from the leading web platform players (Google, Facebook, Amazon, Apple) as the web becomes more audiovisual, and increasing interest in TV from the leading telecoms and broadband providers, where the TV services offering becomes one of the main differentiators.

Despite all these potential developments, the future of commercial PSB TV will be relatively secure in the UK if: (1) it retains its leading position and reach over rivals across linear and on-demand TV; and (2) if TV advertising retains its unique role in rapidly building mass brand recognition and FMCG adoption. However, in turn, this will make it more attractive to the global and convergence players looking to consolidate and aggregate viewing and revenue.

[51] See, for example, studies by Enders Analysis (2015) and LEK (2016).

With so much change happening, it is more difficult – perhaps even ill advised – to predict the exact outcomes for commercial TV (pay or advertiser-funded) in the UK over the next 10 years. Nevertheless, it is possible to outline some broad likely trends and the competitive scenario options that might present themselves. In addition, the BBC's own vision for the next 10 years does attempt to paint a view of how the global and UK market will develop, and is developing, with implications for its own role, scope and plans, as outlined in its "Bold, British and Creative" document of September 2015.

Broadly speaking, there are three alternative visions for the commercial TV sector in the UK:

- consolidated, converged, controlled and globalised (the "invasion scenario");
- fragmented, weak and challenged (the "inevitable decline scenario");
- transformed, challenged, but vibrant and influential, if not independent (the "transformation scenario").

The BBC's strategy and vision documents emphasise the first two but give less focus to the third. The BBC's documents tend to regard the BBC itself as being largely passive in terms of its influence over which of the three (or two) scenarios occur. It suggests that the BBC will have to make up for any shortcomings of the commercial sector as a consequence of future scenarios, rather than investigating in any detail how its behaviour might determine which of the three scenarios actually transpires.

In the first scenario, the free to air commercial PSB sector ends up as part of global and converged media groups, as does the content supply sector that underpins it. While these groups might continue to be relatively healthy and could still comply with their PSB obligations, their service and content investment strategies will be driven primarily by global ambitions and/or their market power in the UK over advertisers, and viewers may work against the interests of UK consumers and citizens. The successful UK content sector becomes the "IP farm" for global media groups (with the implication that "farmers" lack any power over others in their supply chain).

The pay TV sector, while perhaps still competitive between three or four 3P/4P platforms and global OTT service providers, is very much part of the global competitive game, where UK viewers and consumers are given what suits the global ambitions of their owners – i.e. largely US-driven content, or content that could switch UK consumer loyalty, mainly sports rights.

Furthermore, in this scenario, the only organisation focused on UK consumers, the UK content sector and the building of UK-owned and developed brands in non-UK markets will be the BBC and its commercial division, BBC Worldwide. The BBC becomes the vital, and largely only, focus for UK culture, UK media commercial activity and public value.

The second scenario draws similar implications for the BBC, but from a very different view. UK commercial operators are largely left out of the global consolidation trends to struggle on as weak, small and narrow organisations seeking to compete with global rivals which have chosen to compete with them rather than acquire them. The BBC may be small compared with many of the global players involved, or likely to become involved, in TV, but the UK commercial sector is even smaller. Even Sky Europe and Virgin Media (linked to 21st Century Fox and Liberty Global, respectively) may end up as either much less UK-focused in their outlook, or being marginalised by Google, Amazon and Facebook, or perhaps companies such as Comcast and Verizon.

In this vision, there remains a UK-owned and UK-operated commercial sector still relatively focused on UK consumers and citizens, but without the economic clout to maintain high shares of the market, with increasing pressure on its sustainability. At some point, the organisations in this sector may even need public support to continue as independent entities. The choice then becomes a weak commercial sector propped up by public support or a strong BBC.

A third scenario is that the UK commercial TV sector reinvents itself for this new age. Commercial broadcasters diversify into global content production, or move into related areas of e-commerce and OTT service provision, with a focus on the UK but extending out to other major geographic markets. The UK pay TV market, far from becoming an offshoot of the US-driven global sector, becomes the core of a European pay TV and 3P/4P sector, with Sky Europe, BT, Virgin Media and Vodafone becoming major players based on a strong UK presence focused on UK consumer needs. Moreover, the UK's content creation sector remains vibrant, with a significant independent component, and, where elements of it form part of larger groups, the sector becomes the main global hub for innovation within global groups – an "IP powerhouse" rather than an "IP farm".

The BBC Charter submissions have not wholly considered this third scenario, which probably deserves as much attention as the other two scenarios. More importantly, in terms of future market impact (and the focus of this report), the BBC's strategy and plans should probably assess how far the BBC can, by its actions, increase the likelihood of the third scenario arising versus the other two scenarios. In particular, how far does acceptance of either of the first two scenarios in the BBC's strategic response become a self-fulfilling prophecy?

4.4 The BBC's performance and positioning

The BBC is a large and complex organisation operating in a fast-evolving and globalising TV market. Before assessing its potential commercial market impact and net market impact, it is important to map out in more detail all of its activities, its performance and the most important interfaces that exist between the BBC and the commercial TV market, both in the UK and overseas.

4.4.1 An overview of current performance and positioning

The BBC currently operates 8 UK-wide TV channels (BBC One, BBC Two, BBC Three, BBC Four, BBC News Channel, BBC Parliament, CBBC and CBeebies), plus specific local language/cultural services in Scotland and Wales (BBC Alba and S4C), which are funded by the licence fee. It also operates the iPlayer on-demand TV service.[52]

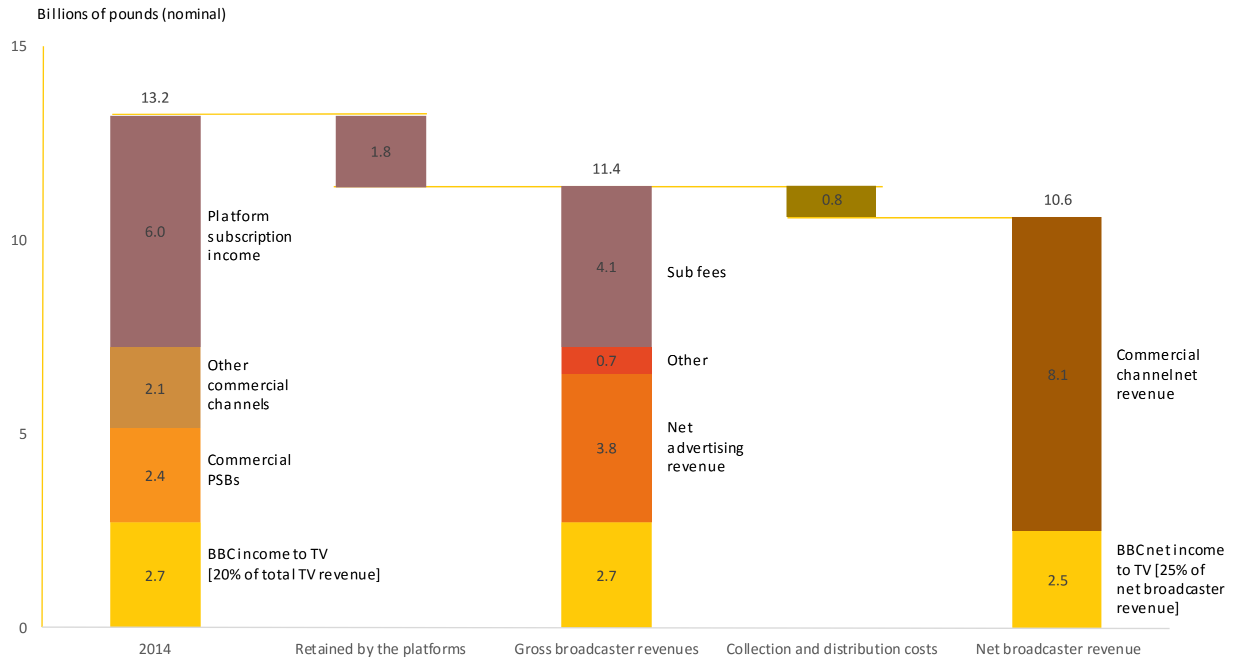
Taken together, its services account for 33 per cent of all measured TV viewing (down from 41 per cent in 1998, and 35 per cent in 2005), with BBC One still being the nation's most watched TV channel by a wide margin – accounting for 22 per cent of measured viewing in 2014, which is 7 percentage points ahead of its nearest rival, ITV1.

BBC Worldwide, the BBC's wholly owned commercial subsidiary also owns 50 per cent of UKTV – a major supplier of commercial thematic TV channels in the UK. UKTV is funded by a mixture of advertising and carriage fees from pay TV platforms and accounts for an additional 5 per cent of all TV viewing. It utilises a mixture of high volumes of archive BBC programming, commissioned programming and acquired programming from the USA.

The share of BBC licence fee income allocated to TV accounted for 20 per cent of all TV gross revenue (licence fee, advertising and sponsorship, total subscriptions and other interactive revenues) in 2014 – down from around 26 per cent in 2002. This is much lower than all pay TV's 45 per cent share of all gross revenues (but of course around one third of all pay TV revenues are taken by the pay TV distribution platforms – i.e. cable, satellite and IPTV – and do not find their way through to funding channels).

[52] Up until late 2015, only viewing 7 days from original broadcast on iPlayer through TV sets was measured. TV measurement systems are being update to include all such viewing on whatever platform.

Figure 15: BBC share of total TV revenue and net broadcaster revenue, 2014



Source: Ofcom Communications Report 2015; Oliver & Ohlbaum analysis
Advertising revenue is net of agency commission.Collection and distribution costs are costs of channel transmission and BBC licence fee collection costs

The BBC licence fee accounts for approximately 25 per cent of all net TV channel revenue, with a further 30 per cent shared among the 14 commercial PSB-owned free to air portfolio channels (those owned and operated by ITV, Channel 4 and Channel 5). The remaining 45 per cent is split between around 400 additional free to air and basic pay TV tier thematic channels (e.g. Dave, Sky One, MTV, SyFy), which account for about 15 per cent; the 20 or so premium sports and movie channels (e.g. Sky Sports, Sky Movies, BT Sports), which account for about 25 per cent; and a range of advertising on-demand, pay per view and SVoD services, which account for the remaining 5 per cent.

While all other players in the market have to compete for their revenue streams, the BBC is the sole recipient of licence fee funding.

The BBC also still accounts for about 40 per cent of all original TV programme spend in the UK (excluding news), with the pay TV sector still more focused on sports rights, movie rights and acquired US series than either the BBC or commercial PSBs. BBC Studios, the in-house production arm of the BBC, accounts for approximately 20 per cent of all commission income for originated programmes in the UK (excluding news), making it the second largest non-news content producer in the UK, just behind ITV Studios (which has recently grown by acquiring independent producers).

The BBC undoubtedly has a much smaller percentage of the UK TV market than it had 25 years ago when multichannel TV first started, in terms of: 1) audience share; 2) share of gross TV market revenue; and 3) share of net TV channel revenue. However, the BBC still accounts for:

- the highest share of all measured TV viewing for any UK channel group – at 33 per cent;
- the UK's most popular channel, BBC One;
- the UK's most popular on-demand long-form content TV service operating across TVs, PCs and portable devices – iPlayer;
- a significant ownership position in three digital TV platforms – Freeview, Freesat and YouView;

- 25 per cent of estimated net TV channel revenue (where it is the only TV channel owner that does not have to compete for revenue) and nearer 40 per cent of net TV channel revenue excluding premium pay TV services;
- 40 per cent of all UK TV channel spending on originated UK programmes (excluding news);
- 20 per cent of the UK-originated commissions supply market;
- the largest commercial secondary and ancillary audiovisual IP rights base operating out of the UK, BBC Worldwide, which has sales of £1.0bn a year.

In a TV channel market that has become increasingly fragmented in terms of both viewing and revenue, the BBC remains the most important single aggregator of TV audiences, TV channel revenue and TV content across the UK market and one of the major exploiters of UK IP overseas.

By way of international comparisons, while the leading German PSB, ARD, has a higher level of public funding, and one or two publicly funded broadcasters in smaller European countries, such as DR in Denmark, have higher audience shares, among large PSBs across the world in large TV markets the BBC is the most successful in terms of TV reach and share, and the size of its commercial spin-off activities.

Since 2006, the BBC TV's total public services expenditure has been in decline. This followed a 60 per cent uplift in nominal terms between 1998 and 2006 that covered both the launch of new digital services and increased funding for both BBC One and BBC Two following the licence fee settlement of 2000.[53]

4.4.2 The BBC versus the commercial free TV market mapped in more detail

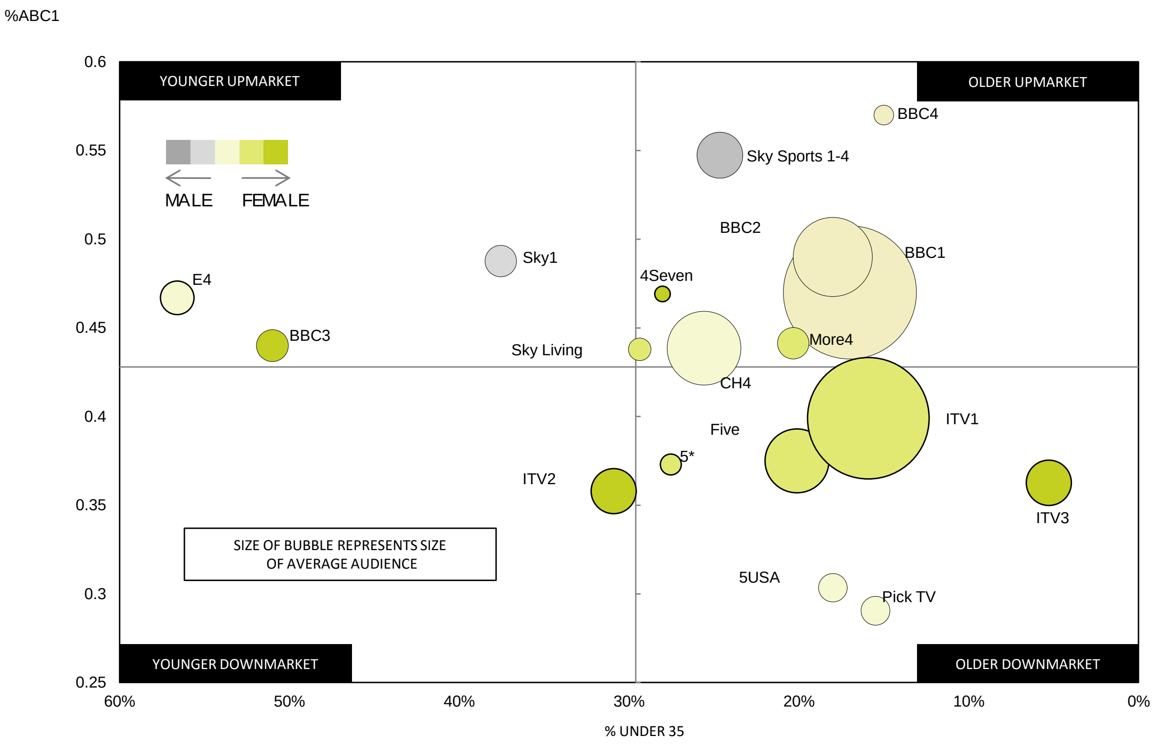
4.4.2.1 The overall competitive dynamic

The free TV channel portfolios of the main PSB TV organisations (the BBC, ITV, Channel 4 and Channel 5) taken together still account for 72 per cent of all measured TV viewing (nearer 80 per cent in peak viewing periods) and nearly all the top 100 TV programmes in any given week. This is still the core market where the BBC competes for audiences every night of the week, and within that, the performance of BBC One and BBC Two versus ITV1, Channel 4 and Channel 5 is still at the centre of the battle for viewers (the 5 main channels still account for over half (51 per cent) of all viewing and over 60 per cent of measured viewing in peak viewing times).[54]

[53] In 1998, the BBC's total UK public services expenditure was £2.02bn. This grew by 60 per cent in nominal terms between 1998 and 2006 to £3.23bn. This is a compound annual growth rate (CAGR) of 6.1 per cent per annum. By 2014 PSB Group expenditure was £3.10bn, representing a nominal decline of 4 per cent over the period (CAGR -0.5 per cent). Figures sourced from BBC annual reports.

[54] BARB data, quoted in Ofcom (2015b).

Figure 16: Demographic positioning of the networks and their spin-off channels in the UK TV market



Source: Oliver & Ohlbaum analysis, Attentional

In terms of overall positioning and competition for audiences, while each channel enjoys significant overlap audiences with rival channels (as TV audiences tend to watch all the main channels over a period of time – in contrast to radio covered in Chapter 5, where the audiences are much more segmented), they do occupy different demographic positions.

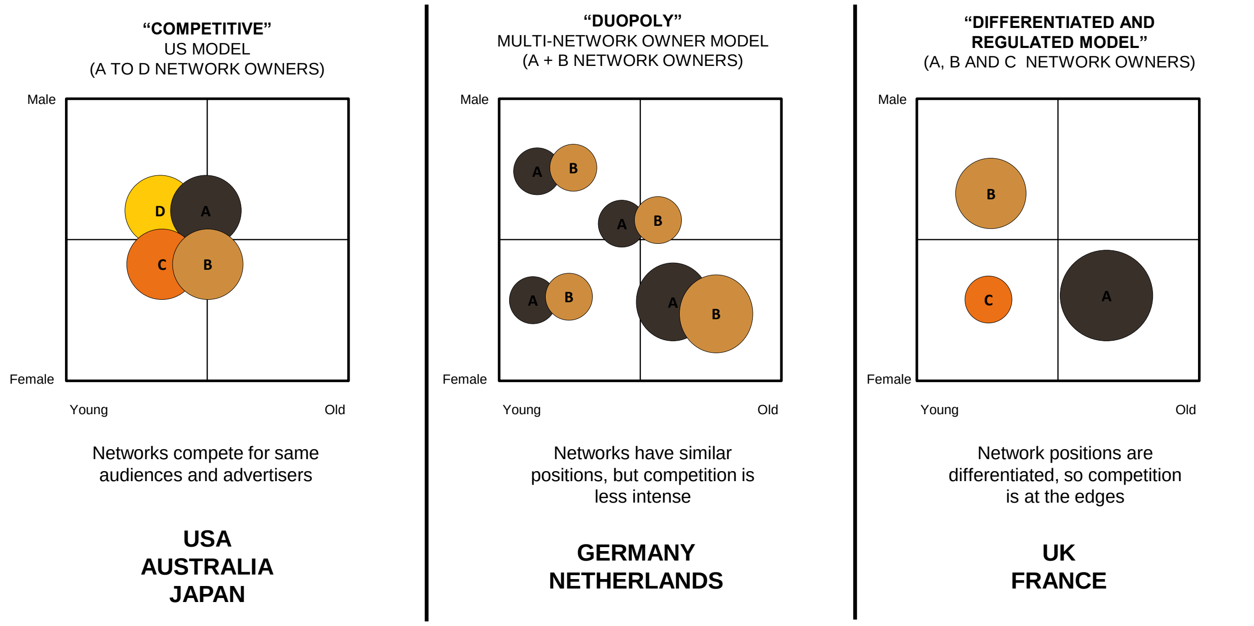
ITV1 tends to skew to an older, female, slightly lower socioeconomic demographic (C2DE) audience. BBC One tends to skew to a slightly more male audience than ITV1, and a slightly higher socioeconomic demographic (ABC1), but still older than the TV average viewer. The socioeconomic demographic of BBC Two's audience is higher still, and skews to a more male and slightly older audience than BBC One. Channel 4 skews to a younger audience than the other channels, and has a higher socioeconomic demographic than ITV1, but not BBC One or BBC Two. Channel 5 is a bit younger and has a slightly lower socioeconomic demographic than ITV1.

The spin-off portfolio channels of the PSB networks tend, for the most part, to occupy the demographic positions of their main networks. Similarly, Channel 5 spin-offs have similar demographics to the main channel. The only exceptions to this general rule are ITV2 and ITVBe, which are now seeking a younger audience than ITV's typical audience, ITV4 which is very male-orientated, and BBC Three, CBeebies and CBBC, which are targeting a younger audience than the BBC network's core audience.

This dividing up of the audience into different "home quadrants" means that the UK network and spin-off market is generally a differentiated market – like some European markets such as France – and is not a head-to-head network market such as the USA, Australia and Japan – where, despite some slight demographic differences, each network is effectively pursuing the same audience every night.

It is also different from another type of European network market that exists in Germany, Spain and the Netherlands, where two commercial owners operate 3 full networks each – channels with over 4 per cent share – and by and large match each other in 3 of the main quadrants with one network each, and leave the fourth quadrant – older and more male – to the publicly funded PSBs.

Figure 17: Competitive network positioning – 3 models (UK, USA, Germany)



Source: Oliver & Ohlbaum

The final difference between the UK network market and others in the developed world is that in no other large developed market does the publicly funded broadcaster own the most popular channel, and in most markets the publicly funded channels tend to serve mainly an older audience demographic (the main exception being home grown children's output).

Within this generally differentiated market there are a number of what might be termed "competitive skirmish" areas – such as Channel 4 and Channel 5 opportunistically moving occasionally into ITVs market to gain higher audiences in peak time, or cheaper audiences in daytime; or BBC Two, which targets Channel 4's younger audience on specific days and with specific slots. Beyond the main networks, ITV uses ITV2/ITVBe to target Channel 4's younger audience, while More4 is trying to appeal to some of BBC One and BBC Two's older upmarket audience, and the BBC has tried to use BBC Three to go after some of Channel 4/E4's younger audience (as well as the thematic channel audiences of Sky and MTV, etc.).

By and large, however, BBC Two, Channel 4 and Channel 5 have much smaller shares and lower weekly reach than BBC One or ITV1, and tend to schedule around the lead channels – attracting minority audiences or complementary tastes and/or demographics – rather than compete head to head with them.

4.4.2.2 The overall PSB dynamic

Just as the UK free to air network market operates as a differentiated market with different channel and channel group socio-demographic positioning, so each of the main players has a differentiated PSB role.

All the main commercial PSB channels – ITV1, Channel 4 and Channel 5 – operate under PSB licences, which means they do not behave like unfettered commercial channels. Each has a minimum requirement to show original productions (ITV1 85 per cent in peak time, Channel 4 70 per cent, and Channel 5 40 per cent). There are additional requirements for news and current affairs.[55] There are additional requirements for news – national for all of the channels and local for ITV1 – and current affairs. They are also required to show less advertising minutes in peak time than their thematic channel rivals or their own spin-off channels, and required to take 25 per cent of programming from independent producers as opposed to the EU 10 per cent rule for other thematic channels. ITV is also required to show high quality home grown

[55] Ofcom reports annually on compliance against quotas. The fact that Channel 4 and ITV exceed their minimum originated output quotas is often attributed to their need to compete with the BBC – something that will be reviewed in the market impact of the BBC analysis later in this chapter. Channel 5 has a higher quota in the day time – 50 per cent.

programming in areas such as drama, while Channel 5 has a specific requirement for children's programming.

In return for accepting these commitments they get free DTT capacity (which helps sustain their high reach and high advertising prices) and due prominence support, which keeps them at the top of Electronic Programme Guides (EPGs) across all main TV platforms.[56]

But within this commercial PSB licence regime, each of the three organisations has a differentiated role. Channel 4 is a not for profit, government-owned organisation with a statutory duty to promote diversity, innovation and alternative viewpoints across its schedule, as well as more specific requirements around investing in UK film. Additional revenues for Channel 4 are largely recycled into more content and services with no current dividend requirement from the UK Government. By contrast, Channel 5 – the newest and smallest operator – has the weakest set of PSB requirements in terms of total news hours, original content levels and some children's output requirements (not necessarily UK made).

ITV's main PSB role is around local news provision in its regional network and its level of originated content in peak time, in particular high quality, high cost content within that such as drama.

The BBC's role within the PSB ecology is not set within the same overall system as commercial PSB (licences and statutory duties) but instead by a Charter and an Agreement. The BBC has a much broader PSB remit to promote public purposes across all its activities – TV, radio and online, with specific service licences regulated by the BBC Trust outlining what each BBC service is supposed to contribute in terms of public value and distinctiveness as well as how far it provides value for money and impact when delivering these public value purposes.

At a very high level this leaves the BBC with the broadest PSB remit in TV, to provide for a range of tastes, interests and socio-demographics with a wide range of high quality genres of largely home grown output, Within that portfolio BBC One has the role of reaching the widest audience, BBC Two with the role of meeting largely areas underserved by BBC One's focus on the mass audience, BBC Three focusing on the 16 to 34 audience and BBC Four on cultural, arts and longer form narrative documentary output (encapsulated by its "a place to think" strapline).

4.4.2.3 The overall BBC One and ITV1 dynamic

It follows from the above analysis of sociodemographic and PSB differentiation that the one area of much more head-to-head competition every night of the week in the UK core free TV market is BBC One against ITV1. The channels' core demographics and overall share and reach ambitions are close enough to leave them in direct competition most of the time, while both have PSB remits of bringing public value to mass audiences as the main focus.

This is the case even though their main reasons for obtaining high reach are different. In the BBC's case, it is driven by its aim to reach more than 90 per cent of people every week across all of its PSB services – and a leading TV channel tends to be a very cost-effective way of helping to achieve this (average cost per viewer hour at about 6 pence[57]). In ITV's case, it is largely to maintain its share and reach lead over all commercial rivals to maintain its advertising price premium and profitability.

The battle between BBC One and ITV1 is particularly important for audiences, as they are the only channels likely to attract audiences of over 5m for a programme – or over 20 per cent of the available audience in peak time. They are therefore probably the only free to air TV channels that can justify the more expensive types of home grown content in any volume – for example, originated drama series, originated scripted comedy, high-end factual and entertainment shows. These two channels both enjoy over 80 per cent weekly reach, and both account for about two thirds of all the viewing within their respective channel portfolios.

But this competitive rivalry is not an accident – it came from the original PSB system when ITV1 was heavily regulated and had a monopoly of advertising and the BBC needed to reach most of the

[56] The commercial PSBs still have to pay for the terrestrial transmission network, and the requirement for them to reach over 98 per cent of the UK through DTT does cost them more money than other DTT channel providers that typically reach 90 per cent of the UK even if the extra reach of the UK population might help their ad share and ad prices.
[57] BBC Trust (2014a).

population. Each was supposed to reinforce each other's position, ITV1 competition would make BBC One a bit more popular and BBC One competition would ensure that ITV1 spent the funds necessary to attract sizeable audiences when competing with the BBC – a double insurance that ITV1 would not only abide by the letter of its PSB licence but also the spirit.

In the multichannel age of 2016, things are slightly different. ITV1 faces much more competition for its commercial audience from rivals, and viewers have more alternatives to watch. ITV1 also has a family of new spin-off channels which, insofar as they help protect the ITV portfolio audience share, probably make ITV more relaxed about declining share of its main ITV1 channel, as long as it is picking up much of that audience across the rest of its channel family.

ITV1's PSB licence is worth much less than it used to be – spectrum is no longer as scarce. Beyond the need to comply with the minimum requirements of its licence, ITV1's schedule mix is driven much more by what is profit-maximising than what might win it a new licence when the franchises come up for re-auction in a programming based beauty competition, as was the case up to 1991.

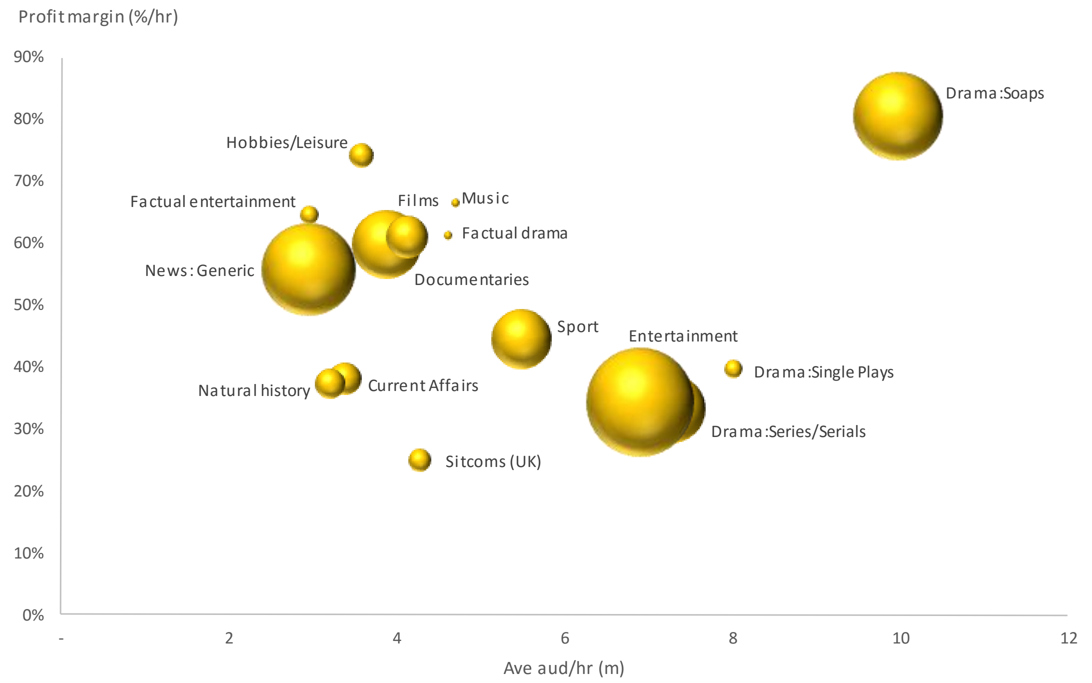
The ITV1 schedule

ITV1's schedule mix is determined by its need to maintain high reach to sustain a high advertising price and its need to make a profit margin. These pressures, plus audience preferences for a range of programming types in their average weekly diet of TV, lead to a mixed genre schedule with high cost and lower margin content that achieves high reach such as drama series, and lower reach but higher margin content such as factual entertainment/reality shows and cheaper forms of entertainment such as quizzes and games shows.

The only exceptions to these two types of output are at both ends of the scale. First, lower margin, lower audience types of output are generally included to comply with a PSB licence condition – local news is still supported in this way, as is probably the scale if not the existence of national news. Religion, arts and children's TV all disappeared from ITV1 once the benefits of the PSB licence declined and Ofcom had to choose a smaller list of obligations to require.

Second, there are some types of output that are high reach and high margin. This can be due to history and longevity – for example, Coronation Street and Emmerdale became some of the nation's favourite programmes when there were only 2 and then 3 channels to choose from, and have remained so. Alternatively, it can be due to owning a "breakout hit" – an exceptional show that becomes a top programme but where its costs do not spiral upwards as fast as its audience. The profits and reach of these breakout hits often have to be seen in the context of the losses/low margins made for many years trying to get the next breakout hit and failing. *The X Factor*, *I'm a Celebrity* and *Downton Abbey* are such breakout hits that are high reach and, probably, still very high margin.

Figure 18: ITV gross profit margin (%) vs audience size (peak hours, million), by genre, 2013



Source: Mediatique report for Ofcom PSB Review: Investment in TV genres: December 2014

Note: Chart shows gross profit before sales, general and administrative expenses.

In recent years, free to air networks have managed to reduce the costs (in terms of failed attempts) of finding these new breakout hits and increased the odds of finding them by importing an existing successful hit from another country and making a local version (the so-called formats market). Those that make or own the rights to their own shows have also managed to increase the returns from any breakout hits that have been internally generated by selling the home grown format – and sometimes making the programme – across the globe.

In terms of the main reach and profit drivers of the ITV1 schedule, it is probably two factors that are most important. First, the cost of its new drama series and how many it needs to make and show at relatively low margins to get high reach across its schedule – versus replacing them with higher margin but lower audience factual entertainment. Second, the development of new breakout format hits – either imported or home grown – that it can export as formats.[58]

There will also be other considerations, given that ITV owns a portfolio of spin-off channels and a growing global production division in terms of the reuse value of the programming on smaller channels or the ability not just to sell a format globally but also to make it globally. Both of these probably also favour both drama and breakout hit investment.

The BBC One schedule

BBC One is the BBC's main outlet for reaching large audiences, some of whom will be light viewers/listeners to other BBC services, and therefore represent an important source of incremental reach to help make the case for value for money from the licence fee to each UK household. Unlike ITV, the BBC is not concerned with the profitability of its schedule (although its plans for BBC Studios may make it more concerned with the profitability of the programme-making itself than in the past).

[58] This focus may go some way to explaining ITV's submission to the Green paper which has made much of the way BBC One schedules its drama and high end entertainment shows against ITV, and the BBC competing for the rights to global formats.

Instead, it is likely to have two main focuses – first, the cost-effectiveness of its spending on BBC One versus alternatives in generating both overall reach, and incremental reach of "hard to get to" viewers/listener groups. Second, the total value of its output – in terms of the consumer surplus generated and the extra public value generated.

As with ITV, the mix of its schedule will come from optimising the combination of two outputs – in ITV's case it was reach and profit margin, in the BBC's case its cost-effective reach (cost per viewer hour) and public/consumer value.

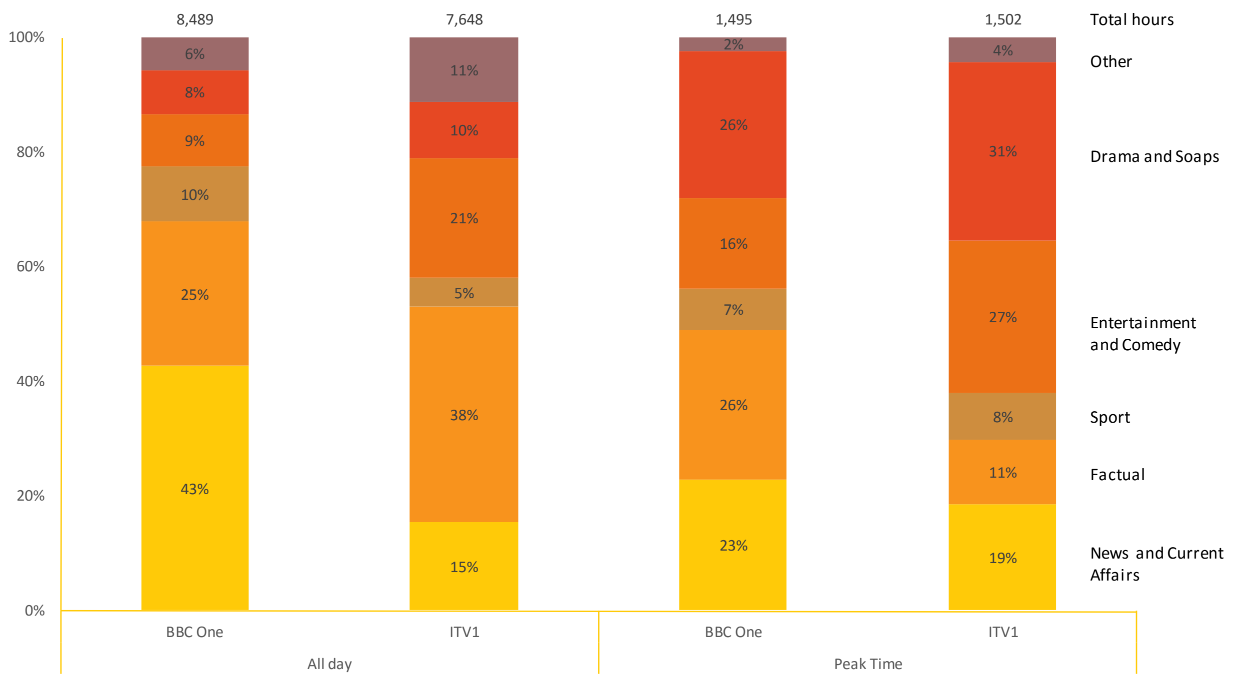
As with ITV, some programming on BBC One may score highly on one, but lower on another – for example, chat shows and formatted entertainment programming may have slightly lower public value than other programming but bring very cost-effective reach. High-end drama, on the other hand, may generate a lot of public value, but be quite expensive in terms of cost-effective reach – even if the audiences are high the costs are even higher. Some programming may achieve both – natural history strands such as *The Hunt*, consumer and rural affairs programming like *Watchdog* and *Countryfile*, and factual entertainment programmes like *The Great British Bake Off* are high in public value and obtain sizeable audiences. In effect, these programmes are the BBC's breakout public value hits.

Over time, just as the ITV has to think about whether to extend a tiring hit programme or risk trying to find a new hit programme, so the BBC also has to decide to keep the things that have produced public value and/or cost-effective reach in the past or try something new.

The interplay between ITV1 and BBC One

ITV1 and BBC One are optimising different sets of objectives but both need audience share and reach to achieve their aims, which is what drives competition between them. This means that while they are effectively rivals for audience attention, their schedule mix is different – ITV1 having a more entertainment-led schedule and BBC One a more factual and news-led schedule, and both showing a fair amount of drama.

Figure 19: Schedule mix of BBC One and ITV1, 2014



Source: Ofcom PSB Review 3, Fig 20, Fig 21, Oliver & Ohlbaum analysis

No channel or network is ever strong across all of its schedule, and there will be slots where the other side's strength is recognised and thus a more niche programme is chosen (i.e. BBC One and ITV1 will behave more like Channel 4 or BBC Two) or a cheap filler programme is used – in ITV's case to bolster profits, and in the BBC's case to redeploy resources to a more cost effective slot.

But there will be other schedule slots where strength is pitched against strength, and in these slots you have the BBC trying to gain cost-effective reach and public value versus ITV trying to gain reach and preserve margins.

In this regard, a BBC One's strategy emphasising public value might behave less competitively for audience share than one under pressure to generate cost-effective reach (pressure that can grow if the BBC is forced to reduce the funding and reach of other services in its portfolio across TV, radio and online). Public value is to some extent the sum of the value per viewer and the number of viewers, so increasing the size of audience is not the only route to more public value. Similarly, a BBC aiming to generate more monies from formats globally might behave more competitively than one with no interest in doing so.

An ITV more concerned with margins than reach is more likely to give way to any push for reach from the BBC by using more programming that is high margin but lower reach. It is less likely to fight BBC One with more investment in drama or to look for more expensive breakout hits on the format market (although the latter might be encouraged by an ITV with sizeable production assets).

How this interplay works out will partly determine whether BBC investment in content helps drive up ITV investment in content, or whether ITV decides to move to a slightly lower reach and higher margin position by not matching the BBC in spending. The other part of the equation will be how close ITV's commercial rivals are to overtaking its position in the advertising market. The larger the gap with its rivals, the more ITV can afford to sacrifice some reach for margin. While the lead over Channel 4 and Channel 5 portfolios did narrow from 1998 to 2002, which may have acted as an extra incentive for ITV to maintain or increase its spending between 2002 and 2006 to ensure the gap did not narrow further, the gap has been more or less maintained since 2007, which in turn might mean ITV can afford to relax its content investment slightly.

Overall, the broad schedule mix of ITV1 and BBC One should be expected to differ as they do, with BBC One's having a greater range of output and more factual and less entertainment in peak time. Beyond this, one might expect a greater difference within genre where the mix of programmes should also be expected to vary. BBC One's public value objectives might lead it to giving more space to specialist, public interest and challenging topics across drama, factual entertainment and documentaries. Simultaneously, ITV1's reach/profit margin objective might lead it to focus on high-cost but perhaps less risky and challenging high reach popular drama (crime drama and popular period pieces), family entertainment shows, and lower cost, higher margin lifestyle and celebrity driven factual programming.

How far BBC One's required commitment to more challenging and perhaps risky mass market programming might also require it to take more risks across the schedule – with more new titles tried each year, less long running "banker" strands, or simply a greater range of titles, is less clear. BBC One, unlike Channel 4, does not have a specific requirement to be innovative and risk-taking, nor indeed, do the BBC's TV services taken together, even though this risk taking could help the UK content sector develop more new ideas to sell around the world.

All three measurable dimensions of a public service schedule – genre mix, mix within genre, and the general level of innovation across the schedule and within programmes – probably have a part to play in delivering public value for BBC One. The appropriate balance between them is less clear from the BBC's overall remit and the specific service licences set by the BBC Trust. Lastly, in the context of the competitive dynamic between ITV1 and BBC One, it is worth mentioning that the fact that the BBC does not take advertising gives it an in-built advantage over ITV1 and other commercial channels. Studies for Ofcom of the UK market and in the US market suggest that high volumes of advertising will put off viewers, especially if they have ad-free options available – perhaps causing audiences for an advertising channel to be 1 to 3 per cent lower than a non-advertising interrupted channel with the same programming. Second, no advertising means that programmes can be longer and/or more cross-promotional time is available – to promote upcoming programmes, other channels or new services.

Longer running times can make programmes a bit more expensive per slot hour – although probably not proportionately, but it can also make them more compelling in some programme types.[59]

This has always been the case, and one could argue that with PVR record and play back functionality viewers can reduce the negative impact of advertising interruptions, but it does suggest that the BBC probably has a slight in-built audience share advantage, and an increased ability to use its main channel to cross-promote its other activities.

The role of BBC Two and the digital portfolio

BBC TV is more of a multi-network operator than ITV. While ITV does now have a portfolio of channels, none has more than 3 per cent share, and none can afford volumes of high budget and potentially high reach programming. The BBC, however, has BBC Two, and the role of BBC Two, and how it relates to BBC One and the rest of the portfolio, has been changing as multichannel TV has grown since the mid-1990s, which may well indirectly increase the competitive pressure on ITV.

First, BBC Two has been used by BBC One in recent years as a way of developing riskier entertainment shows which, if successful, transfer to BBC One – for example, *The Apprentice*, *The Great British Bake Off* and *Miranda*. This may confer an advantage to BBC One over ITV1, whose second channel, ITV2, is much smaller scale in budget and programming range than BBC Two.

Second, the development of BBC Four and BBC Three – which are aimed at two groups of viewers that BBC Two used to try and serve in different time slots and days of the week, may have freed up BBC Two to behave more like a mini-version of BBC One, as well as a nursery slope for it – sometimes taking programmes back from BBC One once they might have lost some of their mass appeal – for example, *Masterchef*.

Historic events and performance

The comparative fortunes of BBC One and ITV1 have varied markedly over the last 25 years, when ITV licences were sold to the highest bidder in 1991 rather being allocated through programming “beauty competitions”. ITV1 remained the UK’s most popular channel through the 1990s, despite the growth of Channel 4 following its independent selling of advertising from 1993, and the launch of Channel 5 in 1997.

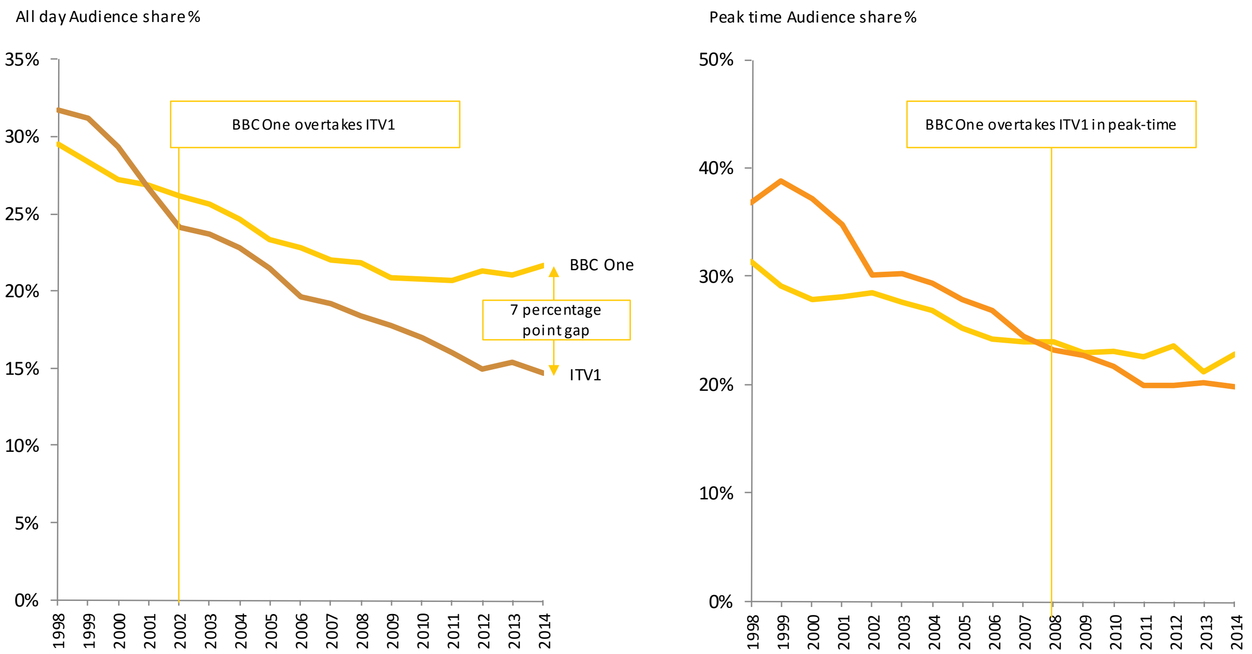
However, around 2001/02 BBC One pulled ahead of ITV1, with a 2 percentage point gap in 2002, a 4 percentage point gap opening up by 2008 and a 7 percentage point gap opening up by 2014. Initially, much of this gap was driven by a loss in share of daytime audiences, where ITV could not justify the programme mix offered by the BBC. However, this daytime gap had limited impact on ITV1’s overall audience reach, as daytime viewers tend to be heavy TV viewers. Perhaps more concerning for ITV was the peak time audience gap which first opened up in 2008 and has remained since.

The opening up of the gap from 2002 coincided with two important trends. First, a significant uplift in BBC TV expenditure, not just in fully launching its digital portfolio – BBC Three, BBC Four, CBBC and CBeebies – in addition to its existing 24-hour News service and BBC Parliament channel, but also significant increases in the programming budgets of its main networks – especially BBC One.[60] Second, the launch of ITV spin-off channels from 2003 onwards, which together now generate over 7 percentage points in share and which to some extent cannibalise the ITV1 audience in order to protect ITV’s overall share.

[59] Observers have often suggested the fact that a BBC situation comedy can run for 29 minutes versus an ITV time of 24 minutes, or a BBC hour slot drama can run for 56 minutes versus and ITV running time of 48 minutes, can allow the BBC more creative freedom and success in these genres.

[60] Evidence suggests BBC One’s network programming budget was increased by £150m to £200m – or 20 to 25 per cent – between 2000 and 2006.

Figure 20: ITV1 and BBC One share, all day and peak, 1998 to 2014



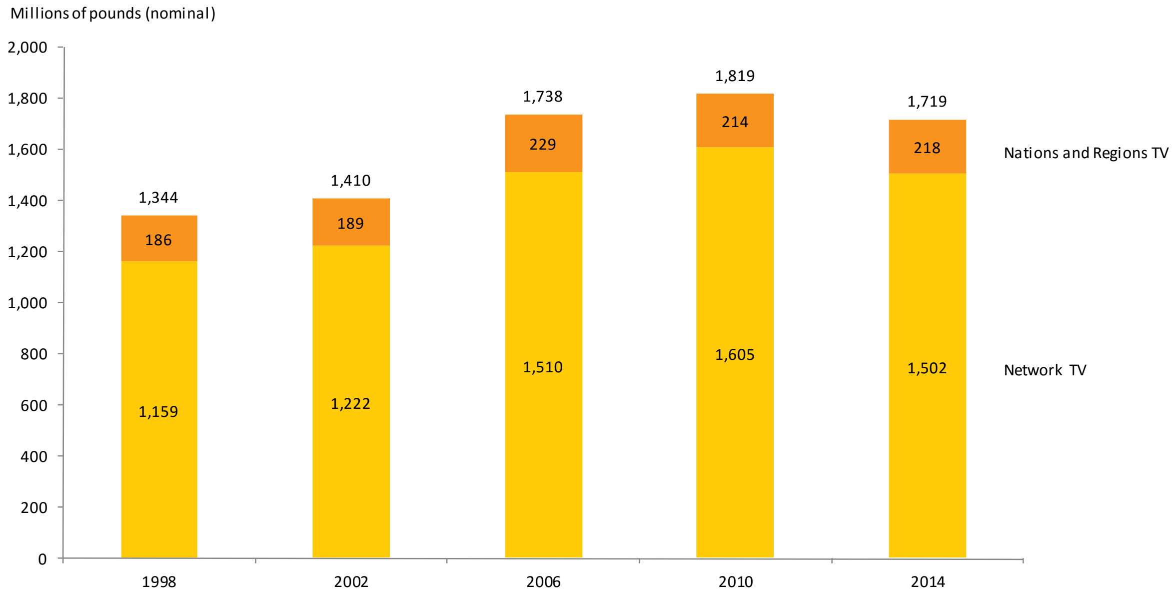
Source: BARB, O&O estimated 2014 peak time

Over the same period, ITV went through a very turbulent period, with the 1996 to 2000 TV advertising boom turning into deep recession in late 2001 through to 2003 (caused by the dotcom boom and bust of the period), and the contested mergers of the three main ITV regional franchise owners – United Media and Entertainment, Carlton Communications and Granada Media into ITV Plc, and the financial collapse of the Carlton/Granada-backed pay DTT Platform (ITV Digital) in 2002.

ITV had to rationalise its investment in its TV service at the same time the BBC was expanding its own investment on the back of the 1999/2000 licence fee settlement for 2001 onwards, which had backed the BBC's digital vision.

In addition to more investment by the BBC at the time, the BBC made a number of important scheduling changes in and around 2000/01, including the addition of a fourth weekly episode of *EastEnders*, the expansion of the *Casualty* franchise into the *Casualty/Holby City* franchise, the launch of a new daytime Soap opera, *Doctors*, and the shift of the BBC *9 O'Clock News* to 10pm, and the consequent establishment of the 9pm to 10pm weeknight slot as a regular home for BBC high-end hour-long drama series. (The move of the news being made possible initially by ITV's experiment in moving its news later to 11pm, and then 10.30pm to help increase the profitability of its schedule as its ratings declined).

Figure 21: BBC TV expenditure, 1998 to 2014



Source: BBC annual reports, O&O analysis

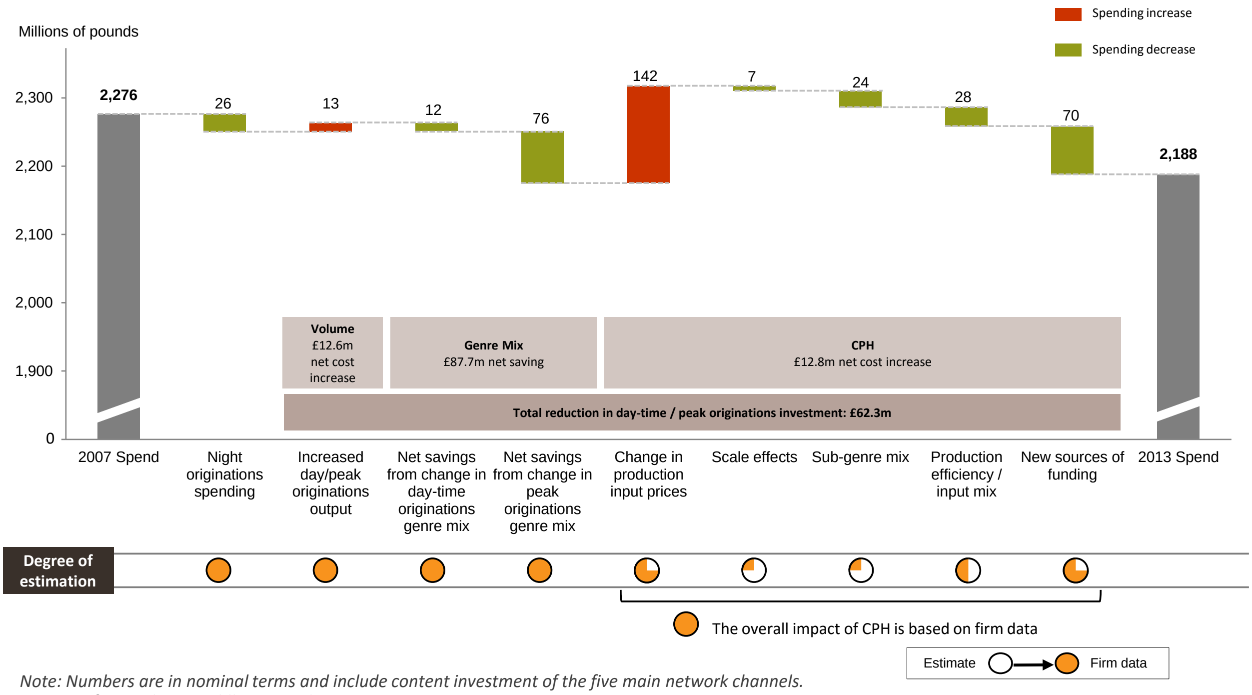
Since 2006, BBC programming expenditure on its network TV services has been largely flat in nominal terms – reducing in real terms.[61] Programming investment by ITV, Channel 4 and Channel 5 across all their channels rose modestly from 2003 to 2008, was then cut back in the advertising recession of 2009/10, and has risen again modestly between 2012 and 2015. ITV1's programming budget has reduced in both nominal and real terms since 2008 – its drama investment in particular has been estimated to have reduced fairly significantly.[62]

Some care needs to be taken, however, with programme spending trends by networks over the last 10 years as an indication of the strength of their schedule and competitive position. The growth of the UK content sector in the global market has brought more third-party financing into UK programming, effectively reducing the price that channels have to pay for a given quality/budget of programme. In this context, the relative spending of one network versus another is probably a better trend to focus on that the actual trend in overall spending. Any recent trend showing spending at networks all tracking downwards could be as much due to this increased level of third-party investment as it is an indication of a causal relationship between the spending of one network to another.

Figure 22 below from the Ofcom TV Content spend report of 2015, breaks down the changes across all 5 PSB networks and the BBC spin-offs (which together make up all of the UK's PSB channels). It shows that much of the decline in nominal spending on UK originated programming over the period is accounted for by increased funding from third-party sources and a dilution in the peak time genre mix away from higher budget programming such as drama series. Ofcom output trends in its annual market review further suggest that this shift away from drama series has been greatest on ITV1. While ITV1 remains a significant commissioner of new home grown drama – especially when compared with other leading commercial networks in Europe – it is doing less than it was in 2008 before the advertising recession.

[61] Although evidenced suggests that cutbacks in its digital channels and non-peak times on its main channels have been greater, with lesser cut backs in peak time on the main channels – especially BBC One.
[62] Mediatique (2014b).

Figure 22: Causes of reduced PSB content spend by network, 2008 to 2014



Note: Numbers are in nominal terms and include content investment of the five main network channels.
Source: Ofcom, Oliver & Ohlbaum analysis

4.4.3 The BBC versus thematic channel/pay TV

The BBC is a less direct rival for audiences to the thematic channel sector in the UK. The strength of BBC One and BBC Two obviously limits the audience share available to thematic channels at a broad level, and probably affects those more focused on a broad entertainment and factual audience or any service that tries to target ABC1 over-45 viewing groups (the demographic strength of the BBC) than other niche propositions.

The BBC's portfolio of digital channels competes with specialist genre based channels such as children's, news, serious factual, culture and arts and entertainment output skewed to a younger audience. However, in each genre, its output mix remains highly differentiated – with children's on CBBC and CBeebies it has a focus on UK material; with serious factual, culture and arts on BBC Four it again focuses on UK themes, and the range of its serious/specialist factual programming; and, in entertainment skewed to a younger audience, it skews to more serious factual and innovative new entertainment formats.

Its nearest rivals taking into account programming mix and demographic positioning across thematic channel TV are probably E4, MTV and ITV2 to BBC Three; Sky Arts, More4, PBS, Discovery and the History Channel to BBC Four; Sky News to BBC News Channel and CITV, Nickelodeon and Nick Jr to CBBC and CBeebies.

Beyond the BBC's licence fee services, however, the BBC's 50 per cent ownership of UKTV through BBC Worldwide does provide a significantly important portfolio of channels in the thematic free to air and basic tier pay TV market. The access that these channels have to the secondary window on BBC output and archive output does impact likely market entry by other UK secondary content focused commercial thematic channels outside of the current PSB portfolio channels.

These channels (Dave, Channel W, Drama, Gold, Alibi, Yesterday, Good Food, Eden) combined now account for about 5 per cent of the measured viewing audience – the highest share outside of Sky owed channels – which makes them the largest non-platform aligned group of thematic channels in the UK market and their advertising contract (currently with Channel 4 advertising sales) probably has a not insignificant impact on competition between ad sales houses in the UK advertising market.

4.4.4 The BBC and the supply chain and adjacent markets

A BBC that commissions 40 per cent of all UK originated non-news content, and that supplies channels accounting for 33 per cent of all viewing and over 40 per cent of all free to air channel viewing is going to have a significant influence over the UK content supply market and the UK TV platform, and especially the UK free to air TV platform market.

BBC backing for Freeview and Freesat and their connected TV versions and YouView, plus its development of the iPlayer and the content and services it places on these platforms not only helps drive all digital TV and now all connected TV, but also influences the balances between free TV, “pay-lite” and full pay TV in the UK.

The BBC’s mix of commissioning by supplier and genre mix, and in particular its commitment to high levels of new strands and titles each year influences the health of the external production sector and its ability to try out new and risky formats in the hope that some become global hits. If a programme makes it on the BBC broadcasters across the globe become interested in commissioning a local version, and this interest is the life blood of the UK content sector.

Overall, while shifts in commissioning spend between BBC in-house and external suppliers or between external suppliers from large media groups and smaller UK independent producers might influence who gets the chance to create the global hit and the overall structure of the UK production sector, it is the level of new titles and innovative risk-taking types of programming that probably have the greatest impact on the fortunes of the TV content sector as a whole (and this forms part of our assessment of the market impact of the BBC and BBC One in particular, later in this section).

4.5 BBC TV market impact – reviews, submissions and evidence

4.5.1 Summary of past reviews, relevant research studies and current submissions

4.5.1.1 Past studies and reviews

Past licence fee settlements and Charter Reviews

The importance of TV within the BBC’s mix of services (especially if offerings such as iPlayer are seen as primarily TV rather than online activities) has meant that each major licence fee review and the Charter Review have prompted extensive assessments of the BBC’s role and the impact on the UK TV market. The Peacock Committee report in 1986, the Davies Panel Review in 1999 and the Burns Panel Review in 2005 all assessed the broad impact of the BBC on the whole TV market, and on the UK economy and creative sector more generally.

In addition, there have been important studies commissioned for these past reviews – most notably:

- UK Television Content in the Digital Age, O&O, 2003;
- PSB Around the World, McKinsey, 2004;
- The Economic Impact of the BBC on the UK Creative and broadcasting sector, PwC, 2008.

The BBC has also commissioned books, with contributions from leading industry commentators, academics and policymakers in the build-up to the Charter Review and licence fee reviews. These include Tim Congdon’s Paying for Broadcasting, 1995, and E-Britannia, 2003.

Market impact reviews

There have been a number of formal MIA reviews covering BBC TV developments – the first by a DCMS-appointed reviewer and subsequent ones by Ofcom (which obtained the remit to conduct the reviews in 2004/05):

- Independent Review of the BBC’s Digital Television Services (the Barwise Review), 2004;[63]

[63] The Barwise Review actually occurred after the new services were launched, as the initial MIA work had been done by the DCMS in consultation with the BBC, with advice from Ofcom. BBC Three’s initial proposition was actually rejected by the DCMS in 2002, which is why the channel launched later than the other three: BBC Four, CBBC and CBeebies.

- New On Demand Proposals, 2006;
- BBC High Definition TV Proposals, 2007;
- BBC's Gaelic Digital TV Service, 2007;
- Proposed changes to BBC Three, BBC iPlayer, BBC One and CBBC, 2015.

In addition, the BBC has commissioned specific studies to inform MIAs, most notably:

- Assessments of the impact of the BBC's new digital TV and radio services, O&O, 2004;
- Implications of a change in the BBC's TV on-demand permissions, Mediatique, 2014.

BBC Trust service reviews, fair trading and value for money reviews
Since 2004, the BBC Trust has conducted reviews of all the BBC's TV services, focusing on distinctiveness and value for money rather than specifically market impact, with recent reviews covering BBC One and BBC Two.

Fair trading and value for money reviews (including competitive impact assessments) with most relevance to this report include those covering the BBC and the On Screen and On Air talent market in 2008, and, in 2014, in response to public concern about specific payments to top stars. Also those covering the BBC's approach to acquiring sports rights, in response to a complaint from UTV over radio sports rights, but which covered TV sports rights as well.

Ofcom PSB, TV content market and TV advertising market reviews
As well as providing extensive reports covering relevant long-run trends in the UK and international TV sectors each year, Ofcom has held a number of specific reviews dealing more closely with BBC impact issues. Most notably, the PSB reviews in 2004, 2009 and 2014 included research and reports commissioned from a range of consultancies, such as O&O, Spectrum Strategy Consultants, and Mediatique. These reports have examined the public's value of different types and sources of programmes, for individuals and for society as a whole, the sustainability of commercial PSBs, and the economics of PSBs' schedules.

Ofcom has also conducted specific reviews of the TV content market and the impact of quotas and terms of trade in 2006, and in 2014/15 and 2015/16, and of the TV advertising market to inform decisions on TV ad minutage and regulations. For the latter, Ofcom commissioned detailed regression analysis of the UK TV advertising market from PwC (in 2004) and from Analysys Mason/Brand Science (in 2010).

Other TV policy reviews and consultations
DCMS and BIS (advised by Ofcom) have reviewed issues such as media plurality – especially news plurality – and retransmission fees and copyright law as they affect the PSB channels and EPG prominence, on both linear and non-linear platforms. Furthermore, BIS, DCMS and the Number 10 Policy Unit have produced position papers on "Digital Britain", and the contribution and future value of the creative industries. All of these reviews address the contribution and impact of the BBC.

General competition reviews/Ofcom competition investigations
The Competition and Markets Authority's (and predecessor organisations') investigations into mergers and proposed new ventures have covered issues around the competitive structure of the UK TV sector and the BBC's influence on that competitive structure, with the BBC often being cited as the nearest direct substitute for commercial advertiser-funded or pay services. Investigations include the merger of Carlton Communications and Granada Media to form ITV plc in 2003, the review of the CRR merger condition on ITV plc in 2007, and the review of Project Kangaroo in 2008 (a proposed joint VoD service from ITV, the BBC and Channel 4).

Ofcom also launches its own competition investigations in the UK TV market, most notably focusing on the pay TV market and the exploitation of premium content rights.

Academic papers and articles
In addition to specific reports commissioned from academics for the above processes and consultations, a number of books and articles cover both the theory of TV markets and competition and the role of PSBs, and the assessed quantitative impact of current policy and interventions. The main works are listed in an annex to this report, with specific articles being cited in this section.

4.5.1.2 Current Charter Review submissions, commissioned studies and independent research

BBC commissioned work for the current Charter Review
The BBC (and BBC Trust) has commissioned 4 major studies in the run-up to the current licence fee and Charter Review debate which focus largely on the TV sector:

- Public and Private Broadcasters across the World – the Race to the Top, Inflection Point, 2013;
- The Economic Impact of the BBC on the Creative Industries, Frontier Economics, 2015;
- The Impact of a Change in the BBC's Licence Fee revenue, PwC, 2015; and
- An Economic Review of the Extent to which the BBC Crowds out private sector activity, KPMG 2015.

Recent independent studies of the impact of the BBC on the TV market

- What if there were no BBC TV? The net impact on UK viewers, Barwise and Picard (RISJ), 2014.

The main submissions to the current Green Paper in relation to the TV market have come from ITV, Channel 4, Sky Europe, PACT, COBA, Viacom, NBC Universal, BT and Virgin Media, in addition to the BBC and BBC Trust. None of these submissions commissioned specific independent studies of the BBC's TV market impact, although ITV's own management team has provided a volume of bespoke analysis in its submission, which is referred to in this section.

4.5.2 Main points and issues emerging from past reviews, research studies and submissions

The main points to emerge from past reviews and studies have been as follows.

- The overall positive impact of the BBC on the market place, with very limited negative impact on the TV advertising market, and its positive impact on commercial PSB content investment, overall commercial sector dynamics and new platform take-up.
- The potential negative impact on UK consumers/citizens and PSB ecology if the BBC were much smaller or fell too far behind market growth rates and audience expectations were driven by new technologies and devices.
- The competitive pressure on commercial PSB TV might leave the BBC as the only PSB provider in the future. There might be a need to ensure PSB plurality at some point through contestable funding or a new public funding source.
- Some specific revenue substitution issues with individual new BBC digital services and specific commercial offerings, but these are far outweighed by platform-building benefits and overall contribution to the creative sector.
- A particular issue with the scale and scope of BBC News Channel and its impact on other UK providers such as Sky News and ITN News.
- Whether the BBC is committing appropriate resources to the development of free TV platforms and the impact on the pay TV sector.
- Some specific potential issues causing cost inflation/barriers to entry for rivals, although these could be dealt with through suggested revised approaches/processes by the BBC management (notably the exploitation/warehousing of secondary rights to content, talent contracts, cross-promotion of either public service or commercial services/products and sports rights contracts).
- Some issues about the distinctiveness of the BBC's services: most recently, BBC One; and about value for money: BBC Three and BBC Four.

- Some general issues around the BBC's impact on the UK's content supply and secondary rights markets (over and above how it exploits its own rights), although these have been dealt with largely through policy intervention in the market to enforce an independent quota, terms of trade and the Window of Creative Competition (WoCC), plus fair trading rules between the BBC and BBC Worldwide.

- The main points to emerge from the Green Paper submissions have been as follows.

- The positive contribution of the BBC to the UK TV services and content market (the BBC, Channel 4, PACT, NBC Universal).

- The need for the BBC to embrace the developing on-demand and personalised TV market while ensuring a high-quality service on traditional TV outlets, and the positive impact of the former on the UK's internet sector and of the latter on the UK's content sector (the BBC).

- The need for the BBC to cooperate with and help other arts, educational, PSB and cultural organisations to embrace convergence (the "Open BBC" initiative), and the positive impact of this on these adjacent activities (the BBC).

- The potential challenges to the commercial TV sector—especially the commercial PSB sector and the potential need for more positive market impact from the BBC (the BBC).

- The overall positioning, genre mix and lack of distinctiveness of BBC One and its impact on commercial PSB television (ITV, in particular).

- The conservative nature of the BBC One schedule (low levels of new commissions and lower number of titles) and its impact both on commercial PSB rivals and on the creative sector (ITV)

- The BBC's scheduling strategy and its impact on commercial PSB television (ITV, in particular).

- The BBC's services for children and young adults and the impact on the commercial market (Viacom).

- The BBC's platform distribution and access strategy for its linear and on-demand content, and its impact on third-party platform providers and competition in the platform market (Sky).

- The BBC's differing secondary and ancillary rights exploitation strategies in linear and non-linear TV – and potential inconsistencies between the two (Virgin Media)

- The BBC's establishment of BBC Studios and its impact on commercial providers in the content supply market (ITV, PACT, NBC Universal).

- The BBC's position in the news market—across TV, radio and online—and the need to re-ensure that it complements rather than competes with the commercial sector (NMA).

4.5.3 Summary of main qualitative and quantitative evidence provided

The section provides a broad overview of past quantitative and qualitative assessments of BBC TV market impact plus relevant evidence submitted to the DCMS in response to its recent BBC Green Paper[64]. For commercial market impact, it covers direct audience and revenue substitution, broader market impacts – positive and negative – and adjacent market and supply chain impacts.

Much past evidence and the more recent Barwise and Picard and PwC submissions to the Green Paper have all suggested that the impact of a larger BBC – either expanded mainstream services or additional targeted services – on the commercial market is a limited amount of audience and then revenue substitution, an even more limited reduction in UK content investment by the commercial sector with the possibility the commercial sector might invest more with a larger and better funded BBC TV service – the "Crowding In" effect.

Additional platform take-up benefits for the commercial sector from BBC digital activities, and potential knock on benefits on platform competition and the supply of rights into the commercial secondary and

[64] DCMS (2015).

ancillary rights markets, as well as an expanded range of programing and IP for the content sector to exploit overseas combine to make a larger BBC net beneficial for the UK commercial sector. Conversely, a smaller BBC leaves the commercial sector worse off. All this even before the extra consumer value of the BBC services are added back to obtain a strongly positive net market impact of a larger BBC and negative net market impact of a smaller BBC.

Less past work has been done on the impact of a similar sized BBC TV service but with a different, more distinctively public service positioning and strategy – especially across its two main TV networks – although the BBC Trust submission to the Green Paper did include some evidence on the impact of specific BBC genre changes on the commercial market's genre output and viewing levels. Conversely, the ITV submission has provided some evidence to suggest BBC One programming mix and scheduling strategy might have some adverse implications for its rivals and not add very much to the content supply market – suggesting a potentially negative net commercial market impact. At the same time, ITV claim the BBC positioning itself adds less than claimed to over consumer benefit, suggesting a potentially negative net market impact when compared with an alternative, more distinctive strategy.

The BBC and ITV evidence about the impact of BBC One strategy and positioning on the commercial sector, and in particular ITV1 and the content supply market are covered in more detail in the additional market impact assessment work conducted by this review in the next section. The next section also takes a new look at the overall evidence for a strong direct positive link between the size of BBC TV and the net market impact on UK consumers given the changing dynamics of the UK and global TV markets,

4.5.3.1 Direct audience and revenue substitutions

Set out below is a review of past evidence and current submission evidence on the extent to which BBC services take audience away from commercial services; the impact of that audience share loss on commercial sector advertising revenue – and whether that impact is spread across many services or disproportionately impacts specific services; and then, the impact of BBC activity on pay TV services.

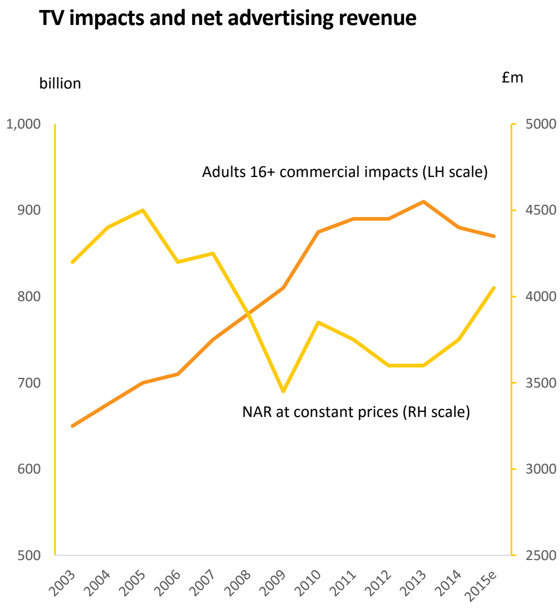
Audiences, impacts and advertising revenue

A great deal of quantitative formal time series regression work has been done on the relationship between commercial audience size and the volume and pattern of commercial impacts and the size of the TV advertising market. Ofcom commissioned studies from PwC in 2004 and Analysys Mason/Brand Science in 2010 to estimate the elasticity of demand for TV advertising and the TV market as a whole; and for the PSB channels as a whole and for individual PSB channels. This followed work commissioned by the Peacock Committee from NERA and from Cave and Swann. Overall, market demand elasticity estimates have ranged from -1.0 to -2.5.

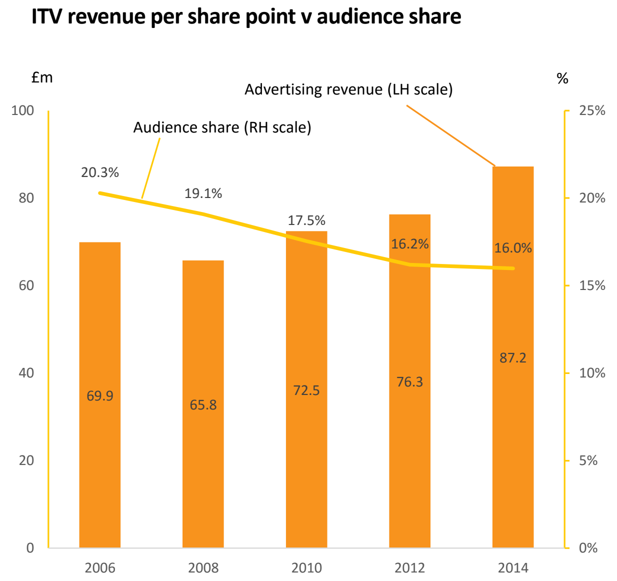
An elasticity of -2 was assumed in Ofcom's most recent MIA looking at BBC Three and BBC One +1 changes, suggesting that a 10 percent decline in commercial TV audiences might cause a 5 per cent decline in revenues. More recent correlation evidence from Enders Analysis has supported the view that increases in commercial market supply, which occurred between 2005 and 2012, put downward pressure on prices, and that decreases in market supply put upward pressure on prices, causing revenue to increase. However, the exact quantum of this impact, adjusting for other market factors, was not estimated.

The Analysis Mason/Brand Science study for Ofcom in 2010 actually looked at individual network and channel portfolio elasticities and cross-elasticities – between the volume of impacts provided by one channel or portfolio on the price of another. This came up with some interesting but disputed results, such as demand for thematic channels outside the PSB system was actually very inelastic, as well as the demand for ITV1 being inelastic and that for Channel 5 being very elastic. Ofcom does not seem to be using this study to inform its current MIA work and a follow up paper from Analyses Mason/Brand Science to their initial study suggested a high degree of uncertainty in their initial results.

Figure 23: Trends in commercial impacts; and ITV revenue and audience share



Source: Enders Analysis: Channel 4: sustainability and privatisation



Source: Industry intelligence; Oliver & Ohlbaum analysis

In addition to specific Ofcom studies on advertising elasticity, the Competition Commission (now the Competition and Markets Authority) has looked at this issue when reviewing mergers in the TV sector – in particular, the mergers from 2000 to 2004 that resulted in the formation of ITV plc out of 13 of the 16 regional ITV licence holders. Its main concern was the prevention of undue price hikes to advertisers, rather than the impact on the size of the commercial market. However, it did measure price sensitivity, which suggested that ITV advertisers, in particular, needed added protection following the most recent merger, between Carlton Communications and Granada Media, as the new ITV plc could impose a price rise and expect to increase revenue. This probably supports the case that ITV1, in particular, has less elastic demand than much of the rest of the market, if impacts expand or contract.[65]

However, all of these detailed studies have been based on incremental and small changes in impacts. They may not reflect how the market would react to a substantial increase in impacts from a significant shrinkage of the BBC, where, on the downside, the advertising market would probably struggle in the short term to accommodate all the impacts and there might be a significant short-term drop in price. In the longer term, the availability of the BBC's more ABC1 audience in volume, potentially aggregated through an attempt by the commercial sector to launch new channels aimed at the vacated BBC audience, might bring new monies into TV advertising from magazines and other non-advertising elements of the marketing mix.

At a much broader and cross-sectional level, the Inflection Point 2013 study for the BBC provides evidence that markets with large publicly funded PSBs also have the largest commercial TV sectors in terms of revenue and revenue per head, and when compared with GDP. This suggests a positive correlation between the size of the publicly funded broadcaster and the market. Inflection Point finds the same relationship with the size of the largest commercial broadcaster, not just the commercial offering as a whole. This also indicates that a sizeable publicly funded PSB does not prevent the emergence of a sizeable lead commercial player.

This evidence certainly puts a negative correlation, and overall substantial crowding-out, in doubt. However, it provides too little specific country factor analysis beyond GDP and population as to shine any light on causation. It could be that countries with the highest ratio of commercial TV sectors to GDP are those most relaxed about the size of the publicly funded PSB. Perhaps because they can more easily sustain any negative revenue impact, rather than there being no negative impact.

[65] Competition Commission (2003a).

Audience substitution

While the impact of changes in audience on commercial revenue has received significant and systematic, if not always conclusive, attention, much less systematic work seems to have been done on quantifying the viewing impact of changes in BBC output mix on its core services or the launch/repositioning of new BBC services on commercial service audiences. This has usually involved estimates and models of audience flow based on a number of observed audience segmentation metrics.

To estimate the likely audiences for BBC Three, BBC Four, CBeebies and CBBC, the 2004 review of the BBC's new digital services combined bottom-up estimates from BBC management on the likely audiences to programme strands on the channel based on the pre-existing pilot services (BBC Choice and BBC Knowledge), with an extrapolation of digital platform take-up. The impact of other channels was then estimated from the degree of demographic profile and output overlap with the BBC service, and then spread across these rival services. So, for example, BBC Three was assessed as likely to take at most a 2 per cent share of viewing, and then only once digital penetration increased towards 100 per cent. Even this eventual gain would be spread across 4 or 5 rival thematic channels targeting the 16 to 34 audience, with some share also coming from BBC networks and commercial PSB networks. On this basis, no one thematic channel was expected to lose much more than 0.2 share points (and, with an assumed advertising elasticity of -2, the BBC would cause less harm in the way of lost advertising revenue).

More recently, in reviewing the potential impact of BBC One +1, Ofcom considered the proportionate uplift in audiences achieved by ITV, Channel 4 and Channel 5 when they launched their time shifted plus one hour channels. Ofcom then assigned the loss of audience to other channels – mostly to the PSBs – and, within the PSBs, proportionate to the size and demographic closeness of each PSB channel, with ITV having the largest negative effect on audiences, revenues and profits.

In the submissions, two pieces of evidence have been put forward to quantify the impact on ITV audiences of changes in BBC One's output mix and scheduling decisions. In order to demonstrate the impact of schedule mix changes, ITV has presented a case study, to show the impact on audiences for ITV's leading drama strand when the BBC decides to schedule something similar and popular against the programme in question. ITV cites the case of *Broadchurch* – a relatively recent ITV crime drama. In series 1, ITV secured a higher total audience for *Broadchurch* (and a higher proportional live audience) when clashes with BBC One crime dramas did not materialise. In series 2, ITV claims that BBC One scheduled its established crime drama, *Silent Witness*, in direct competition with *Broadchurch*, and that this resulted in a lower total audience (and lower proportional live audience) compared with series 1.

KPMG (2015) – commissioned by the BBC Trust – presents time series econometric analysis using aggregate data. The analysis seeks to explain the degree to which, over the 2002 to 2014 period, commercial broadcaster outcomes (for example, commercial entertainment viewing) can be satisfactorily explained by various explanatory variables (for example, commercial minutes of entertainment broadcast). BBC activity is then added as an additional explanatory variable in the analysis – the test being whether the additional impact of this variable on commercial outcomes is negative. The study concludes that this is not the case, and that there is therefore no evidence of crowding out by the BBC.

Both of these approaches, while welcome contributions to the debate, have their respective drawbacks. The ITV approach, by selecting one case study in isolation (Broadchurch versus BBC One crime dramas), does not provide a complete picture across the schedule, within or across genres (e.g. drama) or subgenres (e.g. crime drama). And while providing a useful higher-level picture, the analysis is not econometric, and therefore does not control for other factors that might also explain ITV viewing figures. It also does not demonstrate, across the schedule, whether there are a large number of genre (or subgenre) clashes between BBC and ITV shows.

It could also be that while ITV lost audience due to competitive scheduling versus its best dramas, the BBC also lost audience by having less strong dramas of its own to use against news, factual and entertainment programmes on ITV. In addition, ITV does not provide evidence that the BBC is changing its mix and scheduling strategy to deliberately harm it. Even if the ITV evidence did show this, it would not necessarily conflict with BBC public service objectives if the net result could be shown to maximise exposure to the BBC's most public service output across the schedule.

The KPMG analysis concludes that the BBC activity has no statistically significant negative impact on commercial outcomes. However, the aggregated nature of the data, and the way in which the estimation has then been conducted, makes it highly unlikely that the influence of the BBC variable would ever "show through" in the analysis. As such, there are reasons to doubt the validity of the analysis for either proving or disproving the hypothesis of crowding out. The approach also does not include analysis of effects in drama – a key point of contention in ITV's submission.

Moreover, over any period, the short-term performance of ITV's drama or entertainment portfolio could be due to a particularly successful (unsuccessful) period for its channel in commissioned new ideas, and have nothing to do with the BBC's activity choices. Later in this section, we set out to take a more systematic strand-by-strand look across the schedule to further understand this issue, considering a mix of the ITV- and BBC-commissioned evidence. However, even this examination does not provide the complete answer.

The link between output mix and scheduling on BBC One and the audiences of commercial TV, especially for ITV1, are looked at in more detail in the next section.

Pay TV channel/service income substitution

Even less direct work has been done on the impact of either the scale or the mix of BBC services on the pay TV service market. (Platform take-up is considered below; this section focuses on service take-up within a platform or package.)

BBC evidence submitted to the Barwise Review in 2004 did point out that, in so far as the BBC's new digital services provide a free to air alternative or partial alternative to pay channels in the same demographic segment, their existence might mean that platforms such as Sky and Virgin Media would have to pay their basic tier channels a higher carriage fee to help them improve their content proposition and attract subscribers. Thus, while free to air BBC services might threaten pay TV platform provider take-up, this threat would also strengthen the negotiating leverage of the channels on the platform with the platform owner. In doing so, the commercial thematic channel revenue would increase as might the thematic content proposition).

Specific MIAs, such as the most recent one conducted around BBC One + 1, BBC Three moving online and changes in CBBC hours, have suggested that the pay TV market is unlikely to be affected by small changes in BBC services. Previous independent studies for Ofcom and the BBC have suggested that the absence of BBC TV might lead to a level of subscription funding sufficient to fund a UK version of HBO.[66]

At a broader level, work by Human Capital[67] in 2004 on the willingness to pay for BBC services (work repeated for the DCMS in 2006 by the Work Foundation[68]) did suggest that there is substantial potential pay TV value in much of what the BBC does, which could imply that if the BBC stopped doing it, the pay TV market could be larger. This Human Capital work focused on looking at the sustainability of a pay based BBC TV service (i.e. alternatives to the licence fee), and the distributional impact of such a move on types of licence payer.

A 2015 study by the BBC involving depriving a group of reluctant licence payers of BBC services for nine days showed similar high levels of willingness to pay for the return of these services.[69]

The Human Capital work suggested that the single revenue-maximising subscription price for the BBC would not raise as much money as the licence fee at the time, leading to a probable downward spiral of content investment and willingness to pay, regardless of the exclusion of those who still valued the BBC but not enough to pay the optimal subscription price.

However, most pay TV businesses now work on the basis of complex bundling of pay tiers and/or connectivity options, a method of efficient price discrimination aimed at raising more revenue than a single price option. The work by Human Capital on willingness to pay did suggest that if a way could be found to price discriminate between different types of licence payer with different taste preferences and

[66] Mediatique (2014b) and O&O (2003) suggest a channel with £600m to £800m in revenue funding perhaps £200m to £300m of UK content alongside acquisitions might be the commercial market response to the absence of the BBC, similar in size in relative terms to HBO in the USA.
[67] Human Capital (2004).
[68] Work Foundation (2006).
[69] MTM Life without the BBC: household study. www.bbc.co.uk/mediacentre/latestnews/2015/life-without-the-bbc.

service mix requirements, there would be enough income to fund current BBC TV content from pay TV, and probably reach a high proportion of current licence payers, even if some wanted only a reduced bundle of content.

Other evidence of the pay TV impact of BBC free digital services included evidence in 2004 that fewer people were interested in taking or keeping pay TV with the imminent arrival of Freeview and the BBC's services on the platform than had been before it was developed. (Again this is a mix of pay platform and pay service effects). This development would have knock-on benefits for the commercial PSB channels, as covered in the next section.

The free to air PSBs have also provided evidence in their submissions on the retransmission fees debate (whether Sky and Virgin Media should pay the PSBs for carriage rather than vice versa). They show that the absence of their main channels on a platform would cause significant switching to rival platforms. This claim also suggests that there is a latent potential pay TV value in these services that could be extracted by linking them to specific platforms.

4.5.3.2 Broader market structure/market dynamics impact

This section reviews the past evidence and current submission evidence on the broader TV service market commercial market impacts of the BBC including: the extent to which BBC services help drive new platforms and de-risk such transitions for the commercial sector: the degree to which BBC content investment can encourage the commercial market to invest more in content; the extent to which BBC activity can prevent excessive commercial market revenue fragmentation; and lastly the extent to which BBC activity can force up the costs or increase investment risks to commercial rivals thus either reducing commercial activity or creating specific barriers to entry.

Platform/device take-up

Support for the BBC's positive role in driving new TV platform take-up is near-universal, with the only contentious areas being how far it should favour one specific platform/device over another, and whether it needs to take a direct ownership/management role in platforms or simply make its services available to third-party organisations that own and operate those platforms.

The BBC's full launch of its portfolio of digital services in 2003/04, alongside its cross-promotion of these channels on its main services, was seen as a major driver of the move to Freeview and Freesat at the time, backed up by surveys before and after the launch of Freeview.

The BBC's development of iPlayer has probably played a crucial role in helping the take-up of connected TV sets and low-priced connected TV set top boxes by TalkTalk and BT. This development has not just brought more effective competition to the TV platform and 3P market, it has helped commercial PSB operators de-risk their own moves into extra channel choice (ITV2, E4, More4, etc.) and on-demand services (ITV Hub, All4). Most importantly, it has helped them to maintain a segment of the market where they typically enjoy more share and reach than rivals. In doing so, it has therefore helped them maintain their CPM premiums to the market.

In addition, iPlayer, by helping to establish easy, high-quality access to on-demand content early in the UK, has also helped pay TV players such as Netflix to enter the market, and Sky and Virgin Media to introduce on-demand services.[70]

Now that digital switchover is complete, and BBC services are available on all platforms, the main platform-sustaining value of the BBC's extra channels is to keep the unique Freeview/Freesat reach high, which probably has more benefit to the commercial PSB operators than the BBC itself.

iPlayer probably has a continued role in sustaining the growth of connected TV in the UK and helping to grow the overall on-demand TV market in the UK. It is also probably still allowing a greater degree of competition in the 3P/4P market, as it helps open systems and low-cost set top box platforms compete more readily with established integrated pay TV operators, such as Sky and Virgin Media, especially for the emerging "pay-lite" market.

[70] Both Netflix and Amazon Prime management are on record as saying that iPlayer has helped them in the UK market.

Market structure and competitive dynamics

Support for the BBC's role in helping to increase or decrease competition in the core TV market is less clear. Past studies and reviews have pointed to the BBC's role in keeping barriers to entry in the main PSB network market high (by setting high audience expectations), and therefore preventing excessive revenue fragmentation in the commercial ad-funded network market.[71] However, less evidence in this area has been presented in the Green Paper submissions process.

More specifically, past evidence has suggested that the BBC indirectly prevents too much fragmentation in the free to air commercial network market by pushing up the minimum spend required to establish a high reach network in the UK (Channel 5 spends about £300m to get a 4 per cent share) This beneficial barrier to entry in what is a largely finite revenue, high fixed cost business, sustains the leading networks' ability to fund home grown content.[72]

Past studies have also cited the role the BBC plays in establishing rival TV platforms to the benefit of all channel providers, reducing any potential platform monopoly power. Again, this seems to be less of a factor in current submissions. Other more negative barriers to entry possibly caused by the BBC have focused more on its use of its archive and secondary rights[73] or level of cross-promotion, or its use/overuse of spectrum, although these claims have not surfaced recently. Access to secondary rights was raised by rival digital channels such as Artsworld in 2003/2004, and the potential absence of third-party access to pay TV on-demand rights was part of the objection to Project Kangaroo (the proposed SVoD JV between BBC Worldwide, ITV and Channel 4) by the Competition Commission.

BBC use of spectrum was an issue when the pattern of PSB DTT delivery was reformed and rejigged to allow HDTV transmission and a mechanism has been put in place for the BBC to auction any spare spectrum it may have to the commercial market. The level of promotion the BBC gives to its TV portfolio or on-demand TV services on is main TV networks has not been challenged, the concern is more about cross promotion of BBC radio and online information services or commercial BBC spin off services (covered in the adjacent markets section below).

There has been concern in the past that BBC activity in the sports rights market and the on screen talent market might have helped force up the costs of commercial rivals and/or denied them access to these resources by focusing too much on exclusivity – but changes in BBC talent strategy – reducing spend and dropping exclusivity in many areas, and the reduction in the BBC's coverage of leading sports events (with Formula 1, the Six Nations and UK Open Golf all recently being lost or shared by the BBC) has reduced the levels of concern in these areas.

Commercial sector content investment and competitive dynamics

The final broad area of TV service market impact is the BBC's role in encouraging the whole market, especially the commercial PSBs, to invest in UK originated content – a "crowding in" effect. While there is still much support for this role in theory, and in practice in submissions from Channel 4, NBC Universal, PACT, etc., ITV plc's submission has questioned whether this is still the case, especially with regard to the programming and scheduling strategy of BBC One.

This crowding in argument is separate (albeit related to) from broader arguments about the BBC's net market impact, whereby the BBC's own investment in content is added to the commercial markets to argue that a larger BBC brings positive net market impact and a smaller BBC brings negative net market impact. The crowding in argument relates specifically to how the BBC's own activity encourages or discourages content investment by commercial PSB TV and pay TV rivals.

Crowding in across commercial PSB TV has been cited in past Charter Review debates and evidence[74] as the BBC effectively increases the level of UK content spending by the commercial sector in response

---

[71] The contention is that the BBC makes it more expensive and risky for an ad funded channel to break through to say 5 per cent audience share and take on ITV1, Channel 4 and Channel 5 for the network advertising market, which, if fragmented further, could lead to lower programming investment across the sector. In other words, choice of networks would increase, but the quality of the offering – especially home grown content investment – would be lower.

[72] See O&O (2003) or Armstrong *et al* (2007).

[73] Raised by the Arts Channel in 2004 (see case study), and by the initial plans of the successful consortium for Channel 5. The Channel 5 consortium had planned to purchase volumes of BBC archive comedy and drama material before the BBC set up UKTV (building on the UK Gold channel) as the main outlet for its secondary linear rights in the UK.

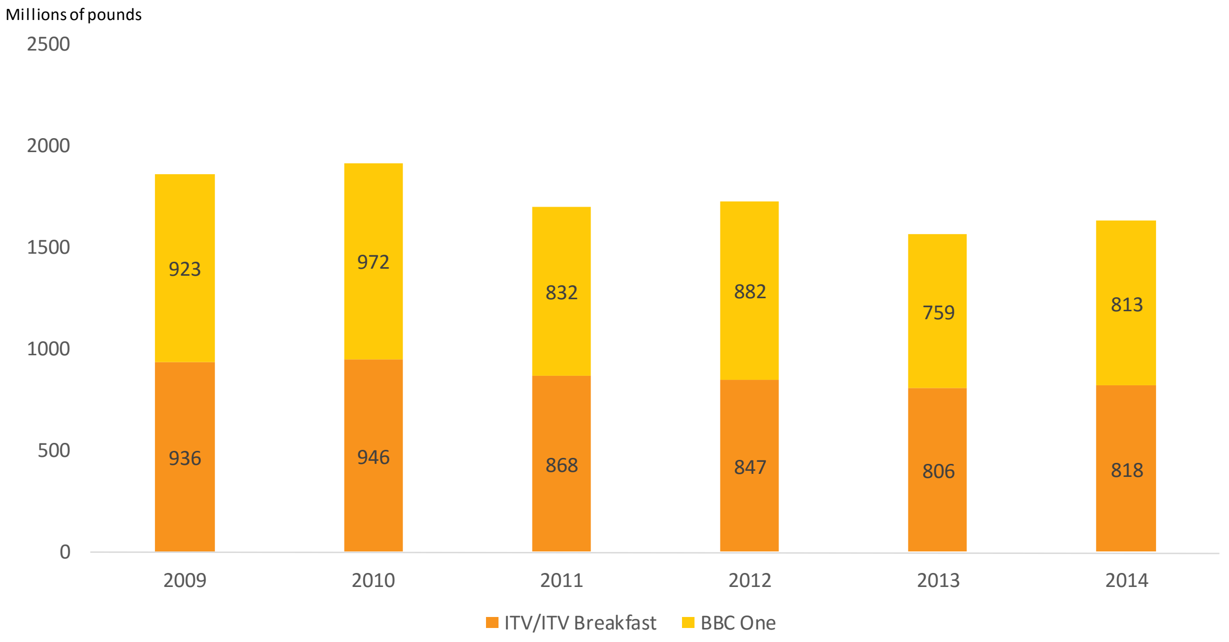
[74] O&O (2003).

by raising audience expectations and developing audience tastes. Michael Grade (former ITV, Channel 4 and BBC executive) once famously said "it's the BBC that keeps us (the commercial sector) all honest"

Less evidence has been provided on how far the BBC forces pay TV to invest more in UK content. It may be the case that the level of investment in UK content by the BBC and commercial PSBs actually encourage pay TV in the UK to focus more on US acquisitions and sports rights than it otherwise might, as an alternative, rather than increasing investment in UK content.

But across both commercial PSB TV and pay TV an important distinction needs to be made between two types of Crowding-in effect. The first, is a link between BBC UK content spending and rival content spending. The second, is a link between BBC network positioning and behaviour and rival content spending. This is an important distinction, as it lies at the heart of new evidence submitted by both ITV plc and the BBC in the Green Paper consultation process. BBC evidence focuses, in the first instance, on the impact of BBC spending on ITV1 spending. It shows the trend since 2008 for BBC One and ITV1 network programming spend noting the tendency for them to track down together, suggesting that ITV spends less when the BBC spends less. On this basis, if the BBC spends even less, this same pattern will be repeated.[75]

Figure 24: ITV and BBC One network programme spend, 2009 to 2014



Source: BBC Policy, from Ofcom analysis

BBC evidence then goes on to refute any suggestion that BBC One's positioning and behaviour has been responsible for any reduction in investment on ITV1. The BBC cites Mediatique's analysis of the profitability of different genres on commercial TV in a recent report for Ofcom and, in particular, the fact it shows that much of the high cost home grown drama on ITV is still highly profitable and will remain so for the next five years. This, the BBC submission implies, means that any reduced investment by ITV in drama, etc. (the Ofcom PSB review does suggest a reduction in drama spend by ITV) has little to do with a more successful BBC One in recent years targeting ITV's drama (which is ITV1's claim). The success of the BBC's own content has not made ITV drama unprofitable and is unlikely to do so in the foreseeable future.

[75] The trends are from Ofcom's broadcaster returns. Neither the BBC nor ITV publishes these precise figures, so they should be on a consistent basis. However, this does not include all content spend. For instance, in 2013/14, the BBC annual report had total BBC One content spend at £1,024m compared with the Ofcom total of £696m in the chart. That leaves £338m spend by BBC One on regional/nations opt outs, acquisitions, repeats, and possibly sports rights. (It is not clear whether these are in the Ofcom total or not.) O&O estimates that ITV1 spent about £950m on all content in 2013 compared with BBC One's £1,024m. BBC One does appear to have a higher total content budget than ITV1, even though its trend has been down.

None of the submissions provides detail to support the likely impact on UK content investment by subscription TV. However, the BBC does provide analysis of the margins made by Sky and the recent inflation in sports rights spending, as well as the low proportion of pay TV spend that finds its way into new originated TV programming apart from sports programming. This suggests any increase in subscription spending that might result from a smaller BBC will either go to shareholders or sports rights owners, and, through them, to the players.

Given the lack of much current clear evidence, the relationship between ITV and BBC spending, between BBC network positioning and strategy and ITV spending, and between BBC spending and behaviour and pay TV sector size and spending on content, all warrant more assessment in this review. This issue is covered specifically in the next section both in terms of spending and behaviour/positioning.

4.5.3.3 Adjacent market and supply chain impacts

This area covers both very specific adjacent/supply chain impacts (such as the UK TV content supply market, the UK on-screen talent market, the UK platform market, the UK archive and thematic channels market, and the international market for UK IP); and the more general impact on the UK creative industries.

Specific impacts are addressed in this section as part of the overall TV services market impact, as they relate very closely to the core TV services market. These include, for instance, platform building and platform competitiveness issues; and the impact on the UK secondary rights market.

The broader effect on the UK creative industries and the UK economy is more of an economic impact assessment than a market impact assessment. However, this is covered briefly in this section where most relevant, as it has been covered by studies (especially the PwC report for the BBC) that look at the macro-level impact of BBC TV.

4.5.3.4 Net market Impact

With such a limited negative net commercial market impact suggested by past reviews of either incremental BBC services or significant changes in BBC TV spending, it is not surprising that in both cases the net market impact of the BBC has been found to be highly positive once the consumer value of the BBC’s provision is added to the commercial market offering. Only where BBC services have been adjudged to have disproportionate negative impact on specific commercial rivals and/or the BBC services have been seen to add little to consumer value, have BBC propositions been rejected. This was the case with BBC One+1, where it was judged likely to have a disproportionate impact on ITV1 and add little to consumer value given the existence of PVRs and the iPlayer.

The only other instances in the case of TV where net market impact was adjudged to be potentially negative were: (1) the initial proposal for BBC 3, which was judged insufficiently distinctive to the commercial market, but was then approved with a modified proposal; and (2) the windowing of on-demand content, where extensive “series stacking” was adjudged to have potentially harmful impacts on the commercial on-demand market, and was therefore limited to a proportion of overall BBC output. In the latest changes to the iPlayer, series stacking beyond 30 days has been excluded.

4.6 Gaps and issues

The preceding analysis of past evidence and issues and current submissions suggests that any additional impact assessment and case studies should focus on:

- the broad net TV market impact of the BBC, given the changing nature of the UK TV market (and, in particular, the estimates from Barwise and Picard and the PwC report for the BBC) of the likely shrinkage in the UK TV content market resulting from a reduction in the size and scope of the BBC and the implications of an increased level of funding for BBC TV);

- the specific issue of the current market impact of BBC One’s positioning strategy and scheduling behaviour on the commercial PSB sector, and in particular ITV1 (as covered extensively in ITV’s submission and partially in the BBC’s submission);

- a look back at one or more specific issues raised in the past reviews of the BBC’s digital services and what happened subsequently – including a case study of BBC Four and Sky Arts (Artsworld).

Each of these is covered in turn below.

4.7 Additional assessments and case studies

4.7.1 The net market impact of the level of spending and size of BBC TV

A great deal has been written about the BBC's positive impact on the originated content sector, and thereby the UK consumer and UK public value. This impact is linked to the following four factors.

- The BBC spends a relatively high proportion of its income on content, especially originated content.
- If the BBC's income and spending reduce, any consequent increase in audience share for the commercial advertiser-funded sector does not increase its revenue proportionately. Thus, even if commercial channels spend all their extra income on content, there is not much extra income to spend.
- If the BBC is spending less overall, then commercial PSB channels – especially the profit maximising ITV1 – might feel that they do not need to spend as much (particularly if the BBC is spending less on BBC One, ITV1's main rival). Instead they might take any extra revenue as a windfall gain and might even take the opportunity to spend less.
- Even if subscription TV grows as a consequence of the BBC having less output (and licence payers having more money in their pocket to spend on entertainment), pay TV needs to operate on high margins to support its platform investment and upgrade requirements. When it does spend on content, it often just bids up the price for a small number of live sports events, movies and US TV series.

This is the line of analysis followed by two major recent studies looking at how a smaller BBC would affect the UK TV sector at the macro level: The Barwise and Picard study for the Reuters Institute (2014); and the PwC review of the impact of licence fee revenue for the BBC (2015). Barwise and Clare Enders for Enders Analysis have also produced an additional report based largely on the 2014 paper for the Reuters Institute.

4.7.1.1 The Reuters Institute and PwC Studies and the main drivers of these conclusions

The Reuters Institute for the Study of Journalism (RISJ) and PwC Studies cover the same market impact drivers in a similar way – the main difference is that the PwC study goes on to look at the broader impact on the creative industries and the economy as a whole, which is not really in the scope of this report.

The RISJ report was based on a complete cessation of BBC TV and then worked back to the impact of smaller changes, the PwC report looked at a 10 per cent increase in BBC TV licence fee funding versus a 25 per cent decline.

Overall, they draw the same conclusion as a central case – every 1 per cent reduction in licence fee income is likely to cause a 0.4 per cent decrease in the size of the UK originated TV content market. The RISJ then goes on to look at the implications for the UK consumer and viewer given the expressed preference for UK content in all relevant surveys, while the PwC report looks at the implications for the creative industries given the BBC's high multiplier impact of commissioned content on the rest of the sector (as measured by a separate report by Frontier Economics on this aspect).

The main drivers and assumptions are as follows.

- *Advertising revenue substitution* – both studies believe that there is a substitution with the RISJ study assuming an elasticity of advertising demand in its mid case at -2, and PwC around -1.5 – this implies that at the margins any extra audience share point that switches between the BBC and the commercial sector is worth between £18m and £27m (equivalent to between a half and three quarters of one per cent of total TV advertising revenue in 2014) at current market levels of advertising spend.[76]

---

[76] A switch of 1 share point increases commercial impacts by 1/68 or about 1.5 per cent, a -2 elasticity suggests revenue would increase by 0.75 per cent, current net UK TV advertising is about £3.6 billion, 0.75 per cent of £3.6 billion is £27m.

- *Audience substitution* – the RISJ report assumes all current BBC viewing passes to the commercial sector with total viewing remaining the same – the PwC report assumes a proportionate reduction in BBC viewing to funding reduction, and also no change in total viewing.

- *Content spending as a proportion of extra revenue by commercial PSBs* – the RISJ review looks at both all content spending and UK originated spending, the PwC report looks at only UK content spending (with the impact of UK content spend driving its conclusions on the UK creative industries and UK economy). Both assume no "crowding in" effect – i.e. the commercial PSBs do not spend less proportionately due to a smaller BBC, but while the PwC report assumes that proportionate spending remains the same, the RISJ report does allow for increases in content spend, and smaller increases in UK content spend, in order to fill some of the gap left by the BBC.

- *Extra subscription spending* – both reports refer to the lack of any quantitative evidence on this, while RISJ does provide some international comparison figures that suggest pay TV markets outside the USA are larger when the publicly funded sector is larger. This suggests that there is almost another crowding in effect (i.e. pay TV income might go down with a smaller BBC) – but it does not use this and assumes a significant uplift in pay TV revenue if the BBC ceased – about 50 per cent in the optimistic case versus nothing in the pessimistic, with a mid-point of 25 per cent (equivalent to about 60 per cent of current licence fee spending per household). The PwC report assumes a 2.5 per cent increase in projected pay TV income if the licence fee reduces by 25 per cent. As pay TV income is currently larger than licence fee income, it translates into a c. £700m reduction in licence fee income, boosting pay TV spending by c. £150m in 2017.

- *Extra content spending by subscription based services* – the RISJ allows for small uplifts in the proportion of spending from current levels on UK content, and larger uplifts on all content, including sports, movies and TV series – it provides a range for both. The PwC report assumes that the current proportions of TV content spend apply, but does not look at UK content.

The overall results are that the RISJ report concludes that cessation of BBC TV would reduce total UK content spend by between 15 and 50 per cent, with a mid-point of all scenarios of 40 per cent. This can be expressed as: "For any 1 per cent reduction in licence fee funding of BBC TV, the UK content market shrinks by 0.4 per cent".

The PwC report projects forward the market to 2020/21 and concludes that spend on first run UK TV content would fall by £334m in 2020/21 – which is approximately a 10 per cent fall in that year, from a 25 per cent reduction in the licence fee, which converts into the same ratio to the RISJ report of 40 per cent.

4.7.1.2 Static versus dynamic assessments and reflecting future market dynamics

The main issue covering both studies is the extent to which they have approached the interaction between the BBC and the rest of the TV sector, and in particular how the BBC's size and presence affects the current content investment decisions of both the commercial PSBs and the pay TV sector – broadly defined.

While the RISJ report does address this issue numerically by allowing for optimistic scenarios where pay TV and PSB commercial TV would spend more proportionately without the BBC, which leads to the lower impact case of a 1 per cent reduction in licence fee income reducing total UK content investment by 0.15 per cent, it does not provide any specific arguments as to why and in what circumstances this might prove to be the case.

Neither study considers the possibility that pay TV's current heavy reliance on sport, movies and US TV series is based on its optimal best strategy given the BBC – and to a lesser extent its UK PSB rivals – invests so much in UK content of quality. Pay TV is primarily about providing additional choice to free TV viewers to get them to subscribe, not the same types of service. It could be that pay TV's heavy reliance on sports content in the UK, and the rapid inflation in the rights to the top events surpassing any other major European market, is precisely because of the strength of the free to air originated UK TV content, where pay TV providers are perfectly happy to take secondary rights in that UK content through UKTV and ITV Encore, etc.

In addition, neither report takes account of recent changes in the structure of the pay TV sector. In particular, in so far as the quasi-monopoly features of the pay TV sector in its early stages might have enabled lead players to boost profits rather than programming investment if the BBC were smaller, increasing competition in pay TV – which is now spreading beyond sports rights where it always existed to some extent, to TV content – with the arrival of Netflix and Amazon Prime – is likely to mean that increased levels of UK commissioning, and more probably UK made content with an eye to both the UK and global tastes for TV, would be the result if the BBC were to reduce the scale of its investment in these areas.

Given that so many surveys in the past have revealed substantial willingness to pay for BBC TV content, it would be odd if the pay TV sector did not try to monetise some of this if the BBC scaled back. While they would focus on the potentially highest margin material, in absolute terms rather than just relative terms, this would not be all UK game shows, chat shows and low end factual entertainment formats, it would as likely to a major push into UK commissioned drama.

Similarly, while neither study assumed a crowding-in impact with PSB commercial TV that might be lost with a smaller BBC, it may be that there are areas of UK content and programming where commercial PSBs cannot justify the investment given the competitive strength of the BBC, which they would find profitable if the BBC were smaller (this is addressed in the BBC One versus ITV case below).

In addition, a smaller BBC might also have implications for the regulation and positioning of ITV1 versus Channel 4 and the prospects for a fourth commercial network operator. While too much further network market entry might fragment revenues and force down all UK content spending, more head-to-head competition between ITV, Channel 4 and Channel 5 might push up spending, especially if there were the prize of the BBC's vacated audience and demographics to target.

4.7.1.3 Specific versus general service/content reductions by the BBC

The other main feature of both studies is that they assume an across the board reduction in BBC output and content, not a more selective repositioning by genre and channel, that might have very different specific competitive responses from rival commercial PSBs and the pay TV sector. While a reduction by the BBC in its serious factual, religious, or news output is unlikely to see significant increases from the commercial sector who would still find such content priorities difficult to justify, reductions in factual entertainment investment, peak time entertainment shows, drama series or soap drama output might get commercial PSBs and pay TV channels to think again about the mix and level of their investment. Channel 4 abandoned its peak time soap – Brookside – partly because the increases in Coronation Street, Emmerdale and EastEnders episodes from 1998 to 2002 meant that there was no room for it. If the BBC were to scale back its soap commitment, Channel 4 and Channel 5 might think again about their priorities, as would ITV2 to defend itself.

Overall, if BBC scaling back allowed the high cost – but still potentially high reach – content such as drama series and peak time entertainment shows – to gain a higher rate of return on commercial PSBs they might increase their total UK content investment as a profit-maximising strategy (and for Channel 4 as a way of maximising its reach and surpluses from some slots in order to keep cross-subsidising its more PSB heavy output).

Finally, with regard to commercial PSBs it is not clear that the optimal configuration of PSB roles and licences would necessarily remain the current differentiated commercial PSB approach with a smaller BBC. A rejigging of obligations and public assets might be possible to create more head-to-head competition between commercial services, while the BBC looks after more of the differentiated and heavy public service obligations.

4.7.1.4 A more nuanced view?

It is perhaps more likely than either study has allowed, that a smaller BBC, especially one reducing in size in areas where the commercial sector might find expansion profitable, would elicit a larger increase in UK content than allowed for; and that the lower end of the RISJ range – a 1 per cent reduction in licence fee funding – might reduce total UK content spend by 0.15 per cent might be nearer the right assessment.

But while the level of content provision may be too pessimistic, the implications for the mix of content and the future of more niche and heavily public service content might be more of an issue than covered by both studies, as would the reach of more heavily public service versions of more commercial genres – such as drama series.

A reduction in BBC funding might well significantly reduce public value even if economic value reduced by less than claimed. This might suggest that the BBC's positive market and economic impact generated by its current output is being overestimated by these studies (and overstated by the BBC), which would mean it might need to find ways to make its public value impact greater – by being even more distinctive – to achieve the same combined consumer and public value impact.

4.7.1.5 The implications for a larger BBC – diminishing returns, and crowding out?

Only the PwC study included an expanded BBC scenario, and then only a 10 per cent increase in contrast to its 25 per cent decrease in funding scenario. However, the modelling does suggest a similar positive relationship, notably, 1 per cent increase in licence fee funding increases total market UK content spending by 0.4 per cent – with implied substantial increases in consumer surplus (and a significant knock-on impact on the creative economy and overall UK economy).

This takes little account of the broader impact on the commercial market of a larger BBC TV operation, which might force the commercial PSB market to finally give up competing with an enlarged BBC in many areas of home grown programming and shift to an import-driven programme mix with cheaper home grown programming. This would be consistent with the evidence from commercial free TV elsewhere in Europe.

In many ways, a larger and larger BBC might push commercial TV into the position commercial radio occupies in the UK, and only serve a certain subset of consumer tastes and a certain demographic, leaving the BBC as the only supplier of certain types of programming and service. While a much more limited commercial offering might encourage an expanded pay TV offering, the increased level of home grown output available on the BBC could both have a negative impact on pay TV penetration growth and encourage the pay TV sector to maintain or increase its reliance on imported TV series and sports.

Again, much would depend on how the BBC spent its extra income. If it spent it on distinctive and differentiated output, it is possible that a larger BBC might be consistent with a healthy commercial PSB and a pay TV sector investing in more content. If on the other hand it expanded its provision of popular drama and entertainment, it could well force commercial PSB to downsize its aspirations and pay TV to maintain its reliance on imports and sports.

4.7.1.6 Conclusions

Studies which suggest that significant reductions in the size and funding of BBC TV would have a significant negative net market impact are directionally correct. However, they may have overstated the magnitude of this negative effect given developments in the pay TV market in the UK, trends in global content provision and by taking insufficient account of the types of programming that might be reduced if the BBC were smaller. This is relevant to the PwC report but not in the case of the RISJ report as their scenario is the absence of BBC TV.

Conversely, care must be taken when applying the logic of both these studies to further increases in the size of BBC TV. A much larger BBC might effectively push commercial PSB "over the edge" in terms of its programming ambition, and force pay TV to reverse its move into new UK content – much in the end would depend on how the BBC chose to spend its extra money – on a differentiated and distinctive proposition or on a higher reach and share proposition.

This specific issue, relating the BBC's mix of programming and distinctiveness, rather than its level of spend, to market impacts, is the focus of the next section of analysis.

4.7.2 BBC One positioning, scope and scheduling strategy

The last section suggested the broad case for the BBC on the basis of its positive market impact on UK content, and proposes that, while the impact still holds, it might be overstated in the evidence provided by two recent studies. This overstatement may be due to insufficient consideration of both the general dynamics of the commercial market and how it might react to a smaller or repositioned BBC, and the specific impact of genre scheduling and programming mix on rivals.

In this section, we look at a specific case – the interaction of BBC One and ITV1 (the main channel which is now just called ITV but which we refer to as ITV1 to avoid confusion with the company and its wider portfolio of channels), focusing on the impact of channel positioning, programming mix and scheduling decisions of one (in particular BBC One) on the other (ITV1). Much evidence has been provided by both ITV and the BBC on this issue, but before outlining the BBC and ITV positions specifically, we set out below some definitional issues that will be relevant to the assessment of impact.

4.7.2.1 Dimensions of distinctiveness

Evidence provided by BBC and ITV suggest a number of different potential dimensions of schedule distinctiveness to be considered; these reflect previous work by both Ofcom and the BBC Trust on the issue (although each side emphasises different aspects), most notably:

(i) the mix of programme genre output and/or investment by day-part (with some genres such as arts and specialist factual being seen as more heavily public service than others such as entertainment and factual entertainment);

(ii) the mix of programme types within genres – with programming approaching subjects in new ways or more challenging subjects being seen as more distinctive and public service than more predictable or formatted approaches;

(iii) the refreshment rate, range and level of innovation across the schedule – as measured by the number of new titles, the number of titles, changes over time within a given title, and the sourcing of titles – most notably the use of pre-existing global formats versus new UK ideas; and

(iv) the scheduling of programming – in terms of head-to-head scheduling versus a more complementary approach.

Across these four dimensions, the BBC tends to emphasise (ii) and downplays the relevance of (iv), while ITV emphasises (i) and (iii) and believes (iv) is very relevant.

4.7.2.2 The relevant time period, and the appropriateness of portfolio versus specific network comparisons

There are two time related issues raised by the ITV and BBC evidence. First, the current level of distinctiveness and, second, the changes in distinctiveness over time. Much of the BBC evidence points to current levels of distinctiveness between BBC One and ITV1. Much of the ITV evidence is focused on a reduced level of distinctiveness over time (i.e. it admits BBC One is distinctive, but less so than it was).

In addition to this time period difference, BBC evidence suggests that their distinctiveness should be assessed across the portfolio of all their services combined rather than focusing too narrowly on just BBC One, while ITV claim the positioning of BBC One is relevant when judging the market impact on ITV and especially ITV1.

4.7.2.3 The relationship between distinctiveness and market impact

ITV put distinctiveness at the heart of the market impact debate, suggesting that a lack of distinctiveness on BBC One may both reduce its incentives to invest in higher cost public service genres (if not now, then certainly in the future) and its overall audience share and advertising revenue (i.e. negative commercial market impact), and as importantly, reduce the positive impact of BBC spending on the content sector (where ITV is now the largest UK supplier) and the creative industries (less positive net market impact).

In contrast, the BBC suggests it’s the level of BBC spending that has the most market impact, with recent reductions in BBC spending on BBC One, being correlated with reductions in ITV spending, and feeding through to a lower level of positive impact on the content supply and creative industries.

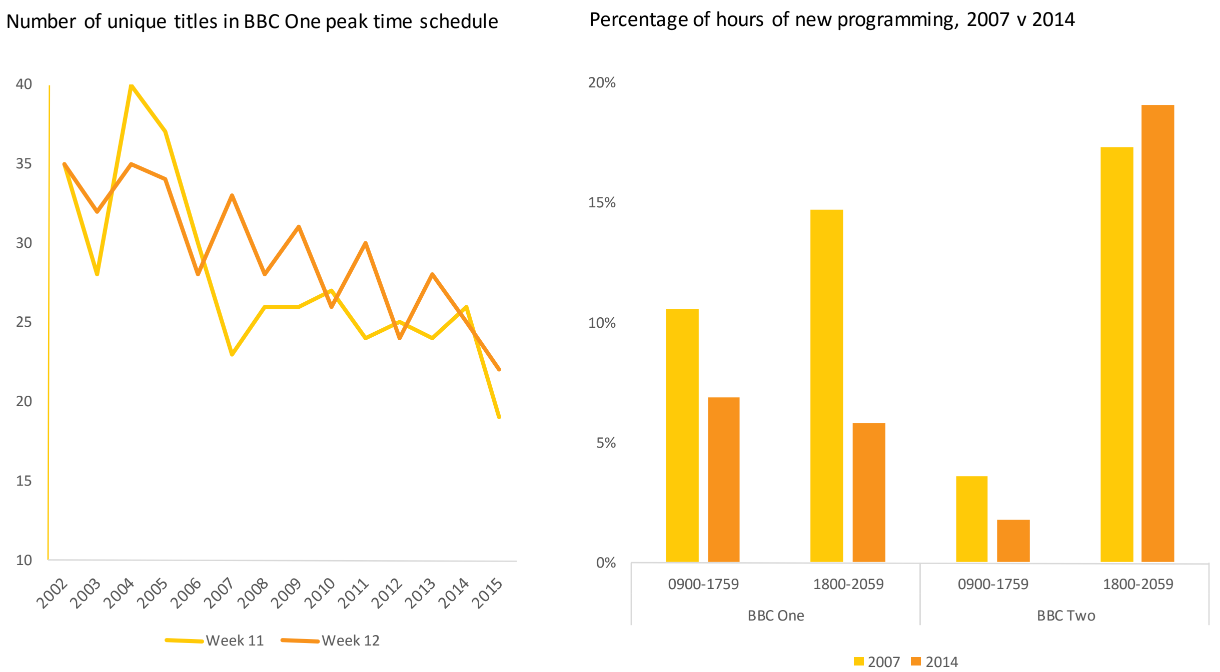
4.7.2.4 The ITV submission and evidence

The ITV evidence provided is as follows.

- An assessment of how static and “format” driven the BBC One typical weekday daytime schedule has become by looking at two dates in September 2015.
- A time series analysis of the number of unique titles on BBC One since 2002 showing BBC One is becoming about a narrower and narrower range of programmes, as narrow a range today than its main rival ITV1.

- A time series snapshot – between 2007 and 2014 – showing the volume of new titles on BBC One and BBC Two as a proportion of all hours – peak time and daytime – which shows a significant drop on BBC One, especially in peak time.
- A case study of how BBC One scheduled against the first series of Broadchurch versus the second series, and the damage done to the ITV series when the BBC decided to schedule an established crime series against it such as Silent Witness, even in the age of play back and catch-up TV.
- A summary of Ofcom schedule trend analysis across the PSB channels by factual subgenre and comedy from 2009 to 2014 – peak time and all day – showing declines in BBC One hours in total and/or a move out of peak time for specialist factual, arts and classical music, religion and ethics, contemporary music and comedy, but an increase in BBC One peak time factual entertainment (and a shift of specialist factual, etc. to either BBC Two or the digital spin-off channels).
- A specific claim that the BBC should not be buying in pre-existing formats such as The Voice but instead focus on creating new ones of its own.

Figure 25: ITV response to Green Paper: new programmes on BBC One and BBC Two



Source: ITV response to DCMS Green Paper Questions, annex figure 1 and figure 2

ITV suggests that all these trends combine to make BBC One today a much more competitive and populist channel than it was five or ten years ago, and that it is today less distinctive from ITV1 than it claims. ITV states that this trend was noted by the BBC Trust in its 2014 service review (although in the case of competitive drama and entertainment scheduling, ITV executives have suggested that this has not increased significantly recently but, rather, it is now more damaging to ITV1 than in the past given the more competitive market place).

ITV claims that BBC One is better funded than ITV and that it should use this better funding to be more distinctive not just to gain more share and reach at ITV's expense.

ITV also suggests that the BBC is using too many international formats to reduce the risk across its factual entertainment and entertainment portfolio, and that this forces up the cost of these formats in the market – instead the BBC should focus on developing its own formats and taking more risks.

Overall, ITV wants BBC One to become much more distinctive and risk taking, both to help it increase its own programming investment and profitability, and to create more consumer value, public value and boost the creative sector more. It is both a commercial impact complaint and a distinctiveness, creative sector multiplier and public value complaint.

4.7.2.5 The BBC response

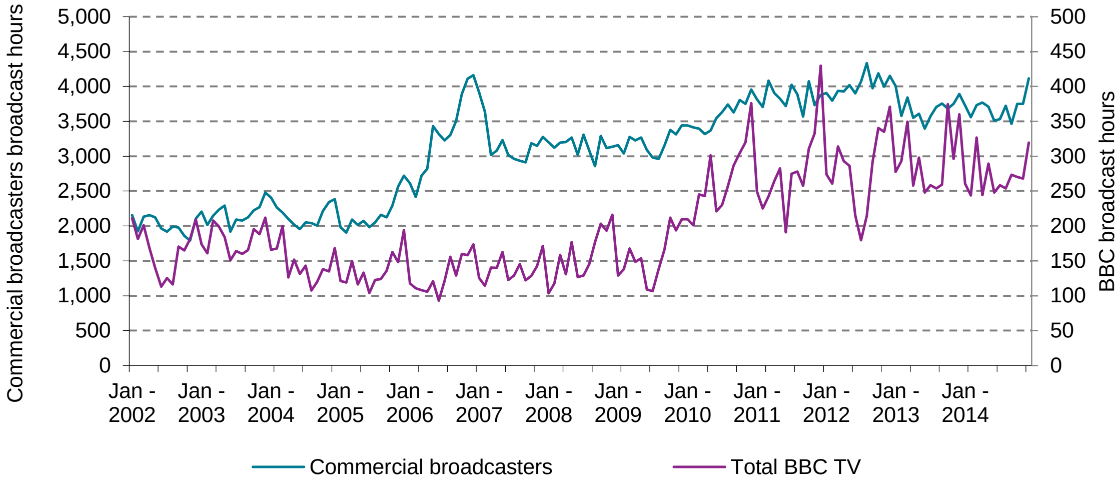
The BBC's response to these specific claims has to point to analysis that shows:

- BBC One is not better funded than ITV (with Ofcom numbers showing over the last 5 years the BBC has had similar programme funding to ITV – excluding national and regional opt-outs for both channels – and less money in the last 2 years), and says that ITV's recent reductions have been at a time when its advertising revenue has grown strongly;
- BBC One's schedule has a very different mix to ITV1's. A 2014 comparison from Ofcom shows that peak time schedules by broad genre show BBC One has far more factual programming than ITV in peak time – about double – and far less entertainment;
- a snapshot of a recent week's schedule showing how ITV strips its top formats like I'm A Celebrity Get Me Out of Here across the week, while the BBC shows a range of programmes – suggesting ITV1 is built on a much narrower range of popular programmes exploited to the maximum than is BBC One;
- a comparison between the BBC One schedule of 1982 to 2012, showing how much BBC One depended on imported programmes in 1982, and had less drama, documentaries and news – indicating that the channel is more public service today than in the past when ITV1 did much better than BBC One in terms of audience share;
- a claim that peak time volume reductions in areas such as specialist factual been about having fewer higher impact, higher budget hours which have got higher levels of viewing, while also maintaining that judging all factual entertainment as being somehow less public service than specialist factual or documentaries is to underestimate the public service value of strands such as *Masterchef*, *The Great British Bake Off* or *The Apprentice* – all defined as factual entertainment.
- evidence from consumer surveys that BBC One is still regarded as a distinctive and innovative channel

Separately, the BBC Trust commissioned KPMG to undertake a time series econometric analysis using aggregate data. The analysis seeks to explain the degree to which, over the 2002 to 2014 period, commercial broadcaster outcomes (for example, commercial entertainment viewing [77]) can be satisfactorily explained by various explanatory variables (for example, commercial minutes of entertainment broadcast). BBC activity is then added as an additional explanatory variable in the analysis – the test being whether the impact of this variable on commercial outcomes is found to be negative. The study concludes that there is no evidence of crowding out by the BBC, as this additional variable is not found to be negative and/or statistically significant (or that its inclusion generates model specification problems such that any negative effect found cannot be relied upon). This holds for both commercial entertainment and news viewing.[78]

[77] In this instance, commercial viewing appears to be the sum of BARB audience data for ITV, Channel 4, Channel 5, UKTV and Sky. Both entertainment and news viewing was examined.
[78] KPMG (2015).

Figure 26: BBC and commercial broadcasters' entertainment broadcast hours per month, 2002 to 2014



Source: Chart reproduced from KPMG (2015)

This analysis is in addition to the material in its initial submission, which referred both to the Ofcom first run network programming spend trends and the Ofcom PSB genre sustainability report showing that ITV drama was still profitable on ITV1 in spite of ITV claims of aggressive scheduling by BBC One. The implication is that whatever the BBC is doing is unlikely to be the reason why ITV may have reduced its investment in Drama series in the past, and provides no grounds for believing the level of ITV investment would be reduced in the future.

The BBC has made no specific response to the claim its daytime schedule is too driven by entertainment and lifestyle formats. In terms of its use of pre-existing formats in peak time, it has pointed out that strands such as *The Apprentice*, *University Challenge* and *Dragon's Den*, while all pre-existing formats, clearly have public service value.

4.7.2.6 Assessing the evidence provided – what is happening?

In assessing the evidence and claims, there needs to be a distinction between, first, what is actually happening to the BBC One schedule and its positioning (given the claims and counter claims above), and second, what might be the commercial market and net market impact of what is happening.

On what is happening, the following areas need to clarified.

- Is the BBC One schedule becoming less innovative and less risk taking (e.g. less new titles, fewer individual titles and the use of pre-existing third-party formats)?
- Is the BBC One peak time schedule reducing its commitment to high public value content?
- Is BBC One engaging in many instances of competitive scheduling, and has this increased in volume or effect?
- Is the BBC One schedule less distinctive overall from ITV1 than in the past?

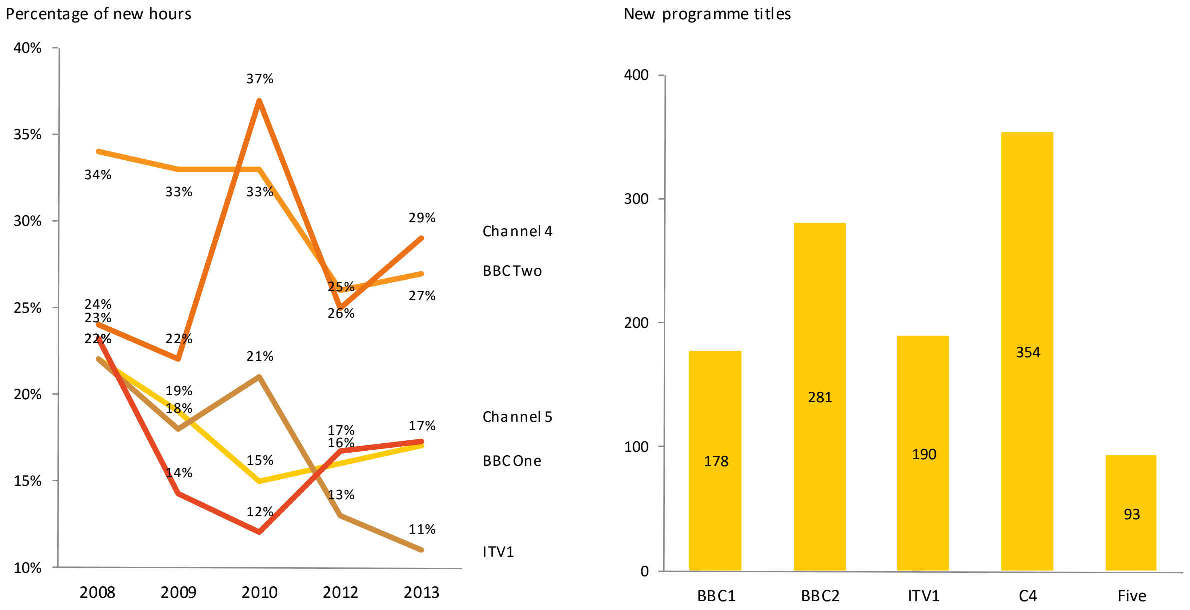
4.7.2.7 Schedule refreshment and innovation

On risk taking/innovation, ITV trends on new titles and the number of titles – which seem reliably sourced from channel output data and correspond to data O&O has on the output of the main channels since 2008, rather than back to 2002 – show that BBC One has been reducing the number of titles and the number of new titles in its schedule over the period to a level similar to ITV1's, but that this downward trend was bottoming out in the last years of the sample.

Figure 27: PSB commissioned hours and new programme titles, 2008 to 2013

Share of PSB network hours that are first run commissioned hours, all day, 2008 to 2013

New programme titles commissioned per year by broadcaster (average 2008 to 2013)



Excludes news and sport
Source: BARB, Attentional Limited, Oliver & Ohlbaum analysis

The BBC suggests that this was largely a result of the strength and longevity of many of its most popular and often highly distinctive shows introduced 10 to 15 years ago and is not reflected in the audience's view of how innovative the BBC is as measured by regular BBC surveys. In so far as it has led to a lack of innovation, this was picked up by the BBC Trust in its most recent review, BBC One service review, but it is still in the process of responding to this and it takes 2 to 3 years to start to change the overall shape and mix of a schedule.

Overall, the trends do suggest some increase in conservatism at BBC One over the period – largely as the result of its own success in the 2000 to 2004 period, when ITV went through some major structural changes. In competitive markets like the USA, programmes schedules tend to go in 7 to 8 year cycles, where one network has more success and title longevity, which means more new programmes are taken to the rival for commissions, which eventually reverses the situation with the new batch of successes on the rival channels. However, even in the USA some networks have managed to refresh themselves even while being filled with successful long-running strands by having a higher new title hit rate, and have effectively been on top for two consecutive 7 to 8 year cycles. We could only find out if this is the case with BBC One by reviewing its new title hit rate over 12 years, which was not possible in the timeframe for this report.

In any event, the low numbers of new titles and total titles in the schedule is likely to reverse in the next few years, given that some long-term strands are beginning to tire, the push by the BBC Trust for more distinctiveness, the recent agreement to subject 40 per cent of the BBC's long-running strands to competitive tender from the independent production sector, and the need to replace some high profile sports output which the BBC has recently lost/decided to withdraw from.

While the BBC does buy in ready-made formats such as The Voice or The Apprentice, innovation can be in programme execution as well as format, and there is no evidence that the BBC is doing it more today than say 10 years ago. The focus should probably be on the ratio of home grown formats, and new home grown formats, to imported formats, and the BBC probably needs to ensure a high positive ratio over time to remain distinctive.

4.7.2.8 Genre mix

The peak time genre mix data presented by the BBC and ITV1, both sourced from Ofcom, suggest that both the BBC One schedule is distinct from ITV1 in 2014/15 but that BBC One has increased its entertainment and factual entertainment output at the expense of the volume of specialist factual and documentaries, etc. The 2002 to 2014 entertainment time trend data for the BBC in the KPMG report also confirms a general uplift in the volume and viewing levels for BBC entertainment programming in 2010.

In terms of the daytime schedule, the examples given do suggest both a lack of variability and a reliance on cheaper factual entertainment titles around “house and home” subjects. But a more comprehensive analysis of the daytime output of ITV1 versus BBC One would need to be made, as it might just be the nature of daytime TV to favour long-running titles of this type, and within that constraint the BBC could be seen to be more ambitious than commercial rivals with both daytime home grown soap output and more current affairs and news.

In addition, volume of output is not the same as levels of spend and investment. We do not have the information to verify whether or not, for instance, the BBC has increased its spending on specialist factual and arts in order to increase the impact of a reduction in these genre hours on BBC One. We see no reason to doubt this is the case.

However, it is not clear whether this strategy, combined with the increased amount of specialist factual and arts on spin-off channels, might not be reducing the overall reach and impact of BBC output in these areas even if, as the BBC maintains, the impact per hour has increased. ITV’s case that these changes are having a damaging impact on its share and investment could still be consistent with a BBC policy of maximising the impact per hour of such output on BBC One.

4.7.2.9 Mix with genre

Care should be taken in equating broad subgenres such as factual entertainment and specialist factual with definitive levels of public value and distinctiveness. Distinctiveness within genre is probably at least as important as distinctiveness across genres; indeed, ITV recognises this when it sets out new ways of measuring innovation and distinctiveness in its submission.

Thus, in terms of peak time schedule mix, it is difficult to say if there has been a reduction in distinctiveness. But it is the case that the BBC Trust raised issues of distinctiveness in its 2014 review, which was as much about range within genres as across genres, and BBC One is currently responding.

4.7.2.10 Competitive scheduling

In terms of schedule clashes, Oxera has examined the number of drama and entertainment clashes between BBC One and ITV1 over the last 3 years, and clashes at a subgenre level such as crime drama – which may be more significant. Oxera has found no systematic increase. Indeed, when meeting ITV management, they clarified that they were not claiming that the clashes had increased recently – they think this happened in 2000–03 – but rather that the impact of these clashes on ITV1’s ROI for high cost genres such as drama series is now greater (covered below). ITV1’s Broadchurch example is simply an example, and it is difficult to determine whether the second series did worse because of counter-scheduling of Silent Witness rather than other issues about series appeal and quality – certainly, the second series received less critical acclaim than the first.

4.7.2.11 Overall assessment

We do not have the data to check the long-run distinctiveness of BBC One versus ITV1 across all the dimensions outlined at the beginning of this section, and we are not sure how relevant this is to the current or future dynamics of BBC One and ITV1 and its impact. We address this later in this section where we try to estimate the likely impact of a future increase in BBC One distinctiveness on commercial market impact and net market impact.

Across the board, we concur that BBC One has probably been quite conservative over the last ten or twelve years and has increased its entertainment and factual entertainment output. So at least in some dimensions BBC One has become less distinctive. While BBC management claim that there will be an uptick in new titles in response to the 2014 BBC Trust review, there is no guarantee this will continue in the long term.

4.7.2.12 Assessing the evidence – what is the likely impact of what is happening?

We have established that there might be grounds to believe that the BBC One schedule is less risk-taking and innovative than 10 to 15 years ago (partly due to the enduring success of many of the programmes introduced 15 to 20 years ago). We have also established that less of the channel's peak time schedule may be being devoted to output that has the highest public value per viewer but not necessarily the highest total public value (public value is a product of viewers and public value per viewer), and that competitive scheduling has probably not increased markedly. We need to establish the market impact of these trends.

The potential market impacts (as opposed to public value impacts) are:

(1) damaging ITV1 revenue and profitability disproportionately;
(2) reducing ITV1 incentives to invest in high cost areas of content – most notably drama;
(3) reducing the positive impact of BBC content spend on UK TV content supply and the creative sector; and
(4) reducing the net market impact of BBC activity (BBC activity reduces commercial UK content spend activity and then adds less to compensate).

We take (1) and (2) together, and then (3) and (4).

A conservative schedule probably does reduce ITV1's ability to create and build new hits, but it should also mean more new ideas come to ITV1 as there is at least as good a chance of getting it on ITV1 as BBC One (and maybe we would have expected ITV1's new titles to have increased a bit more than they have).

In terms of the impact of counter-scheduling and mix changes on ITV1, the evidence provided on this by both ITV and BBC is far from conclusive.

In series 1 of Broadchurch, a relatively recent ITV crime drama, ITV secured a higher total audience and a higher proportional live audience, when clashes with BBC One crime dramas did not materialise. In series 2, ITV claims that BBC One scheduled its established crime drama Silent Witness in direct competition with Broadchurch, and that the effect was a lower total audience (and lower proportional live audience) when compared with series 1. However, this approach, as just one example, does not provide a complete picture across the schedule, within or between genres (e.g. drama) or subgenres (e.g. crime drama). And while providing a useful higher-level picture, the analysis is not econometric, and therefore does not control for other factors that might explain ITV viewing figures. Also, it does not demonstrate that, across the schedule, there are a large number of genre or subgenre clashes between BBC and ITV.

The KPMG analysis of BBC versus rival output and audiences for news and entertainment conducted for the BBC Trust is econometric, and a series of control variables were included in the analysis in an attempt to isolate the impact of BBC activity in entertainment and news. However, the aggregated nature of the data, and the way in which the estimation has then been conducted, makes it highly unlikely that the influence of the BBC variable would ever "show through" in the analysis. As such, there are reasons to doubt the validity of the analysis for either proving or disproving the hypothesis of crowding out. The analysis does not include drama – a key point of contention for ITV.

BBC references to the Ofcom PSB genres profitability analysis showing ITV drama series are still profitable does not address the core issue – i.e. is BBC mix and scheduling behaviour reducing this average profitability compared with other types of programming which could causes ITV to optimise its schedule to profit-maximise by reducing drama and increasing a lower reach but cheaper genre? More broadly, is BBC behaviour reducing the returns to ITV's higher investment and more public service output and undermining its commercial PSB model?

Showing that both ITV and BBC One funding have tracked down together may neither be evidence that less funding for the BBC means less investment by ITV (back to the crowding out versus crowding in debate in the previous section) nor that ITV is exploiting some kind of monopoly over advertisers – reducing programming spend and audience share but charging higher prices for smaller audiences and blaming the BBC. It might reflect more the increasing contribution of secondary and global rights to programming making programmes cheaper for all networks, even while the budgets to make those programmes rise.

In order to clarify the competitive scheduling issue, Oxera has conducted a more thorough review of the schedule clash issue.

As discussed above, ITV's submission uses BARB data for a particular show (Broadchurch), and examines ITV versus BBC One audience figures for each of its series 1 and 2 airings. It seeks to explore how ITV audience is affected by (crime drama) clashes (e.g. with Silent Witness). However, despite using "micro-data", this includes one example, rather than data across ITV dramas and over time. In addition, the approach is not econometric – including all explanatory variables that are in theory relevant. A weakness of the KPMG analysis is that, while econometrics is employed, the data used is aggregated, and so genre and subgenre scheduling effects are difficult to isolate. The modelling strategy used then compounds this, by making it difficult for any negative impact of the BBC's scheduling decisions to "show through".

In order to clear up one of the core issues about drama scheduling, and go beyond single examples, Oxera obtained 3 years of BARB audience data for 28 key weekly ITV drama series/serials, from O&O's programme database. Based on IMDb information, each drama was classified according to its subgenre (e.g. crime, period, fantasy). Information was then also obtained, for each episode, on what was being broadcast at the same time on BBC One, Two, Channel 4 and Channel 5. The analysis and results are explained in further detail in the Annex in chapter 7.

The key issue explored was, based on BBC One and ITV1 scheduling decisions, the extent to which genre (drama) and subgenre (e.g. crime) clashes occurred and, when this was the case, what the impact was on ITV1's viewing figures.

Because the approach was based on panel data (i.e. across ITV dramas, over time), a large number of observations (222) were included in the analysis. The micro-nature of the data meant that the impacts of scheduling decisions could be isolated. It was also possible to model a number of factors that, in theory, might be expected to affect the audience for a particular ITV drama at a particular time – including the audience of the preceding ITV programme ("inheritance" or "flow"), which episode of a series each programme was (was it a premier, etc.), and whether there was a scheduling clash with a similar type of show on BBC One (or indeed the other channels). It was also possible to remove "fixed effects" in the analysis, including normalising for the scale of each ITV show's loyal audience.

The regression analysis conducted suggests that BBC One running a drama series against an ITV drama series does damage the ITV audience share – other things being equal – but that this is only statistically significant when the subgenres of the two shows are the same. In practice, the clashes occur between BBC One and ITV crime dramas. When these clashes occur, there is a 6 to 8 per cent fall in the ITV crime drama programme audience versus what might be expected if BBC One had scheduled a different type of programme.

Due to the fact that the current audience for a show is strongly dependent on the audience from the previous week, the effect of the impact from an initial clash is likely to persist over a number of subsequent weeks. For instance, assuming that, at the beginning of a month, there is a single clash in week 1, this has an initial impact on ITV1 drama audience of around -7 per cent. With an audience persistency week-to-week of 50 per cent,[79] the initial clash would translate into a reduction in ITV1 audience in each of the subsequent weeks of 3 per cent (week 2), 2 per cent (week 3), 1 per cent (week 4) and then very small impacts after this. Adding up the impacts over these subsequent weeks means that the total impact of the clash is comparable to a 14 per cent reduction in audience concentrated in the first week.

While, in the scenario above, audience numbers eventually recover, this is not the case if clashes persist week-on-week. In this alternative scenario there would be around a 13 per cent reduction in ITV1 drama audience in any given week over the longer term. The extent to which repeat clashes occurred in practice varied by ITV drama.

[79] This takes the coefficient for the lagged dependent variable from the fixed effects model of around 0.5, which is a lower bound estimate.

While this supports the ITV claim that its dramas are being adversely affected by BBC One, other subgenres of dramas did not clash with similar BBC One shows over the period examined (e.g. period dramas). Taking account of other subgenres, 13 per cent of ITV dramas have direct clashes with BBC One (28 out of 222 ITV drama episodes).

In addition, the analysis does not seek to explore whether scheduling by the BBC is deliberate. It also does not necessarily show viewers are worse off in total – that might be the case if the total BBC One and ITV drama audience is lower as a result, which the analysis did not cover. Furthermore, the analysis does not seek to explore whether the BBC is damaging ITV's overall performance by counter-scheduling this subgenre – it might be that using its top crime dramas head to head with ITV leaves it much weaker in other parts of its schedule, to the benefit of overall ITV share and reach.

However, it does suggest that BBC One behaviour is probably reducing the relative profitability of drama series, which might be a cause of a switch from drama series to other more cost-effective programming – a switch that would not have happened if the BBC behaved differently. It would be interesting, if time allowed, to repeat this exercise for a number of genres across both channels to see if BBC One is causing this to occur in other high cost PSB ITV genres – and if it is causing a net reduction in the total consumption of these genres when compared with a more complementary scheduling.

Oxera did look at entertainment subgenre clashes as well, where 11 per cent of entertainment episodes had clashes (27 out of 244 ITV entertainment episodes), although, again, no discernible increase over the last 3 years. This isolated only a 1 per cent reduction in the audience to ITV1 entertainment if a similar entertainment subgenre was scheduled against it, and the impact was not statistically significant. As such, the impact is probably both less than for drama and less certain.

Overall, in terms of reducing ITV1 profitability and its commitment to high cost genres such as drama, there may be a negative impact from BBC One's behaviour from both its ongoing scheduling strategy and its conservative schedule approach in recent years. However, there is no evidence that this is deliberate or against the interests of viewers when the output of BBC One and ITV1 is looked at in total.

The second area of potential impact, is on the overall health of the TV content supply and creative sector, which is largely down to a low level of innovation on BBC One, and reducing the returns to high cost drama on ITV1 while not increasing BBC One's own commitment to drama. Certainly, high volumes of new titles – especially new UK IP rather than imported formats – and a commitment to drama across network TV, are both major drivers of the UK and global success of the UK content sector, and have a high multiplier impact on the creative sector in the UK.

Even if the BBC is behaving as it does to maximise the reach of its programming and thus maximise its public and consumer value, it might not be maximising public and consumer value across the PSB system as a whole and it might also be damaging the creative sector multiplier of its actions. This specific issue would need more detailed assessment but there is enough evidence to suggest there might be problems, problems which will be addressed in part by an increasing new title count on BBC One in the next few years.

4.7.2.13 The Likely Market Impact of a More Distinctive BBC One (especially on ITV1 and the Content Supply/ Creative Sector)

Whatever the past trends have been in BBC One distinctiveness and whatever the past and current impact of BBC One behaviour, it's probably better to explore the likely market impact of BBC One distinctiveness by assessing the impact of a future unambiguous shift to a more distinctive service across the four dimensions of distinctiveness – genre mix, mix within genre, refreshment/innovation and complementary scheduling. This review should look in the first instance at the impact on commercial revenue and the likely response of the commercial sector in terms of programming investment, and then, at the impact on the overall content provision to get a sense of the broader commercial market impact and the net market impact.

4.7.2.14 Impacts on Commercial Audience and Revenue

We modelled a shift in all four dimensions for distinctiveness, which while significant would still be likely to leave BBC One as a high reach channel (although not with its current share point lead over ITV1). This is a change in emphasis, not a change in overall position, and should still allow the BBC to remain high reach overall.

We have modelled the likely combined impact of:

- An increase from 20 per cent to 25 per cent in the proportion of titles that are new in the BBC One schedule;
- a shift to a more demanding mix of genres in peak time and day time;
- a shift to a more demanding mix of programmes within genre in peak and non-peak;
- a reduction in the length of existing long term, high output strands; and
- an avoidance of competitive scheduling or subgenres (not genres) wherever possible (most notably crime drama versus crime drama).

We then assess the impact of any share loss by BBC One on the commercial audience and specifically ITV1, and then their advertising revenue.

When modelling these changes, we assume constant spend by BBC One. In so far as the more distinctive output is more expensive on a cost per hour basis, this would then lead to a need to save money elsewhere in the schedule, which might cause a second order audience reduction. We have not looked at these second order effects.

In terms of new titles, a 5 percentage point increase across the schedule would move BBC One towards BBC Two levels but still well short of Channel 4. In would also probably imply the need for BBC One to reduce the length of time it keeps current titles in the schedule (currently about 25 per cent of BBC output hours are of titles more than 20 years old although it might well be that the BBC reduced the volume of hours of these older titles rather than cancelling them).

New titles on UK network TV have a 25 per cent to 30 per cent recommission rate (i.e. 70 to 75 per cent do not get recommissioned[80]). On average, new titles will get a 15 to 20 per cent lower audience than established ones for a given genre. (Commissioners then tend to cancel the titles that get the lower audiences and keep those with the higher audience – although this is not always the case.) New title development therefore involves risk taking and lower average audience in order to find the successful programmes of the future. However, we assume that over time, the higher level of new titles has no positive or negative impact on the audience across the schedule except for the reduced average audience for the increased levels on new commissions.

Therefore, the likely viewing hour reduction is a 15 to 20 per cent audience decline for 5 per cent of programming, which then sums to a reduction in BBC viewing hours of between 1 per cent and 1.25 per cent. This would reduce BBC One audience share by between 0.22 and 0.28 share points.

The shortening of high output, long term titles in the schedule to allow for this increase in new titles would cause a similar level of viewing hour reduction. With about 20 per cent of the schedule accounted for by non-news long running strands, a drop to 15 per cent, with the replacement programming (which could be the new titles or extensions of shorter existing strands) getting only 80 per cent of the average audience of the previous output, BBC One viewing would fall by 1 per cent, contributing another 0.22 share point fall in BBC One's audience share.

A shift in genre mix in peak time on BBC One might include an increase in arts, religion/ethics, health/science, history and current affairs programming. Analysis by O&O suggests that there is about 100 hours per annum of output on BBC One in peak-time in these genres, and that on average they obtain an audience between 1 and 2 million lower than average audiences for the rest of BBC One output. We have modelled a tripling of this output from 100 hours to 300 hours. If we take the mid-point audience loss estimate, and assume that these extra 200 hours of more demanding output have an audience 1,5m lower than the typical BBC peak-time audience, there is an overall loss of 300 million viewing hours – representing a 1.9% drop in BBC One audience (there are approximately 16 billion viewing hours to BBC One per annum). This equate to a 0.4 BBC One share point decline.

---

[80] Based on past reviews by O&O of the UK programming market for investors in UK independent producers.

There might also be a switch to more demanding programming within genres in peak – for example comedy – especially situation comedy – replacing quiz and panel shows and family entertainment shows. New situation comedy has a high failure rate, so any increase in output would involve a reduction in audience in the short/medium term, and if future higher levels of output also meant more titles rather than more output of current titles one might expect the average audience to fall in the long term too. But this is harder to model as situation comedy currently gets higher average audiences than quiz and panel shows and costs more. Given these complexities and the fact comedy costs more we have left it out the modelling.

Shifts within genre to more demanding subjects in drama, factual entertainment and human interest programmes for at least some of the output might be expected to contribute to an increase in distinctiveness – with the result that average viewing hours in these genres fall by 20 to 25 per cent. Currently, these genres account for approaching 3 billion hours in peak time, with the largest volume of hours contributed by drama series and drama one-offs. A reduction of 600 million to 750 million viewing hours would amount to a reduction of between 3.8 and 4.7 per cent in total channel viewing. This equates to a 0.83 to 1.03 share point reduction.

A shift in genre mix and mix within genre in daytime to a more demanding schedule with more arts, science/health, history and current affairs strands and more demanding subjects in factual entertainment and lifestyle output and a more demanding mix of panel and quiz programmes has been modelled with 1,000 hours of output assumed to be getting a 0.3 million to 0.4 million lower average audience than the programming it replaces. This could reduce overall BBC One viewing by 300 million to 400 million viewing hours or by between 1.9 and 2.5 percent. This equates to a loss of BBC One audience share of between 0.4 and 0.55 share points.

A shift to a more innovative approach to these genres is more difficult to quantify, as it might lead to improved average audiences, but much more variance around the average (the higher risks explain why the commercial market is generally less innovative), so it is probably best to assume no audience impact or a slightly negative commercial market impact (the main positive market impact being felt in the content supply sector).

The impact of less counter-scheduling – especially of crime dramas – is both harder to assess and likely to be small given the limited number of clashes (even though Oxera's work measured the impact on ITV crime dramas it did not measure the impact on the BBC dramas). Overall the impact on total BBC One audiences would be minimal, and is more about the impact on ITV1's relative returns to drama and its investment in that genres than the impact on total audiences and revenue.

So overall, as summarised in the table below, total BBC One share would reduce from its current level of 22 per cent by between 2.07 and 2.48 share points to an audience share of 19.5 per cent and 19.9 per cent. We expect some of this viewing to either disappear or transfer to other BBC services or pay only services. A realistic assumption might be 10 per cent of viewing, leaving commercial viewing with a 1.86 to 2.23 percentage point gain.

Total commercial TV share is current 67 per cent of viewing, which means the percentage point gains in audience from transferred BBC viewing represent 2.8 per cent and 3.3 per cent increase in commercial impacts. Given that much of this transfer is likely to be to the commercial PSB market, where advertising elasticity is likely to be lower than the overall market, it's probably reasonable to apply a -1.5 elasticity to this increased audience, which implies that every 1 per cent increase in impacts reduces price by 0.67 per cent, and increases revenue by 0.33 per cent.

Table 1: Impact of greater distinctiveness on BBC One audience

	DETAIL/ ASSUMPTIONS	ANNUAL VIEWER HOURS CHANGE	BBC ONE SHARE POINT CHANGE
COMMISSION MORE STRANDS AND TITLES IN PEAK AND NON-PEAK	• Increase from 20% to 25% average • Knock-on effect on number of titles	• New titles obtain 75% to 80% of existing title average • 1% to 1.25% reduction in total viewing	0.22 to 0.28
SHORTER RUNS OF HIGH OUTPUT LONG-TERM TITLES IN PEAK	• Accounts for 20% of BBC One output • Assume this reduces to 15% of output	• New output attracts 80% of previous audience share • 1.0% reduction in total viewing	0.22
MORE DEMANDING GENRES IN PEAK	• More arts, religion, current affairs, science and history in peak • An increase from 100 to 300 hours	• 1.5m lower average audience • 300 million fewer viewing hours • 1.9% reduction in total viewing	0.4
MORE DEMANDING PROGRAMMING WITHIN GENRES IN PEAK	• More demanding drama, human interest, comedy and factual entertainment • 20% to 25% lower average audience	• 3 billion viewing hours in these genres • 600m to 750m fewer viewing hours • 3.8% to 4.7% reduction in total viewing	0.83 to 1.03
MORE DEMANDING GENRE AND PROGRAMME MIX IN NON-PEAK	• More arts, current affairs and science, history in non-peak – 500 hours • More challenging factual entertainment and lifestyle – 500 hours	• 0.3m to 0.4m reduction in average audience per hour • 300m to 400m fewer viewing hours • 1.9% to 2.5% reduction in total viewing	0.4 to 0.55
TOTAL			2.07 to 2.48

So the 2.8 to 3.3 per cent impacts gain, would convert to a 0.93 to 1.1 per cent revenue gain. With TV advertising revenue in the UK of £3.6 billion, this would represent an increase in revenue of £33m to £40m. The impact on ITV and ITV1 is less easy to predict, and would depend on its own price elasticity compared with the market average, and its share of the impact gain. It is likely that its share of the impact gain would be high, increasing its share of commercial impacts versus rivals, but also that its own price elasticity is less than the market average, which would cause its price to drop more than average from an increase in impacts.

Across these two effects it might even be possible for ITV to gain more than the £33m to £40m market gain by effectively taking revenue share from its rivals (its share of impacts gain being more than its relative price drop).

In addition, over time, with more competition from the internet even PSB network elasticity could increase to -2, which would imply a future 2.8 to 3.3 per cent impacts gain could convert to a 1.4 to 1.65 per cent revenue gain. At a total £3.6 billion TV ad market size that would equate to £50m to £60m increase in advertising revenue.

The impact of a more differentiated BBC on the pay TV sector is less easy to quantify. It is possible that the move might encourage slightly greater take up of pay TV, especially if commercial PSB did not spend any of its additional revenue, but more distinctive BBC output in some genres like drama might actually skew the BBC more towards output with high value per consumer rather than higher audiences, which in turn is more of a substitute for the material on pay TV platforms – much of it commissioned originally by US pay platforms. This could hold back pay TV take-up, although if the secondary rights to this material were available on pay channels and/or the BBC was more inclined to do deals with pay TV to window content between its channels and pay, such a shift might in the end help pay TV take up.

4.7.2.15 Impacts on UK content, consumer surplus and the content supply sector

The impact of the shift in distinctiveness at BBC One on the overall value of UK content to UK consumers and then the content supply sector would depend both on the direct changes in BBC output and on how the commercial sector used its increased potential revenue.

More new titles, would be likely to be a boost to the UK content supply sector, as long as it did not replace those long running genres on the BBC with the most overseas value potential (we assume a reduction in the length of run of long-term titles, not that they are cancelled).

For UK consumers the combined impact of more new titles, more heavy PSB genres and more challenging material within genres is difficult to discern without more research. Overall it depends on how far consumer value – and for that matter public value – is driven by the size of audience or the value per consumer. Fewer people might be watching these programmes but each viewer might gain more incremental value from output which is more differentiated compared with that on commercial PSB services. It certainly should not be assumed that the consumer value of BBC One would drop just because its share dropped by 2 percentage points or so.

How much the commercial sector might increase its own content investment depends on the competitive dynamics of the commercial sector and whether ITV responded to a higher return on investment in its crime drama as a consequence of complementary BBC scheduling by commissioning more drama.

It is, however, unlikely that the commercial sector would invest less in content due to a shift in BBC One positioning and quite possible it would invest some of the £33m to £40m initial revenue gain.[81]

4.7.2.16 Overall impact

While the previous section showed a fall in BBC TV revenue and spending would cause a negative net market impact (albeit less negative than some have claimed recently), the impact of a move by BBC One to a more differentiated schedule is likely to have the opposite effect. It would almost certainly have a positive commercial market impact, although that might be in the form of ITV profits rather than consumer surplus, and it could well have a positive net market impact, as a more distinctive BBC One schedule would be as likely to increase total consumer benefit from BBC output as it would be to decrease it.

In terms of the content supply market, more new titles would probably be a boost, a more challenging genre mix and mix within genre could have either a positive or negative effect. If commercial TV invested some of the increased revenue in content that could also add to the positive benefit.

4.8 Case study – Artsworld/Sky Arts and BBC Four

4.8.1 The history

Artsworld was launched in 2000 as a new independent arts focused cable and satellite channel with coverage of music and opera performance and arts documentaries, and was offered as an extra à la carte channel at £6 per month. It was backed by high-profile individuals (such as Sir Jeremy Isaacs, head of the Royal Opera House at the time, and former founding chief executive of Channel 4), the Guardian Media Group and BSkyB. It was headed up by John Hambly, a former managing director at Thames TV who had also run the successful bid for Channel 5 by a Pearson plc led consortium in 1997.

The BBC announced its plans for BBC Four covering serious and specialist factual programming plus arts and performance to replace BBC Knowledge, its initial pilot channel in 2001, and gained approval for the launch of the channel in mid-2002 from the DCMS. Artsworld protested at this plan from the outset, and in particular the provision of the channel for the basic licence fee rather than an alternative option rejected by the UK Government – that new BBC services should be funded by a new incremental charge to those that chose to upgrade to digital TV.

Following the approval of BBC Four by the DCMS and with a reported subscriber base of just 100k, Artsworld went through its own funding crisis, and was on the verge of closing when a new shareholder funding and subscription management fee deal with BSkyB helped it survive but with a much lower cost base. At the time a BBC spokesman was quoted as saying that Artsworld's managing director had phoned Greg Dyke (then BBC Director General) to assure him that the launch of BBC Four was not responsible for its current financial difficulties. However, in a submission to the Culture Select Committee in 2004, Artsworld management did claim BBC Four's launch and presence had caused them significant difficulties.

In 2003, BSkyB had increased its shareholding to 50 per cent and GMG exited as a shareholder. By mid-2005, BSkyB took 100 per cent control and upped the programming budget so the service could buy

[81] A lower investment scenario by the commercial sector would be most likely if ITV gained revenue share and Channel 4 lost revenue, with ITV having lower incentives to invest in more programming than Channel 4's likely reduction in revenue.

more external archive material and brought the channel into its basic tier. In 2007 it was rebranded as Sky Arts and now forms an important component of the Sky TV offer with a mix of performance coverage, factual programming and some commissioned shows including one-off plays and artistic competitions.

4.8.2 The market impact

At the time of the DCMS proposal and the assessment of market impact there was a focus on Artsworld and the impact of BBC Four on an independent channel trying to fund itself from à la carte subscription and a concern that BBC plans might have a disproportionate impact on the channel.

There were a number of considerations:

- the BBC service would get those interested in the arts to switch to multichannel digital TV earlier and provide a broader base for Artsworld to sell to, which might more than counter any negative impact on Artsworld’s current or likely future subscriber base in the absence of BBC Four;
- the BBC service as free at the point of consumption would increase the access and reach of arts events and institutions much more than an à la carte subscription service;
- advertising revenue was relatively unimportant to the channel as a low reach à la carte service, and therefore it was unlikely that the BBC would take much advertising revenue away.

There was some suggestion in submissions to the DCMS review that Artsworld had tried to licence BBC archive arts material but was told the cost of clearance was too high, but this did not feature prominently in the Barwise review of 2003/04 – by which time the service was becoming more closely linked to BSkyB.

Consideration was also given in the reviews to the economics of an à la carte channel and the charges made by Sky for subscription management and platform access, which were being reviewed by Ofcom at the time, which may have been the main cause of Artsworld’s financial difficulties rather than the launch of BBC Four.

4.8.3 Implications

While the BBC’s launch of new services can have a disproportionate impact of start-up services trying to cater for the same tastes, it was still not clear whether the broad market impact – more digital multichannel homes – might not outweigh the specific substitution impact. Nor whether the channel’s own difficulties were due to the wrong business model and the regulations regarding third-party access to pay platforms that applied at the time.

In the event, Sky Arts has gone on to be a thriving and important service alongside BBC Four, so the only remaining issues are probably whether the launch of BBC Four prevented the emergence of an independent channel operator in the UK market, and the longer-term implications for competition in the pay TV sector. Even on this issue, it would go too far to suggest that the survival of that independent channel would in itself have caused a significant change in the UK pay TV market.

The issues around the BBC licencing of content to third-party channels remains. BBC Worldwide’s 50 per cent joint venture, UKTV, did not launch an arts or cultural channel although it has made some use of music and arts output across some of its channels. The BBC does make extensive use of its arts and cultural archive on BBC Four while little finds its way to the commercial market. Whether the licensing of BBC material to Artsworld could have helped it survive as an independent channel and in the longer run helped develop a commercial secondary market for BBC output on pay TV that might complement the BBC services in a way Sky Arts does not, and eventually helped increase overall funding to BBC arts programming, is not clear.

5 Radio and audio on-demand market impacts

5.1 Main findings

The BBC is the largest player in the UK radio and related audio on-demand market. It has 54 per cent of the measured radio audience and spends 50 per cent more on its radio services than the total income of commercial radio, and probably more than twice as much as commercial radio spends.

The BBC's provision of audio on-demand radio programming content via the Radio iPlayer, the audiovisual version of Radio 1 and the Playlister music service probably make the BBC the only significant UK based rival to global services such as Audible (Amazon), Spotify, Pandora and Vevo[82].

BBC radio provides much output that the current commercial radio sector has no ability or desire to supply, including live concerts, extended playlists, new acts and documentary and current affairs across its popular music services; expensive genres of new speech output such as comedy, drama, documentaries, investigative current affairs, and extensive news bulletins at a national, local and regional level on Radio 4, Radio 5 Live, Radio 4 Extra, and BBC Local radio and services for the Nations; and the new works, arts and cultural programming and extensive live concert output on Radio 3.

While some of this output might be available increasingly through on-demand commercial audio services over the next 10 years, much of it is likely to be available only at high unit prices, be focused on global rather than UK audiences, and with each individual programme likely to reach only small numbers of individual listeners in the UK.

But the BBC's popular music service audiences do overlap commercial radio's core 25 to 44 year old audience, while its popular speech radio services do compete for the sports, news and chat audiences with the commercial sector. The BBC's strategy of developing its own linear and on-demand outlets for its archive output probably increases the costs of market entry for any UK commercial rival to an Audible or even Spotify.

In the long term, DAB, and eventual digital switchover, might eventually release spectrum. It may also help commercial radio develop a platform that will give it more share and revenue than a complete long-term switch to web-based internet listening via WiFi and mobile. In the short term, however, the BBC's role in driving take-up of DAB leaves the commercial sector with increased costs and limited incremental revenue from DAB, especially for DAB-only services.

The BBC's current DAB proposition takes some audience share and reach away from commercial DAB services (especially DAB-only commercial services), although not on a proportionate basis. Although the revenue substitution is likely to be very small in total and spread across a number of services, its overall impact on the commercial sector's DAB-only offering needs to be taken into account in the medium term, given the still challenging economics of DAB-only commercial broadcasting until DAB penetration moves towards 90 per cent.

The positioning of the BBC's popular music and news and sport radio stations (Radio 1, Radio 2 and Radio 5 Live) with a significant overlap with the core commercial sector 25 to 44 year old listener age-group, and their overall broad reach and high share are most probably leaving the commercial radio sector £22m to £38m a year smaller than it might be were the BBC's music led services more closely focused on the under 25s and over 50s and Radio 5 Live more focused on hard news and tier 2 and tier 3 sports. This could grow to £28m to £47m a year over the next 10 years as radio advertising faces greater competition from the internet and needs scale even more to defend its revenue base.

The commercial sector would be unlikely to use this extra money to provide documentary and built speech programming for the 25 to 44 year old audience. However, it might provide a broader range of music and tracks across an extended range of DAB services, and invest more in star presenters and some live music in order to persuade Radio 1 and Radio 2 listeners to come to commercial radio rather than move to streaming services or other BBC services.

[82] Other UK commercial services do exist – such as 7 Digital.

Much would depend on how listener behaviour changes over the next 10 years. If 25 to 44 year old listeners become more willing to mix and match their radio services with DAB and online access, they might obtain a similar music mix as today while sampling built speech and documentaries from the BBC by dipping into other BBC services and/or accessing on-demand content. In such circumstances consumer and public value across radio might remain the same or even increase but with a larger role for the commercial sector.

More open access to BBC archive might also help improve the range of commercial DAB and on demand audio services in the UK. Furthermore, co-operation between the BBC and the commercial sector on developments such as the Radioplayer and Playlister could enhance UK commercial radio's chances of transitioning to the fully digital and web dominated age in the longer term.

5.2 Introduction

This section reviews the BBC's market impact on the UK radio and related audio streaming and on-demand markets. It lays out the BBC's current performance and positioning, and gives a brief history of developments over the last 20 years, covering two Charter periods. It then summaries past and current market analysis of market impact issues, looking at specific studies on the market impact of BBC service changes, evidence of market impact in submissions to the Green Paper consultation in 2015, and more general analysis of the market place in BBC service reviews, previous Charter and licence fee debates, and Ofcom PSB and radio market reviews over the last 10 to 15 years.

It then goes on to identify outstanding issues as a result of gaps in past analysis or the need to update the previous analysis for current and likely future developments. It seeks to fill some of these gaps with extra O&O analysis and case studies. Finally, it draws out our conclusions and the issues that remain on the BBC's market impact.

5.3 Market trends and BBC performance and positioning – a brief overview

5.3.1 The changing UK radio market – audiences, services, advertisers and platforms

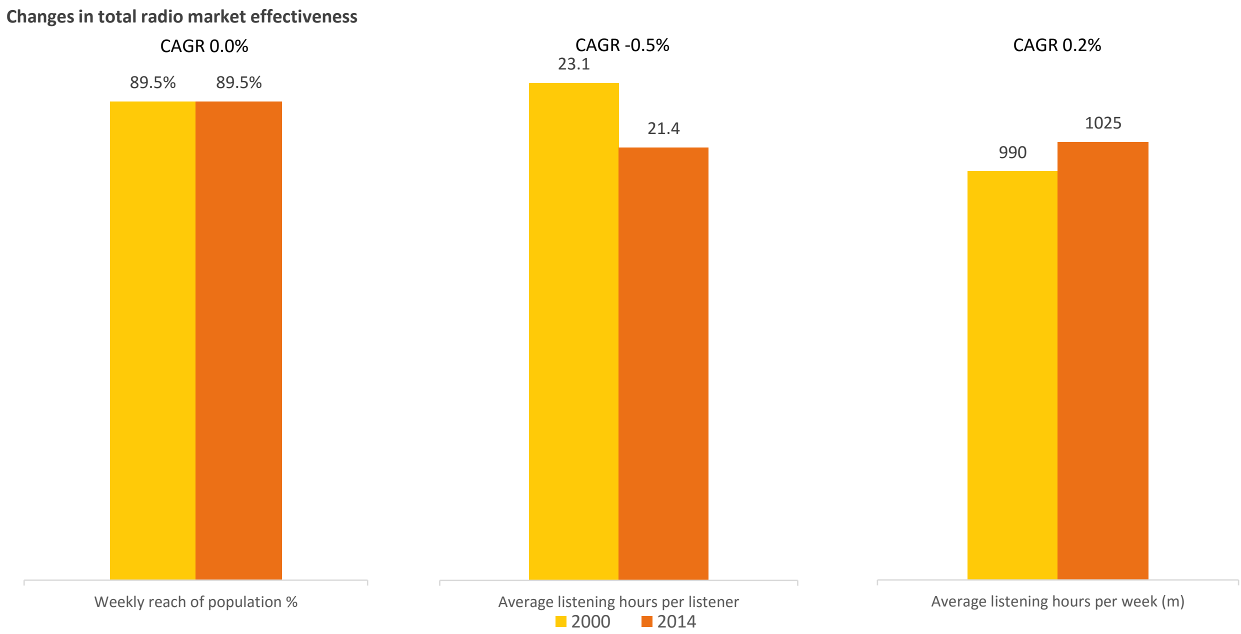
Overall listening volumes and reach have held up well over the last 15 years

Average measured radio listening has held up well over the last 15 years, with an 8 per cent fall in average listening hours over the period (just 0.5 per cent a year), but a 3.5 per cent rise in total listening hours (as the UK adult population has grown by 10 per cent over the period).[83]

Weekly reach has held up even better since 2000, at just under 90 per cent of UK adults across the period. In an average week, 40 per cent tune in to both commercial and BBC radio services, with 25 per cent of adults tuning in to just the BBC services and 25 per cent of adults tuning in to just commercial services.[84]

[83] Prospero (2015).
[84] See below for more details on market segmentation between commercial radio and the BBC.

Figure 28: Aggregate radio listening in the UK, 2000 and 2014



Source: Prospero, Oliver & Ohlbaum analysis

Radio consumption has traditionally been more segmented than TV consumption, although digital radio is changing this

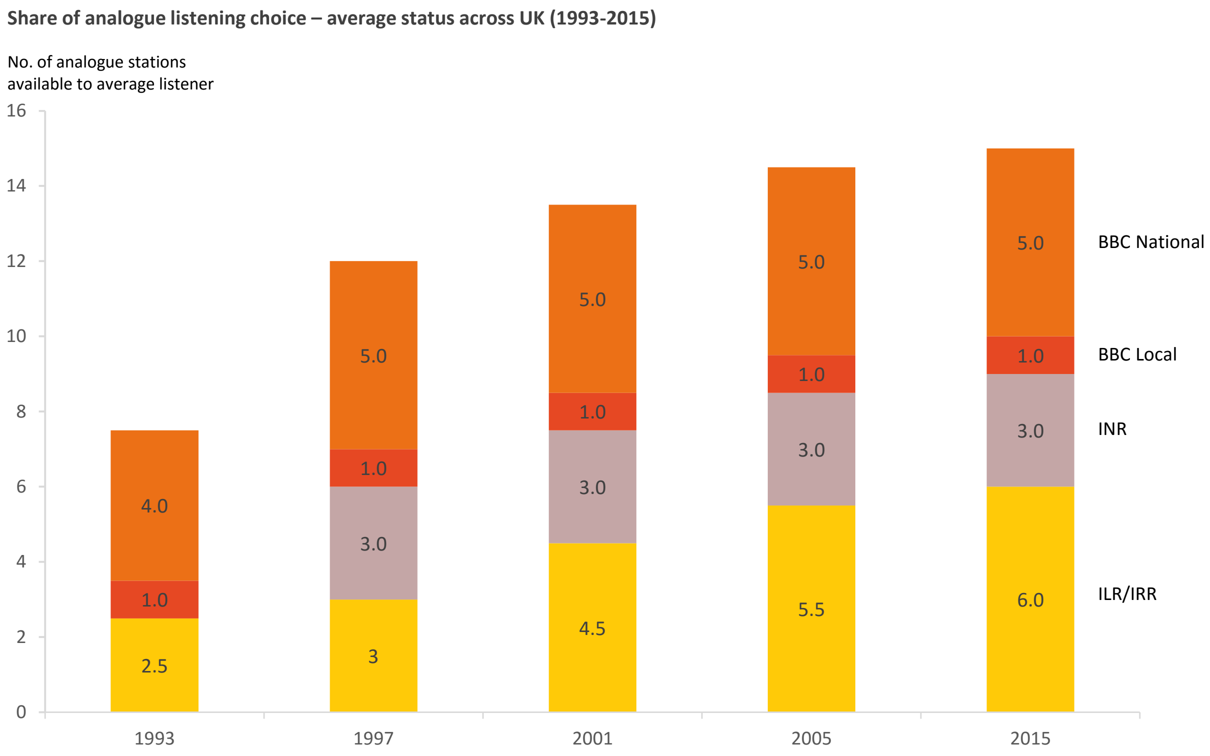
While viewers in DTT TV homes with a choice of 40 to 50 TV channels tend to watch 10 to 12 channels in an average week, the typical FM/AM listener with a choice of 15 stations listens to only 2 stations in an average week – radio listening tends to be segmented; TV watching fragmented. However, the arrival of wider DAB and internet radio choice can push the number of stations listened to in an average week to 4 or 5. Once listeners have access to IP based services with on-demand music and spoken audio, they can begin to mix and match station listening with on-demand listening to piece together a more personalised audio experience.

Analogue radio choice has expanded outside of London – especially commercial radio choice

The average UK listener across the UK now has a choice of 15 FM/AM licensed services, of which 8 are national services and 7 local/regional services. (Some areas also have a small scale community radio station.) This number of services is up from an average of 13 in the late 1990s and just 8 in 1990. The largest change over the last 25 years has been in the commercial radio offering, which went from an average of just two local services in 1990 to 3 national and 6 regional/local services by 2015. The BBC still has 4 national FM services (FM being more popular than AM) versus the commercial sector's single FM national licence, Classic FM. This increase in commercial radio choice helped radio raise its share of display advertising in the UK from 2 per cent in 1990 to 4 per cent in 2000.

But FM/AM listening choice does vary greatly across the UK, with London and the South East having over 25 services to choose from, large cities about 16, and market towns and rural areas between 7 and 12, with the BBC's national service presence giving listeners a greater share of choice in these latter areas.

Figure 29: Evolution of analogue radio listening choice



Source: Oliver & Ohlbaum analysis

The internet generation listens to less radio, and DAB is only now living up to original projections
Listening among the 16 to 24 year olds is now in long term steady decline, and this is beginning to feed through to the 25 to 34 year olds as the internet generation matures. Teenagers now spend more time listening to on-demand music and audio streaming services and digital audio downloads than radio stations. One of the main reasons average listening across the population has declined only slightly has been the ageing of the UK population, with older groups listening to more radio than younger groups.

The hoped-for switch from still limited choice analogue FM/AM reception to wider choice DAB reception (typically 2 to 3 times as many stations as available in analogue) has not occurred as rapidly as originally envisaged. However, DAB reception has improved markedly in the last 2 to 3 years, for both national and local/regional services. Currently, 54 per cent of UK households have a DAB set, people are buying almost as many DAB sets as analogue sets, and 30 per cent of cars have DAB reception, with 80 per cent of all new cars sold now having DAB as standard.[85]

28 per cent of all listening is now to DAB, accounting for two thirds of all digital listening. It is the fastest growing source of digital listening. (Listening via DTV sets accounts for 5 per cent of all listening, and another 7 percent via internet delivery to a number of devices – making a total of 42 per cent of all listening, with 2 per cent being unattributed to any specific type of delivery).

Commercial radio accounts for a greater proportion of choice on DAB than it does on FM/AM, and accounts for a greater share of listening to digital-only services
Commercial services occupy more DAB slots on national and local multiplexes than do BBC services. The BBC supplies an average of 12 services on DAB (6 FM/AM simulcasts and 6 DAB-only stations) to the typical DAB listener across the country, while the commercial sector provides an average of 22.

Commercial DAB is made up of local and national analogue simulcast services, local analogue services broadcast on DAB outside of the analogue reception area, and digital-only services (mostly national with

[85] Ofcom (2015c).

some multiple area local services). Many of the digital-only services and out of area analogue services also have distribution on DTV.

Measured BBC and commercial digital-only services distributed via DAB, DTV and online currently account for 9.7 per cent of all listening (about 24 per cent of all digital listening), with commercial offerings accounting for about 60 per cent of that digital-only service listening.

With the transfer of radio from analogue to digital, radio is becoming more multi-platform across DAB, DTV and internet, and, on the internet, radio is converging with music and spoken audio streaming and download services

The internet is now the second platform for measured digital radio behind DAB, and in these households BBC and commercial radio services compete not only with hundreds of internet-only or international overspill radio services, but also with on-demand music and speech services such as Spotify and Audible. About 12 million UK adults now use an advertiser funded music streaming services, with 2 million paying a subscription for a premium service, generating a £150m activity in the UK in total.

Commercial offerings on FM/AM and DAB systems are allocated by an Ofcom administered licensing regime established by the 1990 Broadcasting Act aimed at enhancing commercial listener choice and encouraging quality services (but not directly addressing total radio listening choice, including the BBC)

Local/regional FM/AM station licensing is done on a “beauty contest” basis. Potential broadcasters submit applications outlining how any new service will extend listener choice and meet local needs, while being financially sustainable. The licence is then allocated, with the licensee being held to its output promises on its music format, demographic targeting and speech, as these are codified into the fixed term licence award. Non-compliance with the licence terms can lead to fines followed by licence removal. Requested modifications to the licence are considered, subject to consultation and a review of the market and listener demand.

INR AM/FM allocation was done in the mid-1990s, with the formats allocated to each frequency laid out in statute. For instance, the national FM frequency had to be allocated to a non-popular music service, so as to add to the existing local radio choice at the time, rather than cannibalise it. INR winning licensees also had to pay an annual charge to Ofcom reflecting the value of the frequency. These annual charges were ended in 2011 in recognition of the more competitive environment for commercial radio.

DAB multiplexes are allocated with a more general consideration of the range of services offered, rather than each individual service – again with the aim of extending listener choice while maintaining financial sustainability.

Commercial radio in the UK is therefore not the result of an entirely free market –open to any applicant or to the highest bidder for the frequency. Rather it is a managed market, where extending listener choice across the commercial sector was a key criterion. Importantly, however, the allocation of commercial licences focuses on commercial choice only. It takes account of the BBC offering only in so far as it might impact the achievable audience share, advertising revenue and sustainability of the station.

With digital heading towards its key 50 per cent of listening target, the Government is currently reviewing the different levels of regulation on commercial DAB and FM/AM licensees with the aim of bringing them closer into line

The Government has said it will review setting a date for analogue switch off when digital listening reaches 50 per cent of all listening, and when DAB coverage of national services matches FM coverage and when local services are at 90 per cent coverage (this should be reached by the autumn of 2016). With digital listening now at 42 per cent and coverage moving towards 90 per cent, the Government is looking at bringing closer together the regulation of commercial FM/AM radio and DAB. This will effectively reduce the overall level of regulation across commercial radio, and is likely to leave FM/AM stations with more freedom over formats and content than at present[86].

[86] DCMS (2014).

Radio advertising has been flat overall since 2003, and its share of all display advertising has fallen from 4 per cent to 3 per cent; better than press advertising performed over the period but worse than TV. Subscription radio services have not taken off in the UK as they have in the USA

Radio advertising comes from three main sources.[87] First, mass market national consumer brands looking for high reach of the 25 to 44 year old core commercial radio market, with an ability to vary their campaigns across the regions and cities of the UK. Often their aim is to complement expensive brand building TV campaigns with lower cost, sales driven frequency on radio, or to substitute for TV entirely with a more cost effective alternative to build their brand.

Second, local advertisers seeking an alternative to local press in providing the geographic targeting they need, but also achieving high weekly reach. Third, more targeted brand advertisers looking to reach a specific sub demographic, where TV's broader channel demographics often lack the precision and segmentation of specialist radio, and where specialist press advertising is both expensive and low frequency and with generally lower reach.

National advertisers, either mass market or targeted, make up about two-thirds of revenue and local advertisers about one-third. Within national advertising, national brands looking for broad reach of the 25 to 44 year old market probably account for over 75 per cent of the total. This means that local or national advertisers targeting broad reach within each radio market probably account for well over 85 per cent of income, and niche advertisers less than 15 per cent. Evidence of the value of high reach comes from achieved CPTs (cost per thousands) within any regional or local market. [88]

O&O estimates that the commercial radio station that achieves the highest reach within a local market will tend to sell its airtime at a 20 to 30 per cent premium to the second placed station. A quasi-national brand that offers the opportunity to buy high reach across a number of individual different local/regional markets will sell at a premium to a national station or individual independent local stations. Finally, stations with younger or more upmarket audiences sell at higher CPTs, with much lower prices traditionally paid for over 50s audiences, especially over 50 C2DEs.

Advertisers generally buy spot ads or sponsor specific slots or specialist output, such as news, weather, travel, or chart shows. Radio advertising accounts for just over 3 per cent of all display advertising. This is low by international standards, and down from just over 4 per cent 10 years previously. (This is, however, better performance than seen for the press, whose share of the display market has fallen by almost a half under attack from the web; but it is worse than TV, which has seen a slightly rising share of the display ad market in the UK).

While radio advertising has grown overall since 2009, this was following quite a deep recession in 2007/08, and very modest growth from 2003 to 2007 following a downturn in 2001/2002, with total radio commercial revenues still lower in nominal terms 2014 than in 2000.

Subscription radio services have not taken off in the UK (or in Europe) as they have in the USA, with satellite and local highway booster delivered services such as Sirius in the USA having about 25m subscribers. The success of subscription radio in the USA has been put down both to the focus of commercial radio on formatted music radio and limited types of speech, and the largely local nature of most commercial radio in the USA. Subscription radio being the only place to hear niche music radio and a range of national speech services with big name national names such as Howard Stern and Martha Stewart.

5.3.2 The BBC versus commercial radio – changing fortunes

In 1973 the BBC lost its monopoly over UK radio broadcasting with the launch of LBC and then Capital Radio in London.[89] It also now accounts for less than half the available average radio station choice across the UK on both analogue FM/AM and DAB. Nevertheless, the BBC has retained a majority of radio listening throughout the last 42 years, with a higher share of radio listening in 2015 than in 2000.

---

[87] See Ofcom Annual Market Reviews – Radio and Audio sections and reports by the Radio Advertising Bureau, part of the Radiocentre.

[88] When estimating the impact of the BBC on the commercial market, we focus on the main ad market serviced by commercial radio – the broad reach of the 25 to 44 age group for national and local advertisers.

[89] Illegal commercial services (e.g. Radio Caroline) and overspill European stations (e.g. Radio Luxembourg) had been the only commercial offerings before that.

The BBC has a mix of speech and music stations, operates at a national, nations and local level, and covers most demographic listener groups across its portfolio

The BBC's popular music offering is delivered via two broadly based FM/DAB networks: Radio 1 focuses on the under 30 audience, and Radio 2 on the over 45 audience. Radio 3 covers classical music and arts/cultural output, with some coverage of jazz and world music. The DAB-only stations are more narrowly focused: 1Xtra targets the under 25s and urban; Radio 6 Music is aimed at popular music lovers aged from 25 to 60, with a taste for a wide variety of rock and pop output (although 60 per cent of its audience is between 25 and 44).

The BBC's speech service offering is focused on FM/AM/DAB Radio 4 (mixed schedule of news, current affairs, documentaries, drama and comedy) and AM/DAB Radio 5 Live (news, discussion and sport). Radio 4 Extra and Radio 5 Live Sports Extra on DAB offer Radio 4 repeats and archive material, with some extra children's and comedy content, and extra sports coverage respectively. In addition, its 40 local radio stations in England provide a mix of local news and information and discussion with some music. BBC Radio Scotland, BBC Radio Wales and BBC Northern Ireland do the same for the nations, but with some drama, sport, comedy and current affairs added in, while Radio Cymru does the same in the Welsh language.

The BBC DAB offering covers simulcasting of its 5 national FM/AM networks and its 40 local radio services for England and 4 Nations service (3 in English plus Radio Cymru), plus six DAB-only services: 1Xtra, Radio 6 Music, 4 Extra, Radio 5 Live Sports Extra, the Asian network (an extended national service based on an original regional AM service for the West Midlands), and BBC World Service.

In terms of demographics, two of the BBC services skew to a younger audience (Radio 1 and 1Xtra); two cover the 25 to 45 age group for the most part (Radio 6 Music and Radio 5 Live); while the rest skew to the over 45s, with Radio 4 and Radio 3 more skewed to an ABC1 audience, and Radio 2 and local/nations radio more C1C2DE. There are overlaps between Radio 5 Live and local/national radio audiences in speech radio, and Radio 2 and local/nations radio in terms of demographics.

The radio market is generally more segmented between the BBC and the commercial operators than TV, with distinctive BBC and commercial radio heartland audiences

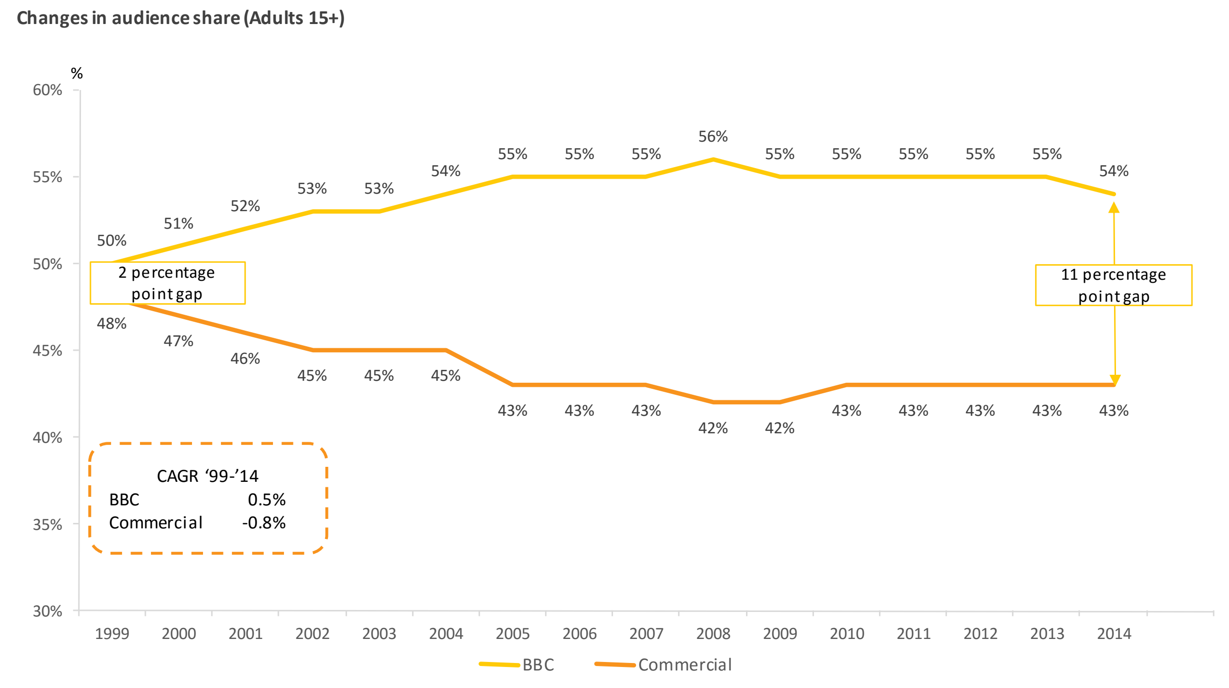
The UK radio market remains a generally segmented market between the BBC and commercial radio (explaining the 50 per cent of the adult population who listen to only BBC radio or commercial radio in an average week). Commercial radio is centred on music radio formats and focuses on the 25 to 44 year old, C1C2 sociodemographic market, with some outreach to older, male, upmarket, and younger audiences with the likes of Classic FM, BBC Local Radio, Planet Rock, Radio X and Kisstory. The BBC has a more even spread of music and speech services focused on the over 40, ABC1 audience, with outreach to C2DEs (local/nations radio, Radio 5 Live and Radio 2), and the under 30s (Radio 1 and Radio 1Xtra).

From 2000 to 2008 the BBC made significant share gains, with services such as Radio 2, Radio 6 Music and Radio 5 Live making significant inroads to the commercial heartland. This growth was against a background of a reversal in commercial radio's gains in the late 1990s that had resulted from the expansion in the number of commercial AM/FM services available across the UK over that earlier period and a rapid growth in radio advertising.

The loss in share for commercial radio was probably due to three factors: (1) largely flat revenue growth for the sector, caused in part by an ad recession of 2001 to 2003, and then growing competition from the internet from 2006 onwards, compared with significant increased investment from the BBC in its FM/AM and its new digital portfolio of stations; (2) the challenging economics of DAB-only commercial services, with both slower than expected take-up of DAB listening and flat overall sector revenues (which led to the cancellation of plans for a second national commercial DAB multiplex and a rationalisation of services on the original national multiplex Digital One); and (3) a move by Radio 2 to cater for a younger audience demographic, while BBC Local Radio focused more on the over 50s, often with high profile TV presenters. These changes, together with the launch of Radio 6 Music and the strong sports rights portfolio of Radio5Live, helped the BBC make more inroads to the commercial radio heartland 25 to 44 year old demographic.

A further cycle of commercial revenue pressures caused by falls in commercial radio share and reach compounded this situation.

Figure 30: Radio market share – all BBC versus commercial radio, 1999 to 2014



Source: Prospero, Oliver & Ohlbaum analysis

Changes in commercial regulations (recommended by Ofcom and enacted in the Digital Economy Act 2010) and the establishment of quasi-national network brands such as Heart, Kiss and Capital with hybrid analogue and digital distribution have helped commercial radio fight back since 2008, despite still relatively weak revenue growth performance

Since 2008 (and despite still weak growth in advertising revenue[90]), commercial radio has contained the loss of total market share to the BBC, and has grown its share of the commercially valuable 25 to 44 year old demographic. This has been driven by the strong performance of FM/AM INR stations and the emergence of quasi-national network brands such as Heart, Capital, Magic, Gold, Smooth and Kiss. However, in 2015 commercial radio was still some way short of its 2000 total market share and share among 25 to 44 year olds, when the BBC started to expand its service portfolio and overall investment in radio.

These quasi-national networks use a combination of FM/AM and DAB coverage for a large number of local/regional stations operating under the same brand name. They share networked programming outside of peak hours, have automated programming overnight, and often produce local news and information from regional hubs.

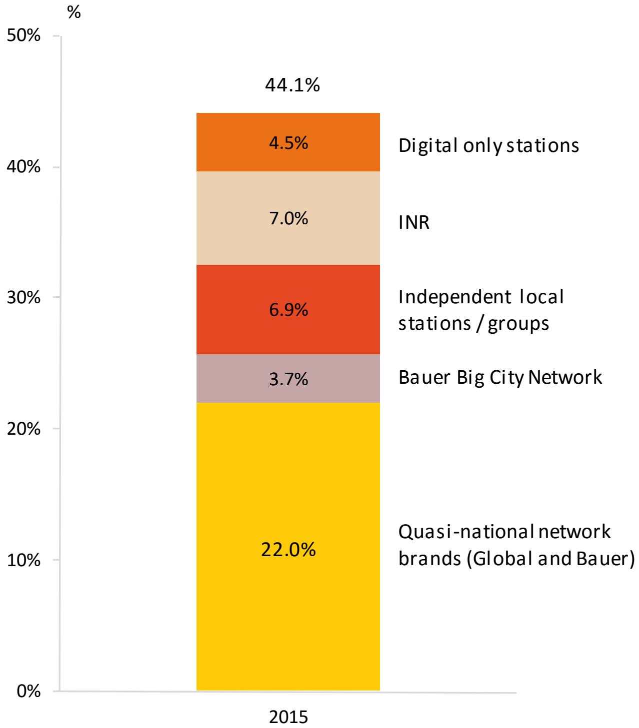
These changes were allowed by a series of regulatory reforms recommended by Ofcom in 2007/2008, and the Myers Review of 2009, and enacted in the Digital Economy Act of 2010 which were in part a response to the challenges commercial radio had faced since 2000. The reforms loosened rules on networked programming outside peak hours, automated programming across the night, and out of area local news production. They also created a more transparent system of reviewing requested changes in commercial formats, which effectively allowed stations more flexibility in making changes to their music format and/or the mix of speech and music. The review and subsequent Digital Economy Act also completed the local DAB multiplex map to allow most analogue AM/FM commercial local and regional stations across the UK to simulcast in DAB, as well as extending the reach of the quasi-national networks.

---

[90] The general advertising recession of 2008/2009 was compounded in 2010/2011 for commercial radio when the UK Government ceased all Central Office of Information (COI) advertising as part of its austerity measures, the COI was a major user of radio advertising.

The quasi- national brands created a single cost effective proposition for national advertisers, while appealing to local tastes and demographic subgroups across the country and providing high local market reach for local advertisers. These quasi-national brands now account for about 22 per cent of all listening, and about 50 per cent of all commercial radio listening.

Figure 31: Share of commercial listening by type of provider, Q3 2015



Source: Oliver & Ohlbaum analysis

Commercial radio today is much stronger financially than 10 years ago but, with a few exceptions, is still very much focused on popular music led formats targeting the 25 to 44 commercial heartland market, reversing its move into mixed music and speech formats in the late 1990s, and moving a long way away from the full service local radio services envisaged in the 1970s and 1980s

From 2008 onwards, the portfolio of strong regional commercial station brands that emerged in the 1990s offering a mix of speech and music, such as Century Radio, Real Radio and Saga Radio, has been subsumed into the music led quasi-national formats of Heart and Smooth.

The new structure of commercial radio is also a long way away from the initial full service local station vision of the 1970s and 1980s, when stations such as Capital, Piccadilly and BRMB provided a wide range of music genres alongside significant local news and current affairs. This has left local/regional speech output outside London largely to BBC Local Radio and its service for the nations, while it still dominates the national speech radio market with Radio 4, Radio 4 Extra, Radio 5 Live, Radio 5 Live Sports Extra versus commercial radio's TalkSPORT and the quasi-national LBC.

Radio 2 is by far the most popular radio service in the UK, and on current performance could probably be profitable as a commercial service

Radio 2's current audience share could probably generate £80m to £120m a year in advertising revenue, which would leave it as a profitable service given its c. £70m total running costs. But such a shift could cause many existing commercial services to go into loss if the advertising market did not expand significantly. A commercial Radio 2 would also have to be given a regulated remit to achieve this. This is because, while Radio 2 could be commercially profitable, it would probably not be the profit maximising solution for the use of a new national FM frequency, and its prospects would diminish as analogue switch-off approached.

5.3.3 A challenging future

The rise and relentless growth of the internet and its move on to portable devices poses a challenge to both traditional radio consumption and radio's share of the advertising market, even if traditional listening in the home and car for music and companionship remain.

Strong recent performance of DAB take-up and listening in the UK is likely to leave established commercial radio stations with a significant reach and share advantage over internet services for at least the next 10 years. This should help them maintain their advertising CPM premiums, while new, more targeted, advertising opportunities on their web simulcasts and on-demand services might help them bring in new incremental revenue streams.

But there is likely to be continued pressure from web based advertising (radio share of display advertising has fallen in the two most advanced web advertising markets: the UK and USA). Demand from both local advertisers and national brand advertisers looking to regionalise their campaigns is likely to become more elastic (as local targeting of adverts to TVs and portable devices becomes more widespread). This will increase the need for commercial radio to grow the size of its audience to defend its position against these rivals for their revenue.

The under 30s are likely to continue to move away from FM/AM and DAB radio listening towards web broadcasting and on-demand music and audio services, where both the BBC and commercial radio face many more rivals. This trend is also likely to feed through to the 30 to 45 age group over the next 10 years.

A long term doubt remains, therefore, over the sustainability of commercial services based largely on popular music formats – especially those focused at the under 45s – if they are unable to invest significantly in the best presenters and some additional high interest speech material when the majority of consumers will soon be able to construct their own music playlists and be prompted with recommendations on suitable new music from a range of streamed music services – increasingly global in scale but local in feel.

In order to thrive, commercial radio will probably have to do one or more of (1) develop very strong niche music brands: (2) increase the star quality of their presenters and speech output to maintain listener loyalty and high reach for their broadly based local and quasi-national services aimed at the 25 to 44 age group; (3) develop their advertising proposition to make the most of the internet consumption opportunity; and (4) move into on-demand music and speech audio content and services, possibly diversifying into direct consumer payments as well as more targeted on-demand advertising.

5.4 BBC market impact assessments

5.4.1 Past reviews and Green Paper submissions

The literature review conducted for this report suggests that the most significant relevant past studies on BBC radio, its distinctiveness and market impact were the following.

- The Gardam Review of the BBC's Digital radio service proposition (and the BBC Management and Ofcom submissions to those reviews) (2004).
- The BBC Submission to the Burns Review on the Market Impact of the BBC's analogue radio services (2004).
- The Ofcom Review of the future of radio – from 2005 to 2007.
- The Ofcom PSB Reviews in 2006, 2009 and 2014.
- The BBC Trust service reviews of BBC FM/AM network services – 2009 to 2015.
- The BBC Trust service reviews of the BBC Digital portfolio – 2009 to 2015,
- The BBC Trust Review of plans to close Radio 6 Music (2010).
- The BBC Trust Review of radio content supply (with a commissioned study by Grant Goddard) (2010).

- The BBC Trust Review of sports rights complaint brought by BBC Local Radio (2009) followed by the MTM Review of sports rights bidding for the Trust (2011).
- The BBC Trust Review of the BBC's on screen and on air talent spending (2008).
- The Myers Reviews of local radio services (2009), synergies in BBC popular music stations (2011) and BBC Local Radio (2012b).
- Ofcom annual reviews of digital radio in the Communications Market Reports

The Green Paper consultation process also received material relevant to issues about BBC market impact in submissions from the BBC, Global Radio, UTV, the Radiocentre, and the Radio Independents Group (RIG), some of which has been re-used in this report.

5.4.2 The main issues raised

Many of these studies recognise the positive market impact that the BBC can have on the commercial sector by expanding the overall level of interest in radio and driving the switch to DAB. However, the BBC's role has been questioned throughout the last 15 years.

The most-debated aspects of the BBC's market impact on the commercial radio sector, reflected in the studies outlined above, have focused on the extent to which the BBC:

- encroaches on the commercial sector's 25 to 44 year old heartland audience, especially with its popular music led services (Radio 2, Radio 2, 1Xtra and Radio 6 Music) reducing audience share and reach and advertising revenue;
- prevents commercial radio's growth into adjacent demographics such as the under 25s, the 40 to 55 year old ABC1 market, and the 30 to 50 year old male market, with its range of well invested service offerings, thus preventing commercial radio from developing new advertising markets;
- is sufficiently distinctive from the commercial market in terms of the music played and the type of speech output offered. This lies at the heart of the improved net market impact claimed by the BBC;
- is targeting potential commercial audiences with its DAB offering while not driving platform switching fast enough to make DAB-only commercial services profitable, thus weakening commercial radio's chance of growing its audience;
- enjoys an unfair competitive advantage through cross-promotion of services and programmes on its TV services and the use of key on air talent across its TV, radio and online services;
- monopolises key contracts for live sports, preventing the emergence of either a strong or multi-network commercial radio sports proposition;
- prevents and restricts third-party access to content and talent in the ways in which it retains and uses its archive rights, or commissions its programmes and contracts key on air and creative talent, thus raising barriers to entry for new services, and a barrier to targeting BBC heartland audiences for established services;
- pushes up the costs of key on air and production talent, reducing the profitability and range of commercial services.

5.4.3 The current and past evidence reviewed

This section summarises the evidence presented in all the above reviews and submissions on the BBC's net market impact across radio and audio on-demand services. Market impact outcomes are divided into three main categories: (1) direct revenue substitution of current rivals; (2) market structure and competitive dynamic impacts; and (3) supply chain and adjacent market impacts. O&O have also added any relevant data we could collate in the time available in each area to enhance the analysis. Some of this has already been covered in the market trends section above.

The quantitative evidence is broken down into different types of time series and cross-sectional analysis, output distinctiveness, and demographic differentiation analysis, and any relevant consumer/industry surveys, plus any work that has been presented on modelling potential commercial sector scenarios with and without the BBC.

5.4.3.1 Direct revenue substitution of existing rival – the evidence

Distinctiveness evidence – popular music services
Much of the evidence on the extent to which BBC services take audience from the commercial sector, and the associated impact on the commercial sector's advertising revenue is based on assessments of how distinctive the BBC output is from the commercial sector. A lesser, but still important emphasis, is also placed on how different the demographic positioning of the BBC services is. BBC management analysis, in its strategy document, emphasised the distinctiveness of the output of its radio services.

More specifically, BBC management and Trust analysis suggests that each of the BBC's popular music led services (Radio 1, 1Xtra, Radio2 and Radio 6 Music) provides a distinct service when compared with the current commercial market (and thus adds to overall range and quality across the market), in terms of:

- the range of music tracks and types played in a typical week;
- the prominence of new music and/or UK music;
- catering for minority tastes within the broad target audience of each network;
- the output of live music;
- the quantity, range and public value of the speech output and special features offered over and above the music.

The implicit implication for market impact is that the people who listen to the BBC services would not be available to listen to commercial services should the BBC not be in the market. Alternatively, if they did shift their listening, they would spread their listening across a number of commercial services, implying that no specific commercial service is being disproportionately adversely affected by the BBC's presence in the market.

BBC service reviews and its submissions to the Green Paper consultation provide plenty of evidence to suggest that the BBC is well ahead of any commercial sector rival in terms of the 5 areas highlighted above: range of music, UK music, catering for minority tastes, the volume of live music, and the volume and range of speech output. Most of the evidence from the commercial sector does not contradict this overview. But it suggests, first, that the BBC is not as far ahead as it claims, and, second, that much of its speech and minority tastes output is kept far away from peak listening hours.

Over and above this, the submissions from Global Radio and the Radiocentre dispute the level of distinctiveness of BBC radio services, both at a general consumer perception level and in terms of the detail of their music playlists and the scale and scheduling of their speech content. Global Radio and the Radiocentre provide survey evidence that suggests their own commercial services get higher scores from listeners when asked "is your favourite radio station distinctive from other stations?" than the BBC's popular music led stations.[91]

(i) Music playlists

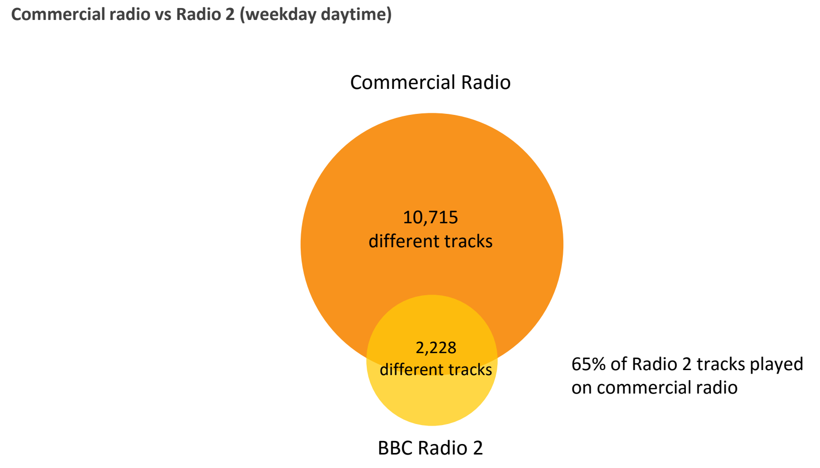
Commercial radio providers dispute the extent of distinctiveness of the BBC's music output, from the commercial sector. Global Radio and the Radiocentre provide their own assessment of the playlists of Radio 1 and Radio 2 and the overlap with commercial sector, claiming more overlap than the BBC research in its service reviews has suggested.

The approach of commercial radio differs from the BBC in three ways. First, the schedule slot measured: the commercial sector measures output only in the high audience daytime period, not evenings, when Radio 1 and Radio 2 have more of their specialist music output. Second, the commercial sector measures the range of tracks not titles. So, while it does not dispute that the BBC services play a wide range of

[91] RadioCentre (2015).

titles, many of these are played only once a day or a week, while the more popular tracks also played by commercial radio are played many times by the BBC as well. So, if you measure tracks played, not individual titles played, there is much more overlap with what one hears on commercial radio. Third, commercial radio assesses the overlap of either Radio 1 or Radio 2 with the entire typical commercial radio choice in many cities in the UK – Capital, Kiss, Heart, Smooth, Magic, Absolute – while the BBC assesses the overlap with specific commercial services, on the basis that most people listen to only one main commercial service, not the whole portfolio.

Figure 32: Overlap in tracks played – Radio 2 versus commercial radio



Note: Different tracks played in weekday daytime (06.30-18.30) between 1 July – 18 August 2015
Source: Radiocentre, Oliver & Ohlbaum analysis

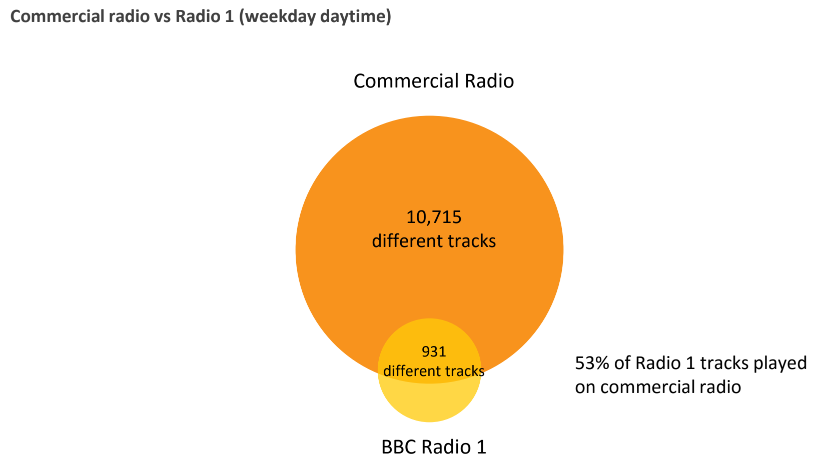
The BBC shows that Radio 1 and Radio 2 have limited playlist title overlap with any specific commercial service over the course of a typical day, while the commercial sector shows significant tracks played overlap with the sector taken as a whole from 6am to 6pm. Both are from independent sources and both we would trust to be perfectly accurate within the parameters measured.

Overall, it would seem more sensible to take the commercial sector approach on time period, and on tracks played versus titles (as this does answer the question: "How likely is a listener to hear the same music on a commercial and a BBC station?"). But the BBC approach on overlap with individual commercial stations seems more reasonable than comparison with 4 or 5 stations combined, as few listeners listen to more than 2 commercial stations in a typical day. However, measuring the overlap with several commercial stations may become more relevant as DAB and web listening increase, and this tends to increase the number of services listened to and the habit of switching stations more often.

While this data comparison is relevant for a view of the distinctiveness of the BBC services, it can be only broadly indicative of audience substitution. It might be that many of the commercial listeners who also listen to Radio 1 or Radio 2 would listen to their favourite commercial station more if it were not for there being a broader mix on Radio 1 and Radio 2.

In addition, it provides an assessment only of how Radio 1 and Radio 2 compare with commercial radio currently. It does not address counterfactual issues as to what the commercial radio sector might offer if Radio 1 and Radio 2 became more niche services more akin to Radio 6 Music and 1Xtra.

Figure 33: Overlaps in tracks played – Radio 1 versus commercial radio



Note: Different tracks played in weekday daytime (06.30-18.30) between 1 July – 18 August 2015
Source: Radiocentre, Oliver & Ohlbaum analysis

(ii) Speech content

The commercial sector also questions the amount and make-up of the BBC's speech content on the popular music stations. In responses to the DCMS Green Paper consultation the commercial sector provides evidence that most documentary output is outside peak time and not well promoted in peak time, and that much of the speech within the main peak time programming is general chat and phone-in material, not specific built content. The BBC Trust's own recent service review (2015d) concurs partly with this view, requesting that Radio 2 do more to promote its documentary output and upgrade its speech content in peak hours.

Overall, there is no doubt that the BBC does include much more speech content in its music services than the commercial sector. But its provision of more in-depth material does tend to be outside peak time, so is heard by fewer people and does not compromise its overall share and reach unduly.

Distinctiveness evidence – other BBC services
Beyond the BBC's popular music service, the Global Radio Green Paper submission provides analysis of Radio 3's output. In its submission, it suggests that Radio 3 is trying to replicate some of the more popular recorded music shows on Classic FM, not covering enough live music (which Classic FM finds most uneconomic to do at scale), and not broadcasting enough less mainstream classical music repertoire in peak listening hours. Although there is evidence that Radio 3 is now moving away from the more populist approach of recent years.

Evidence from UTV, owners of TalkSPORT, is provided on Radio 5 Live output. It shows that Radio 5's live sports output is heavily skewed to the UK's most popular sports – especially football – with limited coverage of even tier 2 sports, never mind minority sports. It also shows that the Radio 5 Live is seen more as a sports network than as a news network.

The UTV submission also looks at listeners' perception of speech radio in the UK, to show that the BBC dominates this market and that many listeners interested in speech output are not even aware of TalkSPORT or LBC, but would welcome more variety in speech radio provider.

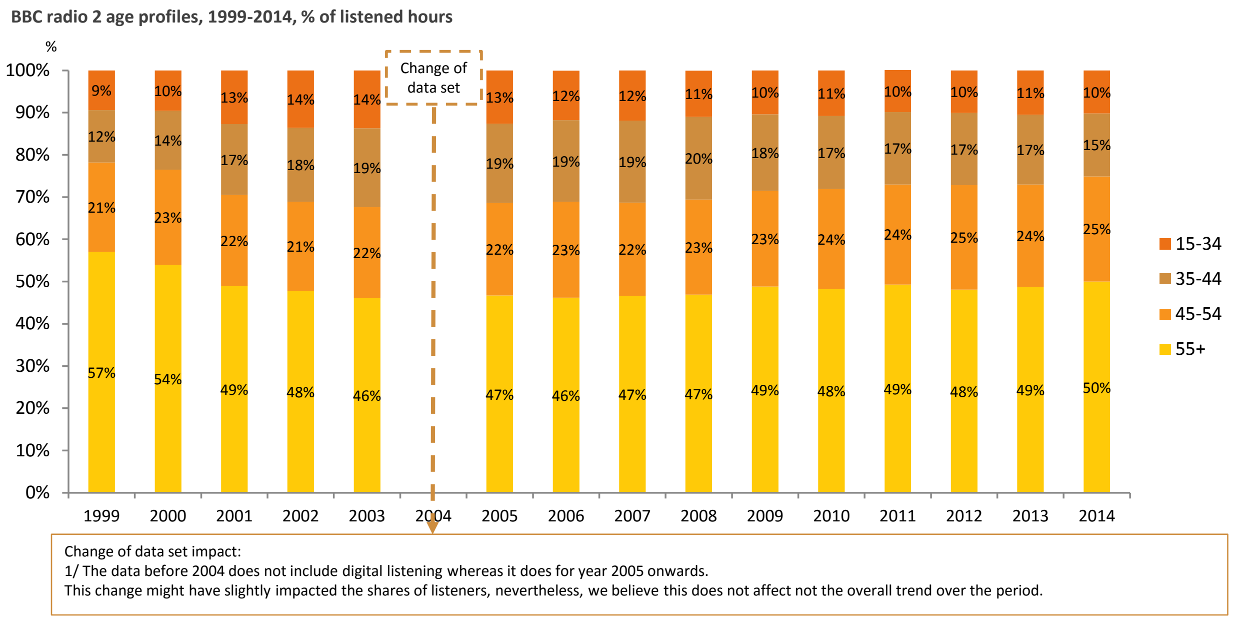
Demographic differentiation
In terms of demographic positioning, BBC evidence in its strategy document this year and the BBC Service reviews by the BBC Trust emphasise:

- the overall demographic targeting of the music and speech portfolio – emphasising the over 45s and the under 25s – complementing the commercial sector's emphasis on the most commercially profitable 25 to 44 age range;
- in the case of Radio 1 and Radio 2, the breadth of audiences served (achieving high reach compared with listening volume, as they chose a less segmented approach than the commercial market, creating shared experiences and a common cultural reference point);
- in the case of the BBC's digital music services, 1Xtra and BBC 6 Music, and Radio 3, in terms of providing for a distinct music loving/music focused segment of the audience.

None of this evidence on demographic targeting means necessarily that BBC services are not taking share from commercial radio. A closer look at Radio 2's audience profile, for example, shows that the increased audience share of that network between 1999 and 2004 was associated with a move to a younger audience profile. It also shows that while Radio 2's audience profile has aged slightly since 2010 (when a BBC Trust service review suggested it focused less on its younger audience), as a network it had a much younger profile in 2014 than in 1999. At the same time, Radio 1, after shifting to a younger audience profile in the 1990s, has started to drift older again, taking a higher share of the 25 to 44 audience than 10 years ago.

While the BBC portfolio overall does skew to much older than commercial radio and is more skewed to an ABC1 audience, it does make significant inroads to the 25 to 44 and C1C2 listening market of the commercial radio heartland.

Figure 34: Radio 2's shift younger



Sources: Rajar, BBC Radio Analogue Services Review

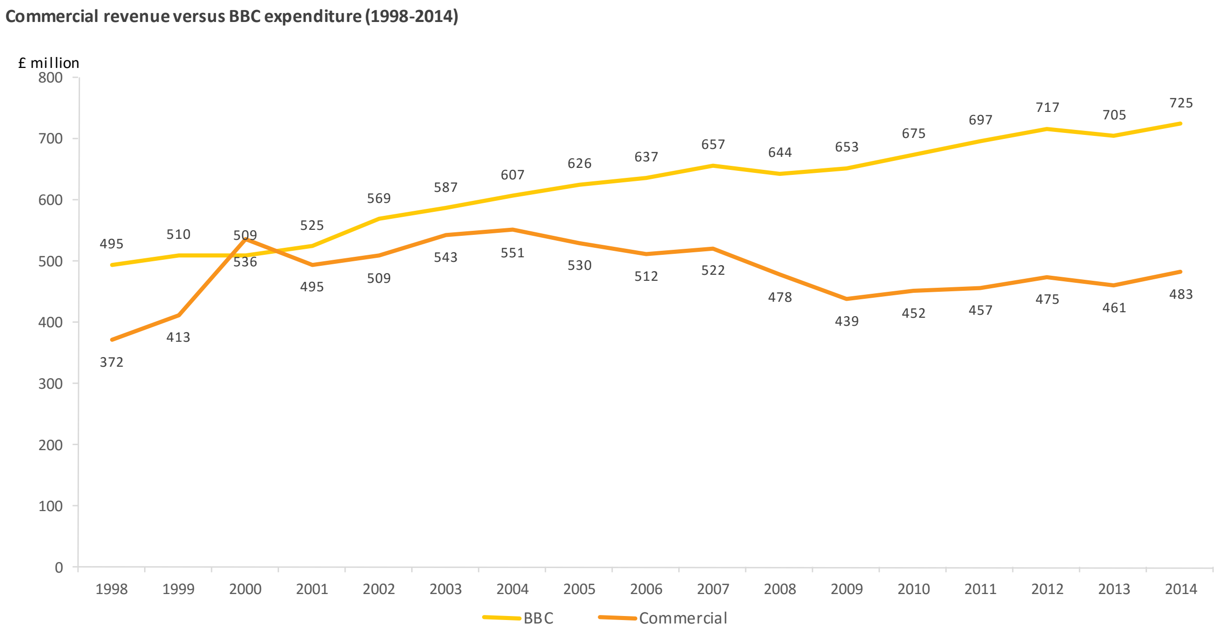
Time series – correlation and causation evidence

There have been some modest and incomplete attempts across all the reviews and submissions to use time series data to quantify the extent to which the BBC services may have taken audience share and revenue from the commercial market.

The BBC's Green Paper response contains a review of the recent trends in BBC real expenditure on its radio services since 2004. It notes that this expenditure has fallen by 18 per cent in real terms, but there has been no subsequent increase in commercial revenues – in fact, commercial radio revenues have also declined in real terms by over 30 per cent. While the BBC admits there are other factors behind commercial radio's revenue decline, it suggests that if the BBC did have a significant impact on the commercial sector's revenue fortunes, it would have seen some kind of revival, as the BBC real spending declined, but it has not.

Long term trends in BBC radio spending since 1999 gathered by O&O, however, do show a significant spending increase from 2000 to 2004. This increase was correlated with significant declines in commercial radio's audience share and revenue over the period. (Although the revenue trend could probably also be related to the rise of the internet as a mature advertising premium over the period.)

Figure 35: BBC radio expenditure versus commercial radio revenue, 1998 to 2014

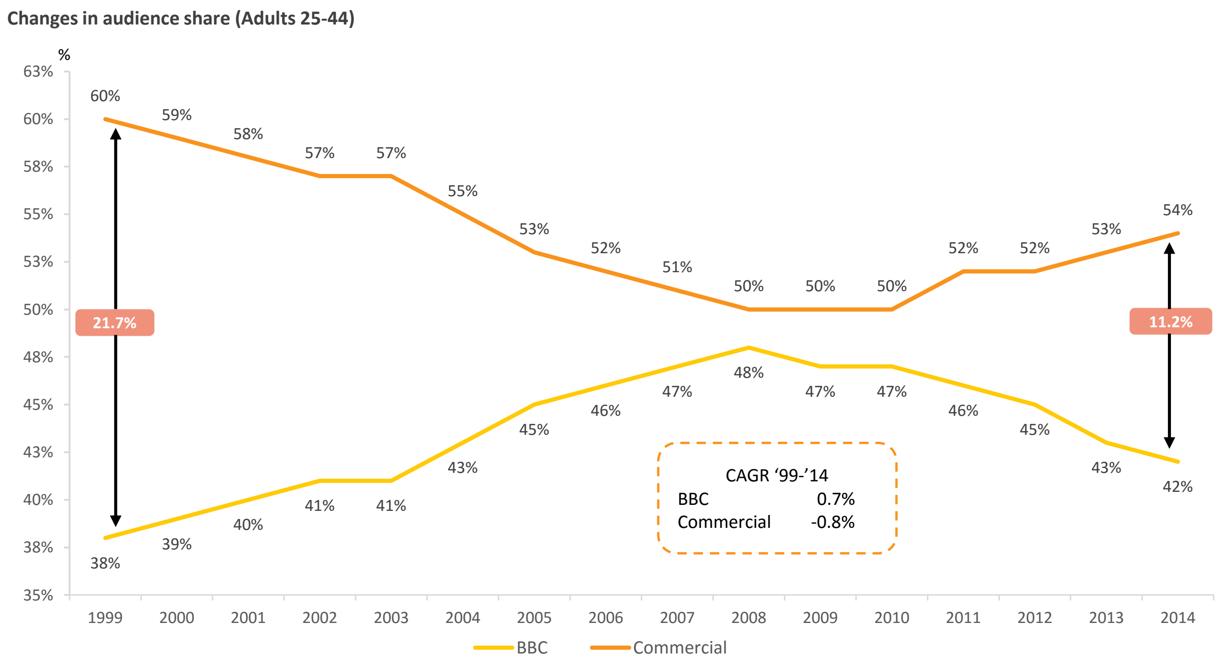


Source: Ofcom Communications Market Reports, Oliver & Ohlbaum analysis. BBC expenditure includes transmission costs

Commercial radio national revenue in 2014 and 2015 has been rising quite fast, as BBC real spending continues to decline, and as Radio 1 and Radio 2 lose some share as they respond to BBC Trust calls to focus on their younger and older listeners more respectively.

The Radiocentre and Global Radio submissions to the Green Paper consultation have provided trend data back to 1999 for the BBC radio services' audience share versus commercial radio share. In doing so, they highlight the increase in the BBC share versus commercial radio from 1999 to 2008, and the very sharp increase in the BBC's share in the commercial radio heartland audience of 25 to 44 year olds from 1999 to 2008, which they show was due mainly to the increased share of this age group's listening by Radio 2 and the addition of Radio 6 Music.

Figure 36: 25 to 44 age group listening share – BBC vs commercial radio, 1999 to 2014



Source: Prospero, Oliver & Ohlbaum analysis

The RadioCentre also cites a report by Prospero Strategy consultants[92]. Prospero Strategy estimates that the share loss of commercial radio currently costs the sector between £15m and £55m per year. The high end of the range includes the entire difference in their share between 1999 (when it was 48 per cent) and 2014 (when it was 43 per cent). This calculation seems to have applied the proportionate loss of listening to the current commercial radio listening levels – i.e. the commercial sector has lost approximately 10.5 per cent of its listening share – and then more or less pro-rated this to their advertising revenue, of which the sector claims to have lost about 12 per cent. This seems to imply a very elastic advertising market, with no increase in price to offset the reduction in listening volume. The lower revenue loss estimates seem to be based on the same very elastic demand for advertising but smaller commercial radio audience share losses from later base years.

Other evidence relating listening share loss to radio advertising share loss includes analysis within the BBC's submission to the Burns Review in 2005. The submission uses a value of -2 for radio advertising demand elasticity. (A 10 per cent drop in commercial impacts leads to a 5 per cent increase in price and a 5 per cent drop in revenue). But this is taken from studies of radio elasticity of demand from time series and cross-sectional data in the USA in the late 1990s and early 21st century.[93]

To shed more light on likely elasticity of demand for radio advertising and its responsiveness to reduced BBC audience share and increased commercial audience share, O&O looked at conducting a time series regression analysis on radio market trends from 1999 to 2014. However, the analysis did not give robust findings. The issue of having only a relatively small number of observations of aggregated data, and therefore a limited number of explanatory factors that could be identified, is likely to have been compounded by strong trends over the period such as the rise of web advertising coinciding with commercial radio's audience share falls from 2000 to 2007, and structural changes to commercial radio ownership from 2008. Hence, the previous US studies in advertising elasticity have been used when trying to estimate revenue impacts of repositioned BBC services, together with the CC estimates of commercial radio advertising revenue elasticity covered below.

[92] Prospero (2015).
[93] BBC (2004). See also Bush (2002).

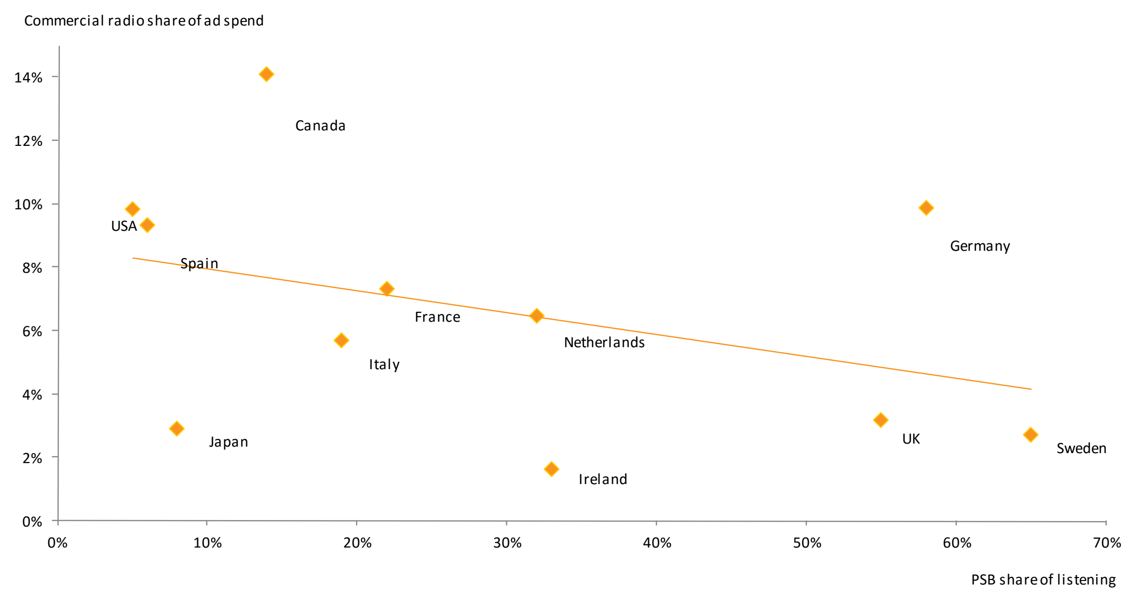
Industry surveys
The only published work on UK radio advertising elasticity is within reports by the CC on radio sector mergers – most recently the acquisition of GMG Radio by Global Radio.[94] As part of this review, advertisers were surveyed to test how much a theoretical monopoly provider of either local radio advertising (in some key GMG station areas) or national radio advertising could raise price and enhance revenue. This found that national radio advertising was fairly elastic because there were substitutes. However, local radio advertising was less elastic as there were fewer substitutes for advertisers. (These findings led the CMA to recommend that Global Radio divest itself of the stations that gave it a large share of specific local radio markets, but not divest stations that simply added to its national market share and scale.)

This analysis would suggest that commercial radio share loss to the BBC would have a greater impact on its national revenue than its local revenue. This would be consistent with the rise of national advertising revenue, as the BBC lost some share in 2014/2015.

Cross-sectional data
There has been no published cross-sectional analysis of audience and revenue substitution in radio, either across countries or local markets. Ofcom does compare the size and revenue sources of radio sectors around the world in its annual international market review.[95] It provides evidence on general radio and audio listening trends. However, it does not compare the size of the publicly funded radio sector with its audience share performance, nor the range of services provided by the commercial sector in each country, which might provide some evidence of the relationship between the size of the publicly funded sector and the health of the commercial sector.

Extra analysis by O&O suggests that BBC's share of audience is high compared with PSB radio share in other countries, although it is not as high as in Sweden or Germany. However, it is difficult to relate audience share to levels of public spending or the size of commercial radio revenue that might suggest that well-funded and popular publicly funded PSB radio correlates with underdeveloped commercial radio sectors taking low shares of the total advertising market. More research would need to be done on this issue. By way of illustration, we show below the relationship between PSB share of listening and commercial radio's share of total advertising, which suggests that there might be a negative correlation; but notable outliers need explaining.

Figure 37: Size of PSB radio audience and radio share of ad spend – 11 countries



Sources: Ovum, Oliver & Ohlbaum analysis.

[94] Competition Commission (2013). See also Competition Commission (2001) and (2003b).
[95] Ofcom (2015d).

It might be possible to review the relationship between BBC Local Radio spend and audience share in specific local markets with the commercial audience share by market or local advertising. However, BBC Local Radio is only a very small part of the BBC offering in each local market, and it would be unlikely to show anything meaningful.

There might be more mileage in looking at the strength of BBC Local Radio by market and the level of local news content and investment in the commercial radio market. But this would require a lot of new output data. It would probably be better to review the correlation between BBC and commercial activity in local information provision across the local commercial radio, TV, online and newspaper provision, and the BBC's provision via radio and online. In short, BBC Local Radio provision is probably a cross-media market impact question and not just a radio issue.

5.4.3.2 Market structure and competitive dynamics impacts – the evidence

Most of the evidence in this area is contained in market reviews of DAB and BBC digital services, where survey evidence on their impact on take-up is provided, or in the BBC's strategic reviews, which lay out its views on the likely future challenging dynamics of commercial radio, the shift to on-demand consumption, and the unique ability of the BBC (when compared with the UK commercial radio sector) to provide both well-funded radio content and follow the consumer into the on-demand age.

Platform take-up and barriers to entry – DAB

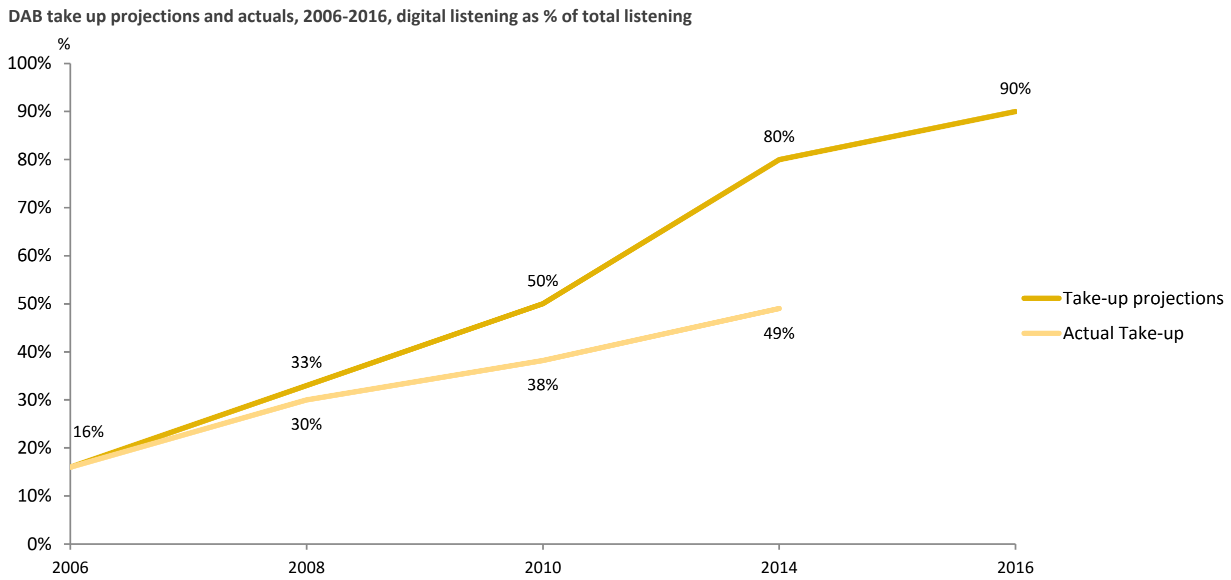
The BBC's commitment to funding new stations on DAB was seen as an essential part of driving the switchover from FM/AM to DAB (and other digital systems such as DTV), when full national DAB was launched in 1999 and then upgraded in 2004. Surveys at the time put new BBC services high up the list of reasons people cited for either purchasing a new DAB set or thinking about doing so (although sound quality and overall increases in listening choice were also cited).

But the original DAB plan also involved an allocation of more capacity to commercial DAB services – national and local – than BBC services, to allow for more market entry and choice from the commercial market. This would help the commercial sector maintain its growth in share and reach achieved in the late 1990s from extra allocation of local FM frequencies, especially in major urban areas.

The initial commercial national DAB proposition developed between 1999 and 2004 included an ambitious range of services aimed at expanding the commercial offering into more specialist music (Planet Rock), built speech programming (Oneword), children's output (Disney/Capital), and news (ITN news service). Over and above, this there has been a significant level of co-operation between the BBC and commercial radio in driving DAB take-up, and the associated extended choice and consumer benefits.

But with slower than expected take-up of DAB, and low growth/declines in the total commercial radio advertising market, the revenue projections for these ambitious new services could not be met, with many exiting or being watered down. A new more cost effective commercial DAB portfolio has emerged. It combines audio versions of music video TV stations (e.g. the Hits), and additions to well-known local brands (e.g. Kisstory) on national DAB, with out of area local DAB re-broadcasts of existing major local/regional FM brands (e.g. Capital, Heart, Kiss, Magic, Smooth). This has probably helped commercial radio regain share in its heartland 25 to 44 listening market. However, it has not allowed commercial radio to push out significantly to the over 50s, under 25s, or the AB listening public as it had probably hoped to do when DAB started.

Figure 38: DAB actual take-up to date versus projections 10 years ago



Source: Actual - Ofcom communications report
Projections – Ofcom: The future of radio 2006

The actual DAB take-up is far form the projected numbers in 2006, the 50% mark only being reached in 2015 against a projected date of 50%

However, a new national DAB service is due to launch in March 2016 with new national Christian, Asian and Muslim speech services and specialist music offerings such as Country Music.

Overall, the current reach and performance of DAB have created a new platform for commercial radio which has less competition and choice than the internet, and so may help preserve relatively high reach and ad yields when compared with web based radio and audio services. However, with full digital radio switchover some years off, it has also increased costs – because stations need to simulcast in FM/AM and DAB (and DTV) – and has yet to bring significant new audiences or revenue to commercial radio.

The BBC's investment in DAB alongside the commercial sector may have helped delay the faster growth of mass choice internet reception, and consequent severe commercial revenue fragmentation, which could be seen as a positive for commercial radio and its listeners. But it has only fairly recently helped commercial radio expand its offering and audience reach.

Platform take-up and barriers to entry – on-demand audio
In its latest strategy document, the BBC lays out plans for a further push into on-demand audio services (both speech and music services) to provide greater discovery and personalisation to respond to changing audience tastes and the challenge from overseas led services such as Spotify, Apple Music and Audible. The BBC has also laid out plans to push Radio 1 further into multimedia output – mixing audio, video and journalism – to help respond to the growth of video music on-demand services such as Vevo and YouTube, and the strong appeal of MCN (multi-channel networks) web based portals to the under 25 age group.

This shift, while seen by the BBC as a way of catering for its audiences in the on-demand age, also represents a change in BBC effort from driving the switch to limited multi-channel linear DAB towards embracing the move of audio and audio dominated consumption to the internet. This has implications for a commercial radio sector whose main economic proposition relies on the high reach it obtains on FM and DAB, and which would face a somewhat more uncertain economic future should the majority of listening start to switch to the web.

The BBC has co-operated with the commercial sector to some degree in bringing linear radio station output on to the web with the shared Radioplayer platform. But the BBC appears to do little to promote the Radioplayer as a route to its own stations on the web. Instead, it pushes access through the BBC website and audio content in the iPlayer.

The BBC has also yet to outline how it might involve the commercial sector in its Playlister service (allowing listeners to bookmark their favourite tracks and build their own personalised music streaming service), or how it might co-ordinate Radio 1's push into video output with the commercial sectors TV video channels such as Capital TV and Heart TV.

The Global Radio response to the Green Paper complains about the lack of consultation with the commercial sector by the BBC when it launches new initiatives such as Playlister or BBC Symphinity, a classical music discovery App. Instead, the BBC's recent strategy document uses the challenging future for commercial radio in the on-demand age as a strong reason why the BBC will have to do more, not less, in this market – in part to provide the only significant UK skewed response to the global challenge of Spotify, YouTube and Audible. The BBC's recent strategy document also suggests that the squeeze on the commercial sector from the on-demand challenge will reduce any current ability the sector has to fund quality speech output or live music, or cater for specific music tastes, thereby reinforcing the positive market impact and public value provided by its existing radio portfolio: speech and music led services.

Platform take-up and barriers to entry – sports rights, talent, cross-promotion and archive access
Four additional barriers to entry points have been raised by past reviews, although only one – cross-promotion – has come up in the current responses to the Green Paper.

TalkSPORT took a fair trading complaint to the BBC Trust in 2008. In this, it outlined the BBC's tendency to secure exclusive rights to major sporting events by outbidding commercial rivals by a significant margin rather than looking to complement the commercial sector, and often not broadcasting some of the output acquired on its radio services. TalkSPORT maintained that the only rationale for the BBC's behaviour was to create a barrier to entry to commercial rivals, especially in areas of mainstream sport. The BBC Trust subsequently commissioned a review of its radio sports rights bidding. MTM, which undertook the review, recommended a number of reforms in the way the BBC assessed the appropriate packages to bid for and the price it paid.

Since then, the BBC, partly due to continued financial pressure, has taken a smaller share of the live rights to leading sporting competitions such as the Premier League and UEFA Champions League, TalkSPORT and Absolute Radio have been able to secure a larger share of the sports audience as a consequence. While UTV's submission to the Green Paper review did question the BBC's continued focus on leading sports, it did not complain that the BBC was pre-empting market entry by its rivals by overbidding for the rights.

The BBC cross-promotes its radio services both within the radio portfolio and across its TV services. Global Radio estimated that the BBC would have to pay £78m a year if it had to acquire its promotion on BBC Television from the commercial TV sector – a level of cross-promotion that the commercial sector could not justify financially, but which gives the BBC an unfair competitive advantage in the UK radio market. The Global Radio submission did not maintain that such cross-promotion prevented new market entry, rather that it reduced commercial radio's share of audience, and therefore its achievable revenue.

The BBC's behaviour in the on air talent market – especially for top DJs on its music led services – was one of the issues raised and assessed by the BBC Trust's review of BBC Talent spending.[96] That review was launched partly in response to coverage of some top BBC star pay – in particular, the TV and radio contract given to Jonathan Ross (who presented two regular BBC TV shows and had a Radio 2 daytime slot) reportedly totalling £18m over 3 years.

The review concluded that the BBC was not systematically overpaying for its top talent. But it did suggest that the BBC might be overpaying in some instances – especially in radio and news – and should review its processes and its development of new talent. The review was not, however, asked to assess whether the BBC should be competing for top talent with the commercial sectors in TV, radio and news, as that was an editorial decision for the BBC. Complaints from commercial radio operators about how much the BBC pays for top on air DJs seem to have abated since 2008 – in part as the BBC moved to reduce its payments to top talent, and in part as commercial radio developed quasi-national networks that allowed it to match the BBC more closely as an attractive outlet for star names.

[96] BBC (2008d).

The last specific barrier to entry/unfair competition issues raised in recent years has been around the commercial sector's ability to access BBC audio archive. The most notable example being the Oneword digital station that closed in 2008. Oneword had attempted to acquire old BBC dramas and comedies from the BBC but was unable to owing to the BBC's concerns about brand issues and talent payment complexities.

Each of the four areas above – sports rights, cross-promotion, talent costs and archive access – is fairly specific and particular in its impact on the whole radio market. But when taken together, they provide a view that the BBC acts to restrict the commercial market from competing on equal terms with BBC radio, especially within high reach national programming or for the BBC's heartland audience.

While BBC Trust reviews and management responses in sports rights and talent spending seem to have reduced the problems, cross-promotion still seems to be a live issue and the archive issue appears unaddressed.

Content investment and innovation

Given the BBC's overall view (reflected in its recent strategy document) of commercial radio providing a very limited type of offering only appealing to a segment of the listening public, it is probably not surprising that BBC evidence on radio market impact has less emphasis on the BBC's role in uplifting quality expectations and content spending across the sector than its TV submissions –the so called "crowding in" effect.

While there have been claims about nurturing talent and training production staff and radio journalists to the benefit of the whole sector, there is less focus than is the case with TV on the commercial services having to "up their game" to compete with Radio 1 and Radio 2, or provide more local news to compete with BBC Local Radio, or speech based commercial services having to invest more in their journalism to rival the BBC.

Radio is assumed to be a more segmented market, where the commercial sector and the BBC's approach are largely separate with few positive feedbacks between the BBC and the commercial groups. This is reflected in both the BBC and the commercial radio sector responses to the Green Paper.

The overall BBC versus commercial radio market dynamic

The main feedback loop highlighted by the commercial sector responses to the Green Paper is the BBC's promotion of DAB, a platform whose rapid growth the commercial sector should have benefited from in terms of growing its share and reach – which recently has begun to happen. The commercial sector is now keen for the BBC to fund the further reach of DAB across the UK, thereby helping the economics of commercial DAB-only and DAB/FM quasi-national networks – something to which the BBC has not yet committed.

Further development of DAB seems less important to the BBC than the shift into the web and on-demand, where the BBC's co-operation with the commercial sector is limited to a secondary aggregator site – the Radioplayer. The overall impression created by the BBC's strategy document and response to the Green Paper is that the BBC and commercial radio are on divergent paths, with any positive feedback loops to content investment and innovation that did exist likely to disappear.

While specific issues, such as aggressive sports rights bidding and paying top on air talent too much, seem to have been addressed by the BBC Trust, cross-promotion and archive access seem to remain issues.

5.4.3.3 Supply chain and adjacent market impacts – the evidence

The main evidence in this area is provided by the BBC and the UK music industry in terms of the BBC's impact on the music sector, and the RIG on how greater use of independents could help the BBC achieve both greater efficiency and more innovation in programme making.

The music sector

Both BBC evidence and submissions from bodies representing the music sector[97] cite the BBC's wide playlists, focus on live and new music, and broad ranges of services as a positive boost to the UK music sector, and part of the reason the UK music sector does so well globally. The boost is both in terms of promotion or artists and tracks, but also the direct financial benefit the music sector gets from PRS, PPL and MCPS copyright fees paid by the BBC to music publishers and music labels.

In the case of the UK music industry, the comments apply across the BBC's music activities online, on TV and radio. That said, the primary focus is still on the BBC's radio activities. The UK music industry makes it clear in its submission to the Green Paper that it believes a lot of what the BBC does for the music sector would not be replicated by the commercial sector should the BBC scope reduce.

There is no analysis provided by the emerging music streaming or audio on-demand sector, either on the importance of the BBC or on the market impact of its streaming and personalisation services; nor is there any comment from the UK music sector on whether it views these moves by the BBC as a positive development.

Independent radio production

The main ways in which the BBC's use of the independent radio production sector could have a positive market impact would be in terms of increased efficiency allowing a greater level of consumer value from a given amount of spend, greater innovation boosting consumer value directly, or by helping to develop a more diversified and high growth audio production sector in the UK able to play a more prominent role in the global radio and on-demand market, and a greater contribution to the UK economy.

The RIG response to the Green Paper covers the first two of these. But it covers the third only in terms of the spread of its members across the UK. Evidence is provided of the RIG members' success in winning commissions versus BBC in-house competition, and the high number of awards won by independent producers, and data is provided for RIG members across the UK. There is little coverage of whether commissioning RIG members could create a new sector capable of global growth when compared with BBC in-house production which is still largely focused on the specific needs of the radio networks.

In particular, there is not much emphasis on rights ownership and the way in which more independent production and their retention of rights could help stimulate a market for BBC archive in the UK and overseas. This is largely due to the very nascent nature of on-demand audio services beyond music streaming. But there is a significant market for spoken word audio – dominated by Amazon's audible – and examples of global speech content on-demand successes, such as the recent Serial crime podcast. This might help diversify the revenue streams of UK audio independent producers and help develop a new growing creative sector for the UK.

5.5 Remaining gaps and issues

The key issues that seem as yet unresolved by previous analysis and raised by current submissions tend to revolve around the following five areas.

(1) How far does the continued existence of Radio 1 and Radio 2 (and to a lesser extent Radio 6 Music and 1Xtra) in their current broadly targeted formats prevent the commercial sector from providing similar services, or a large part of what these services provide?

(2) Is the range of coverage by Radio 5 Live and Radio 5 Live Sports Extra – especially mainstream sport – and the volume and range of BBC news output preventing the emergence of a broader proposition from the commercial sector across news and sport?

(3) How far are the BBC's digital portfolio and its plans to move further into personalised music playlists and audio speech on-demand services likely to compound commercial radio's problems and limit the commercial sector's ability to respond to the web based challenge? (Rather than be necessary to fill future gaps likely to be left by a declining commercial sector?)

[97] UK Music (2015).

(4) Could fair commercial terms access to BBC audio archive, a more complementary attitude to sports rights and local journalism resources plus joint efforts to develop music and audio on-demand services help the commercial sector provide a broader offering? In short, could the BBC compete less and co-operate more with the commercial sector?

(5) Even where BBC services are more or less impossible for the commercial sector to provide, such as Radio 3 and Radio 4, are these services choking off the provision of the most cost effective types of programming within these services by the commercial market, by being insufficiently distinctive (e.g. CD reviews on Radio 3, phone-in discussions on Radio 4)?

Of these, area (1) has not really been looked at since the Burns Review in 2005. Given recent developments across the commercial market, this area probably warrants an update. However, rather than assessing what commercial radio might look like with no Radio1, Radio 2 or Radio 5 Live as the analysis for the Burns review did, it might be more relevant to the issues raised by submissions to the Green Paper, to assess the impact of a repositioning of each of Radio 1, Radio 2 and Radio 5 Live.

Area (3) probably needs a fresh look given DAB's performance since the Gardam Review of 2004 and the growth of the internet as an important platform for audio and music streaming.

Area (4) might be best assessed with reference to the Oneword case study, where the commercial spoken word DAB service closed down in 2008, having made requests for access to BBC archive material. Area (5) needs a detailed look at Radio 3 and Radio 4 schedules over time, which is more than can be done in the time available. Area (2) is quite specific and the sports issue was addressed fairly recently during the TalkSPORT complaint to the Trust and the MTM review of sports right bidding, while the news issues probably apply across radio, TV and online. However, the overall positioning of Radio 5 Live and 5Live Extra might be worth including alongside as assessment of the same for Radio 1 and Radio 2.

5.6 Additional evidence gathered, assessments and case studies

All three areas reviewed below try to assess what the commercial market might look like in the future if there is no change to current BBC services – what its options are in particular for dealing with the many challenges it faces. They then try to assess how the commercial sector – a sector still licensed and regulated on FM/AM and DAB frequencies by Ofcom – might react to a scaling back and/or repositioning by the BBC.

5.6.1 The market impact of Radio 1, Radio 2 and Radio 5 Live in their current formats – an assessment of a shift in positioning and remit

In this brief MIA, we review the evidence on how the BBC's main popular music and speech services Radio 1, Radio 2 and Radio 5 Live (and to a lesser extent Radio 6 Music, 1Xtra and 5 Live Extra) impact on commercial radio, and what would happen if BBC radio made Radio 1, Radio 2 and Radio 5 Live more distinctive from commercial radio.

The evidence: changes to commercial radio and the BBC services since 2008 have reversed audience share trends in commercial radio's heartland audience

BBC service reviews in 2010 and recently in 2015 have urged Radio 1 to focus on an under 29 audience and, within that, to pay special regard to the 16 to 24 audience, and Radio 2 to focus more or an over 35 audience seeking not to alienate listeners over 60 in particular.

They have also called for more public action campaigns on Radio 1 and more promotion of documentary output on Radio 2. While this was not a major shift in remit, it did suggest the main music networks of the BBC should move away from targeting the core commercial heartland audience of 25 to 44, and to put more emphasis on speech and public campaign output.

At the same time, changes to formats and brand licensing by Ofcom from 2008 to 2010 did allow for the emergence of quasi-national networks. These networks now account for just under half of all commercial radio listening and about two-thirds of local/regional radio listening.

These shifts in emphasis by Radio 1 and Radio 2 – combined with consolidation and aggregation of commercial audiences around national brands – have probably helped in a significant swing in fortunes in the share of the 25 to 44 year old listening market. Commercial radio's share lead has increased from just 2 per cent in 2008 to 12 per cent in 2014. Without the emergence of Radio 6 Music – which has its highest appeal among 25 to 44 year olds – the commercial lead could now be as much as 16 percentage points – depending on how much Radio 6 Music listening is assumed to have come from Radio 1 and Radio 2.

The evidence: broadly based music stations and networks focused on the 25 to 44 age group underpin the current sector's economics (not niche music formats)
The UK now has 8 quasi-national network brands, each obtaining up to 10 per cent share in key analogue FM markets, plus smaller shares in DAB/DTV/internet access-only households (Heart, Capital, Kiss, Magic, Gold, Smooth, LBC, Radio X), with each targeting a slightly different sub-segment of the 25 to 44 market, and some outreach to the over 45s and under 25s.

The Heart brand now accounts for about 6.3 per cent of all radio listening in the UK through its local and regional affiliates. This makes it the leading commercial station brand in the UK, and the third most popular music service – behind Radio 2, but neck and neck with Radio 1. The Capital network achieves 4 per cent share with a slightly younger skew than Heart, while Smooth gets a 3.6 per cent share with a slightly older skew. The national reach of these brands allows them to attract leading presenter names across their schedules, while their drive time and breakfast shows – which are required to still be local by the Ofcom licence – often combine a well-known local name/voice providing traffic and news reports alongside the chosen music mix.

The evidence: commercial radio now offers a national news, chat and sports alternative to the BBC
Developments at TalkSPORT, the rolling out of LBC as a national news and chat station on analogue and DAB and the provision of sports content on Absolute radio are combining to provide an alternative speech offering to listeners, especially in the core 25 to 44 year old commercial heartland audience with some outreach to the over 45s and under 25s. The new national DAB multiplex launching in 2016 will see the TalkSPORT offering dividing into an all news and chat service, a sports coverage and chat service and a business news service, as well as a mixed music and speech Christian Radio service.

The future: commercial radio faces a challenging future –especially maintaining high reach to the under 40 audience and protecting its share of display advertising
Average radio listening by the under 35s is already declining. Although lifestyle factors may still lead the 40 year olds of 2025 to listen to more than the 30 year olds in 2015, the under 35s now will be part of the cohort that has grown up with ad funded, web based and increasingly personalised music access, not to mention YouTube and Facebook access 24 hours a day. Maintaining their high reach and attracting advertisers may become an increasing challenge for even the new quasi-national networks if they are faced with the twin challenges of a strong BBC and the web attack on their audiences and revenue.

One potential outcome is that the commercial sector once again has to modify its ambitions, return to become a selection of even more specialist but very low cost music services. Alternatively, it could try to differentiate itself more than music streaming and web based offerings, by scaling up its speech content, recruiting even higher profile TV presenters and trying to recreate the broad reach that brand advertisers are likely still to want, in addition to the precision targeting on the web.

Having re-established themselves as strong resonant consumer brands with the 25 to 44 age group, they might want to consolidate this by diversifying (as they have been already with their music TV channels) into streaming music services and even personality led podcasts.

The future: there may have to be further changes to commercial radio licensing and requirements to prevent decline
In addition to the changes the commercial operators might want to make on their own behalf, they could once again seek to renegotiate the terms of their FM/AM and DAB licences in the light of market challenges. The recently announced Government review of licensing is designed to allow this to happen in light of the recent growth in digital listening, with an eye to eventual analogue switch-off beyond 2020.

The counterfactual: changed BBC positioning or cessation? More free market or PSB licensed commercial services?

Given the BBC's need to reach a range of licence payers with a number of radio services, the closure of Radio 1, Radio 2 and Radio 5 Live with no reassignment of frequencies to the commercial radio sector would probably not be a realistic alternative.[98] If a scenario of Radio 1, Radio 2 and Radio 5 Live closure is to be tested in order to think through the market's likely response, it would probably need to be combined with Radio 1Xtra and Radio 6 Music taking over the FM frequencies and some new output using the DAB capacity released, or Radio 6 Music and 1Xtra being simulcast.

Scenarios around Radio 1 and Radio 2 shifting position can range from the two networks effectively becoming much more like Radio 1Xtra and Radio 6 Music, with the BBC reassigning its DAB services to new types of output or vacating the frequencies entirely. Alternatively, there could be a more modest shift, with Radio 1 focusing more than today on the under 25s and with more public campaigns, and Radio 2 becoming a narrower speech and music service aimed at its current broad audience demographic, or positioning itself more towards the over 50s (where it was positioned until the turn of the century). For Radio 5 Live, the shift could be to all news rather than news and sport, or a shift across news and sport to a mix of hard news and current affairs and more tier 2 and tier 3 sports events.

In terms of the likely commercial sector reaction, we have to decide whether this is a free market reaction within their current licences, or whether there might be a licence review and a negotiation of new terms with such significant change at the BBC. The latter would be likely to happen should the BBC release its FM frequencies to the commercial sector either as FM services or more likely a reassignment to DAB use (as new commercial licences would be available for tendering). It would also be likely to happen even if the BBC effectively put versions of Radio 1Xtra or Radio 6 Music on to FM. (However, in the latter case, any licence renegotiation would have to be around existing services, not the terms for allocating the frequencies to new services.) However, a repositioning of Radio 1, Radio 2 and Radio 5 Live would probably not entail any need to review the structure of regulation of commercial radio.

Given the complexity of the above options, we should probably settle for just one as an example, and, within that, we should focus on the most likely and practical option. This is likely to be the BBC transforming:

- Radio 1 into something more like Radio 1Xtra on FM (or a hybrid of Radio 1 and 1Xtra) where the likely median listener might be aged 18 to 20 and where there is a greater role for some speech output in peak time;

- Radio 2 into something like Radio 6 Music (with more specialist music focus but on the 25 to 50 audience), or an over 50s broadly focused music and speech service with more speech output ins peak time and a music policy focused on the 80s music generation and older – where the median listener might be aged 60 to 65;

- Radio 5 Live focused more in hard news coverage, current affairs and tier 2 and tier 3 sports, moving away from phone in shows, and reducing coverage of top sports events

Of the remaining uncertainties in the list above, it might be most straightforward to model Radio 1 becoming a hybrid of 1Xtra and the current Radio 1 with some more speech in peak time, and Radio 2 being focused on the over 50s with more speech in peak time, with a median listener age of between 60 and 65.

Likely commercial market competitive equilibrium – likely increase in revenue

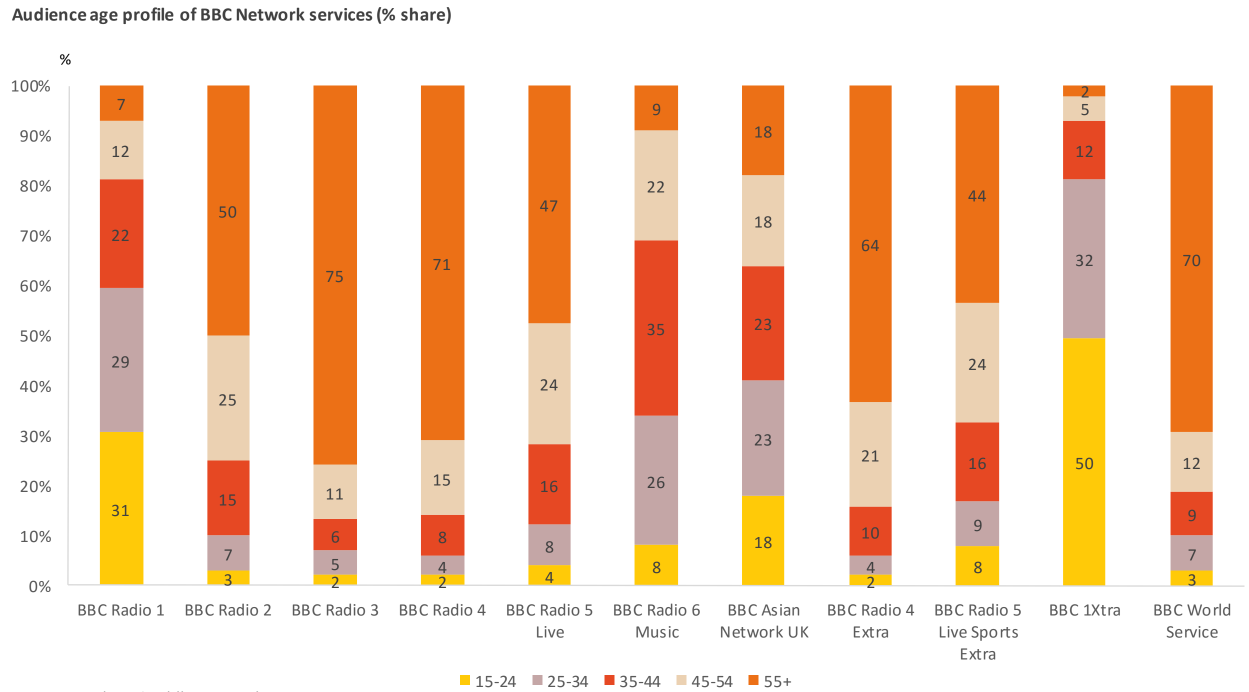
The first issue to consider would be the likely aggregate impact on the BBC's audience share, especially of the 25 to 44 year old listening market. Currently, 50 per cent of Radio 1's listening is from the 25 to 45 age group (and Radio 1 overall has a 6 per cent share of all listening), and 40 per cent of Radio 2's listening is by the 25 to 44 age group (and Radio 2 has a 17 per cent share of all listening), and 40 per cent of Radio 5 Live's listening share is from 25 to 44 age group (and Radio 5 Live has a 3.5 per cent listening share).

---

[98] The current policy is to reassign any unused FM/AM capacity to community radio, although this might change if one or two national FM frequencies became available.

So overall, 25 to 44 year old listening to Radio 1, Radio 2 and Radio 5 Live, accounts for about 11.5 percent of all radio listening – i.e. 11.5 share points. Combined they also account currently for about 28 per cent of all 25 to 44 age group listening.

Figure 39: BBC network radio station age profiles, 2014



Source: Oliver & Ohlbaum analysis

To decide how much of this might switch to the commercial sector, a view has to be taken on the degree to which listeners might shift:

- to other BBC services – most notably Radio 6 Music, BBC Local Radio and Radio 4;
- away from radio altogether – either to audio on-demand music and speech services or towards other media including daytime TV.

Quite a lot of Radio 2 and Radio 1 listening would switch to Radio 6 Music, especially those listeners most interested in a wide playlist of music – which is what Radio 6 Music provides. In so doing it could also increase DAB take up and listening in this age group. Some Radio 5 Live listening would probably switch to BBC local radio as well as Radio 4. Some listeners might abandon radio altogether spending more time on the internet or watching daytime TV (although if BBC One daytime output become more demanding as covered in Chapter 4 on TV market impacts, this switch might be more limited).

The level of switching would also depend on how the commercial sector responded. If it decided to differentiate its services and playlists a bit more and to invest in some more household presenter names familiar to a BBC audience, it could be expected to do better than if it made no changes.

The table below sets out both the current share of all 25 to 44 year old radio listening accounted for by the three mainstream BBC services, and the all listening share points (i.e. within the BBC's overall 54 per cent share) this amounts to. With a moderate response from commercial radio in terms of the breadth of playlists offered and lead name presenters appealing to BBC audiences recruited, we might expect 11.5 per cent of the total 28 per cent of 25 to 44 age listening to stay with other BBC services, most notably BBC Radio 6 Music, and for 4.75 share points of the 11.5 available to also stay with the BBC radio services, again mostly Radio 6 Music. This might also increase over time as DAB penetration increased giving more people access to Radio 6 Music (and would probably help drive DAB penetration).

Table 2: Assumptions about audience switching in response to changes to BBC radio

	Current share of all 25 to 44 listening	Current all listening share points	25 to 44 listening share switching to other BBC radio	All listening share points switching to BBC radio	25 to 44 listening available to commercial	All listening share points available to commercial
Radio 1	**12**	**3**	**4**	**1**	**8**	**2**
Radio 2	**13**	**7**	**6**	**3**	**7**	**4**
Radio 5 Live	**3**	**1.5**	**1.5**	**.75**	**1.5**	**.75**
Total	**28**	**11.5**	**11.5**	**4.75**	**16.5**	**6.75**

What remains to be estimated is the proportion of the 16.5 percent of the 25 to 44 listening not switching to commercial radio which might disappear to on-demand audio, internet or TV consumption (and the same for the total 6.75 share points available). If we assumed 25 per cent went to alternative media use, this would leave 12.4 percent of 25 to 44 listening going to commercial radio, and 5.1 share points going to commercial radio.

Overall then, the shift in Radio 2, Radio 1 and Radio 5 Live might increase commercial radio share from 43 per cent to about 48 per cent and from its share of 25 to 44 listening from its current level of 54 per cent to 66.5 per cent.

The impact on commercial advertising revenue would depend upon two factors – first the elasticity of demand for radio advertising – and second extent to which radio advertisers are interested in any audience or primarily the 25 to 44 year old audience. In terms of elasticity of demand for advertising and the advertising market more generally previous analysis in this section has the following evidence:

- Radio advertising did increase its total share of all display advertising the last time it significantly increased its overall audience share in the 1990s when it went from 2 per cent of all display advertising to 4 per cent

- Although increasing share of the 25 to 44 audience since 2009 has not been correlated with an sustained increase in radio advertising, we have seen recent increases in national advertising in 2014 and 2015 related to recent gains in the age group (and such spending shifts might operate on a 2 to 3 year lag as advertisers wait to see if the increase is temporary or permanent) – and given increased pressure from the internet, even the flat revenue performance of commercial radio from 2009 to 2013 might have represented a balance of increasing 25 to 44 year old audiences with more general substitution from the web;

- There are no robust estimates of radio advertising elasticity – US estimates put it at -2 in their market, while the Competition Commission evidence suggests local advertiser demand is less elastic than national advertiser demand

- About 85 per cent of UK commercial radio advertising income comes from advertisers – local and national – looking for broad reach of the 25 to 44 age group – with niche services aimed at younger and older services often attracting lower CPMs than broad reach of the 25 to 44 age group

So first, we base the estimate of the impact on commercial radio advertising by looking at total listening. An increase of all commercial listening from a 43 per cent share to a 48 per cent share represents an 11.6 per cent increase in commercial impacts. If we assume local advertising has an elasticity near -1 (based on the CC report) and national advertising an elasticity of -2 (based on US estimates), that would give us a blended elasticity of -1.67 (two thirds -2, one third -1). An 11.6 per cent increase in impacts would lead to an increase in all advertising revenue of 4.6 per cent. With commercial radio revenue currently totalling £483m in 2014, that would represent a £22m increase in annual advertising revenue.

Second, we can base the calculation on the 25 to 44 year old radio advertising market, which has been estimated at about 85 per cent of all money spent on radio – or £410m in 2014. If we use the same -1.67 elasticity, then a shift to 66.5 per cent share from 54 per cent share, represents a 23 per cent increase in impacts, which would increase relevant revenue by 9.2 per cent, or £38m.

So the range of impact on commercial revenue we have is from £22m to £38m a year.

Projecting forward, there might be two counteracting trends influencing whether this amount might increase or decrease. On the one hand, radio elasticity of demand is likely to increase as competition from the internet intensifies at a local and national level. This is likely to mean that the uplift from the BBC scaling back will increase in both absolute and proportionate terms. By 2025, with overall radio demand elasticity moving above -2, it could increase the £22m total market impact to £28m and the £38m estimate to £47m a year if the baselines (without any change at the BBC) were still total market £483m and 25 to 44 year old market £410m (i.e. zero market growth). This would represent a significant revenue enhancement. Furthermore, greater levels of internet competition would be likely to reduce the baseline revenue for commercial radio but also increase the elasticity. While this might shrink the absolute level of revenue uplift from the BBC scaling back, it would also increase the size of the uplift relative to the baseline.

However, as DAB penetration grew, one might expect more listening to shift to Radio 6 Music (and on-demand music) rather than being available to commercial radio, this might reduce any level of future increase.

Likely commercial market equilibrium: more segmentation or higher value programming on broader reach networks

With a sizeable and relatively important potential uplift in the revenue for the commercial sector, the remaining vital issue is how the commercial sector might respond to this "windfall", as that will, in turn, determine the net market impact and the consumer experience.

There are three possible scenarios. First, the commercial sector responds like an oligopoly, with each of the main players deciding not to invest most of this windfall and instead most, if not all, of the benefit going to the shareholders in the commercial radio groups – the "oligopoly response" scenario. Second, the commercial sector competes more vigorously for the extra revenue but does so by increased marketing budgets, presenter fees, and possibly the launch of some extra DAB services to further segment and protect its market share, probably reinvesting half the windfall gain in extra services and marketing – the "segmented competition" scenario. Third, they decide to compete, but on the basis of the quality of their programming, recruiting better known and more top level entertainment presenters from the worlds of peak time TV and lead comedy acts across their schedule, and investing in more speech and special features output to help differentiate themselves more from the web offering – the "quality response" scenario.

In the past, with little competition from the web, the first two response scenarios might have been much more likely. But with the very real threat from the web to the volume of radio listening, first to the under 35s and then to the under 45s, the third scenario becomes much more likely as a direction of travel for commercial radio in the UK.

Likely commercial market equilibrium: DAB and other impacts

The impact on DAB uptake would be complex. On the one hand, a shift of BBC listening to BBC Radio 6 Music might boost DAB even while it also led to a shift to the commercial sector. In terms of commercial DAB, if the commercial sector decided to offer greater range on its DAB services these changes could also boost DAB. But if the commercial sector tried to attract BBC listeners through largely its FM offering this might counter any boost to DAB from a move to Radio 6 Music.

The impact on the music sector would depend on how the range of commercial services adapted if a broader mix of DAB services and a slightly more ambitious set of quasi-national network brands would in aggregate mirror the range of output and playlists offered by Radio 1 and Radio 2.

Overall assessment

If Radio 1, Radio 2 and Radio 5 Live moved away from the commercial heartland 25 to 44 audience, it is possible that the commercial radio market would provide a broader range of music output than currently across the aggregate of services and expand its provision of news and sport. It might also invest more in some live music and star TV presenters to persuade previous Radio 1 and Radio 2 listeners to come to commercial radio rather than switch to on-demand consumption or other BBC services. However, in a deregulated environment it would be unlikely to provide the built speech and documentary output currently in Radio 1 and Radio 2, even outside peak hours.

The overall impact on consumer value (and public value) would depend on how listeners overall reacted and probably a shift away from the segmented nature of radio listening. If current 25 to 44 year old Radio 1 and Radio 2 listeners were prepared to obtain the wider music mix they get now from listening to a new wider range of commercial music services plus Radio 6 Music on DAB, while dipping into local and national speech stations for their diet of built speech news and current affairs output, the commercial sector could expand, and consumer value might increase.

Alternative Counterfactuals

At the beginning of this segment a list of options for BBC positioning and portfolio changes was reviewed across Radio 1, Radio 2 and Radio 5 Live. In the end, only a repositioning of all three services away from the 25 to 44 age group audience was assessed. But clearly, other scenarios might also be developed that might increase consumer value, or leave it broadly the same while allowing the commercial sector to expand. These might include putting one or more of the three BBC services on DAB only prior to analogue switch off, both to bolster DAB take up, and increasing commercial radio share of 25 to 44 listening and revenue in the short to medium term. Then when analogue switch off occurred, all three BBC mainstream service positions could be reviewed again in the light of the commercial DAB offering expansion, to ensure maximum choice for DAB listeners and maximum consumer and public value.

5.6.2 The market impact of the BBC's digital portfolio in the next Charter period

This brief MIA reviews whether the BBC's planned balance of investment and focus across DAB – and its development of other audio services such as on-demand audio, podcasting and personalised radio music players – over the next Charter period might have a negative net market impact, and what alternative strategies might improve that situation.

The BBC's Strategy Proposals suggest a significant push into on-demand audio and personalisation, where its main rivals are the global web platforms, but do not envisage a significant increase in DAB investment

The BBC Strategy Proposals contained in its September 2015 "British, Bold and Creative" report and several recent initiatives suggest that the BBC intends to increase its move into streamed on-demand music and audio provision, with services such as the Playlister, Symphinity and the Ideas Service (the last of these being across audio and video). They also suggest that it will bring together some of its more targeted audio services such as Radio 1 with video content to help reach the younger, difficult to engage, audience following the closure of BBC Three.

The BBC proposals suggest that the BBC will develop platforms for use by third-party providers, such as arts institutions, music promoters and labels, and academic institutions, to reach the audience through BBC aggregation services as the linear radio age becomes the non-linear age of discovery and curation.

This is a compelling vision. But it says little about, first, the implications for commercial radio in the UK, which is currently highly reliant on linear broadcasts of recorded music, second, the implications for DAB and full digital switchover, and third, the likely boundaries between licence fee funded provision and commercial content provision on these new on-demand gateways – either BBC commercial provision through BBC Worldwide or third-party commercial provision.

Without a proper migration path on DAB switchover, commercial DAB-only services are unlikely to be profitable and/or high quality

Commercial DAB services are currently a combination of low cost digital-only national services and out of area DAB re-broadcasts of local/regional FM/AM branded stations. Such a portfolio is unlikely to grow commercial radio audience share and revenue while it leaves the services paying for broadcasting in two formats.

Only a renewed push to migrate linear radio listening to DAB is likely to give digital-only commercial stations the reach and scale to fund reasonable programming budgets and reduce commercial radio's need to pay twice for distribution.

Renewed investment by the BBC in its DAB portfolio of services and to extend reach to the last 10 per cent of the UK population could help speed this migration (especially if combined with a more targeted approach from its FM radio networks). It could also help to ensure that commercial radio has a high reach platform where it accounts for the majority of choice, helping to sustain its advertising proposition, so it can compete more effectively in households, increasing their audio consumption via the internet.

A licence funded BBC dominated UK on-demand music and audio proposition may challenge global players, but hinder new UK start-ups and commercial radio's migration into on-demand and might also hinder commercial activity along the supply chain

A BBC platform that covers everything – from programme catch-up through the radio iPlayer to personalised music libraries through Playlister and Symphinity, and access to audio archive through the Ideas Service – might well help challenge Audible, YouTube and Spotify. Doing so might also bring benefits to UK content providers. But it may also hinder other commercially funded on-demand music and audio start-ups, and effectively help content providers disintermediate commercial radio, thus leading to its shrinkage as a rival to the BBC's linear services.

In so far as the BBC activity is provided free of charge as part of the licence fee, great care will have to be taken to ensure that commercial exploitation windows are large enough to encourage new revenue streams for content providers that will help them grow and diversify as businesses.

A BBC led on-demand music and audio platform/aggregator in partnership with commercial radio and digital start-ups, plus a reinvigorated DAB strategy might be most effective in meeting the global challenge ahead

BBC plans are in danger of leaving the BBC as not only in command of the linear radio music market, but as the only serious rival to global challengers in the on-demand market; while UK commercial radio operators face long term decline in the linear radio market and lack scale in the on-demand market.

A BBC strategy that strengthens commercial radio through more rapid migration to DAB and ceding ground to commercial radio in the battle for the FM/AM audience, while developing a fully co-operative on-demand platform with commercial radio players as well as UK content providers, might have the most beneficial market impact.

5.7 The closure of Oneword – a case study

This case study assesses how a commercial radio service aimed at providing output very similar to new BBC DAB services ended up exiting the market – did it fall or was it pushed? It also examines whether a different BBC policy on both the positioning of its service and on archive access might have allowed the service to survive and thrive.

5.7.1 A speech service focused on new and archive spoken word, comedy and kids output

Founded in 2000, Oneword was a spoken word national DAB station originally owned by UBC Media, part of the initial Digital One DAB multiplex. (UBC Media was involved then in independent radio production and operated the AM Gold stations on a revenue share basis with their owner, GCap Media). Oneword was also available on DTV systems and the internet. It had a mixture of comedy and drama archive programming from spoken word CD collections, some children's output, and some discussion programmes. "BBC Radio 4 Lite" might be a good description of the Oneword service.

5.7.2 A request to access BBC archive

In the Gardam Review of the BBC's Digital portfolio in 2004, the issue of BBC7 competition with Oneword was looked at. BBC7's schedule was mostly archive comedy and drama from BBC Radio 4, with some children's output, and was heavily promoted on BBC radio services and BBC TV. As part of the Gardam Review, Oneword's owners made a request to the BBC to license archive programming from the BBC across comedy, drama and popular factual output. The BBC response was that it would only do so if consistent with protecting and promoting the BBC brand. No subsequent archive licensing took place. The BBC also raised concerns about the cost of releasing the archive to third parties, given its agreements with the contributing acting and comedy talent and the writers. (This was despite the fact that the commercial spoken word publisher had a revenue-sharing agreement with the underlying rights holders that allowed for profitable exploitation on DAB.)

BBC Worldwide acquired Chivers plc, the second largest spoken word CD publisher in the UK and a major supplier to Oneword in 2001 (BBC Worldwide was the largest publisher at the time).

5.7.3 The station's demise

In early 2005, Channel 4, which had decided to diversify into radio to promote its remit across different media, as the BBC does, took a minority stake in Oneword, upping its shareholding to 51 per cent later that year, and providing a morning news bulletin from Channel 4 News at 7.30am every weekday morning.[99]

With DAB uptake lagging initial projections, very little revenue, and Oneword's audience share still under 0.1 per cent share,[100] Channel 4 decided to exit and sell the station back to UBC for £1 in December 2007. This move formed part of Channel 4's wider strategic rationalisation due to financial pressures. Oneword then switched to repeats for a few months before closing down.

5.7.4 BBC7's subsequent shift to Radio 4 Extra

In 2010, the BBC Trust recommended changing BBC7 (by this time called BBC Radio 7), with a reduction in children's output and a wider mix of Radio 4 repeat programmes and some new output. In 2011 the station became Radio 4 Extra, topping up its comedy and drama archive output with narrative repeats of recent comedy and drama output, other Radio 4 features programming, and some original output. BBC Radio 4 Extra now has an audience share of 1.2 per cent and is heavily cross-promoted on Radio 4.

5.7.5 Did it fall, or was it pushed?

Two major reasons for Oneword's failure were the slow take-up of DAB and the relatively small audience for such output even if take-up had been higher (as witnessed by the subsequent shift of BBC7 to BBC Radio 4 Extra). Equally, the existence of two services in what was always going to be a niche market, with the BBC service benefiting exclusively from its vast archive of comedy and drama and being cross-promoted across BBC radio, was always going to dominate the segment.

It is not clear whether BBC licensing would have helped the station survive or encouraged Channel 4 to stick with it, or if any earlier review of the BBC7 service might have resulted in a more radical repositioning of Radio 4 Extra, which may have left room for both services. But it does raise issues about the BBC's positioning relative to the commercial market, its protection of its core heartland audience, and its ability to co-operate with the commercial sector to widen choice across the BBC and commercial radio portfolio. Ultimately, the dominant commercial on-demand built speech audio provider in the UK is now Audible – a subsidiary of Amazon Inc.

5.8 Initial conclusions and remaining issues

5.8.1 The prospects for commercial radio in the Digital Age

Commercial radio, while having fought back well over the last 7 years, has a major impending challenge coming from the internet and its streamed radio and on-demand music and speech services – for audiences and advertising. This is likely to affect its under 35 audience initially and then the 35 to 44 audience towards the end of the next BBC Charter period.

While DAB allows commercial radio to broaden its overall offering, it also threatens to further segment its audience and revenue, and to raise its costs, especially if migration to DAB is delayed.

Over the next 5 to 10 years, commercial radio will be likely to be looking to strengthen and differentiate itself against the web if it is to avoid long term decline. Much of its ability to do this will lie within its own actions and resources. But the scope and scale of the BBC – especially in its core 25 to 44 age group market – will also be very important, as will the BBC's willingness to cede any ground in its own heartland audiences.

[99] It is not clear whether Channel 4 cross-promoted the service on its news programme or at other times of the day.
[100] The entire combined audience for all Digital One multiplex services was still only 0.5 per cent share in total.

5.8.2 BBC as insurance or enabler

One view of the future – suggested by the BBC in its strategy documents – is that the threats to commercial radio from the internet increase the obligations on the BBC to cover the whole market with a range of services, to help not just extend range and choice today, but also to insure against further gaps appearing in the commercial offering over the next 10 years as the pressure mounts.

An alternative view is that this is both pre-emptive and self-fulfilling, and that, far from expanding its radio services and moving into on-demand content, the BBC needs to consider (1) ceding more ground to the commercial market in the FM/AM market; (2) speeding the orderly migration to DAB, and (3) co-operating with the commercial market on the development of on-demand platforms.

In return, the commercial market could become more willing to broaden and strengthen its own proposition, rather than simply keep re-segmenting their existing heavily music led proposition in order to respond to the challenges it faces.

The Oneword case study shows what can happen to innovative and differentiated commercial offerings if they come to close to the BBC radio services, and what can happen to such services if the BBC decides not to be cooperative, even if the majority of its problems may have been caused by its marginal commercial prospects with or without the BBC, and by the impact of the web on commercial radio advertising growth rates after 2000.

5.8.3 Net market impact of the BBC

The exact impact of the BBC on the commercial radio sector's revenue and profitability (producer surplus) is hard to pin down without more detailed work on advertising elasticities. The contention is that all BBC current services add more to consumer benefit than is lost through replaced consumer benefits from displaced or smaller commercial services. This premise is based very much on a view of the current commercial radio sector, not on what this sector might look like if the BBC repositioned its services.

In addition, projections that envisage linear commercial radio operators simply passively accepting that they become less and less relevant and viable, and a UK on-demand music and audio response to global players being only one that is led by the licence fee funded BBC, probably underestimate the UK commercial audio market's ability to innovate and respond.

A co-operative solution might prove the most consumer/producer value enhancing route across DAB and on-demand services.

6 Online market impacts

6.1 Main findings

The BBC is a key player – by some measures, the main player – in the UK's online space. Although there is a degree of consensus that it has helped drive the sector to its current world leading position (particularly in the case of online video), the BBC's position as an industry leader also means that it has a large footprint which is bound to have an effect on the commercial sector.

The analysis in this chapter focuses on one specific aspect of this effect: the extent to which consumers may be using BBC online services *at the expense of* commercial services, and how commercial revenues are likely to be affected as a result. We note that is only one of several elements that should be weighed when assessing the BBC's overall impact on the market, especially in the context of conducting public value tests. Other criteria should include the BBC's role in market creation and the value that accrues to consumers and citizens from the BBC's output. However, the analysis in this chapter has not directly considered these issues.

For the specific case of advertising in online news, the analysis presents a "static" comparison between the status quo and hypothetical "output reduction" scenarios, in which the BBC's news output is more limited than today, estimating the likely revenue uplift that could accrue to UK commercial online publishers under each scenario. The use of these counterfactual scenarios does not imply that any of them are either realistic or desirable; it is simply a methodological device that allows us to consider the BBC's market footprint in a definite way. In the context of these scenarios, our analysis shows that the BBC's impact on commercial revenues is likely to depend on a variety of factors, including: (1) the type and scope of the output reduction in question, and how many website page views ("traffic") are affected by this; (2) how much of the affected traffic transfers to the commercial sector; and (3) the ability of the commercial sector to monetise this additional traffic.

The analysis suggests that a reduction in the BBC's output affecting 10 per cent of its current online traffic would be likely to lead to UK commercial revenues increasing by between 0.2 per cent and 1.9 per cent (or between £0.8m and £7.3m per annum, based on existing estimates for UK publishers' 2013 online revenues). Under the extreme assumption of a closure of the BBC's news website, we estimate an uplift in commercial revenues of between 12 per cent and 23 per cent (or between £46m and £89m per annum). However, as our methodology is designed for small changes, it is likely to overestimate the impact under such a radical change. We also stress that our estimates are based on a "static" analysis that might be challenged if commercial providers were to evolve their offering in the future.

We have also considered stakeholders' concerns about a perceived expansion in the editorial scope of the BBC's online news service into "soft news" (or news items of purely entertainment value). We have considered stakeholders' general objections to the BBC producing such content, particularly in connection to news consumption via social media, whereby audiences may dip in and out of news websites to read articles in isolation. In those contexts, we have found that audiences are unlikely to consume additional content (in particular, public service content), suggesting that little or no public value may be delivered. On a related note, some stakeholders have suggested that the BBC's arrangements with social media providers (particularly in connection to the syndication of content) may have an adverse effect on commercial publishers' ability to negotiate commercial terms with such providers or other intermediaries. While we have not examined this issue in our report, we consider that it may be important in future as mediated consumption of news continues to grow and becomes an increasingly large source of traffic for commercial publishers.

Nonetheless, at least on the specific point of consumption of soft news on the BBC's website (including consumption mediated by links in social media), the evidence suggests that the *scale* of this issue is relatively small. Depending on questions of judgement on the exact definition of soft news, as well as on assumptions about the prevalence of this type of content, the proportion of affected traffic can vary significantly. For example, the sections of the BBC News website where soft news might be more commonly expected to reside (the Magazine, Entertainment & Arts and Newsbeat sections) account for only around 5 per cent of all BBC news traffic.[101] Our analysis suggests that even the outright removal of these sections would have an impact of only between 0.4 per cent and 0.9 per cent on commercial revenues, or between £1.3m and £3.4m per annum.

If the definition of soft news were extended to capture some of the content residing in other sections of the BBC News website, the proportion of news traffic affected if such content were removed could potentially rise to around 13 per cent.[102] This could have an impact of between 0.8 per cent and 2.1 per cent on commercial revenues, or between £3.2m and £8.2m per annum. The impact could be higher if the definition of soft news were extended further to include some non-news BBC online content. In any case, we stress that these are indicative estimates as they involve indicative assumptions about the proportion of traffic that could be categorised as soft news.

With respect to international advertising in online news, our analysis suggests that the BBC's impact on UK commercial publishers may be far smaller than the case of UK advertising in online news. However, this conclusion relies on assumptions about the market in which the BBC's international news website operates, particularly in relation to who its main competitors in that market. If, as we have assumed, the BBC primarily competes against the world's main English language global news players (e.g. CNN, MSNBC, Yahoo, US and UK newspapers), the impact on UK publishers is likely to be small. However, if international audiences see other UK services (particularly *The Guardian* and *Mail Online*) as close substitutes for the BBC, the impact might be more comparable to what we find in the case of UK audiences. We have not had access to data that might allow us to ascertain which of these scenarios applies.

We have also considered the BBC's likely impact on publishers' ability to raise revenues through paywalls. Our analysis suggests that a degree of demand substitution may be present, so that, in the absence of the BBC, paywall revenues would be likely to be higher than they are today. However, the evidence here is too limited to allow for quantitative estimations. On the other hand, if the BBC were to simply offer a (marginally) reduced choice of news content, our analysis suggests that this would have virtually no impact on paywall revenues.

Finally, in the case of online video, our analysis suggests that the iPlayer is likely to have played a pivotal role in establishing the UK VoD industry as a European leader. Nonetheless, our analysis also suggests that, today, consumers' use of commercial players' VoD services might be higher if the iPlayer were not in the market, possibly by as much as around 30 per cent. Estimating the degree to which this would translate into additional revenues has not formed part of this report.

None of the above appears particularly surprising given the scale of the audiences of the BBC's online operations. We have not found clear evidence that the effect we have considered – i.e. demand substitution – has prevented market entry or forced market exit, at least not in the markets we have examined more closely (national online news and online video). However, we do review in this report cases in which the BBC Trust has intervened to prevent such an effect. In any case, as noted, demand substitution is only one of several elements that should be weighed when assessing the BBC's overall impact on the market. Other criteria should include the BBC's role in market creation and the impact on consumers and citizens.

Considering the future, we make two suggestions. First, we consider that there is scope for the BBC to explore a more radical approach to aggregating other news publishers' content, relying on links to other publishers for content that audiences might not necessarily associate with the BBC. This would address the concerns raised about soft news – particularly in connection to news consumption mediated by social media – while the BBC would continue providing a "balanced news diet" to its regular visitors.

Second, the BBC's current focus on reach as a measure of performance, which may be adequate in broadcast media, is blind to key aspects of audience behaviour that influence public value and commercial impact. There is potentially a large difference in "public value" delivered in the case of an

[101] These sections currently account for around 7 per cent of the page views measured within the BBC's news website. However, for the purposes of our analysis, we have also considered some of the BBC online traffic residing outside the BBC news website as part of the BBC's provision of online news, in order to facilitate comparison with the commercial sector. On this wider basis, the proportion of page views corresponding to these sections amounts to 5 per cent. For details see section 6.7.6.
[102] After re-scaling; see previous footnote.

online visitor whose only contact with the BBC over a month is to read a few soft news articles after following links in social media, and another who regularly skims the news front page for the day's news. Nevertheless, today both cases count equally towards the BBC's reach. In this regard, we consider there is scope for more nuanced measures of reach to be developed – for example, by tracking the number of times when audiences were offered different types of content, as well as the times when audiences "clicked" on the relevant links. Such "conversion" metrics are widely used in the commercial online world.

6.2 Introduction and overview

By multiple metrics, the UK boasts one of the world's most developed online sectors. Although the BBC has certainly played a key role in this, the story of the UK's online sector is also one of commercial success; for example, the UK's expenditure in online advertising and ecommerce are among the highest in the world. Nonetheless, the BBC's large scale and significant market share in some areas have historically led to concerns about its market impact.

The growth of the internet and the transition to digital have proved challenging for media players across the developed world, including in countries, such as the USA, without a strong public intervention comparable to the BBC. But the existence of these wider challenges does not mean that the BBC's presence does not have adverse effects on UK commercial players, or that these are comparatively minor. What it does mean is that untangling the BBC's impact – particularly its potentially negative gross impact – is challenging.

6.2.1 Purpose and scope

The purpose of this chapter is to consider the BBC's impact on the UK's online sector in terms of its nature and scale, in the context of a complex and fast changing industry. Given the vastness of the terrain, for practical reasons our approach is limited in several ways: it is mainly qualitative rather than quantitative (although for certain scenarios we provide order of magnitude estimates); its focus is limited to online news and (to a lesser extent) online video; and it centres on the issues raised in responses to DCMS's current Green Paper.

In line with the rest of the report, for reasons of scope and time, we focus here on the BBC's gross market impact. More specifically, on the key question of advertising revenues, we focus only on the potential revenue uplift that a reduction in BBC output might have on the commercial sector, and do not fully cover other potentially positive aspects of market impact, such as the market expanding role that the BBC may play (with the exception of iPlayer).

More broadly, we do not consider the important question of the value that the BBC generates for consumers and citizens. Although considerations of public value are not completely absent from this chapter, a full consideration of this topic is outside the scope of the chapter. However, public value is the "other side of the coin", against which any finding of gross adverse impact on the industry should be considered, and this chapter should be read in that context.

6.2.2 Approach

The analysis in this section is based on a qualitative understanding of the online industry and its dynamics, and a stylised quantitative model of the impact on news providers' online advertising revenues. These are set out in sections 6.3, 6.4, 6.6.1 and in the Annex in chapter 9, as well as the factual evidence set out in section 6.2. In turn, in developing our understanding, we have relied on a review of relevant literature (including confidential submissions to the current Green Paper); discussions with policy representatives at two news publishers and the BBC, as well as five industry experts; and our own experience.

6.2.3 Structure of this section

In section 6.3 we consider the UK's online market and the BBC's role within it, relying on publicly available information and data kindly provided by the BBC, commercial publishers and comScore. With the essential factual basis in place, in section 6.4 we provide a brief strategic discussion of competitive dynamics in the markets in focus, building an essential framework for our later analysis.

In section 6.5 we review the policy debates. Starting with a rundown of previous policy and regulatory reviews (with details provided in the Annex in chapter 9, we then turn to the issues being discussed in the context of the current Green Paper, drawing on a review of stakeholder submissions, as well as discussions with selected stakeholders and experts held during the preparation of this report. We conclude by highlighting key gaps in the evidence provided, as a guide for our own assessment in the rest of this chapter.

With this context in place, we turn to our own assessment of the BBC's market impact today. We start by assessing the scale of the BBC's overall impact on the online news industry (section 6.6.1 covering advertising revenues and section 6.6.2 addressing paywalls). We then examine two specific issues raised by stakeholders: the BBC's news presence overseas (section 6.7) and its perceived provision of soft news (section 6.7.4). Finally we discuss the BBC's impact on online video (section 6.8).

Section 6.9 concludes with a discussion of certain topics that cut across this section. First, stakeholders have questioned whether the BBC should, at least to an extent, relate to other publishers as an aggregator of their content. This question is highly relevant in the light of our discussion. The conclusion section discusses what this might mean in terms not only of market impact but also public value. We also consider the question of the BBC's public value more generally – one that, for reasons of scope, we do *not* address directly in this report, but whose role needs to be clear since any finding of adverse market impact needs to be weighed against the public benefits involved.

As will be seen later in this chapter, one of the key contributions to the debate on online news was by O&O itself, on behalf of the NMA.[103] **To avoid any perceived or actual conflicts of interest, the development of the present chapter has been the responsibility of Oxera alone – not O&O – and the views presented here may not necessarily reflect those of O&O.**

6.3 Market context

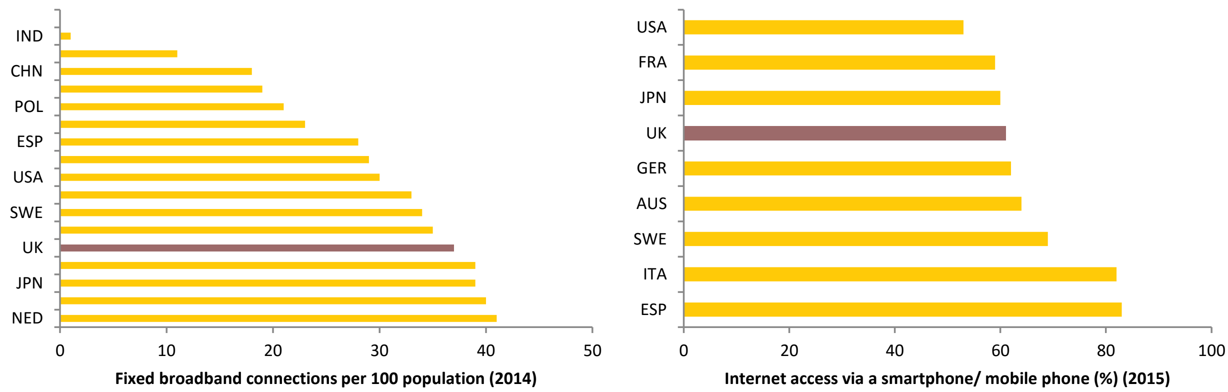
In what follows we discuss the UK's online market overall and then the specific cases of online news and online video. In each case we start with an overall view of the market and then turn to the BBC and its role in the ecosystem.

6.3.1 The UK's online market

6.3.1.1 General view

By multiple measures, the UK today is one of the world's internet leaders. By 2015, 85 per cent of UK consumers had access to the internet,[104] and take-up of both fixed and mobile internet was among the highest in the developed world (see Figure 40). Consumers in the UK with fixed online access spend over 33 hours online per month, more than their counterparts in most key comparable countries.[105]

Figure 40: Internet take-up in selected countries[106]

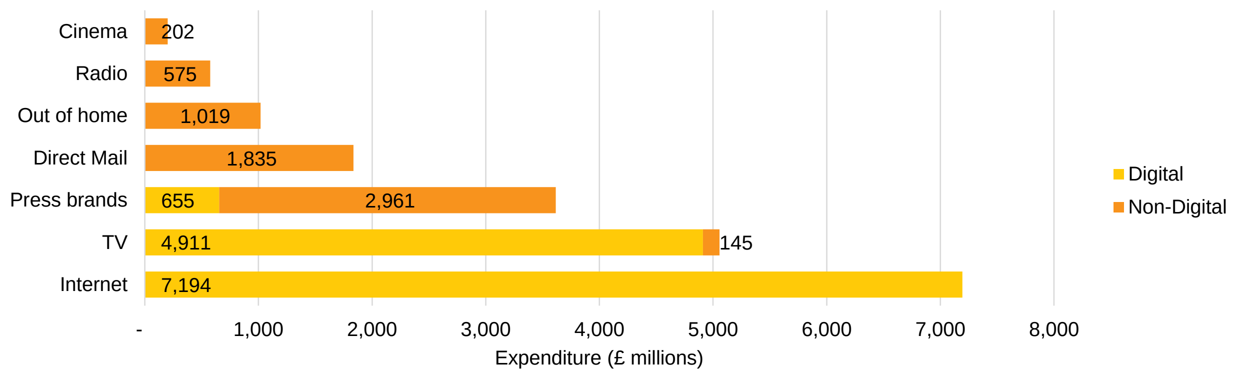


Source: Ofcom

[103] Oliver and Ohlbaum Associates (2015b).
[104] See Ofcom (2015d).
[105] Includes only desktop and laptop computers. Additionally, UK smartphone users spend around 66 hours per month. See Ofcom (2015g).
[106] Source: Ofcom (2015g).

This high degree of consumer activity has led to strong revenues among online players in key categories as well. For example, UK per capita ecommerce revenues are among the highest in the world, at £1,591 per year per head.[107] Of more direct relevance to this study, overall internet advertising accounted for 43 per cent of all advertising revenues, a proportion higher than that reported for key comparator countries including the USA,[108] and higher than that for any other media in the UK (see Figure 41).

Figure 41: UK advertising expenditure, 2014[109]



Source: Ofcom

6.3.1.2 The BBC's services

In the 19 years since it launched its first website in 1997, the BBC's online presence has grown into one of the UK's largest offerings and a key global source for online news. Taken as a whole, the BBC's collection of websites at bbc.co.uk is considered by the BBC as a "service", named "BBC Online", on a par with TV and radio services such as BBC One, Two, CBBC, Radios 1 to 4, etc. By 2012, BBC Online had achieved a weekly reach of 22.4m adults (or 46 per cent of the UK population and around 57 per cent of online adults, vs a target of 65 per cent of online adults), making it the BBC's third most popular service behind BBC One and Two.[110] By 2014 to 2015, it was reaching 50.2 per cent of all UK adults.[111]

In terms of expenditure, the BBC spends around 5 per cent of its licence fee income (£201m in 2014 to 2015, up from £174m in 2013 to 2014[112]) on BBC Online. This is small compared to UK online advertising revenues of around £7.2bn pa (or £3.4bn excluding search advertising[113]), although this is not a like-for-like comparison (as in the BBC's case this figure is not revenues but rather the cost of running an online service).

The BBC's online portfolio spans 10 "products": News, Sport, Weather, Homepage, Search, Knowledge & Learning (covering formal and informal learning-related content, such as food-related content), TV & iPlayer, Radio & Music, CBeebies and CBBC. Products vary widely in their popularity, from the highly popular iPlayer, news and sport services, to offerings targeted at children and other less widely used offerings within the "Knowledge & Learning" proposition. This structure reflects a rationalisation of the BBC's proposition carried out in 2011 following a strategy review partly in response to financial pressures and partly against a background of industry concerns about the BBC's role in the market.[114]

In 2007, the BBC Trust approved the BBC's plans to launch its bbc.com proposition.[115] Since then, nearly all of the BBC's English language online presence is actively exploited commercially. By relying on "geo-IP" technology, overseas visitors to any part of the BBC website are shown a different proposition in

---

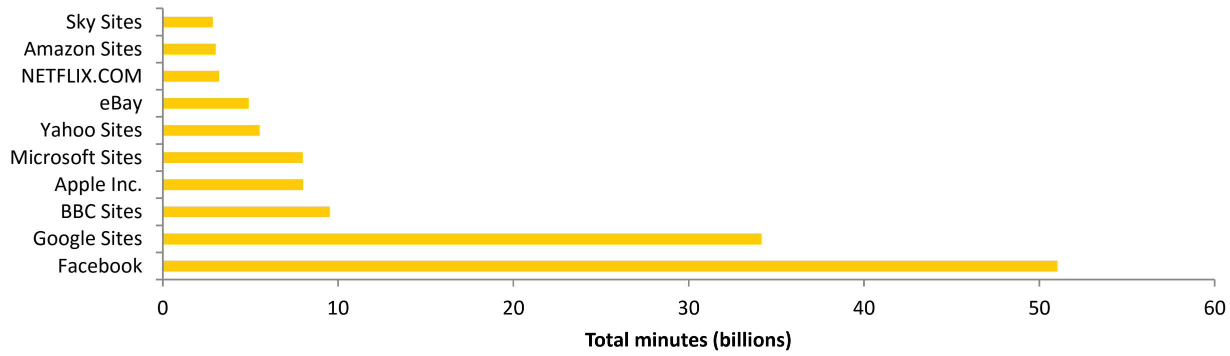
[107] Compared with £918 for the USA, £746 for Sweden, £714 for France and £698 for Germany. Ofcom (2015g).
[108] Other key countries with lower figures include France, Germany, the Netherlands, Sweden and Austria and South Korea. See Ofcom (2015g), p. 277.
[109] Source: Ofcom (2015g).
[110] Source: BBC Trust (2013), p. 76.
[111] Source: Source: BBC (2015a).
[112] BBC (2015b).
[113] Based on Ofcom (2015g).
[114] Source: BBC Trust (2011b).
[115] BBC (2007a).

which advertising is shown, different content is promoted and certain UK targeted content is unavailable. (For example, partly because of rights, overseas visitors to iPlayer cannot view UK TV content.) The BBC's internal arrangements for managing this involve its commercial division, BBC Worldwide, being required to pay market rates for the right to license the BBC's content for the purposes of commercial exploitation, under a regime overseen by the BBC's Fair Trading compliance unit.[116]

6.3.1.3 The BBC's services in the context of the wider market

BBC Online is the third most used online service in the UK, significantly behind Facebook (at no. 1) and Google (at 2), but far ahead of the next UK based service, Sky (at 10). Two of the BBC's most popular online products play prominent roles in the wider UK online ecosystem: the news service is the most popular online news service in the UK,[117] and iPlayer is the UK's most popular[118] VoD service (excluding YouTube).[119] It should thus not be surprising that the majority of online related comments in Green Paper responses revolved around these services, and they are therefore be our focus in the rest of this section.

Figure 42: Top ten properties among digital audiences, by time spent[120]



Source: Ofcom / Comscore

6.3.2 Online news

6.3.2.1 General view

As Figure 41 shows, online news accounts for only a relatively small part of online advertising revenues (of the order of 10 per cent) *and* of press brands' overall advertising revenues (of the order of 20 per cent). The £655m per annum in Figure 36 refers to "press brand'" revenues, which includes magazines. A more conservative figure, provided in a 2014 report,[121] estimates the 2014 digital news revenues of the UK's main newspapers (£285m pa), broadcasters (£12m pa) and new digital only players (£90m pa), giving a total of £387m. Advertising accounts for the vast majority of UK online news revenues, with paywalls estimated to account for only another £90m pa.[122]

In terms of consumer adoption, the internet has quickly grown into one of consumers' main news sources: 41 per cent of UK adults claim to use the internet for news, more than radio (32 per cent) and newspapers (31 per cent), but significantly less than television (67 per cent).[123] Notably, the situation is markedly different for younger consumers: among those aged 16 to 24, the internet is the most popular

---

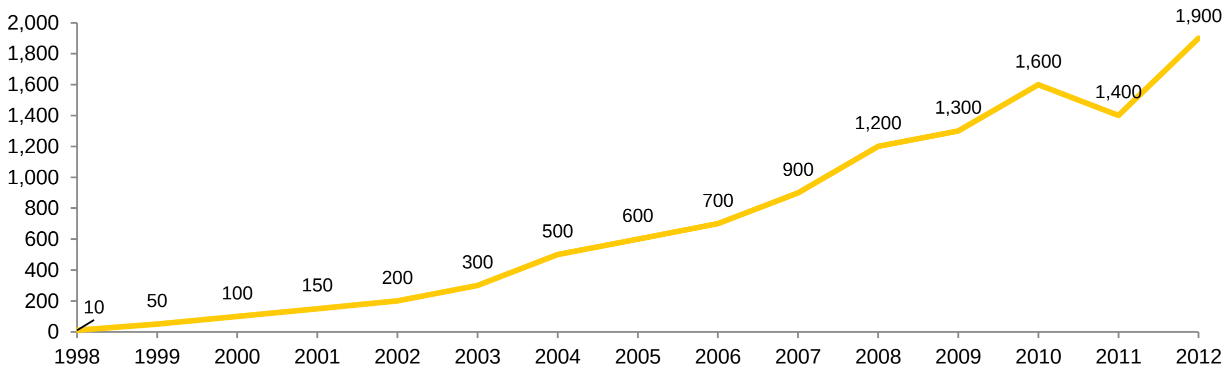
[116] For details, see http://www.bbc.co.uk/bbctrust/our_work/commercial/bbc_com.html. In 2014 the BBC Trust reviewed the framework behind the BBC's relationship to its commercial services; for more on this, see http://www.bbc.co.uk/bbctrust/our_work/commercial/commercial_framework
[117] Over 27m unique browsers in the UK went to BBC News online each week in the first three months of 2015. Source: BBC (2015b).
[118] In 2014, 31 per cent of internet users had accessed BBC iPlayer in the previous 12 months. Ofcom (2015d).
[119] BBC (2015b).
[120] Source: comScore, quoted in Ofcom (2015d).
[121] Source: Mediatique (2014b).
[122] Source: Mediatique (2014b). 2013 figures. Paywall figures exclude the Financial Times. Digital advertising revenues to "press brands" account for around 8 per cent of the total digital spend in Figure 41; however, this excludes the online advertising revenues linked to news content published by publishers other than the press and magazines (press brands). Mediatique estimated that newspapers account for around 74 per cent of online news revenues.
[123] Source: Ofcom (2015f).

source for news, with 60 per cent claiming to use it vs 51 per cent using TV, 21 per cent using newspapers and 23 per cent using radio.

6.3.2.2 The BBC's services

The BBC News website was launched in November 1997, building on the BBC's experience running a dedicated online service covering that year's General Election (the BBC's general website, bbc.co.uk, of which news became a component, launched soon thereafter). The service was launched at a time when there were fewer than 8m people online in the UK.[124] Usage of the website (at the time known as "News Online") then grew rapidly; as shown in Figure 43, by 2012 it was serving around 1.9bn page views per month, or over 60m per day,[125] and by 2013 it accounted for over a quarter of all time spent on online news in the UK (followed by 16 per cent of time spent on the Mail Online[126]). By 2015 it was being visited by 28m monthly unique visitors, or 59 per cent of the total digital population, more than any other UK news website.[127]

Figure 43: Average monthly page views (million) to BBC news website, 1998 to 2012[128]



Source: BBC

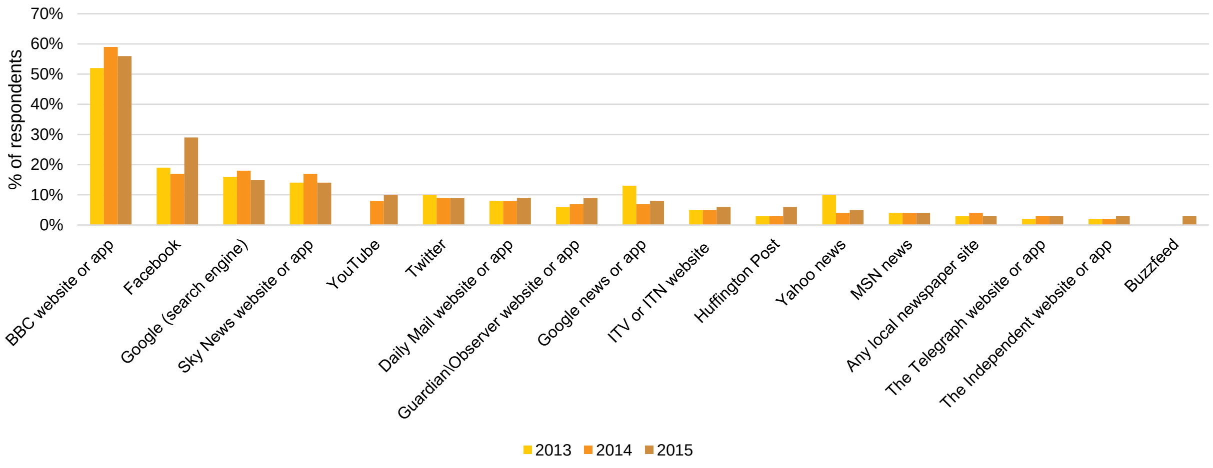
In terms of expenditure, in 2014 to 2015 the BBC reported spending £60.7m on online news, sport and weather (vs £47.8m for 2013 to 2014).[129] By comparison, a 2014 report commissioned by Ofcom put industry expenditure for 2013 at £210,[130] so that the BBC would account for around 29 per cent of all expenditure in that year (as we will see below, roughly in line with its share of usage).

6.3.2.3 The BBC's services in the context of the wider market

The BBC's competitor set in online news includes other broadcasters (mainly Sky News and ITV/ITN), national and local press (of which Mail online and Guardian online are the most heavily used sites), online-only players such as Buzzfeed and HuffPost, online portals that syndicate news provided by newswires and other publishers (e.g. Yahoo News), and digital intermediaries that link to publisher websites (e.g. Facebook, Google News, NewsNow). Although not all of these services may classify as publications in a traditional sense, they are seen by consumers as sources of news. This is reflected by responses to an Ofcom-commissioned survey[131] for which respondents were asked what their main online sources for news was, as shown in Figure 44.

[124] BBC (2012a).
[125] The 2010 spike in monthly page views can be attributed to the 2010 General Election.
[126] Mediatique (2014b).
[127] Unique visitors to the Daily Mail and the Guardian's website were 25m and 21m respectively. Ofcom (2015c).
[128] BBC (2012a).
[129] Source: BBC Annual Accounts 2014-15.
[130] Mediatique (2014a).
[131] Source: Ofcom (2015f).

Figure 44: Self-reported use of news websites or apps



Source: Ofcom

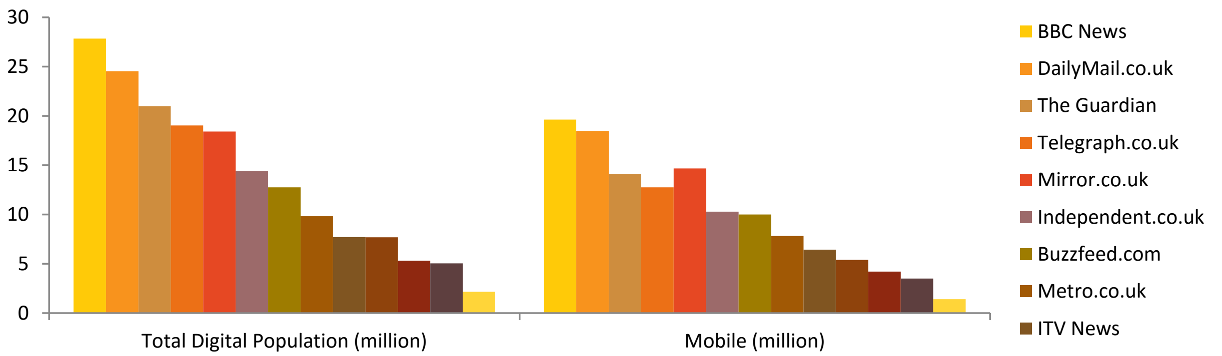
Apart from the prominence of the BBC's service, we note in Figure 44 that the proportion of respondents listing Facebook as one of their news sources has grown significantly between 2014 and 2015, making it the second most popular source after the BBC. The role of social media as a discovery mechanism for news will be explored at various points in this section.

Because the survey results in Figure 44 have been widely cited in the current debate concerning the BBC's market impact, it is important to clarify what these do and do not mean. We make three points: (a) consumers' responses about websites used do not reflect websites' actual reach; (b) neither consumers' responses nor actual reach reflect market shares; however, (c) separately sourced data does show that the BBC has a commanding market share.

(a) The measures in Figure 44 do not reflect websites' reach

Figure 44 reflects consumers' self-reported preferences about services they turn to in search of news, and not necessarily all the sites that they actually use. (The survey question was: "Thinking specifically about the internet, which of the following do you use for news nowadays?") In particular, self-reported preferences are likely to omit sites visited occasionally, incidentally or even without being aware of which news provider is being used. Such behaviours are common, for example when following links to news articles mentioned in social media or emails, or listed in search engines. Indeed, 28 per cent of respondents in the same survey claimed that following links in social media is one of their most common ways of reading news, and as we see below such "mediated" traffic accounts for the majority of visits to some news websites. For a view of actual behaviour, Figure 45 below shows the number of "unique browsers" visiting a selection of the UK's main news websites over a month (March 2015), as measured by technical means. As can be seen, the BBC still leads, but by a smaller margin:

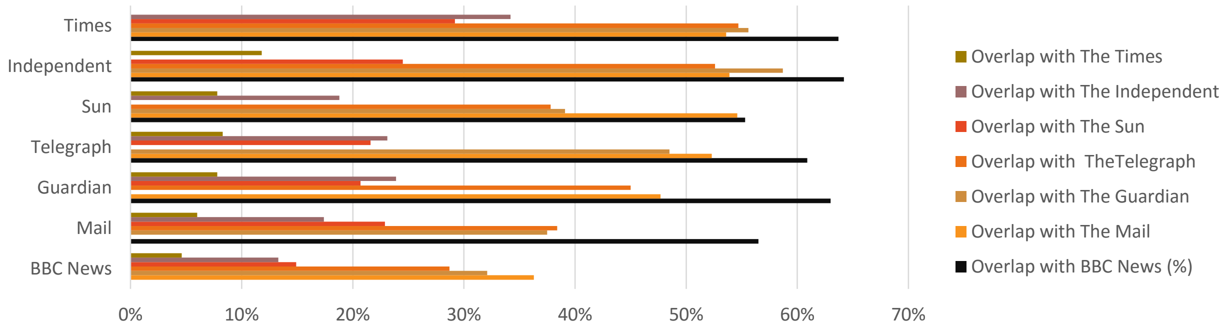
Figure 45: Measured unique-browser reach for selected news services, 2015[132]



(b) Neither the evidence in Figure 44 nor that in Figure 45 reflects market shares

Given that audience may – and typically do – visit multiple news websites, reach figures do not necessarily reflect market shares. Indeed, respondents to the same survey mentioned above reported relying on 2.1 online news sources on average. Moreover, actual behaviour is likely to differ substantially from this if incidental visits are included; indeed, a study relying on technical monitoring of users' online behaviour found that, by Q4 2013, audiences were relying on average on 5.1 news sources, with the number increasing steadily each year.[133] Thus, the evidence in Figure 44 or Figure 45 could be interpreted as reflecting only that the BBC's service is the one that most consumers have in common among their preferred news sources – not that it is the one most frequently used. This view is supported (but not proven) by Figure 46, which shows that, among visitors to each of the main news publishers' websites, the BBC is the other website most frequently also visited. On a similar note, in its submission the BBC notes that "75 per cent of those who use BBC Online in a month also visit one of the other top 20 news and information sites." (However, note that this includes non-news BBC visitors.)

Figure 46: Proportion of news websites' audience who also visit other websites, 2012[134]



Source: Ofcom

(c) Nonetheless, the BBC does have a commanding market share

For a more meaningful sense of market share, we must turn to measures that, when added up, combine to 100 per cent. Three possible candidates include the BBC's proportion of:

- **visits**: times that consumers visit a news website;
- **time spent**: time spent by consumers visiting news websites;
- **page views**: web pages viewed by consumers (which in this report we also refer to as online "**traffic**").

[132] Source: comScore MMX-MP and MoMX, UK, March 2015. MMX Multi-Platform includes laptop/desktop browsing, laptop/desktop video streams and mobile use. Mobile includes Android smartphones and iOS smartphones and tablets. Quoted in Ofcom (2015d).
[133] Desktop use only. Source: comScore and BBC, quoted in Mediatique (2014a).
[134] Source: Ofcom (2012b).

Among these, we choose to focus primarily on page views,[135] since this is one of the main determinants of online advertising revenues. Below we discuss the link between page views and advertising revenues in (in Box 1), after which we discuss the BBC's share of page views, first domestically and then internationally.

Box 1: Online advertising – key aspects

Certain aspects of how online advertising is bought and sold play an important role in this section.

First, online advertising is almost invariably sold in a geographically targeted way so that advertisers separately buy impressions by UK and overseas audiences (and at different prices). As a result, **advertising targeted at UK audiences is a separate market from advertising targeted at overseas audiences** even if the sellers are the same publishers (and even if the buyers are sometimes the same brands).

Second, online advertising is typically bought and sold according to cost per thousand impressions (CPM, in which "M" denotes the Roman numeral for one thousand) or cost per click (CPC). That is, publishers are remunerated each time a user views an advertisement and/or responds to it, and this is proportional to the number of pages viewed as well as the number of advertisements shown on each page. (Thus, in general, visitors who read several articles generate correspondingly more revenue than those who read a single article.) As a result, advertising **revenue is driven mainly by page views**. However, the link between traffic and revenues is not straightforward, partly for the following reasons.

- Publishers typically sell ad impressions ("inventory") through multiple channels, each of which has different characteristics and unit prices. At the high end, "direct" sales (typically around one-third of all inventory) involve media buyers directly dealing with a publisher's sales force and negotiating a price. At the low end, "bulk" inventory is sold via intermediaries in such a way that advertisers have minimal or no control over which websites will show their ads. In between these two extremes, "programmatic" sales comprises a wide variety of technology-mediated channels, where buyers have varying degrees of knowledge and choice over (1) the content next to which their ads will appear ("context"); and (2) the audience segments to whom advertisements will be shown.

- Industry experts we have interviewed[136] for this study have reported a rapid growth in recent years in the use of programmatic sales. A key feature of programmatic channels is that advertisers are able to target specific audience segments or even specific individuals across multiple websites, relying on detailed (although not necessarily "personally identifiable") data about each audience member to whom ads are shown. As this becomes prevalent, advertisers become increasingly able to "buy an audience" without having to "buy a context" (e.g. the right to show ads on a specific website) as a proxy for reaching a target audience. Although it is expected that there will always be advertisers wishing for their ads to appear on specific websites, our interviews suggest that this is quickly becoming less important (our discussions suggest that today both criteria are roughly equally important.) As a result, news is likely to become less differentiated as a category for ad buyers, and its prices more subject to market-wide fluctuations.

Notwithstanding these and other possible observations, the key point remains that advertising revenues are primarily driven by page views.[137] Accordingly, in the context of the BBC's impact on the advertising market, a key question to explore is how the BBC impacts on publishers' traffic, which in turn calls for an understanding of the BBC's own share of page views. However, how a change in BBC traffic would affect commercial traffic and revenues is not straightforward, as we discuss later.

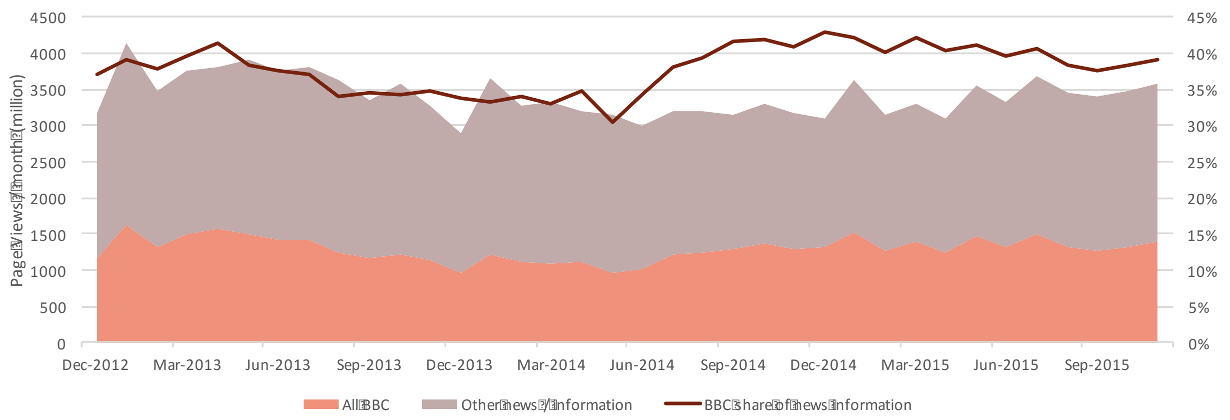
---

[135] With respect to time spent, the BBC's submission claims that the BBC's share of time is 30 per cent.
[136] These include a senior executive at a buying agency, revenue manager at online publishers, and two industry analysts
[137] Some of the factors that, for the sake of simplicity, we have not included in our analysis are: (1) not distinguishing between CPM, CPC and other performance linked rates; (2) not distinguishing between different audience segments, which may have different price levels; and (3) not considering other types of sales, such as "run-of-site" sales, whereby ads are shown to all visitors to a website, a section within a website, or a specific page within a website, sometimes irrespective of how many impressions this involves. However, our industry interviews suggest that it is rare for these not to be priced on a CPM basis; moreover, even under fixed fee sales (for example, sometimes when online ads are sold together with print ads), it is possible to consider the effective CPM implied by the fee used.

The BBC's share of UK audiences' page views among news websites

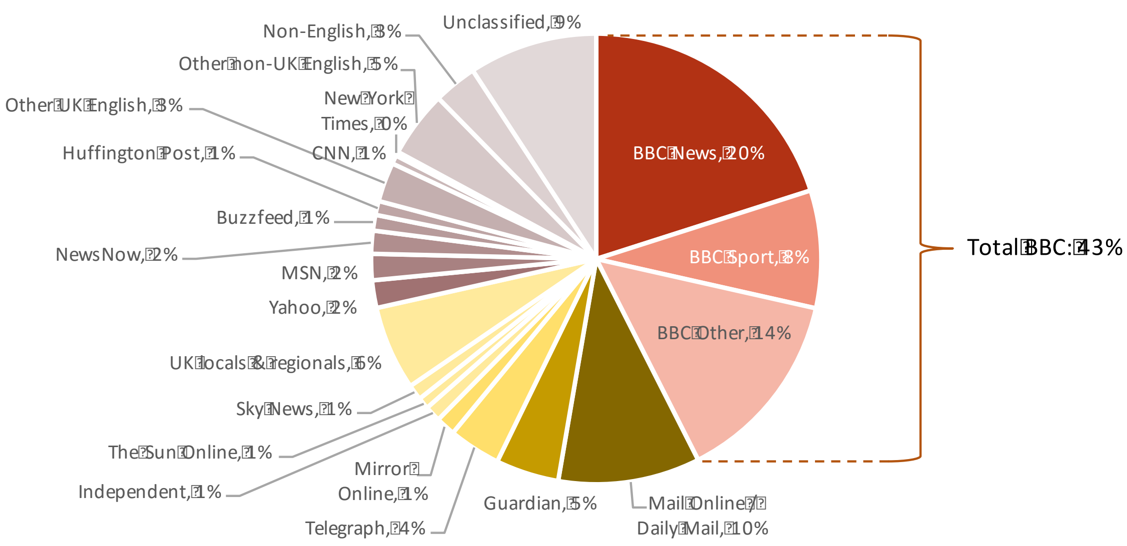
Figure 47, based on comScore data kindly supplied by the BBC, shows BBC page views in the context of all those views to websites in comScore's "News/Information" category over 2013 to 2015:

Figure 47: Historical evolution of BBC page views, 2013 to 2015[138]



As can be seen, the BBC has consistently accounted for around 35 to 40 per cent of relevant page views to news websites by UK consumers. However, this share refers to *all* the BBC's web sites (including iPlayer, for example), not only the news website. Further clarity on this point can be gleaned from Figure 48, which shows the main traffic sources for 2015, separating traffic to BBC news from other traffic.

Figure 48: Key players' share of UK page views to news/information websites, 2015[139]



The fact that much of the BBC's traffic is not to its news website suggests that the BBC's share of news traffic is less than the 43 per cent in Figure 48. However, exactly what share of news traffic should be attributed to the BBC is a technically complex question, since at least some of the BBC's non-news traffic

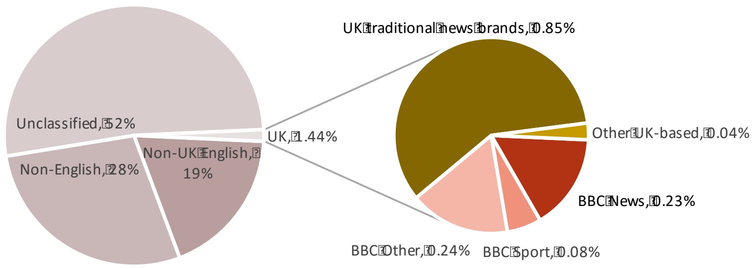
[138] Source: comScore MMX, Dec 2012 to Nov 2015, [P] BBC Sites, Page Views. Figures include only PC/desktop usage and exclude smartphones, tablets and apps.
[139] Based on analysis of BBC/comScore data of page views over 12 months up to November 2015. Shares represent proportion of page views among all websites in comScore's "News/Information" category. Based on analysis of the 100 top websites by traffic; traffic from other websites is listed as "Unclassified". Includes only desktop usage (excludes smartphones and tablets). Categories labelled "Other UK English", "Other Non-UK English" and "Non-English" reflect Oxera classifications of websites.

(e.g. sport news coverage) is comparable to traffic also measured for other websites in the same category.[140] As a practical solution, for the purposes of the modelling exercise that we discuss later in this chapter, we have opted to include one-half of the non-news traffic. This yields a total share of traffic of 31 per cent (= 20 per cent + 4 per cent + 7 per cent). This is only an assumption and actual share of traffic may be higher or lower.

The BBC's share of overseas audiences' page views among news websites

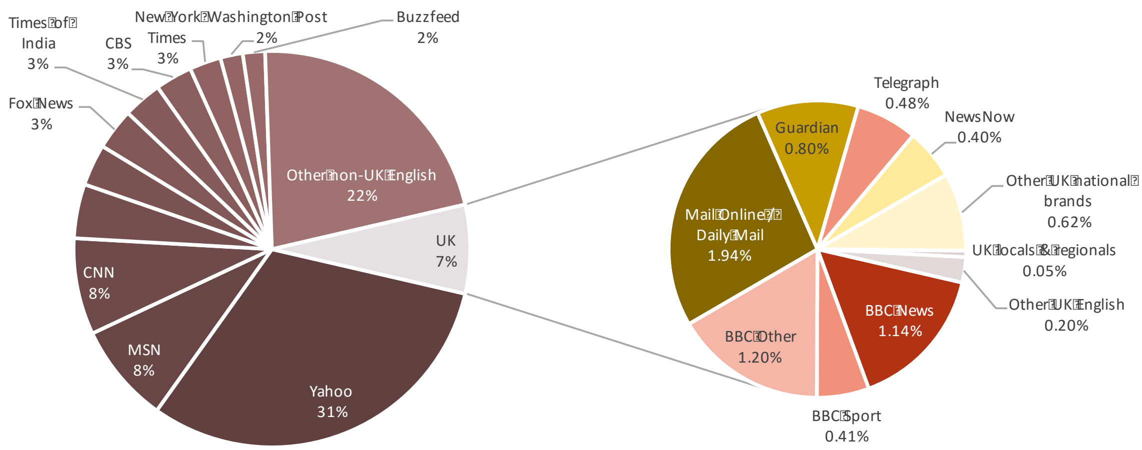
The case of traffic originated by audiences based outside the UK is more complex due to the relatively minor role played by UK based players in global consumption of English language online news, as well as the large role played by non-English language services. This is shown in Figure 49, which summarises pave views to news websites by audiences based outside the UK:

Figure 49: Overseas page views to news websites, by category, 2015 (high level)[141]



If we only consider traffic to English language websites, it is possible to compare key UK players to some of their foreign counterparts. Figure 50 below shows individual traffic shares among the most popular English language news websites.

Figure 50: Key players' share of page views to most popular English language news services, 2015[142]



---

[140] On the one hand, counting only page views to the BBC News website is likely to understate the BBC's share of news traffic. This is because much of the traffic to other parts of the BBC's website may be due to visitors looking for news (e.g. the front page of bbc.co.uk), or may involve content (e.g. sport news) that would normally be classified as news. On the other hand, counting all the BBC's traffic would overstate its share of news traffic. This is because it would include BBC services whose relevant industry peers (e.g. ITV player for online video, ESPN for sport) are not included in comScore's "News/Information" category.

[141] Source: Oxera analysis of BBC/comScore data. Categories reflect Oxera's own classification of websites. Figures represent overseas, rather than global, page views (i.e. they exclude UK audiences), as estimated by Oxera analysis comparing global and UK originated page views for different websites.

[142] Source: Oxera analysis of BBC/comScore data. Figures represent share of traffic among English language websites within the top 100 news/information websites (in any language) with highest global traffic as listed by comScore.

We note that the BBC's share of traffic (even if all BBC sites are included, at 2.8 per cent of the largest English language sites) is significantly smaller than that of other global players such as Yahoo, MSN or CNN. Finally, we note that the BBC's overseas share among UK based websites (at 38 per cent, not shown above) is similar to its share domestically (at 43 per cent, Figure 48).

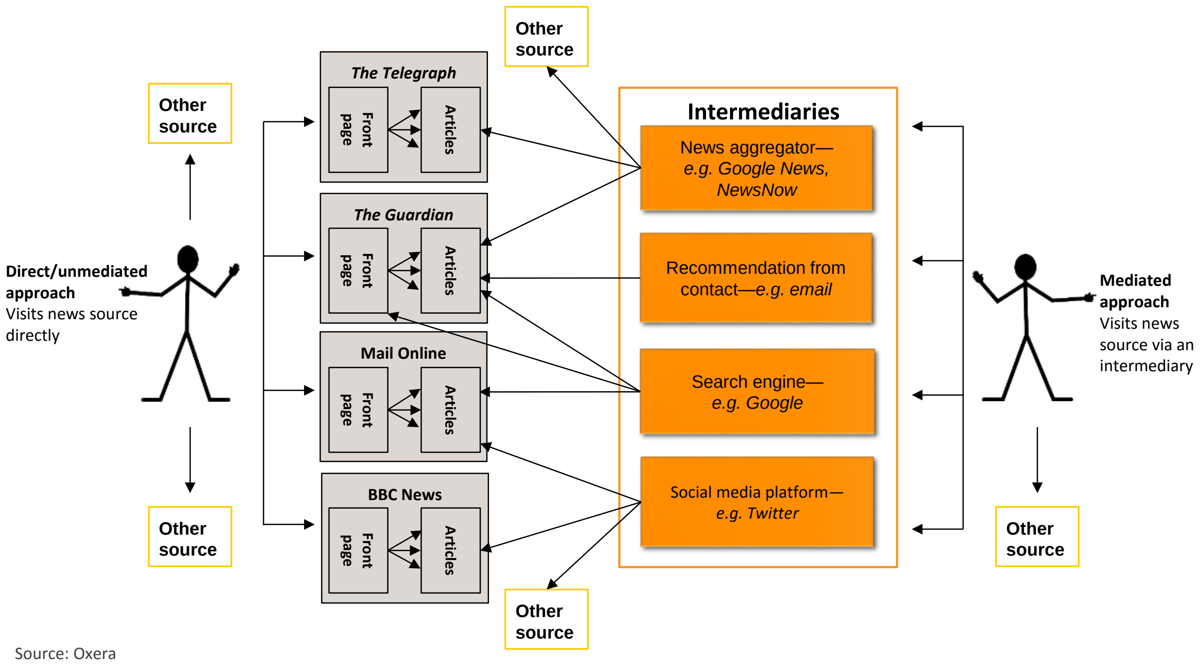
6.3.2.4 Content discovery

Finally, we discuss the ways in which audiences discover news, an issue that will play an important role in our analysis in section 6.4 and beyond. For reasons that will become clear there, for our purposes it is important to distinguish between:

- **unmediated content discovery:** consumers whose visits to a news website start by the site's front page, after which they may browse the day's news and click on a few articles to read; and
- **mediated content discovery:** cases where a consumer follows a link to a specific news article found on a search engine, a social network, an email or another third-party site.

The difference is illustrated in Figure 51 below.

Figure 51: Discovery mechanisms for online news[143]



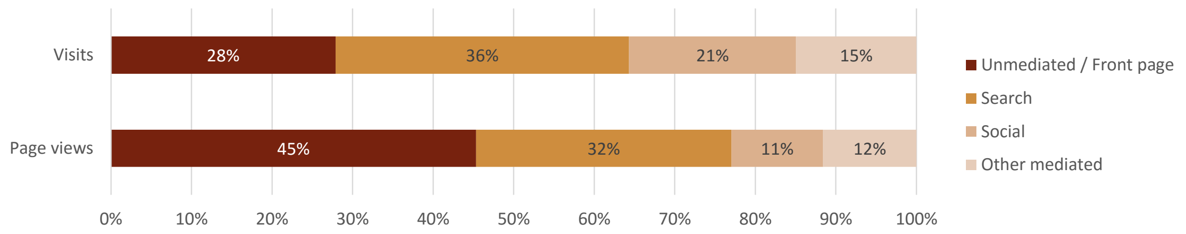
Source: Oxera

For each means of discovery, it is possible to consider (and measure) the corresponding share of website visits. Thus, for example, we found that for a given website 50 per cent of all visits started at the front page we would say that half of its visits are unmediated, while for the rest we might be able to ascertain the percentages due to visitors who arrived via links in social media, search engines, etc. Moreover, we can also consider the corresponding share of *page views*; for example, if we found that unmediated visits on average involve twice as many page views per visit as mediated visits, then we would expect mediated visits to account for 2/3 of all page views.

Figure 52 shows the share of visits and page views due to different means of discovery for a specific commercial publisher which has kindly shared relevant data:

[143] Source: Oxera analysis. Figures based on Reuters (2015). *Q10. Thinking about how you got news online (via computer, mobile, or any device) in the last week, which were the ways in which you came across news stories? Please select all that apply. Base: Total sample.*

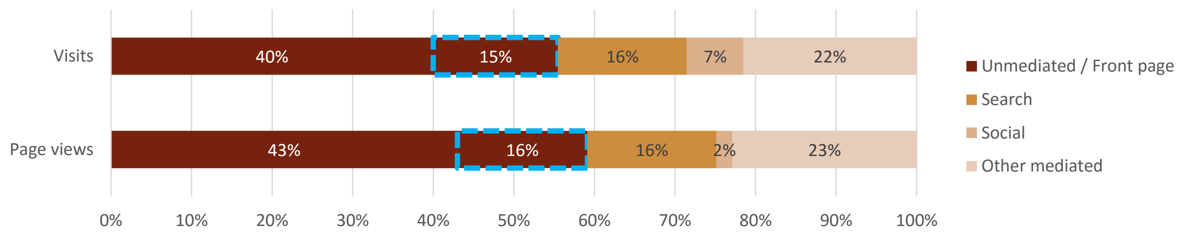
Figure 52: Mediated and unmediated shares of visit and page views – commercial publisher[144]



Source: Oxera analysis of publishers' data

As can be seen, mediated consumption accounts for the vast majority of visits and for slightly more than half of all page views. Exactly comparable figures are not available for the BBC; however, based on information provided by the BBC, we have estimated the shares of traffic in Figure 53, where the dotted line denotes the portion of traffic that we have estimated from the available data:

Figure 53: Mediated and unmediated shares of visit and page views – BBC[145]



Source: Oxera analysis of BBC data

Comparing the BBC's data in Figure 53 with that of commercial publisher above in Figure 52, we note the relatively high share of BBC traffic (page views) and visits that is unmediated and the relatively small share of BBC traffic and visits that is mediated by social media. This will play an important role in our impact analysis later in this section.

We stress that these figures may not be representative of the wider industry. Our discussions with stakeholders suggests that the relevant figures vary widely across providers, in particular with some publishers relying much more on social media than others. At one extreme, US publisher, NowThis, hosts its content in social media *only*; it does not even provide a website that others can link to.[146]

Finally, we note that commercial news publishers report rapid growth in the share of mediated visits, in particular citing Facebook as a strong source of growth.

6.3.3 Online video

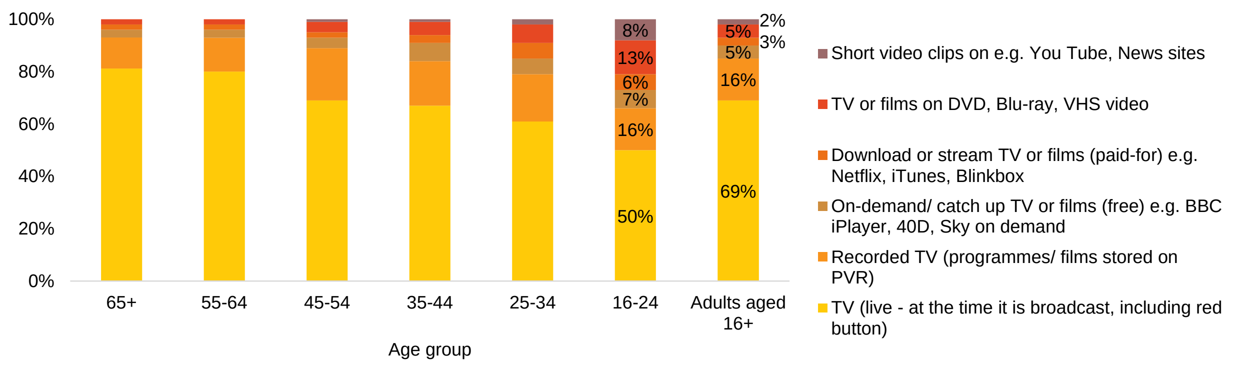
6.3.3.1 General view

Over the last decade, technological developments have offered UK consumers a wealth of new sources of audiovisual content, as well as new ways of consuming old and new types of content. A survey based

[144] Based on Oct 2015 data provided by a commercial publisher. Data reflects UK based audiences only. Page views reflect traffic including the point of entry as well as onward navigation.
[145] Based on data covering October to Dec 2015 provided by the BBC. Data reflects UK based audiences only. For page views, data provided by the BBC is as presented except for a further category – traffic referred to BBC News from other parts of BBC Online. We have apportioned this category partly to Unmediated and partly to "Other" based on the proportion (43%) of this traffic that corresponds to the front page of BBC Online (as distinct from the BBC News front page), highlighting this proportion of unmediated visits. For page views the situation is the same. Traffic in all the non-highlighted categories is as reported by the BBC, except for "other". The only exception is that we do not know what proportion of BBC referred traffic that is due to the BBC Online home page; accordingly we have applied the same percentage (43%) as for page views.
[146] For more on NowThis, see http://blog.newswhip.com/index.php/2015/09/re-thinking-engagement-in-the-age-of-distributed-content#3KRvb6KrCdm62msH.97

study carried out for Ofcom found that by 2014 around 70 per cent of all audiovisual consumption was to traditional (live) television; although much of the remainder was accounted for by forms of viewing other than online (particularly personal video recorders (PVRs) at 16 per cent); on-demand catch TV services (5 per cent); paid for online video (e.g. Netflix, Blinkbox; 3 per cent); physically stored media (DVDs or videocassettes, 5 per cent); and online clips (2 per cent). Notably, this picture is markedly different for younger audiences. For example, among those aged 16 to 24 years old, only 50 per cent of viewing is to traditional live TV.[147]

Figure 54: Proportion of watching activities, per cent of total viewing time, by age[148]



Source: Ofcom

It is worth noting that only 10 per cent of this consumption represents potentially online video.[149] Although other studies have found different figures, there is a degree of consensus that currently time-shifted TV viewing (combining PVR and on-demand) stands at around 15 per cent – 20 per cent of TV viewing – and that today this is predominantly accounted for by PVR usage.

As to the future, analyst expectations are, in general, for a gradual and moderate growth in time-shifted viewing, with growth driven by catch-up services which will gradually overtake PVRs. For example, an Ofcom-commissioned 2015 study predicted that, by 2020, 30 per cent of all TV viewing would be time-shifted, of which on-demand would account for slightly more than PVR viewing.[150]

Notwithstanding this generally conservative outlook, what today are only marginal trends are already having a significant impact, and have the potential to become centrally important over the next Charter period. For example, despite comparatively marginal usage, in terms of take-up, on-demand has already become mainstream; in 2015, almost six in ten adults said that they have used at least one video-on-demand service in the past 12 months (including both paid-for services and free of charge services such as iPlayer, but excluding short form video services such as YouTube).[151]

Moreover, the UK market is proving to be particularly fertile ground for new on-demand video propositions, particularly those delivered over the internet, as outlined in Figure 55 below. By 2013, the UK alone accounted for 45 per cent of overall European consumer spending on SVoD), and by 2014 the UK had the highest number of VoD services of any European country.[152] Revenue from online TV was estimated to have reached £793m, with income from online TV subscriptions (e.g. Netflix) reaching £317m.[153] By mid-2015, 4.4m households had subscribed to Netflix (more than any other pay TV provider except Sky) and 1.2m households had a subscription to Amazon Prime Instant (formerly LoveFilm).[154]

[147] Source: Ofcom (2015d).
[148] Source: Ofcom (2015d).
[149] “Catch-up”, “paid for” downloads/streams, and “short video clips”; although part of catch-up corresponds to use of pay TV operators’ non-internet services.
[150] Source: Mediatique (2014b).
[151] Source: Ofcom (2015d).
[152] Spend figures include VoD services offered by pay TV operators. Source: European Audiovisual Observatory (2015).
[153] Source: IHS, quoted in Ofcom (2015d).
[154] Source for VoD figures: Ofcom (2015d). By 2014 Virgin Media had around 3.8m pay TV subscribers. (Source: Virgin Media selected 2014 results.)

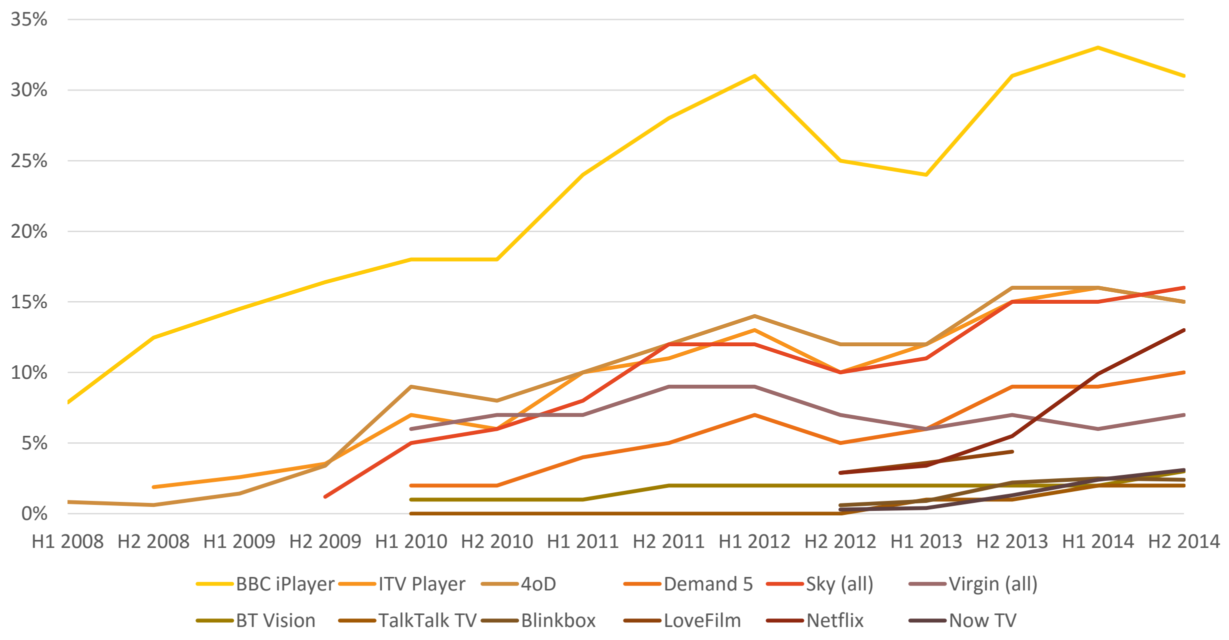
6.3.3.2 The BBC's services

The BBC launched iPlayer as a mass-market, streaming catch-up VoD service in 2007, as well as in the form of a branded application within pay TV operators' VoD platforms. Supported by a substantial marketing effort, the official launch was a success, quickly achieving widespread awareness and adoption. By April 2008, iPlayer was receiving 700,000 requests every day, with a unique audience of 1.4m per month,[155] or 7 per cent of the UK internet population.[156] A year later, in May 2009, this had grown to over 1m daily requests and iPlayer reached 15 per cent of the internet population.[157] Growth continued apace for the following years, initially driven by PC based usage and then smartphone and tablet usage. By 2015, 31 per cent of UK adults claimed to have used iPlayer at least once in the last year.[158]

6.3.3.3 The BBC's services in the context of the wider market

As noted above, iPlayer is not the only successful VoD service in the UK. However, as shown in Figure 55, it is by far the most successful of the long form video services (i.e. excluding the likes of YouTube).

Figure 55: Active reach/proportion watching VoD services in the past 12 months for the UK's main VoD players[159]



Source: Source: 2008-2010 data: Ofcom (2010) 'Communications Market Report 2010'; 2011-2014 data: Ofcom (2015), 'Communications Market Report (2015)'. Note: 'Active reach' is the percentage of all active persons aged 2+

iPlayer has both high reach and a high market share: in 2012 its share of catch-up viewed hours was estimated to be 42 per cent,[160] significantly above the BBC's share of viewing in linear TV (21 per cent).[161] We return to these points later in this section.

[155] Ofcom (2008e).
[156] Ofcom (2010b).
[157] Ofcom (2009).
[158] Ofcom (2015d).
[159] Source: 2008 – 2010 data: Ofcom (2010a); 2011 – 2014 data: Ofcom (2015d). "Active reach" is the percentage of all active persons aged 2+ who visited the site or used the application. Base for active is defined as anyone who used an internet-enabled computer within the time period.
[160] 2012 estimates. Includes catch-up viewing through all VoD players, including non-broadcasters. Mediatique (2013), p. 12.
[161] 2013 figures, all homes. Ofcom (2014a).

6.4 Competitive dynamics in online news and video – selected aspects

We complement our view of the market with a brief discussion of certain dynamics that are important for our analysis – specifically, the role of online intermediaries in the user experience, and the implications of this for the competitive relationship between online publishers and online intermediaries.

We begin by discussing certain aspects of online media consumption, introducing concepts that will play a key role in our analysis throughout this section. This allows us to consider two forms of competition – for unmediated consumption in the context of non-specific needs; and for mediated consumption. As we see later in this section, an understanding of these dynamics provides essential background to current discussions about the BBC's role in the industry as well as the wider strategic challenges facing all players. Although most of our examples will revolve around online news, our discussion also applies to online media in general; accordingly, we also point out aspects of specific relevance to the case of online video in preparation for our discussion of this topic later in this section.

6.4.1 Online intermediation - overview

Because in this section the question of competition and substitution between online service providers will play a central role, it is key to start from a typology of forms that this competition can take.

Consider first what is probably the most prominent type of needs that may lead consumers to turn to a media service – everyday, routine needs such as to "check the day's news", "find a programme to view", or "research a topic". We call these **non-specific content needs**, as they involve consumers turning to a service provider without a specific content item in mind.

By contrast, consider now consumers turning to a service with a clear sense of the content needed – e.g. a specific TV programme, news about a specific event – which we call **specific content needs**. This may be in response to something heard in a conversation, or to a content item having been being mentioned or promoted within a media service.

Traditionally, non-specific needs have been addressed by publishers who propose a menu of content items related to the general type of need involved, as well as providing the analysis and coverage of the content itself. For example, a newspaper provides both an editorially selected shortlist of news-worthy events, as well as articles about those events. Earlier in this section we termed this **unmediated** (or direct) consumption.

However, thanks to the hyperlink, the world wide web has allowed new online intermediaries to position themselves as the "first port of call" around different needs – e.g. researching a topic, learning about the day's news – by playing only the relevant "curatorial" without themselves offering (or necessarily having any business relationship with the publishers of) the content that they link to. Earlier we termed this **mediated** consumption.

The two distinctions we have introduced (non-specific vs specific content needs, mediated vs unmediated consumption) are summarised below, where each cell lists typical examples.

Figure 56: Need states and forms of consumption

	Non-specific content needs	Specific content needs
Mediated consumption	(1) Visit social media website, then follow link to articles on news publishers' websites Use search engine to research a topic, then follow links to suggested articles Browse EPG from previous week listing programmes from different broadcasters; then select a programme to watch (e.g. Freeview Connect, YouView)	(2) Use search engine looking for specific article/film/other, then follow link to publisher website Receive email with link to specific article to read, then read article on publisher website Use search facility in VOD platform to search for specific film across a variety of VOD *apps* (e.g. Apple TV unified search)

Unmediated consumption	(3) Visit news publisher's front page, then read articles in same website Go to broadcaster's VoD service, browse programmes, select programme	(4) Use facility provided by publisher (e.g. A-Z directory, search engine) to efficiently find desired content item

We make two observations with a view to our analysis later in this chapter, as follows.

- As online intermediaries grow in importance, mediated ways of addressing nonspecific needs have become more prominent – effectively introducing competition between cells (1) and (3) above. For example, in online news we noted that for some publishers the majority of website visits are already mediated.
- Whenever consumption is mediated (whether in the context of specific or non-specific needs – that is, for both cells (1) and (2) above), which publisher consumers visit is not so much a matter of *consumer* choice as of the *intermediaries'* choices and functionality.

In turn, these considerations have implications for the question of substitutability between different publishers (in particular, when one of these is the BBC), for content monetisation, and other aspects of relevance to our later discussion. We explore the two issues above in more detail below.

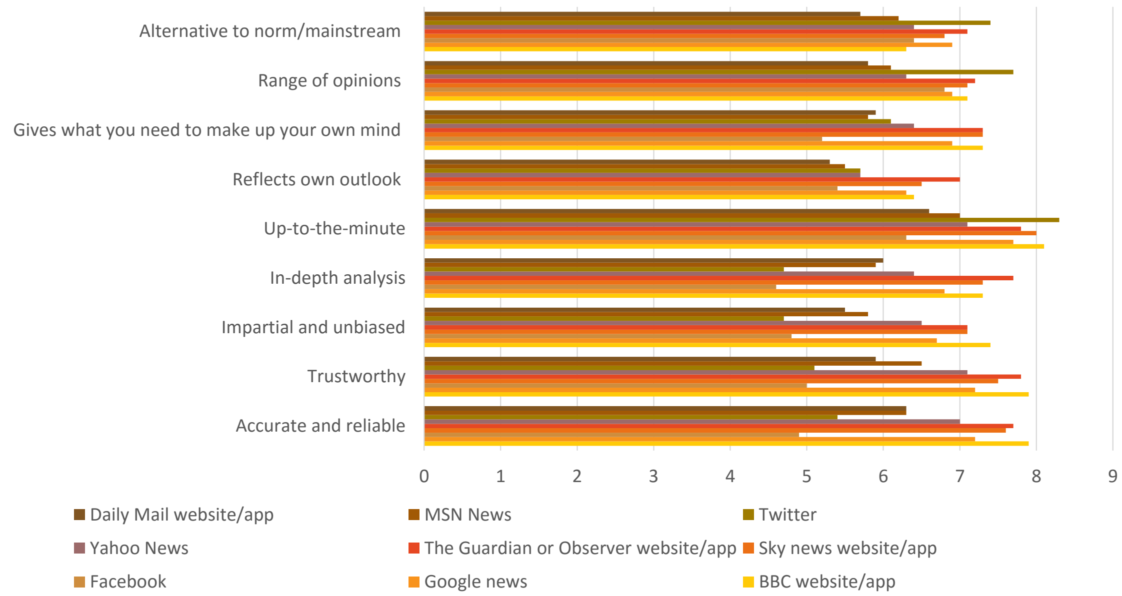
6.4.2 Competition for consumers with non-specific content needs

Consumers with non-specific needs (e.g. reading the day's news, watching some TV) are in a position to choose between service providers to turn to. Services of two types compete for this business: "vertically integrated" publishers who provide both content and curation services (unmediated consumption), and online intermediaries who link to publishers with whom they may have no business relationship (mediated consumption). Competition is both within and between these business models. We make four observations concerning this type of competition:

For consumers with non-specific content needs, competition among providers operates along traditional lines (consumer preferences, editorial affinities, etc.)

In the case of non-specific consumption, consumers start with a set of needs and a set of providers to choose from. In particular, following the withdrawal of one provider from the market, an editorial change resulting in a decrease in quality, the introduction of a pay-wall or an increase in price, consumers can be expected to partially divert their use to other alternatives to the extent that they see those as **substitutes** for the affected product. In turn this may involve consumers' perceptions of quality (which may involve content breadth and/or depth), editorial affinities and budget. For example, Figure 57 below shows audience perceptions of selected online news sources; we can expect that considerations such as timeliness, trustworthiness and viewpoint may play an important role.

Figure 57: Audience perceptions of selected online news sources[162]



Source: Kantar Media

In the context of consumers choosing between news services (including intermediaries) in connection to non-specific needs, the presence or absence of any given *content item* (e.g. a specific news story) is unlikely to have any effect on consumers' choice of service (with some exceptions), since they may not be aware of any specific absences. For most such users, any such absence is also unlikely to result in a decrease in page views, or an increase in page views in other websites (again, with exceptions). However, consumers may be sensitive to overall changes in a service's breadth, quality or style, which may dissuade them from continuing to use the service in connection to certain needs. All of this will play an important role in our analysis of the BBC's impact later in this chapter.

For consumers with non-specific content needs, digital intermediaries increasingly compete head to head with publishers

Consumers' non-specific content needs call primarily for a *selection* (or "curation") service that will lead them to suitable content on the basis of their context. And, at least to a degree, audiences seem to be indifferent as to whether their needs are met by a "vertically integrated" publisher who provides both curation and content, or an online intermediary who only provides curation and links to a wide range of publishers. For example, Figure 44 above shows that audiences list social networks among the main services that they use as sources of news, effectively ignoring the fact that such services link to publishers' websites only.[163]

In the context of online video, it is estimated that non-specific usage (namely, visits to a service without a specific programme in mind) accounts for around 41 per cent of iPlayer viewing. By our reasoning, this viewing is potentially in competition with other VoD services (including aggregators and broadcaster owned services) with a similarly broad content offering.

Services that cater to key non-specific content needs (e.g. reading the news during a commute, or enjoying nightly entertainment) may invite repeat custom, and potentially subscription revenues

Unmediated consumption may not be the most popular way to access publishers' websites; however, it is closely linked to repeat custom. For example, for one news publisher we spoke to, unmediated

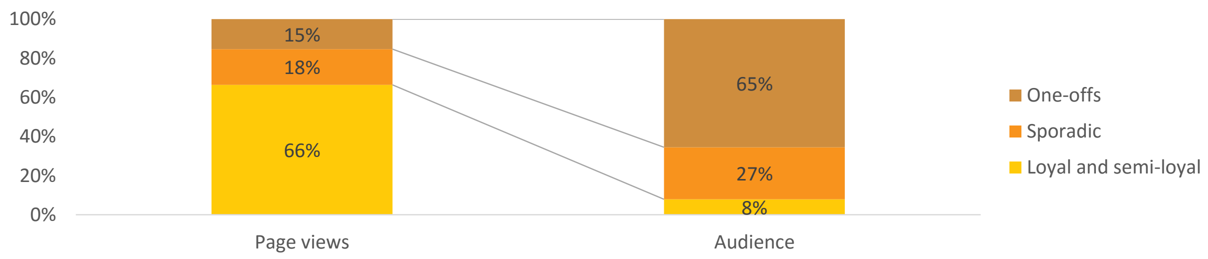
[162] Source: Kantar Media (2012), Respondents to the question: "To what extent do you think the following statements apply to as a news source?" Answer using a scale of 1 to 10, where 1 is "Not at all" and 10 is "Completely". Base: all who use news source at least once a week.

[163] Social media is increasingly including content from publishers within their services, so that users who follow links are quickly offered a copy of the content "in place". This reinforces the notion that, from the audience perspective, the difference between linking to content and carrying content may be immaterial.

consumption was highly concentrated among loyal audiences, and conversely unmediated consumption was uniquely common among this group: the 8 per cent most loyal users accounted for over 80 per cent of all unmediated visits, and for the 1 per cent most loyal audience, 2/3 of visits were unmediated (versus a corresponding rate among all users of only around 1/4).

To be sure, intermediaries may also be able to attract similarly loyal audiences (and, unlike publishers, for intermediaries all use is unmediated, since they act as "mediators"). But, for publishers, loyalty may also be linked to revenues. Indeed, as shown in Figure 58, loyal users of one publisher we spoke to account for the vast majority of page views. Thus, not only do they account for the majority of advertising revenues, but they are also likely to derive the most value from the service:

Figure 58: Relationship between audience segments and website traffic, 2015[164]



Source: Oxera analysis of publishers' data

Subscription paywalls' market may be limited to general-needs, unmediated consumption

In turn, this suggests that *subscription* paywalls (as distinct from "micro-payment" schemes which grant users access to a website for a day, or to a specific piece of content) may need to target a relatively small audience segment. Indeed, the evidence that we review in section 6.6.2 suggests that paywalls convert anywhere between around 0.5 per cent and 2 per cent of the unique visitors that news websites had before their introduction.

The apparent smallness of these numbers does not mean that paywalls are "a failure". As our discussion so far has shown, the denominator in these percentages (unique audiences) is likely to be composed largely of infrequent, mediated visitors who might not consider themselves users of the publisher's service (although they might consider themselves users of the intermediary service that referred them to it).

Finally, we note that some publishers' decisions to allow mediated *or* infrequent visitors a degree of free access suggests a conclusion that such users may be unlikely to pay for a subscription, since in that case that allowing content to be read for free represents no significant loss on the paywall side while ensuring that advertisements can be shown.[165] For example, several publications (including services as varied as *The New York Times*, *The Sun* and the *Financial Times*) have allowed limited or unlimited free access to users arriving from social media or news aggregators such as Google News.[166] Similarly, some services (e.g. *The New York Times*, *The Boston Globe* and, until recently, the *Financial Times*) use or have used a "metered" model that allows infrequent readers undisturbed access, and only display a paywall to visitors who read more than a certain number of articles in a given month.

6.4.3 Competition for mediated content consumption

Next we consider the case of consumers who have been referred by an intermediary, via links, to content within publishers' websites. Again we make four observations:

[164] Source: A UK publisher's data, 2015. Note that this is qualitatively consistent with data published in a 2009 US study on online news – see American Press Institute/Belden Interactive (2009): *Revenue initiatives 2009.* Available at http://it.ejo.ch/wp-content/uploads/API-ITZBelden-Revenue-Initiatives-Survey1.pdf
[165] This is a case of indirect price discrimination, with different groups charged according to their willingness to pay.
[166] For a rundown of the exceptions to the New York Times' paywall at the time of its launch, see http://www.nytimes.com/2011/03/18/opinion/l18times.html

When consumers reach publishers via online intermediaries, their preferences among publishers are secondary

Before consumers reach a publisher in a mediated way, they choose between options presented by an intermediary. In this, consumers may not know, notice or care what publisher is behind each link, and may not notice if a given publisher's content is not available. Accordingly, under mediated consumption, the key parties choosing among publishers are the intermediaries rather than the consumers.

This has implications for our analysis of **substitution** and diversion in connection to the BBC, later in this section. If a given publisher's content (say, hypothetically, the BBC's) were to become no longer available through an intermediary, it is not clear a priori where the affected traffic would go. Links to the affected publisher might be replaced by links to other publishers chosen not on the basis of consumer preferences but on commercial grounds, for example. Ultimately this will depend on the nature of the intermediary in question; in particular, in the case of social networks like Facebook, the choice of alternative links would be made by a proprietary algorithm which might combine – among other factors– recommendations by friends as well as its own assessment of the relevance of different links to each consumer. In particular, a link to a BBC news article might be replaced by one to a non-news item.[167]

Intermediaries erode publishers' ability to expose consumers to new content

Making audiences aware of news items they might not actively seek is a key editorial aim for many news organisations, including but not limited to the BBC. Similarly, promoting TV programmes with public-service characteristics is a key consideration for the BBC. However, both of these are undermined when content "discovery" is facilitated by intermediaries who may have their own priorities when aggregating content (for example, as two publishers noted, Facebook prioritises articles partly based on what it deems to be their relative "meaningfulness" to each user). However, when the audiences brought by aggregators are incremental to what publishers would have achieved otherwise, this need not be a net loss either editorially or commercially.

This makes for a fraught relationship between publishers and intermediaries

In deciding which publishers' content to include and to what content to give prominence, intermediaries play a critical gateway role that has a strong influence on publishers' traffic. For example, in interviews news publishers told us of how on certain days their traffic could be significantly impacted if their coverage of a breaking news story is shown as a top option by Google to users who type relevant search terms. Similarly, publishers have reported significant swings in traffic referred by Facebook following changes to the social platform's ranking algorithm.[168]

Intermediaries may offer publishers access to audiences or traffic that is incremental to what they can generate on their own. However, because from the intermediaries' perspective, publishers may not be strongly differentiated, publishers have limited power when negotiating terms (for example, for revenue shares). This is leading some publishers to increasingly see the growth of intermediaries as a collective threat – even if, individually, they see a compelling logic for cooperating with them.

Mediated consumption faces important hurdles – and this may help larger players

The growth of mediation may have some hurdles. Specifically, *link*-mediated consumption is not always compatible with, or suitable to, consumption on devices that may not always be connected to the internet (e.g. smartphones), or that use platforms in which hyperlinking is not technically available (e.g. some connected TV platforms). In these cases publishers and intermediaries rely on self-contained "native" applications that compete partly on the basis of their availability on different platforms, as well as on their content breadth.

In particular, some news publishers argue that smaller publishers may not succeed in persuading users to install and regularly use their apps, which in turn drives concentration of mobile traffic towards players of scale – which in practice means online intermediaries (provided that they secure rights to carry publishers' content, typically on a revenue-share basis) and large publishers who can offer their own native apps and achieve widespread distribution. We return to the topic of scale advantages and native apps in the context of iPlayer and online video in section 6.8.2.

[167] Currently, Facebook prioritises content partly on the basis of an assessment of "meaningfulness". See "Here's How Facebook's News Feed Actually Works". *Time* 9 July 2015, available at http://time.com/3950525/facebook-news-feed-algorithm/
[168] See http://blog.newswhip.com/index.php/2015/03/faceboocalypse-publishers-see-drop-in-facebook-shares#mpRUDvEGbdBcEOOq.97

6.5 Policy discussions about the BBC's online market impact

6.5.1 Evidence on market impact from past reviews

Given the BBC's significant online presence, it is not surprising that the history of BBC Online has been characterised by ongoing policy interest in its impact on the industry. As part of the preparation for this report, we reviewed a subset of the relevant developments – namely, the main formal reviews into the BBC's activities by the Government, the BBC Trust and Ofcom. Highlights from this include:

- various reviews of the **BBC's online service in general**, including early DCMS-commissioned reports by KPMG (2003) and Graf (2004) and more recent service reviews by the BBC Trust (2008, 2013).Concern with the mitigation of market impact has been a constant theme in these reviews, with particular emphasis given to the need for the BBC to proactively drive traffic to external websites through the use of outbound links, with the BBC Trust repeatedly calling for this to be intensified; and ensure distinctiveness, limiting activities where this is not the case;

- a long history of recommendations (Graf 2004[169]) and later formal requirements by the BBC Trust (2008c) for the BBC to drive traffic to external website by "**linking out**" to them when external content is editorially relevant and of value to users. The BBC Trust has at times found the volume of "click-throughs" achieved to be unsatisfactory;[170]

- a series of formal market impact assessments and competition investigations in connection to **online video**, including the approval of iPlayer (BBC Trust 2007) and Project Canvas (BBC Trust 2010e) (which eventually launched under the consumer brand YouView); the rejection by the Competition Commission (Competition Commission 2009) of plans to launch a multi-broadcaster version of iPlayer under a commercial joint venture with other public service broadcasters (on the grounds of lessening of competition in wholesale video markets); and the subsequent rejection by the BBC Trust (BBC Trust 2009c) of a scoped-down multi-broadcaster partnership excluding commercial aspects and the setting up of a JV (on grounds of complexity);

- the development of the BBC's **syndication framework**, which set out the conditions under which the BBC may allow third parties to carry its content. In the current iteration of the Framework (BBC Trust 2015c) conditions include that content should be free at the point of service (or available in the lowest possible tier of subscription services), and not carry advertising. With respect to catch-up VoD content, the framework sets out that, where technically possible, third-party platforms should link to content provided within a standard iPlayer experience in which branding and navigation are controlled by the BBC. This is intended to ensure attribution, to manage brand exposure, and to ensure that the BBC can promote content on editorial grounds (among other reasons).

- a series of interventions by the BBC Trust in relation to the BBC's activities in **online education**, in response to market impact concerns by industry. This included the closure of BBC Jam (an e-learning service; BBC Trust 2008a) and the re-scoping of other services following a formal investigation prompted by a complaint by BESA, the industry association (BBC Trust 2010b).

As can be seen, the subject of market impact has been a constant feature of the regulatory history of the BBC's online service. This has not only been a concern, but has led to the abandonment of some major initiatives.

Current discussions about the BBC's market impact should thus be seen in this context. Claims that the BBC's impact is excessive therefore are not only an assertion of fact; to the extent that they are deemed to hold, they also imply that the current system of oversight has not been adequate.

[169] Graf (2004) concluded that "BBC Online should also, as a priority, re-assess its links strategy. A wide range of content outside of BBC Online's own services is directly relevant to the BBC's purposes, service objectives […] (for example, local sports and listings sites). BBC Online does not need to be the sole originator or provider of these services. It could, potentially, improve its delivery against its core purposes by providing a wide-ranging set of links to external sites (including those of commercial "competitors"). Whilst BBC Online cannot unduly favour particular commercial sites, it is perfectly appropriate for editorial judgement to determine when links are relevant and would be of value to users."

[170] See, for example, BBC Trust (2013), and the BBC's accountability report, which has at times reported performance below the targets set by the BBC Trust (e.g. BBC 2014b).

6.5.2 Submissions to current Green Paper and surrounding debate

As part of the preparation for this report, we have reviewed selected submissions to the Green Paper made by industry stakeholders and experts. We have also met with selected stakeholders (including the BBC) and experts to further explore key issues. In what follows, we attribute views to commentators on the basis of submissions to DCMS, including confidential submissions. Accordingly, DCMS may wish to redact this section before publication. As to views provided to us in discussions, because most of these were "off the record", it is not appropriate to specify here which commentators provided which views to us (except where we have sought permission to do so). Our review focuses mainly on comments related to online news and video, which form the bulk of the submissions we reviewed.

The proposals made by the BBC in its September 2015 submission provide important context to the stakeholder submissions that we have reviewed. Accordingly, we summarise these proposals in Box 2.

Box 2: BBC proposals related to online activities

In its September 2015 submission to DCMS,[171] the BBC made proposals concerning the evolution of its services. Below we outline a selection of these based on their relevance to what follows. In relation to **local and regional online news**, the BBC's main proposals are as follows.

- **To open up the BBC news platform to content from external providers**. This would entail "creating a fund for local newspapers and others to create content for [its] services and syndicating finished stories to newspaper sites".
- **To establish a Local Accountability Reporting Service**. The BBC would set up "a network 100 public service reporters across the country" funded from licence fee revenue to report on "councils, courts and public services in towns and cities across the UK", the output of which would be made available to "all reputable news organisations".
- **To establish a News Bank to syndicate content**. The BBC would offer other organisations easy access to content produced by its regional and local news teams. Local and regional news organisations would be able to search, download and deliver the content, or embed the content into their websites.

In relation to **national and global news**, the main proposals are the following.

- **To build the "best English language digital news service in the world"**. The BBC aims to "stay a leading global provider of news and information" (BBC). To do so, it noted that it would need "**commercial ambition**; seeking audiences outside the UK; and being open to funding from Governments and civil society". For bbc.com, this means exploring various avenues to generate revenue, including "new advertising deals, subscription services, live events, syndication packages and commercial opportunities across all platform and languages".
- **To establish an "internet-fit, open BBC News"**. The BBC aims to develop a news streaming service targeted at younger audiences, as well as to open up its services to "local news partners and arts organisations" to "underpin democratic reporting".

In relation to **online video**, the main proposals include the following.

- **To create a managed platform for entertainment,** whereby **content from other broadcasters** and partners would be included within a single proposition. Audiences would benefit from being able to search for British programmes in one place, and to "use their data across all that expanded catalogue to find the best of those programmes just for them".
- **To explore opportunities to aggregate UK original content**. The BBC aims to "increase the traffic to, and investment, UK original content" by creating a video service available for use by other UK content commissioners. The service would also allow users to "buy and keep programmes", as the BBC is now doing with BBC Store.
- **To bring together all BBC content for children in one place, iPlay.** The BBC aims to create iPlay, an online platform catering to the needs of "children, their parents and carers". The service would

[171] BBC (2015a).

"feature a wide range of content forms, from long-form video to interactive formats", commissioned from internal and external teams. It is intended that iPlay would be "free from any commercial influence".

Other proposals related to the BBC's online activities include providing curriculum support across the UK, by developing "curriculum resources for each Nation, ensuring that our offer for students in Scotland, Wales and Northern Ireland is as comprehensive as it is in England", while recognising that the BBC should have "appropriate regard" for its impact on market players. Additionally, the BBC would develop a "digital music proposal with the music industry", building on BBC Music's Playlister.

6.5.2.1 General points concerning the scale of the BBC's news operation

Some commentators considered that simply by virtue of its sheer size, the BBC's online news presence exerted competitive pressure on commercial publishers. Specifically, GMG argued that the Guardian and the BBC compete for audiences in the UK. O&O made a similar point in *UK News Provision at the crossroads* (commissioned by the NMA) (O&O 2015b).

The BBC's proposals for online news seem to have accentuated these concerns. For example, the NMA argued that "the BBC's stated ambition to expand BBC online news provision threatens to crowd out commercial news providers at local, national and international levels", and that "the BBC should not seek to build rival services to those already provided by other UK news providers, especially in online news where the UK's rich and diverse range of newsbrands […] are in the process of building their long-term futures". In particular, it argued that "the BBC's drive to create its own suite of local news services across the breadth of the UK's communities is unnecessary and risks damaging the local press sector which is currently in transition to a sustainable digital world."

In its September response to the DCMS consultation, the BBC counter-argued that there is no evidence that news brands' online operations are suffering due to the BBC, with strong growth in usage and revenues. Instead (and in line with Enders Analysis' submission), the BBC argued that newspapers' business models are being challenged – not only in the UK – as a result of the transition from print to digital news. It further pointed to research showing that use of the BBC's online services is not necessarily substitutive, since consumers on average multi-source from around five sources, with different brands playing different roles.

At a more general level, in one of our discussions, a news publisher wondered whether the BBC had a clear sense of its ideal size in terms of online audience reach and traffic, or whether it would always seek to grow further. Along these lines, the NMA also argued that "in an attempt to justify the licence fee and provide a "universal service", the BBC appears to be seeking to become the default option across multiple platforms, subjects, genres and issues, often in direct competition with the commercial media". Sky's submission argued that "a wide remit for BBC Online may well have been appropriate in 1997 given the relative paucity of private provision at the time. But the availability of high quality news and entertainment content on the web, for free, is now enormous. Despite this, the size of the BBC's online offering continues to grow. The BBC needs to be quicker in identifying and responding to changes in the market – even if this means reducing its scope in areas where licence fee payers are well served by alternatives."

In defence of the BBC's scope, in his submission Professor Patrick Barwise argued that, ultimately, the BBC's aim is to deliver value to audiences, and that this may sometimes involve a moderate degree of negative market impact, which should be acceptable. He also argued that, in this context, distinctiveness should not be considered an ultimate goal for the BBC, provided that audiences benefit overall.

Finally, we note that, in general, the submissions did not go into specifics about how the BBC's scale might disrupt commercial players – possibly because, as O&O acknowledges, "the nature of this competition is complex." As to evidence of the BBC's scale, a key fact cited was that, as shown above, 59 per cent of online news users use the BBC's services, so that "the BBC's digital properties have become the default point of access to online news for UK consumers" (GMG). (However, as our earlier discussion has shown, this figure is not necessarily relevant to the BBC's market impact.)

6.5.2.2 Soft news, distinctiveness and the BBC's editorial scope

Some stakeholders (GMG, NMA) argued that the BBC has expanded its editorial scope in recent years so as to increase its provision of soft news – a category that is hard to define, but which broadly refers to news items whose main purpose is to entertain. As O&O put it: “a journalistic style that blurs the line between information and entertainment, starting with feature stories but increasingly encompassing more personality-led news coverage”. It has further been argued that (1) such news items provide a key source of advertising and promotional revenues for commercial publishers – revenues that may be eroded by the BBC’s activities (GMG, NMA); and (2) in providing its coverage, the BBC is not delivering any public value, while failing to be distinctive from the market.[172]

In relation to the relevant BBC activities or their impact, limited factual, non-anecdotal evidence was provided. This in no way implies that the allegations at stake are not valid. Rather, as we have found out during the preparation of this report, it reflects the fact that the relevant evidence appears to be difficult to obtain, even for the BBC itself. During the preparation of this report the BBC has kindly supplied us with some limited factual evidence on this, which we shall discuss in section 6.7.4.

The paucity of factual evidence means that discussions on this point have turned mainly on general arguments. We find these arguments to be serious and worthy of discussion. The main argument put to us by publishers can be summarised by the following question: “what public value is delivered when a member of the public searches for a given soft news story in Google and a link to a BBC article appears among the top results?” A variant of this question refers to a user finding a link to a celebrity-related BBC news article in a social network such as Facebook. In either case, it has been claimed that (1) users who follow a link to the BBC do so at the expense of following links to commercial coverage of the same story; (2) this can amount to a significant part of commercial publishers’ online traffic and revenue; and (3) consumers do not receive any extra benefit from reading such stories on the BBC’s website rather than elsewhere – particularly given that consumers who follow links from social media tend to read only the one linked-to article, and then return to the social media website without reading other content on news providers’ websites, which might expose them to other types of news. We have been provided with some evidence on these points, which we discuss in section 6.7.4.

For its part, in discussions with us the BBC noted that all BBC news meets BBC editorial standards, and its soft news provision (inasmuch as any of its content can be classified in this way) is limited, and is aimed at providing a well-rounded news service; at ensuring that all audiences are catered for; and at reaching audiences who might otherwise not be reached, to whom other content can then be offered.

However, on this point the NMA’s submission argued that although “it is perhaps understandable that, in an attempt to retain relevance with every demographic within the UK that pays for the license fee, the BBC feels under an obligation to create a news product or service that is relevant for every license fee payer”, “the danger is that, in chasing relevance, the BBC seeks to emulate emerging commercial digital news brands such as Buzzfeed and Vice, while moving into the space of news media providers whose business model relies on advertising and sponsorship.” We return to these issues later in this section.

6.5.2.3 Paywall revenues

Some stakeholders argued that the BBC’s presence makes it difficult for online websites to charge their readers to access their content, given the “huge quantities of online content” (GMG) available on bbc.co.uk. Similarly, in the context of soft news, O&O argued that the BBC’s provision of this material “at the very least” would erode publishers’ ability to erect paywalls across this type of content.

However, as noted in submissions by Enders Analysis and Professor Barwise, even if the BBC were not present, consumers considering paying for an online new service might still have a wide range of free alternatives to turn to. In response to this, some stakeholders suggested in conversations that, in the BBC’s absence, publishers that today do not charge for their content might decide to charge in the expectation that other publishers would do the same. Under this hypothesis, it might be enough for a single large quality provider to “break ranks” and offer free news, and all its peers would be forced to follow suit. But if the BBC is not there to break ranks, an alternative outcome might be possible. On this point, Enders Analysis’ submission argued that the evidence from the USA (where no comparable public intervention exists) strongly suggests that this scenario is unfeasible.

[172] Concerns about “soft news” were not limited to news provision. For example, GMG also referred to the BBC’s *Dish Up* website (a cooking service, presumably of BBC Online’s Knowledge and Learning product), and O&O referred to “factual entertainment” content of the type that BBC Worldwide might have offered previously.

Finally, we note that Enders Analysis and the BBC also argued that UK newspapers facing falling circulation and struggling to monetise online audiences is due to shifts in consumption habits in the internet age, rather than the BBC's activities. Professor Barwise also argued that British newspapers have fared no worse in their online activities than their US counterparts, which do not have to compete with an equivalent PSB of the BBC's scale.

6.5.2.4 Global news

Stakeholders have also raised concerns about the BBC's current and planned international activities. For example, GMG argued that the BBC's intention to embark on "new advertising deals, subscription services, live events, syndication packages and commercial opportunities across all platforms and languages" overseas threatens the future sustainability of the Guardian, cutting across its existing and future commercial activities, and more generally posing "a severe risk to the **health of international commercial news brands**". The concerns are further articulated by O&O, which argues that, as it embarks on international expansion: "the BBC will need to recognise that it is increasingly competing with UK based global news brands such as The Guardian and Mail Online. To the extent that the BBC is able to take advertising revenues from these markets […] it may be, to some extent, taking revenues from other UK news organisations (assuming a finite demand for UK sourced news in those markets)."

A further concern highlighted is the **relationship between the BBC's commercial divisions** (BBC Worldwide and BBC Global News), which exploit the BBC's English language online news offering overseas, and the licence-fee-funded UK-facing news operation. The BBC's public service and commercial operations are required to operate at arm's length, with the commercial division paying the public service BBC market prices for the content that it exploits and the services it commissions. This is in compliance with State Aid rules and is supervised by the BBC's Fair Trading compliance unit.[173] In discussions with us, concerns have been raised by publishers that the details of these relationships are too opaque for market stakeholders to ascertain whether or not the BBC's commercial divisions enjoy an unfair advantage in the marketplace (however, in our view an assessment of this question amounts to investigating the extent of the BBC's compliance with its Fair Trading policy as well as with State Aid law, both of which questions are outside the scope of this report).

Finally, in a related vein, one stakeholder raised concerns about soft news and social media in the context of international consumption. Specifically, it was posited that (what is perceived as) the BBC's focus on producing social media friendly soft news stories might originate from international editors paid using commercial funds, who might have authority to commission content intended to be featured on the website's international edition. It was posited that even if those stories were never featured in the UK-facing website, intermediaries such as search engines and social media platforms might show such links to UK audiences. In discussions with us, BBC representatives noted that the BBC was not aware of taking place, although it also noted that BBC Global News Limited (which controls the international version of the BBC news website) does fund some newsgathering activity and bespoke commissions for international audiences, which are also of value to licence fee payers, and whose viewing by UK audiences is low.[174]

6.5.2.5 "Linking out"

As noted above, the BBC has an obligation to **link to external websites**, with a target number of click-throughs set at 22m by 2013/14.[175] However, as one publisher noted, this obligation is currently not being met. Moreover, some publishers told us that they felt that the current target was too low, and that the BBC should consider linking out much more aggressively, acting more as a curator of commercial provision – at least for certain types of content.

In a related vein, in its submission, the NMA has called for an extended BBC commitment to third-party content sourcing to include news content generated by other UK news providers, especially where the BBC would otherwise need to duplicate pre-existing reporting from other news organisations (e.g. coverage of local institutions, sporting events). The NMA's submission is not specific as to whether this would mean syndication in the traditional sense (i.e. the BBC purchasing content from other

---

[173] For an overview of the BBC's Fair Trading arrangements, see http://www.bbc.co.uk/corporate2/insidethebbc/howwework/policiesandguidelines/fairtrading.html
[174] Examples given include an online series around the theme of "The Business of…" – e.g. Business of Sport, Business of Technology, etc.; as well as high-quality international journalism commissioned on topics such as health, science and politics.
[175] BBC Trust (2013), paragraph 132.

organisations) or simply linking to other publishers' websites. However, from the context, we assume that the former is intended. (Elsewhere in its document the NMA mentions that the BBC could purchase publishers' content.)

6.5.2.6 Online video syndication

Pay TV providers, Virgin and Sky, objected to limits placed by the BBC on the **inclusion of BBC TV content in third-party platforms**. Under its current Distribution Framework the BBC allows syndication of catch-up TV content only where it is not technically possible to offer a standard, BBC controlled and branded iPlayer experience. In practice, this mainly means platforms not delivered over the internet. In the platform providers' view, this limits the appeal of their own propositions, by forcing them to exclude BBC content, while also limiting licence fee payers' convenience and exposure to BBC content. More generally, Sky has further argued that the BBC should "**scale back its platform activities**", adjusting its remit to focus on investment in distinctive, high quality content, while ensuring that "content which has been funded by the licence fee is widely distributed with as few conditions as possible."

For its part, in a document made available to us, the BBC argues for the importance of its ability to influence how its content is aggregated when shown to audiences (i.e. which items of BBC content are presented most prominently to audiences). In the BBC's view, the ability to exert curatorial influence ensures that audiences are made aware of content that they might not otherwise seek – an on-demand equivalent of the technique known as "hammocking" in broadcast scheduling, where a programme with high public value is scheduled between two more popular ones. On a similar vein, the BBC also argues that controlling the user experience around the consumption of content (as distinct from its initial discovery) allows it to promote further content through onward navigation options. The BBC argues that third parties linking to content within the BBC's own iPlayer product wherever possible is the best way to achieve this (other reasons given for this policy include the need to ensure efficiency, to control brand adjacencies, to ensure attribution, to guarantee availability of functionality and to ensure timeliness in content distribution); and that to this end it has developed technologies designed to help third-party platforms include links to BBC content within their own user interface (even though playout remains in iPlayer).

6.5.2.7 News publishers' relationships with online intermediaries

Finally, in private discussions some stakeholders have suggested that the BBC's presence in the market may make it more difficult for commercial online news publishers to negotiate with online intermediaries. Based on industry discussions, we understand that today publishers negotiate with intermediaries (such as news aggregators or social network platforms) on the commercial terms under which their content can be included in third-party platforms when this involves full text inclusion (rather than just a link), as in the case of Facebook's *Instant Articles* functionality.[176]

Some stakeholders have suggested that, in the absence of such legislation, intermediaries' negotiating strength is being unduly helped by the presence of the BBC, which guarantees them a plentiful supply of news content to link to (and possibly also syndicate content from). Moreover, it has been posited that if it were not for the BBC, publishers might be able to credibly threaten not to collaborate with intermediaries, which (if enough publishers do so) might force intermediaries to agree different terms. We note, however, that this is only speculation and that negotiations might well be unaltered in the BBC's absence. We note also that in this speculative scenario outcomes might vary strongly depending on whether publishers could negotiate collectively vis-à-vis intermediaries – a question with implications for competition law, which we do not address here.

On a related note, some stakeholders have argued that, because BBC headlines and links to content frequently appear in social media news feeds, the BBC is helping social media platforms to retain users on their properties. It has been argued that this has a financial value to the platforms, indirectly in terms of customer loyalty, and directly whenever advertisements are shown on the same page as BBC headlines,[177] which in effect plays the role of a subsidy. For reasons of time we have not studied this topic

---

[176] Moreover, there have recently been discussions at the European level over "ancillary copyright" legislation around calls for requiring intermediaries to pay publishers for the right to link to their articles when this is accompanied by a snippet of contextual text. For more information see European Commission: https://ec.europa.eu/digital-agenda/en/copyright

[177] In the context of socially shared links (including links shared by the BBC with its "followers" in social media), the BBC is unlikely to have visibility or control over whether or what advertisements are shown in the same page (we have not confirmed this with the

in this report, although we do consider the BBC’s use of social media as part of our discussion of soft news in section 6.7.4.

6.5.3 Gaps and issues raised

As our discussion above shows, stakeholders’ submissions reflect a wide range of concerns. However, the evidence that would be needed in order to independently assess these issues is generally lacking both in the submissions and in the public domain. In particular, there is a lack of readily available evidence on:

- the scale of the BBC’s operations, particularly for online news;
- how, and to what extent, a “large” BBC might affect commercial providers’ revenues;
- the *scale* of the BBC’s financial impact on commercial players, even in ballpark terms, domestically and overseas;
- the size and scope of the BBC’s soft news output; whether this has grown in recent years; and the degree to which this displaces consumption from other publishers;
- the extent to which BBC traffic originating in social media is to soft news content; the extent to which this traffic is then converted to other types of news; and the extent to which this is substitutive of traffic (and revenues) to commercial publishers;
- the extent to which the BBC’s absence from the market might impact on consumers’ willingness to pay for online news and on publishers’ likelihood to erect paywalls;
- the extent to which the BBC’s presence affects publishers’ bargaining relationship vis-à-vis online intermediaries such as social media and news aggregators.

These are all complex questions and, given limitations of time and resources, for the present report we are unable address them all, or even a subset with the level of depth that might be required. Instead, based on discussions with DCMS, we have focused on what appear to us to be some of the key issues at stake. These are:

- in terms of orders of magnitude, the *scale* of the impact of the BBC’s online news provision on online publishers’ main revenue source, advertising;
- the possible nature of the BBC’s impact on publishers’ ability to charge consumers for content;
- the BBC’s activities in global news and soft news;
- the impact of iPlayer on the wider UK market of online VoD providers.

6.6 Impact analysis: online news

We now turn from reviewing evidence to providing our own assessment of the BBC’s role in the wider market, focussing on the issues we identified in section 6.5.3. We begin by discussing online news. The section is structured as follows.

Section 6.6.1 assesses the BBC’s impact on publishers’ advertising revenues by examining the dual questions of the *scale* of the BBC’s impact on the UK commercial sector and the *mechanisms* by which this occurs. This assessment includes an estimation of the likely magnitude of the gross “static” impact of the BBC News online activities on the UK commercial sectors’ advertising revenues.

Section 6.6.2 focuses on the second most important revenue source for online news – paywalls – and on the question of whether and how the BBC might affect commercial players’ ability to raise revenues through online paywalls.

BBC). This should be contrasted with the case of full articles syndicated by the BBC for inclusion in social media platforms, which would normally be under a syndication arrangement following the BBC’s guidelines, which prevent advertising.

Finally, we then turn to two specific areas of policy interest – global news (section 6.7) and soft news (section 6.7.4). We approach these issues mainly qualitatively, drawing on findings from earlier sections.

6.6.1 Assessing the BBC's impact on publishers' advertising revenues

In this section we consider the BBC's impact on online news publishers' advertising revenues. We do this by considering the difference in commercial revenues between the status quo and an alternative scenario in which the BBC reduces its online news output. This approach is not meant to imply that the alternative scenario in question (a reduction in BBC output) is either realistic or desirable, but is simply a methodological device that allows us to consider the BBC's market footprint in a definite way.

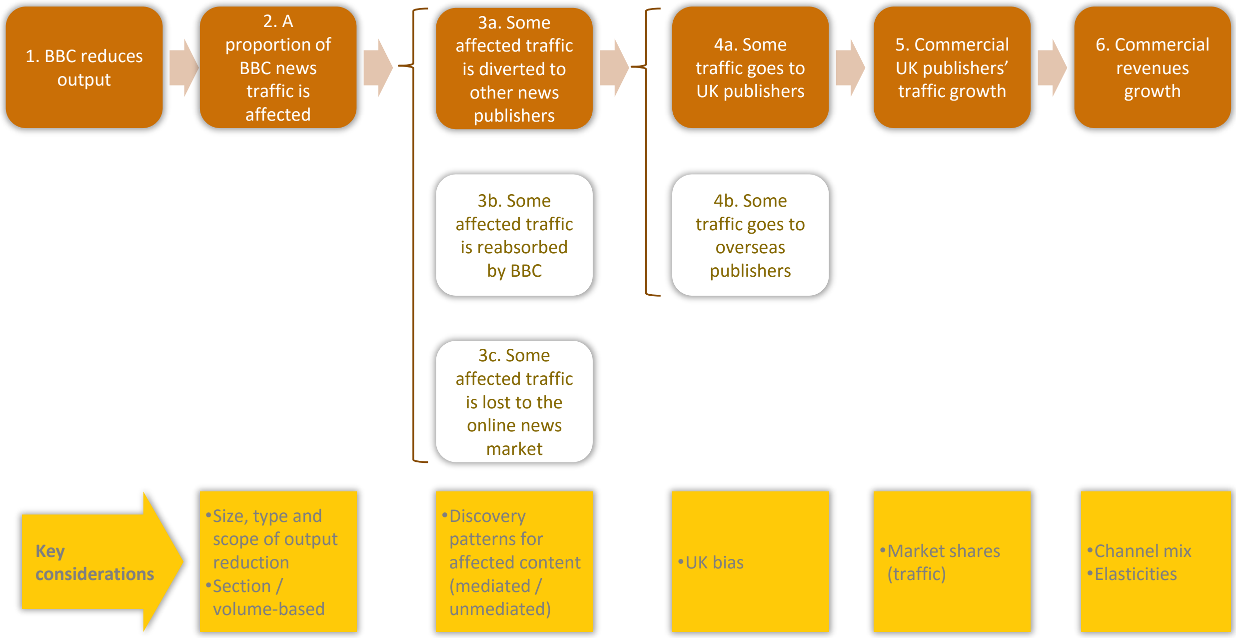
We also note that, in line with our overall aim of obtaining an indicative order of magnitude estimate of impact, our approach involves important simplifying assumptions. The most important of these is the use of a static approach, which implies that we omit considerations of how commercial players might change their offerings if faced with reduced BBC online activity. Other simplifications include, but are not limited to, not distinguishing between different audience segments or between different types of publisher (other than whether or not they are UK based, in both cases). We consider that these assumptions do not alter the overall order of magnitude validity of our findings; nor do they impede this exercise providing a helpful understanding of the ways in which the BBC may impact on commercial revenues.

As we noted in Box 1, commercial revenues are principally driven by page views to commercial websites. Accordingly, our approach considers:

- what the difference in UK commercial traffic would be if the BBC's output were lower;
- how commercial publishers are able to monetise this additional traffic and drive incremental advertising revenues.

More specifically, we consider that map out how lower BBC output could lead to a change in commercial revenues, in six causally linked developmental steps (see Figure 59). Below we provide a high-level discussion of key aspects in the approach, as well as a summary of our results; full details are provided in in the Annex in chapter 9.

Figure 59: Modelling approach for online news advertising impacts



Below we discuss, at a high level, the links between:

- a lower level of BBC output and higher commercial publishers' page views (steps 1 to 5 above);
- higher publishers' page views and higher revenues for commercial providers (steps 5 and 6).

After this, we provide the results of our stylised modelling exercise (section 6.6.1.3).

6.6.1.1 From lower BBC output reduction to commercial traffic increase (steps 1 to 5)

If the BBC had lower daily content output – for example, publishing less articles each day across the website – there would be a proportion of the BBC's news page views that is normally accounted for by the content in question which we call the "affected traffic". The key question is then how much of this affected traffic would be diverted to other UK publishers. To consider this, we distinguish between affected traffic that:

(a) diverts to other news publishers;
(b) is reabsorbed within the BBC's website (including non-news parts);
(c) is lost to the online news market (including reduced internet use and absorption by non-news services such as social networks).

The larger that (b) and (c) are, the smaller (a) is. Drawing on our discussion of online consumption above, the affected traffic can be divided into traffic due to mediated and unmediated consumption.

- Under **unmediated consumption**, we consider mainly regular visitors to the BBC's news website whose visits start at the website's front page and then browse for news items of interest. We understand that unmediated visits on average consist of around 5 pages per visit.[178] Given that the BBC publishes enough stories each day to keep all of its multiple sections up to date, this means that an average unmediated visitor only reads a very small proportion of the available output, and may not even be aware of the content available in more than a few sections. This suggests that a small content reduction may have a **relatively small** effect. Our more detailed analysis in in the Annex in chapter 9 reaches this broad conclusion, with the exception that the effect would likely be more substantial in the context non-marginal output reductions (e.g. in scenarios in which major sections or the entire website are no longer available), as in those cases some audiences would stop using the BBC website and turn to other services instead. Moreover, traffic transferred to UK publishers is further reduced when unmediated traffic is instead transferred to non-news-publisher services such as social networks, and when consumers use the BBC as one of several sources of news ("multi sourcing").

- Under **mediated consumption**, as per the discussion in 6.4.3, the decision of what links will replace links to BBC content affected by the output reduction will be made by intermediaries. Although we understand that some key intermediaries tend to prioritise links to content from large and trusted publishers, in general we would not necessarily expect that a link to affected BBC content would necessarily be replaced by other BBC content (for example, a user searching in Google for news about a specific event would likely be offered links to coverage by other providers, rather than a link to unrelated BBC articles). Moreover, we note that intermediaries may also replace a link to a BBC news story by a link to a non-news-item (e.g. in the context of social networks). Thus, as a result, we would expect that a **relatively large** proportion of affected traffic would leave the BBC, and that **a large amount of this would transfer to other news publishers**.

Based on these and other considerations, we have qualitatively considered the degree to which the BBC traffic affected by an output reduction would transfer to commercial publishers under: (a) a small reduction in the number of articles published by the BBC, affecting some 10 per cent of current traffic; (b) the closure of a section; and (c) a major output reduction affecting 50 per cent or more of current traffic (see Figure 60).

[178] Direct visits to the front page of bbc.co.uk/news on average consist of 4.9 page views (source: discussions with BBC).

Figure 60: Proportion of affected traffic likely to be diverted to commercial websites under different types of output reduction

Type of consumption	Volume based reduction	Section based reduction	Major reductions (volume or sections)
Unmediated	• Visitors with non-specific needs: **low** (audiences likely to switch to other BBC webpages) • High-volume readers: **medium**	• Visitors with non-specific needs: **low-medium** (audiences likely to switch to other BBC webpages) • Subject-interest visitors: **medium**/**high** (visitors may turn to other websites to satisfy need) • High-volume readers: **medium**	• **High**: some audiences may abandon BBC service altogether
	Diversion to third parties moderated by multi-sourcing and diversion to intermediaries		
Mediated	• Search engines, news aggregators: **high** • Social media, email: **medium**		• **High**

In the stylised model we describe in Annex 9, we have made quantitative estimates of the degree to which traffic would transfer to commercial publishers in each of these cases. In all cases (given the uncertainties involved) we have used ranges of parameters rather than point estimates. We have then combined these by considering the relative importance of mediated and unmediated consumption in BBC usage, following our discussion around Figure 53, so that unmediated consumption has a relative weight of around 60 per cent while unmediated consumption would have around 40 per cent. The net result is that we would expect a fraction of affected traffic to transfer to the commercial sector.

Finally, we consider the degree to which the BBC traffic that is transferred to other publishers would go to *UK based* publishers. Given that UK consumers currently use UK based publishers almost exclusively (including UK subsidiaries of foreign brands, such as Buzzfeed), we expect that nearly all traffic from UK audiences would go to UK based publishers. However, for overseas traffic the question is less straightforward; while specific audience segments such as UK expatriates might turn to other UK based publishers in the BBC's absence, for other audiences the BBC might be seen as closer to global brands such as CNN and *The New York Times*. Given this, for international audiences we have allowed for a broad range of possibilities, from a complete lack of "UK bias" (in which case UK based publishers receive around 5 per cent of the traffic, in line with their share of global news traffic), to a case in which 50 per cent of the relevant traffic goes to UK based publishers.

6.6.1.2 From BBC traffic drop to commercial revenue uplift (steps 5 to 6)

As discussed in Box 1, online advertising revenue is primarily driven by page views. Accordingly, once we have estimated the degree to which commercial page views are likely to increase, we might expect to be able to estimate the degree by which advertising revenues will grow as well. However, the relationship between the two is not necessarily a linear one, and advertising revenues are likely to grow by *less* than the underlying traffic. This is mainly due to two factors.

- **Publishers' mix of ad sales** – as noted in Box 1, publishers typically sell their inventory through a variety of mechanisms with different price points. Following a transfer of traffic from the BBC, publishers may not be able to maintain their current proportions between channels; specifically, it is possible that at least initially (and particularly if the increase in inventory is substantial) much of the additional inventory might be monetised through lower-yielding channels.

- **The impact of extra inventory on CPM levels** – in the UK, where audiences do not see advertising in BBC websites, a shift in BBC page views towards commercial websites would lead to a corresponding increase in the available inventory that publishers can sell to advertisers. As a result, price levels (i.e. CPMs) can be expected to fall due to the interplay of supply and demand. In extreme cases, this reduction could be enough to outweigh any increases in revenue due to increased sales, yielding no increase in revenues, or even a reduction in revenues. We expect that this may be an issue particularly for direct and programmatic sales, given their relatively more inelastic demand curves compared with bulk sales.

Given the absence of empirical evidence on these factors, our stylised exercise relies on a relatively broad range of plausible estimates for these parameters, as discussed in the Annex.

6.6.1.3 Results

Scenarios used

Our stylised modelling exercise has involved a number of assumptions and estimations, for example concerning the degree to which affected page views might transfer to commercial publishers under mediated and unmediated consumption. The detailed consideration of this (which we provide in the Annex) varies depending on the types of content that would be affected by a reduction in BBC output. Accordingly, we have considered five different output reduction scenarios, and have modelled the impact under each case. These are:

- Scenario 1: the BBC publishes fewer articles than it does today, with the change centred on in-depth content (the number of news events covered remains the same)
- Scenario 2: the BBC publishes fewer articles than it does today, with fewer news events covered
- Scenario 3: the BBC no longer publishes one of its smaller, non-core sections (e.g. "Magazine")
- Scenario 4: the BBC publishes drastically less content than today, with the difference affecting 50 per cent of more of BBC news traffic (section or output based)
- Scenario 5: the BBC news website is no longer available.

The scenarios are further specified in Table 3, where the final row specifies the scale of the output reduction in terms of the proportion of current BBC traffic that would be affected:

Table 3: Output reduction scenarios

	1. Marginal depth reduction	2. Marginal breadth reduction	3. Marginal section closure	4. Multi-section closure[261]	5. Website closure[179]
Volume/section	Volume	Volume	Section	Section	n/a
Breadth/depth	Depth	Breadth	Both	Both	Both
Scale (per cent of traffic affected)	Marginal 10%	Marginal 10%	Marginal 10%	Major 50%	Major 100%

Below we provide our results for revenues from advertising targeted at UK and overseas audiences.

Results for UK audiences

Given that our modelling exercise has involved the use of ranges for a number of assumptions; accordingly, the results also consist of a multiplicity of estimates, one for each combination of assumptions. We have carried out an analysis of the results so as to discard outliers and focus on plausible results (see in the Annex in chapter 9 for details). Based on this analysis, Table 4 presents our estimates for the minimum and maximum plausible increase in commercial revenues from UK advertising, expressed first in percentage terms and then in absolute terms, for each of the output reduction scenarios considered in our analysis.

[179] Included for completeness; modelling approach not designed for large scale reductions.

Table 4: Order of magnitude estimates of impact on UK commercial revenues following BBC output reductions (UK advertising only)

	1. Marginal depth reduction	2. Marginal breadth reduction	3. Marginal section closure	4. Multi-section closure	5. Website closure
As proportion of current revenues					
Low end	0.2%	0.6%	0.8%	4.3%	12.0%
High end	0.8%	1.5%	1.9%	10.0%	22.9%
In absolute terms (£m pa)					
Low end	0.8	2.2	2.9	16.6	46.4
High end	3.3	5.9	7.3	38.5	88.8

Interpreting our results in terms of orders of magnitude (in line with the nature of our estimation approach), we can make the following two remarks. First, the BBC's footprint on commercial online news publishers is not negligible. Its presence or absence is likely to mean a difference to UK commercial revenues of around 12 to 23 per cent or £46.4m and £88.8m per annum (see scenario 5 in Figure 61). We stress that these results should not be interpreted as the BBC's online news operation having a negative dynamic impact on the industry, or a negative impact overall on consumers or society (i.e. a net negative public value). As we discussed in section 6.1, those questions would require a separate analysis which is outside the scope of this study.

Second, the degree by which commercial revenues would be greater than today in a world without the BBC (ignoring dynamic effects) is likely to be far smaller than might be suggested from a simple consideration of the BBC's market share, principally as a result of the way in which audiences consume news online. In other words, a *marginal* reduction in the BBC's content output is likely to have relatively small overall impact on commercial revenues; for example, if content accounting for 10 per cent of the BBC's page views were no longer available, our analysis suggests that commercial revenues would increase by around 0.2 per cent and 1.9 per cent (£0.8m and £7.3m per annum), with the high end estimate corresponding to a hypothetical section closure scenario (see scenario 3 in Figure 61). We note, however, that these are overall industry effects. It therefore cannot be ruled out that some publishers specialised in particular types of content could be disproportionately affected, particularly in a scenario involving a hypothetical section closure.

Results for overseas audiences

As for international advertising, absolute pound figures cannot be provided as we have not had access to reliable estimates of publishers' current international revenues.[180] Our estimates in terms of proportional impact are presented Table 5.

Table 5: Order-of-magnitude estimates of impact on UK commercial revenues following BBC output reductions (overseas advertising only)

	1. Marginal depth reduction	2. Marginal breadth reduction	3. Marginal section closure	4. Multi-section closure	5. Website closure
As proportion of current revenues					
Low end	0.0%	0.1%	0.1%	0.5%	1.1%
High end	0.4%	0.5%	0.6%	3.3%	7.4%

Our results suggest that the impact on international commercial revenues from the BBC's presence is small, even if taken as a proportion of publishers' current overseas revenues (which we understand are

[180] Nonetheless, industry discussions suggest that these revenues are currently far smaller than their domestic counterparts. In the light of this, the net impact of BBC traffic might be small not only in proportional terms but also in absolute terms, compared with the UK impact.

significantly smaller than their UK online revenues). For example, for an output reduction affecting 10 per cent of BBC News international traffic, UK commercial publishers would likely see an uplift in their international revenues of at most 0.6 per cent. The difference compared to the UK case is due mainly to two reasons:

- as explained in the Annex in chapter 9, the magnitude of the impact is affected by the relative size of the BBC's vs. other UK publishers' traffic. In the case of UK traffic, this ratio is around 2/3, whereas in the case of overseas traffic, our analysis suggests that this ratio is closer to 1/5;[181]

- given the relatively small size of UK based publishers in the international market for English content, our analysis has assumed that a large proportion of the affected traffic following a hypothetical content reduction scenario by the BBC would transfer to non-UK publishers.

We consider that these are reasonable assumptions to make in order to reach a view on the likely average overall impact of different hypothetical output reduction scenarios in the BBC's international online services. However, we cannot rule out that in future, hard evidence regarding the degree to which UK based publishers are close substitutes for BBC services in the eyes of international audiences, might reveal that the impact could be higher, potentially closer to what we have found in the case of UK audiences.

6.6.2 Paid-content impacts

As noted earlier in this section, several of the submissions to the Green Paper claimed that the presence of the BBC in the online news market limits commercial players' ability to charge consumers through "paywalls". In this section we aim to assess the degree to which this is the case. Below, we discuss:

- conceptually, in what ways the presence of the BBC might be expected to have an impact on commercial providers (section 6.6.2.1);

- implications for the UK context (section 6.6.2.2).

Throughout our discussion, the ways in which audiences discover news online play a key role. This was discussed earlier in section 6.3.2.4 and 6.4. Due to a general paucity of quantitative evidence on paywalls in the public domain, our discussion in this section is mainly qualitative.

6.6.2.1 How the BBC might limit publishers' ability to charge

Our analysis in section 6.4 suggests that *subscription* paywalls should be mostly associated to unmediated news consumption, specifically in response to how non-specific content needs (e.g. "reading the day's news") may be linked to a consumer routine. On the other hand, in cases of mediated consumption users often do not reach a point where choices between news providers are relevant. For example, consider a user following a link from a colleague with the text "see this insightful comment by Martin Wolf today", who is faced with a paywall. This user does not face a choice between different news providers, but simply between paying or not paying – price comparisons and the relative strengths of different news services are much less relevant. Similar considerations apply when "deep links" to articles in publishers' websites are found in social media, news aggregators and search engines.

Thus, the BBC's impact on competitors' ability to charge needs to be assessed separately in these two cases. The overall impact will be determined by the relative importance of each.

➢ **Impact on publishers' ability to charge for unmediated consumption**

The BBC's presence could potentially undermine publishers' ability to monetise audiences' unmediated consumption through subscriptions in two main ways:

First, audiences' unmediated visits to the BBC's website *today* may to a degree be at the expense of other websites – including free websites for whom those BBC audiences would be particularly unlikely to subscribe following the introduction of a paywall. This concern was reflected by respondents to the Green Paper who argued that the BBC has become "the default point of access to online news for UK

[181] There is a degree of uncertainty around the overseas ratio because our analysis is based on assessing traffic patterns for the top 100 global websites and extrapolating these ratios to the market as a whole.

consumers"[182] or the "first port of call in the online world".[183] This concern may be justified in the light of evidence discussed earlier (especially the discussion around Figure 46) which suggests that there is a significant group of consumers who *only* use the BBC's website (however, as noted there the evidence is not conclusive on this).

Second, audiences who today regularly use a given commercial publication in an unmediated way, perhaps regularly, might be less likely to accept the introduction of a paywall if they can count on the BBC to provide a comparable service for free. More precisely:

- if a given free publication were to introduce a paywall, we could expect its unmediated traffic to split into traffic from (A) those users who are sufficiently loyal and choose to pay, and (B) those users who refuse to pay;
- among the latter group (B), a subgroup group (C) might come to rely on the BBC's website as a replacement for their original, formerly free, service; this may take the form of former non-BBC-users turning to the BBC ("switching") or, perhaps more likely in view of Figure 46, users who formerly relied on both the BBC and the publication in question now relying only on the BBC;
- among those users in group (C), a further subgroup (D) might have chosen to pay the paywall's fee if using the BBC's free website had not been an alternative.

There is not enough information in the public domain to allow us to reliably estimate the sizes of these audience segments. However, it does appear likely on analytical grounds that if consumers did not have the option of using the BBC's website then paywalls' conversion rates would be higher; *how much* higher cannot be ascertained with certainty, but the evidence suggests that a moderate increase might be plausible. Specifically, based on the evidence presented in Box 2:

- in the case of the *Times*, evidence from a survey conducted after the launch of the service suggests that the BBC acted as an important substitute for former *Times* readers who chose not to pay for the paywall. Although we can expect that a proportion of these would have chosen to pay had the BBC not been present, we lack evidence to assess this proportion. For illustrative purposes, if we were to assume that this proportion is the same as that of *Times* readers who chose to accept the pay-wall in the first place, then this would suggest that subscriber numbers might have been around 1/3 higher than they were.[184] However we stress that this is merely illustrative;
- international survey evidence suggests that UK consumers are among the least likely to pay for online news content, in particular significantly below the USA (6 per cent versus 11 per cent of consumers having paid in the last year, respectively – see Box 3.)
- however, comparing the *Times'* paywall's performance with that of US newspapers suggests that, in terms of the proportion of unique visitors who "converted" to a paid service, its success rate has been on a par with some of the US' higher performers and well above the US average.

As the divergent implications of these cases illustrate, the evidence does not allow for firm conclusions to be drawn, although it is reasonable to expect that a degree of substitution is present, which in turn would to some degree constrain publishers' ability to charge for news online.

The discussion above relates to a counterfactual in which the BBC was unavailable altogether – i.e. our radical scenario 5 in our discussion of online advertising in section 6.6.1. By contrast, if we were to consider a counterfactual in which the BBC's output is marginally *reduced* (scenarios 1 to 3 in section 6.6.1), we would expect the impact on publishers' paywall revenues to be negligible. Indeed, for the same reasons that we gave in the context of advertising, we would expect unmediated use of the BBC to be

[182] Submission by the Guardian Media Group.
[183] Submission by the News Media Association.
[184] 9% of respondents reported agreeing to pay for an online-only subscription while 31% turned to the BBC. If we suppose that 9% of those who went to the BBC would instead have paid had the BBC not been available, then subscriptions would have been 9% + (31% x 9%) or 131% x 9%, that is 31% higher than they were. We note however that our supposition that 9% of "BBC switchers" might have agreed to pay is arbitrary (although not a necessarily unreasonable); consequently, these figures are provided for illustrative purposes only.

affected to only a limited extent, leading only a small proportion of users to resort to other websites even when these are *free*.

Box 3: Analysing paywall evidence

Online news publishers have been experimenting with online subscriptions since the *Wall Street Journal*'s first paywall in 1997.[185] Although industry practices have evolved significantly over the years, two key patterns are discernible which are relevant for us. First, online subscriptions are purchased only by a relatively small proportion of online users – possibly of the order of 1 to 3 per cent of a website's unique visitors before the paywall was introduced.

Second, some of available evidence (points 1-2 below) suggests that the BBC may have constrained publishers' ability to charge online – but this is far from conclusive, and other evidence (points 3-4) suggests that UK paywalls have been relatively successful.

We consider the following four sources of evidence:

1. A UK consumer survey[186] – in an analysis of a 2010 survey carried out soon after the introduction of the Times' paywall, it was suggested that, among respondents who identified as *Times* readers (not necessarily online readers), around 31 per cent of former visitors to the Times' website reported switching to the BBC, whereas only 9 per cent agreed to pay for online access (another 9 per cent obtained online access included with print subscriptions). Therefore, for each user who paid for a digital subscription, 3.6 (31 per cent/9 per cent) other users switched to the BBC. However, we note that for methodological reasons caution should be employed when generalising from this data.[187]

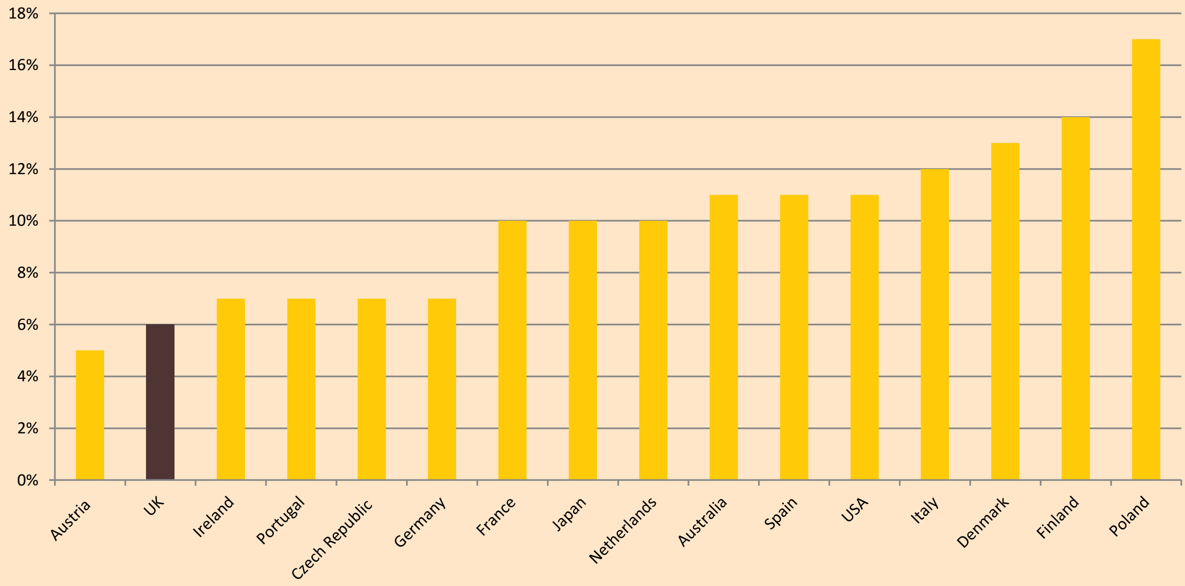
2. An international consumer survey – data from a survey,[188] in which consumers across 16 countries were asked whether they had paid for online news in the last year, placed the UK as having the second-lowest proportion of paying consumers among the countries surveyed. The results are summarised in Figure 61.

3. An assessment of 500 US paywalls – according to analyst commentary, around 500 US publications are supported by paywall technology provider Press+. On average the number of online subscribers is roughly around 0.5 per cent of the number of monthly unique visitors measured before paywalls are introduced. (Press+ also reports wide variations between publishers).[189]

4. A comparison of two prominent paywalls in the USA and the UK – before the introduction of its paywall, the Times reportedly[190] had around 6.3m monthly unique visitors. In October 2012, it was reported[191] to have around 131,000 online (online-only) subscribers, or 2.1 per cent of its original monthly unique visitors. In December 2012 it was reported[192] to have 152,000 online-only subscribers, or around 2.4 per cent of its pre-paywall unique visitors. By comparison, before the New York Times introduced its paywall in 2010, it reportedly had 30m unique US visitors and 60m worldwide visitors per month, and in August 2015 it reportedly[193] reached 1m online-only subscribers, or 1.6 per cent of its original monthly unique visitors and 3.3 per cent of its US based visitors (who may be a more relevant basis for comparison). This suggests that both newspapers' performance was significantly superior to the US average, and at the high end of the range served by Press+.

[185] For a timeline of newspapers' early paywall experiences (with a predominantly US focus), see The Week (2010).
[186] The survey was discussed in Oliver & Ohlbaum (2010).
[187] Figures reflect respondents' self-reported behaviour. Moreover, the figures do not distinguish between digital-only payments and payments for print + digital bundles, which in some cases are the only way to purchase a traditional print product.
[188] See Reuters (2015).
[189] The relevant report does not specify whether unique visitors were measured before or after the paywall had been introduced. However, since websites that rely on Press+ technology typically offer audiences a number of articles per month free of charge before a paywall is triggered, we can assume that monthly unique visitors with and without the paywall are broadly similar. See Harvard Neiman Journalism Lab (2014).
[190] Techcrunch (2010).
[191] Business Insider (2014).
[192] *Ibid*.
[193] Nieman (2015).

Figure 61: Proportion of consumers who have paid for online news in the last year[194]



Source: Reuters Institute for the Study of Journalism

➢ **Impact on publishers' ability to charge for mediated consumption**

The BBC might have a negative effect on publishers' ability to monetise mediated consumption if the BBC's presence made it less likely that

(a) consumers would be offered links to websites using paywalls;
(b) consumers would pay when faced with a paywall in the context of mediated consumption.

Regarding a), this could be a result of intermediaries (such as news aggregators, social media friends, colleagues) linking less to paywalled websites. However, while this is certainly possible, actions by publishers and intermediaries might go a long way towards limiting this effect. For example, under Google News' "First Click Free" policy[195] the service includes links to articles behind paywalls provided that publishers allow unregistered visitors to read at least one article after following a link from the aggregator. Likewise, social sharing features operated by online newspapers such as the *Financial Times* allow subscribers to share links to articles that allow recipients to bypass the website's paywall, and the *New York Times* does not count social media referrals towards a user's monthly free allowance. In short, commercial practices around social link sharing of paywalled content seem to be evolving in complex ways, with the general aim of limiting the impact of paywalls on social traffic; however, the extent to which this aim may be achieved is not clear.

Regarding b), the likelihood of consumers paying might be affected if, upon following a link leading to a paywall, users were likely to turn to the BBC instead of paying. However, for reasons outlined above, this is generally not the case in contexts of mediated consumption – e.g. it does not apply in the case of a link in an email urging the recipient to read a specific article. Thus, we do not expect the BBC's availability to have a major impact on publishers' ability to charge for mediated consumption.

In summary, although there is a degree of uncertainty, we do not expect the BBC to have a significant impact on online publishers' ability to monetise mediated consumption. Selling subscriptions may be particularly challenging in the context of one-off visits that may not be repeated for a long time, and selling one-off access for a low enough fee ("micro-payments") may be unfeasible if the time and inconvenience required from users is substantial. However, we note that successful experiments in the Netherlands

[194] Reuters (2015). Notably, the only country where even fewer consumers had paid than the UK was Austria, a country that also has a strong public service broadcaster with a free of charge online news service.
[195] See https://support.google.com/news/publisher/answer/40543?hl=en-GB

(involving a unified, multi-publisher micro-payment platform[196]) and Poland (involving federated, multi-publisher subscriptions[197]) offer promise that mediated traffic can be monetised.

6.6.2.2 Assessing the BBC's likely impact

Given that the BBC competes with commercial websites precisely for the type of consumption for which publishers can charge (unmediated consumption in connection to non-specific news needs – i.e. loyal regular readers), it is reasonable to expect that in the BBC's absence UK paywall revenues would be somewhat higher than they are today, although the available evidence does not allow us to ascertain how large this impact would be.

Since subscription paywalls normally capture only regular, unmediated users of commercial websites, websites with a smaller-than-usual proportion of loyal users may be weakly positioned to capture paywall revenues, regardless of the BBC. Moreover, we expect publishers' ability or inability to charge visitors for mediated traffic to be largely unrelated to the BBC. We note that new experiments with micro-payment technologies and federated paywalls may address some of these issues.

6.7 Case study: global news

In this subsection and the next, we apply our general discussion so far to the consideration of two issues raised by respondents to the Green Paper. We begin with "global news", by which we mean the provision of news by UK based publishers to audiences based outside the UK. As a second case study, in section 6.7.4, we will discuss a perceived expansion of the BBC's editorial scope into soft news.

6.7.1 Context

The BBC has been actively commercialising its international online presence since 2007, when the BBC Trust approved the BBC's strategy for its bbc.com international website. In the context of the BBC's news website, all content is available to both UK- and overseas based audiences, but when articles are viewed from abroad, a different layout is used that allows for display advertisements to be shown, and short advertisements are inserted before video clips are played back. The BBC has also actively exploited commercial syndication opportunities at least since 2005, when it struck a deal to distribute online video to US subscribers of RealNetworks' SuperPass service;[198] subsequently in 2007 it announced a deal with YouTube for commercially distributing online news clips outside the UK.[199]

In this context, the BBC's plans for "new advertising deals, subscription services, live events, syndication packages and commercial opportunities across all platforms and languages" appear to reflect an intention to intensify activities that it already undertakes, rather than a qualitatively new proposition. Accordingly, when considering the nature of the impact of the BBC's overseas presence on UK news publishers, it may be sufficient to consider the BBC's current activities.

Given its prominent role among online publishers' revenue sources, online advertising will be the main focus of our discussion.

6.7.2 The nature of the impact

Our analysis in section 6.6.1 considered in general terms the impact of the BBC's services on UK publishers' revenues from advertising targeted at overseas audiences. Our analysis found that the presence or absence of the BBC was unlikely to significantly affect publishers' revenue; specifically, we found that under reasonable assumptions the presence of absence of the BBC would be unlikely to affect commercial publishers' revenues by more than 7.4 per cent under the extreme scenario in which the BBC was not present in the provision of news to international audiences. However, as we noted there, this estimate is subject to a degree of uncertainty given (1) difficulties in estimating the BBC's share of global news traffic as compared to that of other UK publishers, as well as (2) a lack of evidence regarding the degree to which overseas audiences of BBC news would prefer UK based publishers in the BBC's absence.

[196] See https://launch.blendle.com/
[197] See https://www.pianomedia.sk/en_GB/about-us
[198] Brand Republic (2005).
[199] BBC (2007c).

As a result, the impact on commercial revenues could be significantly higher than the 7.4 per cent above – potentially in the region of 20 per cent to 30 per cent,[200] in line with the domestic case, *provided* that UK publishers absorb *all* of the traffic that would be transferred from the BBC to other publishers, in the BBC's absence.

Thus, the key question is: what is the relevant competitor set for the BBC overseas? Taken as a whole, the global online news industry would not be significantly affected by the BBC's absence. But would the situation be different for *British* publishers' overseas operations? If global audiences see large non-BBC British publishers (e.g. the *Guardian* or the *Mail Online*) as being closer substitutes to the BBC than other global news brands, their revenues might be significantly impacted (albeit to a lesser degree than in the UK case, both relatively and absolutely). For example, amongst certain audiences in the USA and Australia, the BBC might be used precisely because it is a non-domestic service and thus offers a different perspective – a characteristic that the BBC has stressed in its own marketing overseas. Other audiences, such as British expatriates, might simply seek British news.

It is unlikely that such a description would apply to a significant degree beyond specific audience groups in specific countries. However, we cannot rule this out. We have not had access to evidence that would allow us to assess how significant these effects are likely to be.

6.7.3 Preliminary conclusions

Our analysis suggests that the BBC's impact on UK commercial publishers may be far smaller than the case of UK advertising in online news. However, this conclusion relies on assumptions concerning the market in which the BBC's international news website operates, particularly in relation to who its main competitors are in that market. If, as we have assumed, it primarily competes against the world's main English language global news players (e.g. CNN, MSNBC, Yahoo, US and UK newspapers), the impact on UK publishers is likely to be small. However, if international audiences see other UK services (particularly The Guardian and Mail Online) as close substitutes for the BBC, the impact might be more comparable to what we find in the case of UK audiences. We have not had access to data that might allow us to ascertain which of these scenarios applies.

6.7.4 Case study: "soft news"

Some of the responses to the Green Paper have argued that the BBC has expanded its editorial scope in order to increase its provision of soft news; that this affects commercial publishers because it erodes a key source of advertising and promotional revenues; and that there is no public value justification for this. These claims give rise to the following questions:

- how significant is the BBC's provision of soft news, and has this grown over time?
- how, and to what extent, could this provision undermine publishers' revenues?
- would the BBC's provision of soft news be justified in terms of public value?

We discuss these questions in turn below.

6.7.5 How significant is the BBC's provision of soft news today?

The concept of soft news is without a generally accepted definition in the literature. However, if we focus on concerns expressed in submissions[201] to the Green Paper, it is sufficient for our purposes to assume that soft news refers to "news items whose main purpose is to entertain rather than to inform."[202]

Establishing the extent of the BBC's provision of soft news (or its consumption by audiences) is not straightforward. In industry discussions about the BBC's soft news output, three sections of the BBC

[200] Under an assumption of full UK bias (i.e. all traffic that is transferred from the BBC to other publishers goes to UK publishers) and a BBC share of news traffic (among UK publishers) similar to that observed in the UK, our model suggests that commercial revenues could increase by around 30%.
[201] For example, Oliver and Ohlbaum Associates (2015b) refers to "a journalistic style that blurs the line between information and entertainment, starting with feature stories but increasingly encompassing more personality-led news coverage"; the News Media Association refers to "'soft' news articles, magazine 'lifestyle' content, and celebrity columnists"; and the Guardian Media Group refers to "'soft news' or magazines content". A 2012 survey for Ofcom (Kantar Media, 2012) categorised as "soft news" human interest stories, travel, entertainment, local events and weather.
[202] For example, a review of the academic literature concluded that "there is no consensus about what hard and soft news exactly is, or how it should be defined or measured". Reinemann *et al.* (2012).

News website have been commonly mentioned: "Magazine", "Entertainment & Arts" and "Newsbeat". If we were to treat all the BBC's output under these sections as soft news then, we might conclude that soft news accounts for around 7% of the BBC's news traffic. (Data provided to us by the BBC shows that these three sections account, respectively, for 2.8%, 3.8% and 0.6% of page views to the BBC's news website, yielding a total of 7.2%.[203] However, we caution against taking this as a definitive view of the magnitude of soft news traffic, since the soft news label may not apply in a straightforward manner to all content in these sections; conversely, some content in other sections might be categorised as soft news. For example:

- at the time of writing, the lead story in the Magazine section was an article on post-partum psychosis,[204] drawing on plot developments in a BBC soap opera to discuss mental illness;
- conversely, on 22 January 2016, the BBC published, under its "World" category, a story about a wedding ceremony in New Zealand during which the bride had been moved to tears by the guests' performance of a traditional Maori ritual dance.[205] The story was based on a video posted on social media (of which the BBC carried still images) and had been widely covered by other outlets.

As these examples illustrate, soft news is an inherently ambiguous category. In general, whether a given news item is primarily meant to inform or entertain is a question of editorial judgement – and one that goes beyond our scope. Consequently, we are unable to provide a definite view as to the extent of the BBC's soft news provision. Moreover, even if these questions were resolved in an unambiguous way, quantifying the proportion of BBC output or traffic that would fall under soft news would be a significant task. In principle, it would require detailed content analysis of a large amount of published articles. With these caveats in mind, we can provide the following indicative figures.

- *Narrow definition within BBC News:* under a conservative view, it could be argued that soft news accounts for **at most 7%** of the BBC's traffic in terms of page views – given that not all the content in the three sections discussed above may classify as soft news.
- *Broader definition within BBC News:* under a more expansive view, a proportion of content in other sections could also be considered to be soft news. For illustrative purposes, if we assume that "soft news" accounts for 20% of all the non-front-page traffic in sections other than those mentioned above ("Magazine", "Entertainment & Arts" and "Newsbeat"), then analysis of data provided by the BBC shows that the relevant traffic would amount to **a further 13%** of BBC News traffic. However, this is strictly illustrative, as our use of a 20% factor here is arbitrary.
- *Broader definition outside of BBC News:* beyond its news website, historically[206] BBC Online has had multiple propositions some of whose content might be said to fall under the soft news category to varying degrees; this includes its sport website, but also other propositions such as its food and gardening websites. The analysis is more complex in this case, but if (again arbitrarily) we assume that one-fifth of this can be classified as soft news, the corresponding traffic would amount to **around 11%** of all news page views. [207]

As can be seen, depending on questions of judgement on the exact definition of soft news, as well as on assumptions about the prevalence of this type of content, we could find that soft news has a share of news page views of under 7% if a narrow definition is adopted, up to 20% (7% + 13%) if a broader definition within BBC News is adopted, or potentially up to 31% (7% + 13% + 11%) considering soft news traffic beyond the news website.

---

[203] Based on comScore MMX data for October to December 2015, UK audiences, desktop-only usage.
[204] See "I was convinced my baby would die the next day", BBC News 16 February 2016. Available at http://www.bbc.co.uk/news/magazine-35543747
[205] See "Wedding haka moves New Zealand Maori bride to tears", BBC News 22 January 2016. Available at http://www.bbc.co.uk/news/world-asia-35378875
[206] The market impact of these propositions has been discussed in policy contexts before. For example, in the context of the renewal of the bbc.co.uk service licence in 2008, the British Internet Publishers Association cited health, parenting, film and music reviews as examples of these areas of provision well served by the market. See BBC Trust (2008c), p. 47.
[207] In Figure 48 we saw that measured non-news BBC traffic is roughly twice as high as news traffic, although (as discussed there) a closer analysis reveals that the situation is more complex, since some traffic that is measured as non-news should be classified as news for the purposes of this study. If we treat as news 50% of the traffic measured as non-news and non-sport, the remaining non-news traffic (which would include all sport traffic) is equal in magnitude to around 56% of news traffic. One-fifth of this equals 11% of news traffic.

We have not been able to obtain evidence that would allow us to clearly confirm or reject the claim that the BBC's provision of soft news has grown over time. We have had access to BBC traffic data showing that combined traffic to both the Magazine and Entertainment & Arts sections has slightly fallen the 16 months leading to December 2015. But, for the reasons given above, this does not imply that the provision of (or traffic to) soft news stories has diminished (or grown). We have heard views from industry suggesting that soft news provision has grown, although this is anecdotal evidence that we have not been able to verify.

6.7.6 How could the BBC's provision of soft news undermine publishers' revenues?

Here we focus on online advertising, given its predominant role in online publishers' revenues. In order to assess the likely impact of soft news content on publishers' advertising revenues, we use the analytical framework outlined in 6.6.1 (and set out in detail in the Annex in chapter 9). This allows us to compare, in terms of a percentage difference, commercial publishers' revenues under the status quo and under an alternative scenario in which the BBC did not offer certain content (an "output reduction").

In Table 4 we estimated that the removal of a section accounting for 10 per cent of the BBC's news traffic would affect commercial revenues by between 0.8 per cent and 1.9 per cent. Before the share of traffic figures in section 6.7.5 can be applied to our framework, they need to be "re-scaled" by a factor of 0.65, for the reasons given in section 6.3.2.3. Thus, the 7% above (for Magazine, Entertainment and Arts, and Newsbeat) becomes 5%. When applied to our framework, this suggests that the removal of these sections would be likely to have a commercial impact of between 0.4% and 0.9% of commercial revenues, or **between £1.3m and £3.4m per annum**.

Similarly, in Table 4 we estimated that a breadth-based content reduction affecting 10% of the BBC's news traffic would affect commercial revenues by between 0.6 per cent and 1.5 per cent. In section 6.7.5 we considered that if 20 per cent of traffic to sections other than those listed above were to be classified as soft news, this would amount to 13 per cent of BBC news traffic; after re-scaling (as above), this yields 8 per cent. Applying our framework thus suggests that the removal of this content would be likely to affect commercial revenues by between 0.5 per cent and 1.2 per cent, or **between £1.8m and £4.8m per annum**.

The combined effect of these considerations is that the simultaneous removal of the "Magazine", "Entertainment & Arts" and "Newsbeat" sections, *plus* a reduction of content affecting 20 per cent of traffic in all other sections, would amount to an overall reduction of content affecting 13 per cent of BBC news traffic (5 + 8 per cent), with commercial revenues increasing by between 0.8 per cent and 2.1 per cent, or **between £3.2m and £8.2m per annum**.

The impact could be larger if a proportion of non-news BBC content were also categorised as soft news. However, we stress that this is strictly indicative, as our impact framework is not designed to apply to non-news content. Moreover, the revenue attributed to non-news content might be captured by non-news commercial publishers (e.g. magazine publishers).[208]

We also stress that the illustrative impacts above need not correspond to discontinuing the BBC's soft news provision. This is because we do not have a reliable sense of how prevalent soft news is within the BBC's output. As noted, this is a question which, in any case, would involve editorial judgement about what should be considered soft news. Accordingly, the figures above need to be used in connection to soft news only in a strictly indicative sense.

Finally, we note that the estimates given above are based on an output reduction considered in general, without taking into account any specific characteristics of soft news. However, there is limited evidence suggesting that for the specific case of soft news within the BBC's news website, the commercial impact may be somewhat lower than suggested above. This is for two reasons.

- **Unmediated consumption may be higher than normal, in the BBC's case**: as we saw in Figure 53, around 59 per cent of the BBC's traffic is unmediated, and this information has fed into the impact estimates discussed above. However, data shared with us by the BBC for the Magazine section

[208] Our framework makes specific assumptions related to the ways in which audiences consume news. Moreover, non-news traffic transferred to the commercial sector might go to non-news publishers, whose ability to monetise traffic might be weaker than that of news publishers.

suggests that over 80 per cent of traffic to its pages is unmediated.[209] Unless the opposite applies to "Arts and Entertainment", this means that unmediated consumption is over-represented in the context of the sections in question. Moreover, since (following our general analysis) unmediated consumption is generally associated with a lower impact than mediated consumption, this would suggest that the commercial impact of the BBC's soft news might be less than suggested above.[210] We note, however, that individual soft news items may exhibit different consumption patterns.

- **Diversion under unmediated consumption may be lower than normal**: in our analysis, diversion under unmediated consumption is driven by audiences who might stop visiting the BBC website if certain content were not available. However, it appears unlikely that this would apply to soft news content. Unmediated consumption is mainly driven by audiences with non-specific needs, who turn to a given news brand with certain expectations. But audiences associate the BBC News website with serious coverage of "hard" news. For example, research commissioned by the BBC Trust in 2014 found that audiences felt that commercial publications reflected their personal interests *more closely*, and provided more "colour", than the BBC's more formal and impartial offer. The BBC was seen as best for "the facts or "hard" news that is told straight", as well as breaking news and updates.[211] Therefore, we find it unlikely that, in the absence of soft news, audiences would turn to other websites instead. Again this suggests that our initial impact ranges may be too high.

Thus, it would appear that, in terms of its *scale*, the impact on publishers' revenues from the BBC's soft news activities may be relatively small. However, this does not automatically imply that such activities are necessarily justified in terms of the BBC's public service remit.

6.7.7 Would the BBC's provision of soft news be justified in terms of public value?

As noted earlier, in discussions on the subject with us, BBC representatives have argued that any "soft news" provision (to the extent that there is any) is limited, and is aimed at providing a well-rounded news service; at ensuring that all audiences are catered for; and at reaching audiences who might otherwise not be reached, to whom other content can then be offered.

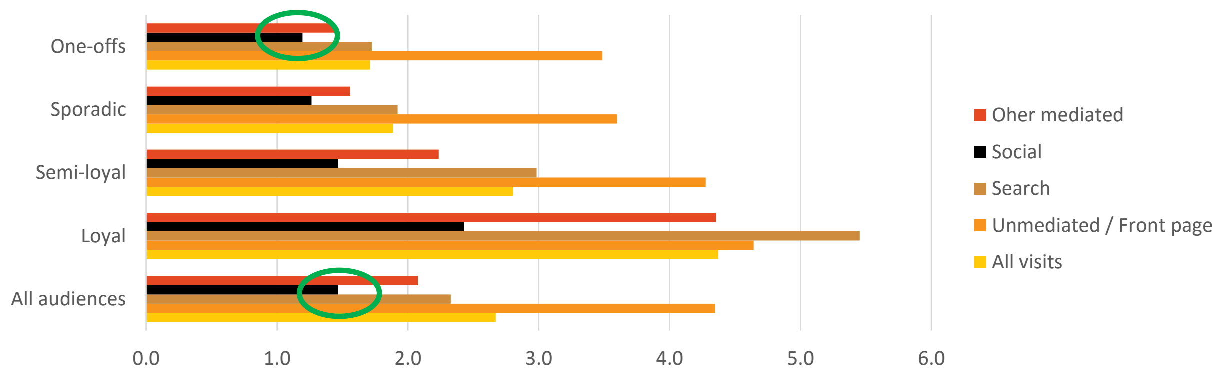
We note that the aim to offer a well-rounded service is a key aspect of the Reithian public service tradition – i.e. John Reith's "something for everyone" – and as such it potentially applies to a far broader range of content that may not be considered particularly distinctive or of public service, but which may not be described as soft news either.[212] However, even if we accept this argument, we note that this is of limited relevance in the case of consumption mediated by social media or search engines, which may supplant the BBC's curatorial role so that audiences' news diet is no more varied or complete when the BBC makes available content that is covered elsewhere in a similar form and for free.

An exception to this might be cases when audiences who arrive to read a specific article are then exposed to further content through onward links; however, the evidence suggests that this is rare. Indeed, BBC visits mediated by social media consist of only 1.3 pages on average (compared with an average of 3.5 pages per visit across all visits[213]). The same pattern is visible at the (non-BBC) commercial website whose data is reflected in Figure 62, where it can also be seen that one-off visitors are less likely to read further articles than loyal visitors.

---

[209] 86 per cent of relevant page views are preceded by another page view within BBC Online. Source: BBC.
[210] We exclude Newsbeat, given its relatively low traffic.
[211] Sparkler Consultancy (2014).
[212] See, for example, Crisell (2002).
[213] Source: data provided by the BBC. The BBC also shared that, on average, search-mediated visits consist of 3.6 page views. This might suggest that search based mediation is not incompatible with "Reithian" onward navigation. However, a large component of search referrals is likely to reflect users simply entering "BBC" or "BBC news" in search engines, which is effectively equivalent to unmediated consumption.

Figure 62: Page views per visit for different audience segments and means of discovery



Source: Oxera analysis of publisher data

The evidence thus suggests that there may be limited public value in "going where the audience is" when this means involves content, such as soft news, whose primary justification is in connection to audiences who "go where the content is" – that is, unmediated visitors to the BBC's website. As we discuss more fully at the end of this section, these reflections apply not only to soft news, but also more broadly to the BBC's use of mediated consumption as a way to reach additional audiences where the content involved is not distinctive.

6.7.8 Concluding remarks

Our conclusions regarding soft news point in two different directions. First, in terms of the *scale* of the impact that the BBC's soft news activities may have on the market, our analysis suggests that this is likely to be limited. To be sure, this is only an overall average result and there may be cases – e.g. specific publishers, or specific news events – for which this is not the case. Nonetheless, our analysis suggests that not only is consumption of BBC soft news output likely to be limited, but its substitution effects, particularly in the context of social media, are also likely to be limited – up to around £8m per annum under an expansive definition of soft news, and under assumptions about the prevalence of soft news which this report has not sought to verify.[214]

On the other hand, our analysis has also led us to consider arguments concerning the BBC's use of soft news *and* of social media and mediated consumption as a way to achieve reach. On this, independently of the question of scale, on the basis of the evidence we have reviewed, it does not appear to us that there is a strong public value rationale for this activity. In turn, this suggests that if the BBC were to stop production of this content, the impact on public value might be limited. Moreover, since this content is normally also produced by the private sector, consumer impact might also be limited.

Our analysis also suggests that wherever the scale of these activities is *not* small (e.g. if the effect falls disproportionately on a small group of commercial publishers), we would have a situation in which mediated consumption of BBC soft news content might be both disruptive to the market and low in public value. Indeed, if publishers' expectations about the growth of mediation are right (particularly in the context of new business models such as Facebook's "Instant Articles" feature, whereby publishers' content appears with Facebook's app), this may become an increasingly pressing issue. In turn, this suggests that the BBC's traditional assumption that increased reach equals increased public value may need to be revisited. We return to this point in our conclusions to this section (section 6.9).

6.8 Case study: online video

In this section we discuss the BBC's impact on the UK's VoD industry. This comprises the TV catch-up services offered by each of the main free to air broadcasters (e.g. iPlayer, ITV player, All4); the services provided by pay TV and telecoms operators offering access to on-demand content (including TV, film and sport); and internet-delivered services such as Netflix, Amazon (formerly LoveFilm), Blinkbox (acquired by

---

[214] The impact may be higher if a proportion of non-news BBC content were also categorised as soft news

Tesco) and YouTube. Business models include advertising, transactions (pay-per-view, download-to-own) and subscriptions (SVOD).

There is a degree of consensus that, as one of the first successful mass-market players in this space, the BBC's iPlayer has contributed strongly to the development of the UK's VoD industry. For example, in its response to the Green Paper, a commercial broadcaster stressed the importance of the BBC having a compelling on-demand offer[215] and in its submission the BBC quoted industry leaders including Netflix and Amazon, which have credited the BBC with helping install VoD consumption among UK consumers.

However, although the possibility that the BBC might have also had a negative impact on some VoD was not explicitly raised in the responses to the Green Paper,[216] the question has been at the centre of regulatory and industry discussions at various points throughout the history of iPlayer, particularly in the context of BBC Trust consultations.[217]

This section will briefly explore the two broad questions above; that is, to what extent the BBC's investments in VoD have driven market supply of on-demand services (in section 6.8.1) and/or substituted for commercial operators or aggregator services (in section 6.8.2), before offering some preliminary conclusions (section 6.8.3). We discuss the issues in broad terms at a qualitative level only. While we do not offer firm conclusions as to the degree of the BBC's market impact, we find that, despite all of its strong positive contributions, particularly in the early days of the UK VoD industry, it is likely that today iPlayer may to a degree be competing with commercial services.

6.8.1 Positive impact

We start by discussing the dynamic and generally positive impact that iPlayer has had on the UK's VoD industry and adjacent sectors. (We note that this is only part of the "positive" side of a net market impact assessment, as it ignores in particular any potential increase in net consumer welfare associated to iPlayer.)

Arguably, the main way in which the introduction of iPlayer may have incentivised other players' entry into the VoD market is by helping de-risk their investments. Before the iPlayer, VoD was a nascent space, and investors might have had doubts about consumer demand, consumer technology and behaviour, and the adequacy of broadband investment. A few years later, these doubts were largely gone. We discuss these aspects in turn:

6.8.1.1 Consumer demand

Before the introduction of iPlayer in 2007, the VoD market was much less developed than today, both in the UK and internationally. Although short-form video clips had already achieved a degree of popularity (driven largely by video-sharing services such as YouTube, launched in 2005, as well as publishers of all kinds offering short clips as part of their services), VoD services with *long-form, professional content* (e.g. TV or film content) were largely limited to pay TV operators' own services. Although several UK broadcasters and others had experimented with online catch-up video propositions, before the iPlayer's launch in 2007 these had met with only limited success. Moreover, there is a degree of evidence that iPlayer helped drive consumer adoption of VoD; for example, according to the BBC, for 43 per cent of its users, iPlayer was the first service that introduced them to video on demand.[218]

6.8.1.2 Consumer technology and consumer behaviour

At the time of iPlayer's launch the technology landscape was significantly less mature than today. Service providers were divided on the technologies and user interfaces that should be used to distribute online video. Key unanswered questions included whether video would be downloaded or "streamed"; whether PC based consumption would take place within a web browser or within dedicated consumer software; whether other devices would gain dominance (the iPhone only launched in 2007 and the iPad did not exist); and whether content would be transmitted over peer-to-peer networks or sent directly from content providers to consumers.

---

[215] Channel 4 (2015b).
[216] ITV's submission suggested the BBC's spending on iPlayer has been inefficient; however, value-for-money questions are outside the scope of this case study.
[217] For example, see BBC Trust (2007); BBC Trust (2013); and BBC (2014a).
[218] Source: BBC communication, quoting BBC Pulse data, Q4 2014.

Like other players, the BBC had made its own bets regarding these choices, some of which proved wrong. But within months of launching iPlayer it quickly learned important lessons about what would and would not work in a mass market VoD proposition. Video downloads, peer-to-peer distribution and the requirement for consumers to install custom software were either abandoned or made optional in favour of a straightforward web based experience akin to YouTube, with other providers following suit. There were other large players learning similar lessons (e.g. US broadcasters were going through a similar process at roughly the same time), and it is possible that other UK players might have reached similar solutions in a similar timeframe. However, as one of the world's first mass-market players, the BBC offered a viable roadmap for others to follow.

6.8.1.3 Infrastructure investments

At the time of iPlayer's introduction there was widespread scepticism in the media and telecoms industries about the viability of the internet as a distribution mechanism for premium video content. Watching streamed videos was a low-resolution, jittery and often interrupted experience. This was largely due to the quality of access connections used; in 2008 just over a quarter of UK households had broadband connections and less than 7 per cent of these had advertised/headline speeds of 10mbps or more.[219]

However, as consumer demand for reliable bandwidth intensified, network operators (supported by public policy and regulatory interventions) responded with investments which placed the UK in a position where by 2012 the BBC was able to simultaneously stream live Olympics video coverage to over 1m people.[220] By 2015, 78 per cent of UK households had fixed broadband connections, of which around a third had headline speeds of at least 30 mbps, and 83 per cent of households had the option of using superfast broadband.[221] iPlayer is only a relatively small user of this capacity: by 2014 the two services consuming most bandwidth were YouTube and Netflix.[222] Nonetheless, there are indications that iPlayer played an important role in driving consumer demand for broadband; for example, according to the BBC, 13 per cent of BBC audiences claim that iPlayer was one of the reasons they had for initially subscribing to broadband.[223]

6.8.1.4 Preliminary conclusions

There is a significant degree of "correlation" between the successes of the iPlayer and the uncertainties outlined above being progressively addressed. This does not imply a cause-and-effect relationship; it is possible that similar developments would have taken place in the absence of iPlayer (although probably at a slower pace). Nonetheless, it is clear that the BBC did make important risky bets, and it seems plausible that the outcomes of these bets should at least have helped diminish other players' risk in the dimensions above, so that Netflix CEO Reed Hastings' view that iPlayer "really blazed the trail"[224] may well be justified.

However, reaching a definitive conclusion on the question of causality is beyond the scope of this case study.

6.8.2 Negative impact and crowding out

In this section we consider the degree to which iPlayer might have had a negative impact on the UK VoD industry by capturing demand that might otherwise have gone to commercial players. We start by setting out a conceptual approach to the question in section 6.8.2.1, after which we consider the available evidence in section 6.8.2.2. We offer preliminary conclusions in section 6.8.3.

6.8.2.1 Conceptual approach

Whether iPlayer has crowding-out effects on commercial VoD providers depends to a large extent on the degree to which consumers see it as a suitable substitute for commercial offerings. In turn, substitutability between different services is closely linked to each service's content offering. For our purposes, long-form VoD content can be classified into the following categories:

---

[219] European Commission, "Digital Agenda Scoreboard", accessed 26 November.
[220] Source: BBC Internet blog: http://www.bbc.co.uk/blogs/internet/entries/95df296f-d37d-314a-aa8d-4ba872a86c62
[221] Some figures refer to late 2014. Source: Ofcom (2015e).
[222] Based on figures combining the UK and Ireland. Source: Sandvine (2014).
[223] Source: BBC communication, quoting GfK for the BBC.
[224] The Telegraph (2014).

- **catch-up TV**: recently broadcast content (i.e. content that is still within its catch-up rights window, typically lasting 7, 14 or 30 days after broadcast transmission);
- **archive TV:** post-broadcast content no longer in its catch-up rights window;
- **other TV:** imports not necessarily broadcast on UK television, digital-native TV-like episodic content such as *House of Cards*, or other similar content;
- **other content:** films, live sport, user-generated video and other content.

Using these categories, at first sight it might seem that iPlayer and other services are clearly differentiated. Specifically, it could be argued that because iPlayer only offers access to BBC catch-up content, and is the only player that offers such content, it does not substitute for other broadcasters' VoD services *or* other VoD services (e.g. Netflix, YouTube), since audiences do not use those services to find catch-up BBC content.

However, this requires closer examination. As part of its analysis of a proposed VoD JV between the BBC, ITV and Channel 4 (Project Kangaroo, blocked in 2009), the Competition Commission (CC, now the Competition and Markets Authority) found that there might be substitution between catch-up TV content from different UK broadcasters; and between catch-up and archive content, so that all catch-up and archive TV should be considered as forming one single market. As to other types of content (our third and fourth categories),[225] the CC found that these might be less substitutable for catch-up and archive TV content.

The CC's findings suggest that iPlayer's impact on the VoD industry might be limited to other broadcasters' services as well as to other services that offer archive TV content. However, the CC arrived at its conclusions at a time when the VoD industry was much less developed than today. In the last two years, Netflix's *House of Cards* has become a household name, Amazon Video has announced that it will launch a global competitor to *Top Gear* with the BBC's original talent, and both online players have reportedly outbid broadcasters for rights to TV content. In this world, the CC's distinction between catch-up plus archive TV and other content appears less clear.

To explore this further, consider the likely impact on other services if iPlayer were to stop being available: would this result in more usage for other services? The answer largely depends on whether in this scenario catch-up BBC content would be available through other providers (which it currently is not): if it is, then those players' usage (and revenues) might increase significantly in iPlayer's absence, especially if these do not require incremental payments from users (e.g. if unlimited access is provided as part of a pay TV subscription service).

Even if we assume that commercial services do not offer access to catch-up BBC content, we would expect that if iPlayer were to stop operating, then at least *some* of its usage would transfer to commercial players. In terms of the concepts of specific vs nonspecific content needs introduced in section 6.4, we would broadly expect that a relatively small proportion of iPlayer's usage linked to specific content needs ("**directed** viewing" below) would transfer to commercial players, while the usage corresponding to non-specific content needs ("**undirected**" viewing below) might be higher. Below, we discuss this in conceptual terms, and then in section 6.8.2.2 we consider the available evidence.

Directed viewing

For directed viewing, consider the likely impact if iPlayer were no longer available – would this result in more usage for other services? Consumers who would otherwise have turned to iPlayer in order to view a specific programme would now face a choice between several other activities, including:

- using digital video recorders (DVRs), if available, to view the desired content;
- viewing other content through a commercial VoD service;
- viewing other content on linear TV;
- doing something entirely different.

We are not aware of reasons to expect the second of the options above (i.e. turning to other VoD providers) to play a more prominent role than the others; indeed, we would expect the first option (using a

[225] The CC's classification of content types is more complex than ours.

DVR) to play a predominant role in households with the necessary equipment.[226] Accordingly, we expect that in iPlayer's absence other services would see only a relatively limited uplift in usage linked to directed viewing of iPlayer.

To the extent that directed iPlayer viewing converts to other VoD viewing, we would expect this to split into directed and undirected viewing of other providers' content. In each case, we can expect both broadcasters and non-broadcasters to compete for custom, although for directed viewing this requires audiences to be previously aware of specific content, on which catch-up and archive content might have an advantage. However, non-broadcast content should also be relevant; it appears perfectly plausible today that some audiences might choose between BBC4's The Bridge and Netflix's House of Cards, for example. In these cases, iPlayer's absence would lead to higher usage of VoD services not owned by broadcasters, and we would expect this effect to increase as commercial VoD services gain in popularity and audiences become aware of their content offerings.

Undirected viewing

Undirected viewing presents an altogether different picture. Here, consumers start with a less specific set of needs – e.g. to find family friendly entertainment about an hour in length – and face a more relevant choice between competing *services* first, and only then (once a service has been chosen) between available *programmes*. If iPlayer were not available, we would expect a considerable proportion of its current undirected use to result in consumers using commercial alternatives, at least to the degree that other VoD services, singly or collectively, can meet similar consumer needs.

The choice *between services* would be linked to users' expectations of each (e.g. likelihood to find suitable content, presence/absence of advertising), price considerations, and (for subscription services) expectations of future use. This is roughly akin to consumers choosing content by "channel surfing" in linear TV platforms, and consequently we might expect usage of commercial *broadcasters'* services to be affected to a degree roughly similar to what might be expected in the linear TV context, except for certain factors that might favour iPlayer over other services over and above the degree to which BBC content is favoured in linear TV contexts. In particular, we note two factors related to iPlayer's scale:

- **scale effects related to walled garden approaches:** while in the case of linear TV, viewers can easily switch between different broadcasters' programmes, in the online context users who "enter" iPlayer are thereafter limited to choosing BBC content (until they "exit" iPlayer and "enter" another service) and are not exposed to listings or promotions for non-BBC content.[227] The more effort it takes to switch between services, the likelier users may be to choose a service where they expect to find suitable content, which in turn would favour a service with a wide range of content;

- **platform ubiquity:** iPlayer is currently available in a wide range of platforms (from smartphones to smart TVs to pay TV platforms) which, anecdotal evidence suggests, is wider than for some commercial broadcasters.

Both factors mean that, when consumers wanting to "watch TV" consider which VoD service to turn to without having a specific programme in mind, iPlayer offers a ubiquitous, reliable "one stop shop" that is likely to offer *some* suitable content. This may lead audiences to iPlayer over smaller services (i.e. services with smaller content catalogues or less widely available in different platforms) even if superior content is available elsewhere (possibly at no additional charge, e.g. through subscription VoD services).

6.8.2.2 Assessing the evidence

Our analysis above can be summarised as follows.

- If iPlayer were no longer available, some of its current usage might be expected to transfer on to commercial VoD services.

[226] In 2014, 73 per cent of the TV viewing population had access to DVRs and they "time-shifted" 17 per cent of their TV viewing. See Ofcom (2015d), p. 157.

[227] This is not unique to iPlayer and applies to all main VoD players. The BBC is considering changes that might diminish this effect, to which we return below.

- If commercial services could carry BBC catch-up content and offer this at no additional cost to their users, then we could expect a significant portion of current iPlayer usage to transfer to commercial players that have this content.
- If commercial players do not offer BBC catch-up content, we expect that: usage would transfer to commercial players to a more limited degree; and transfer would largely correspond to “undirected” usage of iPlayer.

This leads us to consider the actual split between directed and undirected viewing of iPlayer. Currently, undirected viewing is thought to account for around 41 per cent of iPlayer usage.[228] The analysis set out above suggests that a significant portion of this usage might transfer to commercial competitors (including non-broadcasters), although we are not in a position to quantify this. We note that the BBC’s recent decision to move BBC3 online and to grow its offering of online-only content might well have the effect of increasing this figure.

Our analysis also suggested that, thanks to scale effects, undirected iPlayer usage might today be higher than might be expected simply by virtue of audiences’ content preferences. The evidence suggests that this might be true: in 2012, iPlayer’s share of catch-up viewed hours was estimated to be 42 per cent,[229] which is significantly higher than the BBC’s share of viewing in linear TV of 21 per cent.[230] If all of iPlayer’s undirected usage were to transfer to commercial services, and if the bulk of this went to commercial broadcasters, we could expect their usage to increase by as much as around 30 per cent.[231] Although these assumptions may fail to hold, this figure (30 per cent) serves as a rough estimate of the likely *maximum* impact that iPlayer’s presence might have on commercial broadcasters’ VoD services’ usage. The extent to which this would translate into additional revenues would depend on considerations similar to those discussed in section 6.6.1 in the context of online news, which we do not consider here.

We stress that this analysis has involved a counterfactual in which no provider is allowed to offer BBC catch-up content. This static analysis has allowed us to consider iPlayer’s footprint in terms of its displacement of other today’s existing services. However, we note that this is not the only possible counterfactual – indeed it may not even be the likeliest. For example, in iPlayer’s absence other providers might be allowed to syndicate BBC catch-up content (either for a fee, as they do today,[232] or free of charge) to be offered to consumers at no additional cost or for a fee. Indeed, as we saw in section 6.5.2.6, such a scenario would be in line with proposals by industry participants.

6.8.3 Preliminary conclusions

Our analysis suggests that iPlayer may well have played a pivotal role in establishing the UK VoD industry as a European leader. The BBC’s investments in innovation helped establish the viability of VoD (and particularly online VoD) as a mass-market proposition, and it is highly plausible that other players may have benefited from this in the years since iPlayer’s launch.

Nonetheless, our analysis also suggests that, today, commercial players’ usage might be higher if iPlayer were not in the market, possibly by as much as around 30 per cent. Estimating the degree to which this would translate into additional revenues would require further work.

To recognise that iPlayer may have a revenue impact on the industry is not to say that this amounts to crowding-out in the sense of preventing commercial activities. As discussed in section 6.3.3, the UK VoD market is one of vigorous activity, with the largest number of VoD suppliers in Europe (with 225 available VoD services, of which 114 are UK based).[233] iPlayer’s development seems not to have come at a significant cost to the industry’s overall development.

Finally, we note that certain new BBC initiatives may increase the BBC’s impact on other players’ revenues. In particular, the recently launched BBC Store will compete directly with other players in the commercialisation of archive BBC content, and this has caused a degree of debate.[234] The BBC’s plans

---

[228] In Q4 2012, 59 per cent of iPlayer users came to iPlayer to find a specific programme”. See Mediatique (2013), p. 17.
[229] 2012 estimates. Includes catch-up viewing through all VoD players, including non-broadcasters. Mediatique (2013), p. 12.
[230] 2013 figures, all homes. Ofcom (2014a).
[231] (40% x 42%)/(1 – 42%) = 30%.
[232] For example, Sky offers broadcasters a discount in its Platform Contribution Charge in exchange for catch-up VoD rights.
[233] December 2014 data. European Commission (2015).
[234] See http://www.theguardian.com/media/2015/nov/11/bbc-chief-new-tv-download-service-not-in-competition-with-netflix

to move BBC3 online may increase the disparity between its VoD and linear shares, even if overall it means a net decrease in viewing of BBC content.[235] Finally, the BBC's plans to increase commissioning of online-only content may also increase iPlayer usage, thereby increasing its impact.[236]

6.9 Concluding remarks

In this section we have considered the impact of the BBC's online activities on other online service providers, with a focus on online news and video. In all cases, we have concluded that the BBC is likely to have at least a moderate impact on commercial providers' revenues, in the sense that if the BBC's presence did not exist – or were to shrink – commercial revenues would be likely to increase.

This should not be surprising, given the scale of the audiences of the BBC's online operations. The type of "static' impact that we have considered – the likely effect of a reduction in BBC activity, without considering competitors' likely reactions – is only one of several elements that should be weighed when assessing the BBC's overall impact on the market. Other aspects that should also be considered include the BBC's role in market creation (which we discussed in the context of iPlayer) and in developing industry capabilities, among other things. Moreover, the impact on consumers and citizens – arguably the ultimate test of the desirability of a public intervention – would call for yet another set of considerations involving questions as to the degree to which the BBC's services are distinctive (and the degree to which distinctiveness should be pursued), and the importance to society of having a public-service voice in certain areas (e.g. news) regardless of the degree of private provision. These are all critical questions which were outside the scope of this study.

In the context of the BBC's Charter Review, it is worth considering the future development of the BBC's online services in the light of our discussion. Throughout this section we have drawn attention to the distinction between the BBC (or any other online publisher) acting as a first port of call online, versus only providing content that acts as stepping stones in a user's journey which may start elsewhere – for example, in social media. Each role is related to different user needs and forms of consumption, has different competitive effects and plays a different role in the delivery of public value. We summarise this in Figure 63.

Figure 63: The BBC as first port of call vs the BBC as a stepping stone in audiences' journey

	BBC as first port of call	BBC as stepping stone
Consumption	• Non-specific needs, unmediated consumption	• Specific content needs; mediated consumption
Relationship with publishers	• Competitive, based on audience perceptions of each brand (although multi-homing mitigates this) • BBC can concentrate significant traffic and potentially reduce commercial traffic • May undermine willingness to pay for paywalls	• Also competitive, but relative performance depends on intermediaries' choices rather than audiences' choices • Likely far smaller in financial terms (incidental traffic likely to be lower) • May not necessarily affect paywalls
Public value delivery	• Public is exposed to a variety of issues and views (hammocking) • Something for everyone	• Public-service, distinctive content is only consumed when specifically included/linked-to by third parties • Further public service content may be consumed through onward navigation

[235] BBC (2015c).
[236] For more information, see Wired (2013).

As our analysis has shown, the first port of call role is the one in which competition with market participants is most direct, since here audiences make choices between service provider brands, and as different providers seek to be in a position to influence audiences' content choices. Given this, it is understandable that certain stakeholders (e.g. Sky, Virgin Media) whose services also play a first port of call role might wish that the BBC concentrate on the stepping stone role, acting as a publisher providing content for others to aggregate. However, the BBC has argued that aggregation is key to it exposing audiences to a variety of views; as a former Director General once argued, "public service broadcasting is woven of whole cloth".[237]

But the world is changing. As we have seen, online intermediaries are quickly gaining prominence, challenging both the BBC and commercial publishers as alternative first ports of call. This is already evident in online news with social media, but it is also a rising theme in online video as connected TV platforms are able to surface content from across a range of content providers.[238] As this develops, new strategic challenges arise for all publishers (public and private) including questions about plurality, fair allocation of profits (as witnessed by current European debates around "ancillary copyright"[239] as well as about content carriage and promotion in "connected TV" platforms), and the Reithian promotion of public-service content that may be relatively unpopular.

These developments also suggest there might be new options and opportunities for the BBC. As we noted earlier, there have been calls for the BBC to harness its first port of call status to curate content from, and drive traffic to, a wide range of providers – starting with the 2004 Graf report,[240] and in the current context reflected in calls by GMG for the BBC to play a more active role as a content aggregator. Although the BBC has already experimented with this[241] (and in its response to the Green Paper is proposing to intensify this), the considerations above raises the question of whether the BBC should embrace aggregation in a more fundamental way. Our discussion of soft news highlighted that while such content may help the BBC provide a well-rounded news diet (something for everyone), when this consumption is mediated (i.e. a stepping stone) the public value argument may be significantly diminished while competitors are deprived of revenue. However, as intermediaries like Facebook have shown, it is possible to meet audiences' needs for a news diet through links, without necessarily publishing the relevant content.

In this context, the question arises as to whether the BBC should include links to (carefully chosen) soft news stories from other providers alongside its own content, refraining from producing such content itself. More broadly, the BBC could consider a similar approach to all online content that is not necessarily distinctive (as one commentator put it in a different context, "cover what you do best and link to the rest"[242]). Visitors to the BBC's website would still be met with a well-rounded news selection, but the relevant traffic would accrue to publishers; and since the relevant content would not sit on the BBC's website, the issue of mediated consumption of non-distinctive content would not arise. To be sure, there are a myriad of challenges that would need to be considered here, not least concerning the BBC's relationship to publishers for whom the BBC's referrals might become an important source of traffic; there are also questions about the degree to which aggregation is consistent with the BBC's brand and culture (a point made to us by an industry stakeholder). We believe there is merit in these issues being explored further.

Moreover, as our discussion of soft news in section 6.5.2.2 showed, we believe there is scope for reconsidering the BBC's focus on measures of audience reach as a way to track public value delivery. While in broadcast media assumptions can be made about the degree to which audiences who "tune in" to a particular programme may then be exposed to other content, in the online content this (a) varies greatly depending on the form of consumption involved (mediated/unmediated) and (b) can be monitored precisely using technology. For example, the BBC should not only be able to tell, but should report on and

---

[237] Mark Thomson 2010 MacTaggart lecture – available at http://www.bbc.co.uk/pressoffice/speeches/stories/thompson_mactaggart.shtml
[238] For example, Freeview Connect (which may in time achieve the ubiquity that Freeview has today), allows audiences to browse for VoD content from all broadcasters without having to log into a proprietary "player" environment; and similarly, Apple's Apple TV allows its users to search seamlessly for content from a variety of providers.
[239] For more information see European Commission: https://ec.europa.eu/digital-agenda/en/copyright
[240] Graf (2004).
[241] For its part, the BBC has explored linking to other services, partly in response to regulatory requirements, but also of its own initiative, such as in the case of its 2009 "Project Markee" (which was blocked by the BBC Trust).
[242] See http://buzzmachine.com/2007/02/22/new-rule-cover-what-you-do-best-link-to-the-rest/

actively seek to influence the proportion of visits mediated by social media that involve more than one article being consumed; the proportion of cases in which this involves finding content with particularly high public value (e.g. navigating from a celebrity story to one about the economy); and the audience segments that benefit from this. This is precisely what is done on a routine basis in the commercial world in the context of online marketing. By contrast, the BBC's emphasis on raw reach seems not only outdated but also potentially unhelpful; a visitor whose only contact with the BBC over a month has been to follow a few links to soft news stories, without consuming any further content, should not count in the same way towards the BBC's performance target (set by the Trust at 65 per cent of the online population) as one that has at least once skimmed the day's news.

Finally, although we have not had access to direct evidence corroborating this, publishers that we spoke to reported a marked increase in the role played by online intermediaries (primarily social media, but not exclusively) in driving traffic to their websites. Some also drew attention to the trend, commonly referred to as "distributed content", whereby content consumption may increasingly take place within intermediary platforms (such as in the case of Facebook's *Instant Articles* functionality). Our analysis throughout this section suggests that publishers are right to pay attention to these trends, as they suggest that the already important question of the relationship between news providers and intermediaries is likely to become increasingly central. As this develops, the role of the BBC – both in its direct relationship with intermediaries, and in terms of the indirect that this may have on commercial publishers – may call for further examination.

As the discussion in this section has shown, the future of the BBC's impact on the online market is complex. Efforts to mitigate negative impact by, for example, strengthening the BBC's role in linking to other publishers may help, but may also open further questions. One thing that seems clear is that the BBC's online market impact is likely to continue being a focus of policy discussions throughout the next Charter period.

PART THREE – ANNEXES

7 BBC One audience data (2014)

7.1 Peak time

GENRE	AUDIENCE (000)	SHARE (%)	OUTPUT HOURS	TOTAL VIEWING HOURS (000)
ARTS	1,161	9.6%	13.2	15,357
CHILDREN'S TV				
DRAMA STORIES	5,088	19.8%	1.9	9,752
FACTUAL	1,752	11.4%	2.4	4,175
CURRENT AFFAIRS				
CONSUMER AFFAIRS	3,234	15.2%	41.7	134,769
MAGAZINE	3,750	18.7%	126.4	473,903
POLITICAL/ECONOMICAL/SOCIAL AFFAIRS	2,439	15.2%	80.5	196,283
SPECIAL EVENTS	1,380	10.0%	0.8	1,035
DOCUMENTARIES				
CELEBRITY	2,952	22.0%	1.0	2,854
CRIME/REAL LIFE	2,255	16.8%	8.7	19,696
FACTUAL DRAMA	4,920	19.8%	4.3	20,912
FACTUAL ENTERTAINMENT	5,166	20.8%	25.4	131,399
HISTORY	3,844	13.6%	4.9	18,836
HUMAN INTEREST	3,003	15.6%	42.1	126,382
NATURAL HISTORY & NATURE	5,305	23.9%	68.9	365,493
SCIENCE/MEDICAL	2,870	12.7%	7.9	22,626
TRAVEL	3,827	15.8%	2.9	11,099
DRAMA				
SOAPS - UK	7,261	32.1%	98.1	712,544
SERIES/SERIALS - UK	5,555	21.7%	264.8	1,470,904
SINGLE PLAYS - UK	3,868	16.8%	10.5	40,419
ENTERTAINMENT				
CHAT SHOWS - GENERAL	3,441	21.3%	41.1	141,529
COMEDY STAND UP	2,155	13.2%	11.2	24,169
FAMILY SHOWS	8,305	34.5%	65.3	541,919
LOTTERY SHOW/UPDATES	3,704	17.0%	27.4	101,310
OTHER COMEDY	3,052	16.0%	2.9	8,850
QUIZ, PANEL & GAME SHOWS	3,228	16.5%	86.0	277,565
SITUATION COMEDY - UK	3,917	16.8%	44.4	173,838
SPECIAL EVENTS	5,817	29.9%	22.0	128,173
HOBBIES / LEISURE				
COOKERY	6,118	25.2%	44.2	270,101
GARDENING	2,997	14.5%	1.0	2,897
HOBBIES/LEISURE - GENERAL	5,189	21.0%	32.0	165,780
PURSUITS - LIFESTYLE - HOME	4,113	17.7%	13.7	56,137
TRAVEL	3,244	14.0%	3.9	12,650
MUSIC				
CLASSICAL – DOCUMENTARY	4,362	16.0%	1.9	8,433
CLASSICAL – GENERAL	3,557	17.3%	1.5	5,454
CONTEMPORARY - PERFORMANCE/LIVE	3,024	16.4%	3.1	9,474
NEWS/WEATHER				
NEWS - NATIONAL/INTERNATIONAL	4,432	23.9%	287.7	1,275,205
NEWS - REGIONAL	1,220	9.3%	0.7	793
NEWS/WEATHER - MISCELLANEOUS	1,072	19.4%	8.2	8,829
OTHER - NEW PROGRAMMES	2,426	13.5%	13.5	32,834
RELIGIOUS				
SPORT				
FOOTBALL DOMESTIC	3,203	22.4%	81.7	261,489
FOOTBALL INTERNATIONAL	7,343	33.4%	39.9	293,002
FORMULA ONE	3,160	17.7%	3.0	9,373
MOTOR RACING	4,670	22.8%	2.7	12,376
RUGBY	4,659	19.3%	2.1	9,628
SPORTS COMPOSITE	4,703	22.6%	32.9	154,484
SPORTS NEWS	1,952	13.9%	11.1	21,697
TENNIS	4,643	23.7%	1.3	5,958
RELIGIOUS	5,216	22.5%	1.6	8,432
TOTAL			**1,694**	**7,800,821**

Average BBC1 4+ audience (weighted for programme duration) by BARB subgenre, 2014, all peak-time output

7.2 Day time

GENRE	AUDIENCE (000)	SHARE (%)	OUTPUT HOURS	TOTAL VIEWING HOURS (000)
ARTS	1,915	12.5%	1.5	2,808
CHILDREN'S TV				
CARTOONS/ANIMATION	1,576	14.4%	0.5	840
DRAMA STORIES	2,077	14.9%	2.9	6,094
ENTERTAINMENT	752	7.2%	1.0	715
FACTUAL	1,312	9.7%	3.4	4,418
PRE SCHOOL	1,276	14.0%	0.7	829
CURRENT AFFAIRS				
CONSUMER AFFAIRS	1,195	23.7%	303.3	362,579
POLITICAL/ECONOMICAL/SOCIAL AFFAIRS	1,030	15.5%	110.2	113,570
SPECIAL EVENTS	1,903	25.7%	16.3	30,924
DOCUMENTARIES				
CRIME/REAL LIFE	1,280	23.3%	17.9	22,908
FACTUAL ENTERTAINMENT	1,399	11.6%	4.0	5,621
HUMAN INTEREST	1,131	16.2%	267.1	301,977
NATURAL HISTORY & NATURE	1,337	11.9%	37.8	50,495
TRAVEL	934	9.5%	2.9	2,739
DRAMA				
SERIES/SERIALS - UK	1,511	20.9%	144.6	218,402
SINGLE PLAYS - UK	1,141	14.8%	9.9	11,312
ENTERTAINMENT				
ANIMATIONS – CARTOONS	2,136	18.7%	6.9	14,702
ANIMATIONS – PUPPETS	918	13.8%	0.5	428
CHAT SHOWS - AUDIENCE PARTICIPATION	1,993	17.5%	0.4	731
COOKERY	962	12.9%	3.4	3,240
FAMILY SHOWS	3,394	17.3%	4.1	14,028
MISCELLANEOUS	3,656	19.6%	1.9	6,946
QUIZ, PANEL & GAME SHOWS	2,255	19.2%	331.3	747,150
SITUATION COMEDY - UK	1,583	13.5%	1.9	2,981
SPECIAL EVENTS	2,067	12.9%	1.3	2,652
HOBBIES / LEISURE				
COOKERY	1,234	16.6%	196.4	242,407
DIY	1,341	25.3%	243.8	326,855
GARDENING	1,032	12.6%	19.6	20,246
HOBBIES/LEISURE - GENERAL	1,732	22.2%	414.2	717,340
PURSUITS - LIFESTYLE - HOME	855	12.1%	2.7	2,322
PURSUITS - LIFESTYLE - PERSONAL	1,115	18.5%	43.0	47,925
TRAVEL	1,412	15.6%	12.2	17,206
MUSIC				
CLASSICAL – DOCUMENTARY	1,227	11.0%	1.9	2,372
CONTEMPORARY – GENERAL	2,341	14.9%	1.0	2,263
CONTEMPORARY - CHART SHOW OR COUNTD	3,091	23.5%	1.0	2,988
NEWS/WEATHER				
NEWS - NATIONAL/INTERNATIONAL	1,515	34.5%	1300.8	1,971,137
NEWS/WEATHER - MISCELLANEOUS	1,660	32.1%	3.0	4,953
OTHER - NEW PROGRAMMES	1,092	17.3%	19.3	21,033
RELIGIOUS				
ACTS OF WORSHIP	1,356	10.3%	32.2	43,610
RELIGIOUS - OTHER	885	11.7%	44.3	39,155
SPORT				
ATHLETICS	1,272	14.2%	35.9	45,623
CYCLING	1,145	9.8%	9.5	10,839
DARTS	1,457	12.1%	3.7	5,393
FOOTBALL DOMESTIC	1,098	17.7%	94.5	103,795
FOOTBALL INTERNATIONAL	3,803	28.0%	19.3	73,517
FORMULA ONE	2,353	22.6%	35.7	84,015
GOLF	2,170	20.9%	15.7	33,955
MOTOR RACING	2,791	27.9%	23.0	64,293
RUGBY	3,364	24.4%	43.2	145,398
RUGBY LEAGUE	859	9.2%	13.7	11,774
SNOOKER/POOL/BILLIARDS	1,155	11.6%	12.0	13,806
SPORTS COMPOSITE	1,450	16.8%	122.8	178,095
SPORTS MAGAZINE	666	6.2%	0.5	311
SPORTS NEWS	943	10.6%	6.6	6,175
TENNIS	1,857	19.7%	62.5	116,004
TRIATHLON	788	9.6%	3.2	2,496
WATERSPORTS	3,220	18.5%	3.1	10,037
WINTER SPORTS	2,224	24.5%	9.6	21,387
TOTAL			**4,125**	**6,317,812**

Average BBC1 4+ audience (weighted for programme duration) by BARB subgenre, 2014, 0600-1800 output

8 TV scheduling analysis

8.1 Introduction

The BBC has an impact on commercial broadcasters through the types of television programme it broadcasts and the timing of when it broadcasts the programmes. If a particular type of programme is being broadcast live on BBC One at the same time as a similar type of programme is being broadcast on ITV1, the head-to-head scheduling might be expected to have an impact on ITV1's audience.

This annex explores the extent to which such clashes occur in practice, and their impact on ITV1. Oxera analysed the impact of BBC One on ITV1 viewing figures during prime time slots over the three year period 2012 to 2014.[243] To do this, the approach used in a US econometric study was adapted to the UK context and dataset, and to the specific questions being examined.[244] In particular, the impact on ITV1 audience numbers of drama scheduling clashes with BBC One, BBC Two, ITV1, Channel 4 and Channel 5 was explored through econometric panel data analysis using BARB data on the scheduling of weekly drama series. Also considered was the impact on ITV1 of prime time weekend entertainment scheduling clashes.

The main impact has been found in drama programmes. The results indicate that when a BBC One drama of a particular subgenre (e.g. crime) is broadcast at the same time as an ITV1 drama of the same subgenre, the ITV1 audience is 6 to 8 per cent lower than would otherwise be the case. (This may underestimate the impact, as the audience figures modelled include live and catch-up viewing.) This finding is robust across all the main ("effects based") estimation methods applied, and a negative impact is observed across all specifications.

In addition, because it is also found that any given week's viewing figures for a particular show are highly dependent on those of the prior week, the effect is likely to persist over a number of weeks. For instance, assuming that, at the beginning of a month, there is a single clash in week 1, this has an initial impact on ITV1 drama audience of around -7 per cent. With an audience persistency week to week of 50 per cent,[245] the initial clash would translate into a reduction in ITV1 audience in each of the subsequent weeks of 3 per cent (week 2), 2 per cent (week 3), 1 per cent (week 4) and then very small impacts after this. Adding up the impacts over these subsequent weeks means that the total impact of the clash is comparable to a 14 per cent reduction in audience concentrated in the first week. While audience numbers eventually recover under this scenario, this is not the case if clashes persist week on week. In this alternative scenario there would be around a 13 per cent reduction in ITV1 drama audience each week over the longer term. The extent to which repeat clashes occurred in practice varied by ITV drama.[246]

More broadly, however, where a BBC One drama of any type clashes with an ITV1 drama of any type, the negative impact on ITV's audience is much more modest in the main model specifications applied. The impact is at most -1 per cent, and is not statistically significant.

At the subgenre level, the analysis of weekend entertainment indicates much weaker effects than for drama. Across the main model specifications, if a BBC One entertainment programme is shown at the same time as an ITV1 entertainment programme of the same subgenre (e.g. music/dance contest), this results in an impact on ITV1 audience of around -1 per cent, which is not statistically significant.

The same result holds for weekend entertainment across the main model specifications when scheduling clashes are defined more broadly – i.e. where a BBC One entertainment show of any type clashes with an ITV1 entertainment show of any type. Again, the impact on ITV1 audience is around -1 per cent, and is not statistically significant.

---

[243] For drama, prime time slots are defined as 8pm to 10pm Monday to Friday and Sunday. For entertainment, prime time is defined in the vast majority of cases as 7pm to 10pm on Saturday (although there are a limited number of instances in which shows occur before 7pm on a Saturday, and a limited number of instances of shows occurring on a Sunday).
[244] Shamsie *et al*. (2006).
[245] This takes the coefficient for the lagged dependent variable from the fixed effects model of around 0.5, which is a lower bound estimate.
[246] See Table 15 for a comparison.

8.2 Drama analysis

The main issue examined was the extent to which BBC One's (and other channels') scheduling of dramas affects ITV's drama audience. To explore this, ITV1 shows were identified over the period 2012 to 2014 that were series or serials, aired on a weekly basis, and were non-repeats. Entertainment shows and soaps were excluded. The time slot examined was prime time: 8pm to 10pm.

8.2.1 The data

We identified 20 ITV1 shows that met the above criteria (see Table 6). The panel dataset comprised 222 observations across ITV1 shows and weeks. Most of the observations in the panel were for *Downton Abbey*, *Scott & Bailey*, and *Law & Order: UK*.[247]

Table 6: ITV1 weekly dramas examined by day of broadcast, 2012 to 2014, 8pm to 10pm

	Day						
ITV1 programme title	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Sunday**	**Total**
Breathless	0	0	0	6	0	0	6
Broadchurch	8	0	0	0	0	0	8
DCI Banks	6	0	5	0	0	0	11
Doc Martin	8	0	0	0	0	0	8
Downton Abbey	0	1	1	1	0	24	27
Eternal Law	0	0	0	6	0	0	6
Grantchester	6	0	0	0	0	0	6
Homefront	0	0	0	6	0	0	6
Law & Order: UK	0	0	8	0	7	6	21
Lewis	6	0	4	0	6	0	16
Lightfields	0	0	5	0	0	0	5
Love And Marriage	0	0	6	0	0	0	6
Monroe	6	0	0	0	0	0	6
Mr Selfridge	0	0	0	0	0	20	20
Mrs Biggs	0	0	5	0	0	0	5
Scott & Bailey	8	0	15	0	0	0	23
The Bletchley Circle	4	0	0	3	0	0	7
Vera	0	0	0	0	0	12	12
Whitechapel	6	0	6	0	0	0	12
Wild At Heart	0	0	0	0	0	11	11
Total	**58**	**1**	**55**	**22**	**13**	**73**	**222**

Note: The individual instances of *Downton Abbey* on a Tuesday, Wednesday and Thursday relate to special showings on Christmas Day during the 2012 to 2014 period.

Source: Oxera analysis of BARB data.

All the ITV1 shows identified on this basis were dramas. It was then possible to compare scheduling clashes with BBC (and other channel) dramas. Both a broad and a narrow definition of scheduling clashes were considered; a broad clash being assumed to occur when ITV1 and another channel (e.g. BBC One) simultaneously air any drama. Using this broad definition, Table 7 summarises clashes between ITV1 and BBC One dramas.

[247] For dramas split into two episodes (e.g. in the series finale), only the first episode was included.

Table 7: Broad clashes between ITV1 dramas and BBC One dramas

BBC One programme title	Number of clashes with ITV1 dramas
By Any Means	6
Call The Midwife	6
Death In Paradise	1
Good Cop	2
Hunted	5
Hustle	6
Inside Men	2
Inspector George Gently	1
Jamaica Inn	1
Jonathan Creek	1
Mayday	3
New Tricks	11
Our Girl	5
Our Zoo	5
Outnumbered	2
Public Enemies	2
Ripper Street	7
Sherlock	1
Shetland	2
Silent Witness	5
Silk	3
The 7.39	1
The Musketeers	9
The Royal Bodyguard	1
The White Queen	6
Truckers	5
What Remains	3
Total	**102**

Source: Oxera analysis of BARB data.

Table 7 indicates that there were 102 clashes out of the 222 ITV1 drama episodes listed above, or that just over 45 per cent of ITV1 drama episodes examined clashed with BBC One dramas.

As discussed, a first port of call for our econometric analysis was to explore the impact of BBC One drama scheduling clashes with ITV1 when these were defined at this broad level. However, it was not immediately obvious that a drama on one channel (e.g. a crime drama) would necessarily be in direct competition with a drama of a different kind on another channel (e.g. a period drama). In addition, a previous US study had analysed the issues at the subgenre level.[248]

To explore scheduling clashes in more depth, we therefore categorised the ITV1 dramas into the following subgenres using IMDb information: crime, medical, comedy, period, history, fantasy, adventure, and life story (see Table 8). The series number for each drama, as first observed in the dataset, was also identified – providing an indicator of the "tenure" of the show.

[248] Shamsie *et al*. (2006).

Table 8: ITV1 drama categorisation by subgenre

ITV1 programme title	Subgenre	Series number
Breathless	Medical drama	Series 1
Broadchurch	Crime drama	Series 1
DCI Banks	Crime drama	Series 3
Doc Martin	Comedy drama	Series 6
Downton Abbey	Period drama	Series 2
Eternal Law	Fantasy drama	Series 1
Grantchester	Crime drama	Series 1
Homefront	Life drama	Series 1
Law & Order: UK	Crime drama	Series 6
Lewis	Crime drama	Series 6
Lightfields	Fantasy drama	Series 1
Love and Marriage	Comedy drama	Series 1
Monroe	Medical drama	Series 2
Mr Selfridge	Period drama	Series 1
Mrs Biggs	Crime drama	Series 1
Scott & Bailey	Crime drama	Series 2
The Bletchley Circle	Crime drama	Series 1
Vera	Crime drama	Series 2
Whitechapel	Crime drama	Series 3
Wild at Heart	Life drama	Series 7

Source: Oxera encoding of subgenre based on information from IMDb website.

For the time slots covered by the 20 ITV1 dramas, programmes showing simultaneously on BBC One, BBC Two, Channel 4 and Channel 5 were also categorised by subgenre, where these were identified as a series/serial drama or special one-offs of a series – e.g. *Jonathan Creek*. On a number of occasions the ITV1 dramas clashed with BBC One dramas, albeit not necessarily of the same subgenre.

Table 9 shows the clashes between three core ITV1 crime dramas – *Broadchurch*, *Law & Order: UK*, and *Scott & Bailey* – and BBC One shows. There are a number of clashes with BBC One crime dramas, but also with BBC One non-crime dramas. There are also occasions when no clashes (if broadly defined) occurred.

Table 9: ITV1 crime dramas versus BBC programming

Broadchurch

	Date	Day	Start time	ITV1 series number	ITV1 audience ('000s)	BBC One programme title	BBC One audience ('000s)	BBC One subgenre (if drama)
1.	04-Mar-13	Monday	21:00	Series 1	9,074	Mayday	5,836	Crime drama
2.	11-Mar-13	Monday	21:00	Series 1	9,007	Shetland	5,681	Crime drama
3.	18-Mar-13	Monday	21:00	Series 1	9,648	Motorway Cops	3,036	
4.	25-Mar-13	Monday	21:00	Series 1	9,420	Motorway Cops	2,809	
5.	01-Apr-13	Monday	21:00	Series 1	8,799	Jonathan Creek	8,748	Crime drama
6.	08-Apr-13	Monday	21:00	Series 1	8,961	Margaret Thatcher: Prime Minister	2,520	
7.	15-Apr-13	Monday	21:00	Series 1	9,557	The Prisoners	3,997	
8.	22-Apr-13	Monday	21:00	Series 1	10,464	The Prisoners	3,306	

Law & Order: UK

	Date	Day	Start time	ITV1 series number	ITV1 audience ('000s)	BBC One programme title	BBC One audience ('000s)	BBC One subgenre (if drama)
1.	06-Jan-12	Friday	21:00	Series 6	5,426	Public Enemies	4,747	Crime drama
2.	13-Jan-12	Friday	21:00	Series 6	5,292	Hustle	6,514	Crime drama
3.	20-Jan-12	Friday	21:00	Series 6	5,369	Hustle	5,880	Crime drama
4.	27-Jan-12	Friday	21:00	Series 6	5,031	Hustle	5,842	Crime drama
5.	03-Feb-12	Friday	21:00	Series 6	5,224	Hustle	6,129	Crime drama
6.	10-Feb-12	Friday	21:00	Series 6	5,123	Hustle	6,100	Crime drama
7.	17-Feb-12	Friday	21:00	Series 6	5,088	Hustle	6,800	Crime drama
8.	14-Jul-13	Sunday	21:00	Series 7	6,069	The White Queen	4,563	History drama
9.	21-Jul-13	Sunday	21:00	Series 7	5,788	The White Queen	4,589	History drama
10.	28-Jul-13	Sunday	21:00	Series 7	5,841	The White Queen	4,584	History drama
11.	04-Aug-13	Sunday	21:00	Series 7	5,444	The White Queen	4,354	History drama
12.	11-Aug-13	Sunday	21:00	Series 7	5,517	The White Queen	4,157	History drama
13.	18-Aug-13	Sunday	21:00	Series 7	5,303	The White Queen	4,406	History drama
14.	12-Mar-14	Wednesday	21:00	Series 8	5,362	Famous, Rich And Hungry	3,872	
15.	19-Mar-14	Wednesday	21:00	Series 8	4,856	Crimewatch UK	3,839	
16.	26-Mar-14	Wednesday	21:00	Series 8	5,313	Masterchef	5,111	
17.	02-Apr-14	Wednesday	21:00	Series 8	5,172	Monkey Planet	3,635	
18.	09-Apr-14	Wednesday	21:00	Series 8	5,311	Monkey Planet	2,992	
19.	16-Apr-14	Wednesday	21:00	Series 8	5,329	Monkey Planet	3,308	
20.	23-Apr-14	Wednesday	21:00	Series 8	4,901	Jamaica Inn	5,165	History drama
21.	11-Jun-14	Wednesday	21:00	Series 9	4,687	Del Boys And Dealers	3,012	

Scott & Bailey

	Date	Day	Start time	ITV1 series number	ITV1 audience ('000s)	BBC One programme title	BBC One audience ('000s)	BBC One subgenre (if drama)
1.	12-Mar-12	Monday	21:00	Series 2	7,377	Empire (BBC)	2,379	
2.	19-Mar-12	Monday	21:00	Series 2	7,093	Empire (BBC)	2,663	
3.	26-Mar-12	Monday	21:00	Series 2	6,475	Empire (BBC)	2,185	
4.	02-Apr-12	Monday	21:00	Series 2	5,903	Silent Witness	6,859	Crime drama
5.	09-Apr-12	Monday	21:00	Series 2	6,067	Silent Witness	6,675	Crime drama
6.	16-Apr-12	Monday	21:00	Series 2	5,970	Silent Witness	5,527	Crime drama
7.	23-Apr-12	Monday	21:00	Series 2	6,035	Silent Witness	5,886	Crime drama
8.	30-Apr-12	Monday	21:00	Series 2	5,916	Silent Witness	5,418	Crime drama
9.	03-Apr-13	Wednesday	21:00	Series 3	7,741	Motorway Cops	3,747	
10.	10-Apr-13	Wednesday	21:00	Series 3	6,849	Victoria Wood's Nice Cup Of Tea	3,653	
11.	17-Apr-13	Wednesday	21:00	Series 3	6,418	New Tricks	3,038	Crime drama
12.	24-Apr-13	Wednesday	21:00	Series 3	6,831	Great Bear Stakeout	3,988	
13.	01-May-13	Wednesday	21:00	Series 3	6,633	Masterchef	6,056	
14.	08-May-13	Wednesday	21:00	Series 3	6,987	The Apprentice	6,642	
15.	22-May-13	Wednesday	21:00	Series 3	6,647	The Apprentice	7,691	
16.	10-Sep-14	Wednesday	21:00	Series 4	6,358	Our Zoo	5,343	Period drama
17.	17-Sep-14	Wednesday	21:00	Series 4	6,035	Our Zoo	5,231	Period drama
18.	24-Sep-14	Wednesday	21:00	Series 4	5,946	Our Zoo	4,805	Period drama
19.	01-Oct-14	Wednesday	21:00	Series 4	5,909	Our Zoo	5,557	Period drama
20.	08-Oct-14	Wednesday	21:00	Series 4	5,909	Our Zoo	5,662	Period drama
21.	15-Oct-14	Wednesday	21:00	Series 4	5,839	The Apprentice	7,502	
22.	22-Oct-14	Wednesday	21:00	Series 4	5,931	The Apprentice	7,786	
23.	29-Oct-14	Wednesday	21:00	Series 4	6,468	The Apprentice	7,625	

Source: Oxera analysis of BARB data.

Downton Abbey and *Mr Selfridge* are core ITV1 non-crime dramas in the dataset. Table 10 shows that these period dramas clashed with BBC One dramas in general on a number of occasions, but not with BBC One dramas of the same subgenre.

Table 10: ITV1 period dramas versus BBC One programming

Downton Abbey

	Date	Day	Start time	ITV1 series number	ITV1 audience ('000s)	BBC One programme title	BBC One audience ('000s)	BBC One subgenre (if drama)
1.	16-Sep-12	Sunday	21:00	Series 2	10,498	Inspector George Gently	5,211	Crime drama
2.	23-Sep-12	Sunday	21:00	Series 2	11,010	Andrew Marr's History Of The World	3,852	
3.	30-Sep-12	Sunday	21:00	Series 2	10,864	Andrew Marr's History Of The World	2,954	
4.	07-Oct-12	Sunday	21:00	Series 2	10,714	Andrew Marr's History Of The World	2,722	
5.	14-Oct-12	Sunday	21:00	Series 2	10,779	Antiques Roadshow	4,717	
6.	21-Oct-12	Sunday	21:00	Series 2	10,902	Andrew Marr's History Of The World	2,535	
7.	28-Oct-12	Sunday	21:00	Series 2	10,614	Andrew Marr's History Of The World	2,607	
8.	04-Nov-12	Sunday	21:00	Series 2	10,959	Andrew Marr's History Of The World	2,822	
9.	25-Dec-12	Tuesday	20:45	Series 2	9,150	EastEnders	11,308	
10.	22-Sep-13	Sunday	21:00	Series 3	11,952	By Any Means	5,227	Crime drama
11.	29-Sep-13	Sunday	21:00	Series 3	12,100	By Any Means	4,490	Crime drama
12.	06-Oct-13	Sunday	21:00	Series 3	11,863	By Any Means	4,071	Crime drama
13.	13-Oct-13	Sunday	21:00	Series 3	11,749	By Any Means	4,201	Crime drama
14.	20-Oct-13	Sunday	21:00	Series 3	11,392	By Any Means	4,207	Crime drama
15.	27-Oct-13	Sunday	21:00	Series 3	11,537	By Any Means	4,071	Crime drama
16.	03-Nov-13	Sunday	21:00	Series 3	11,925	Richard Hammond Builds A Planet	2,316	
17.	10-Nov-13	Sunday	21:00	Series 3	12,159	Richard Hammond Builds A Universe	1,724	
18.	25-Dec-13	Wednesday	20:30	Series 3	9,407	EastEnders	9,362	
19.	21-Sep-14	Sunday	21:00	Series 4	10,707	Our Girl	5,219	Life drama
20.	28-Sep-14	Sunday	21:00	Series 4	10,462	Our Girl	4,900	Life drama
21.	05-Oct-14	Sunday	21:00	Series 4	10,152	Our Girl	4,813	Life drama
22.	12-Oct-14	Sunday	21:15	Series 4	10,245	Our Girl	5,277	Life drama
23.	19-Oct-14	Sunday	21:00	Series 4	10,389	Our Girl	4,920	Life drama
24.	26-Oct-14	Sunday	21:00	Series 4	10,213	Tutankhamun: The Truth Uncovered	3,063	
25.	02-Nov-14	Sunday	21:00	Series 4	10,767	Death In Paradise	2,618	Crime drama
26.	09-Nov-14	Sunday	21:00	Series 4	10,440	Formula One: The Brazilian Grand Prix Hi	3,407	
27.	25-Dec-14	Thursday	21:00	Series 4	7,662	EastEnders	8,604	

Mr Selfridge

	Date	Day	Start time	ITV1 series number	ITV1 audience ('000s)	BBC One programme title	BBC One audience ('000s)	BBC One subgenre (if drama)
1.	06-Jan-13	Sunday	21:00	Series 1	9,356	Ripper Street	6,943	Crime drama
2.	13-Jan-13	Sunday	21:00	Series 1	8,947	Ripper Street	6,544	Crime drama
3.	20-Jan-13	Sunday	21:00	Series 1	7,603	Ripper Street	6,948	Crime drama
4.	27-Jan-13	Sunday	21:00	Series 1	7,731	Ripper Street	6,468	Crime drama
5.	03-Feb-13	Sunday	21:00	Series 1	7,764	Ripper Street	6,306	Crime drama
6.	10-Feb-13	Sunday	21:00	Series 1	7,791	British Academy Film Awards	5,565	
7.	17-Feb-13	Sunday	21:00	Series 1	7,876	Ripper Street	6,104	Crime drama
8.	24-Feb-13	Sunday	21:00	Series 1	7,714	Ripper Street	6,444	Crime drama
9.	03-Mar-13	Sunday	21:00	Series 1	7,396	Mayday	7,676	Crime drama
10.	10-Mar-13	Sunday	21:00	Series 1	7,725	Shetland	7,966	Crime drama
11.	19-Jan-14	Sunday	21:00	Series 2	6,756	The Musketeers	9,278	Adventure drama
12.	26-Jan-14	Sunday	21:00	Series 2	6,497	The Musketeers	7,584	Adventure drama
13.	02-Feb-14	Sunday	21:00	Series 2	6,155	The Musketeers	6,767	Adventure drama
14.	09-Feb-14	Sunday	21:00	Series 2	6,258	The Musketeers	6,138	Adventure drama
15.	16-Feb-14	Sunday	21:00	Series 2	6,329	British Academy Film Awards	4,735	
16.	23-Feb-14	Sunday	21:00	Series 2	6,357	The Musketeers	5,911	Adventure drama
17.	02-Mar-14	Sunday	21:00	Series 2	6,325	The Musketeers	5,620	Adventure drama
18.	09-Mar-14	Sunday	21:00	Series 2	6,384	The Musketeers	5,691	Adventure drama
19.	16-Mar-14	Sunday	21:00	Series 2	6,075	The Musketeers	5,449	Adventure drama
20.	23-Mar-14	Sunday	21:00	Series 2	6,326	The Musketeers	5,249	Adventure drama

Source: Oxera analysis of BARB data.

On this basis, at the subgenre level, the only direct clashes in the dataset were for crime dramas – in part driven by the prevalence of crime drama episodes in the BBC One and ITV1 dataset. Over the period analysed, there were 28 occurrences of schedule clashes between BBC One and ITV1 crime dramas (see Table 11), out of a total of 222 ITV1 drama episodes – or, more specifically, 121 ITV1 crime drama episodes. In practice, the clashes occurred after the 9pm watershed – i.e. between 9 and 10pm, the limited prime time period during which adult drama can be shown.

Table 11: Crime drama schedule clashes between BBC One and ITV

Date	Start time	ITV1 programme title	BBC One programme title	BBC One subgenre
06-Jan-12	21:00	Law & Order: UK	Public Enemies	Crime drama
13-Jan-12	21:00	Law & Order: UK	Hustle	Crime drama
20-Jan-12	21:00	Law & Order: UK	Hustle	Crime drama
27-Jan-12	21:00	Law & Order: UK	Hustle	Crime drama
03-Feb-12	21:00	Law & Order: UK	Hustle	Crime drama
10-Feb-12	21:00	Law & Order: UK	Hustle	Crime drama
17-Feb-12	21:00	Law & Order: UK	Hustle	Crime drama
02-Apr-12	21:00	Scott & Bailey	Silent Witness	Crime drama
09-Apr-12	21:00	Scott & Bailey	Silent Witness	Crime drama
16-Apr-12	21:00	Scott & Bailey	Silent Witness	Crime drama
23-Apr-12	21:00	Scott & Bailey	Silent Witness	Crime drama
30-Apr-12	21:00	Scott & Bailey	Silent Witness	Crime drama
06-Sep-12	21:00	The Bletchley Circle	Good Cop	Crime drama
13-Sep-12	21:00	The Bletchley Circle	Good Cop	Crime drama
04-Mar-13	21:00	Broadchurch	Mayday	Crime drama
11-Mar-13	21:00	Broadchurch	Shetland	Crime drama
01-Apr-13	21:00	Broadchurch	Jonathan Creek	Crime drama
17-Apr-13	21:00	Scott & Bailey	New Tricks	Crime drama
01-Sep-13	21:00	Vera	What Remains	Crime drama
08-Sep-13	21:00	Vera	What Remains	Crime drama
15-Sep-13	21:00	Vera	What Remains	Crime drama
20-Jan-14	21:00	The Bletchley Circle	New Tricks	Crime drama
24-Feb-14	21:00	DCI Banks	Silk	Crime drama
03-Mar-14	21:00	DCI Banks	Silk	Crime drama
10-Mar-14	21:00	DCI Banks	Silk	Crime drama
06-Oct-14	21:00	Grantchester	New Tricks	Crime drama
13-Oct-14	21:00	Grantchester	New Tricks	Crime drama
20-Oct-14	21:00	Grantchester	New Tricks	Crime drama

Note: Start times were rounded to the nearest 15 minutes due to small differences in start times between dramas and from week to week. Shows on BBC One, BBC Two, Channel 4 and Channel 5 of less than 7.5 minutes were excluded from the dataset e.g. the weather, some children's programmes.

Source: Oxera analysis of BARB data.

Table 12 shows that while the number of narrow scheduling clashes has not increased over the three year period examined, around half of the clashes occurred on a Monday.

Table 12: Crime drama schedule clashes between BBC One and ITV1 by day

	Day					
ITV1 programme title	**Monday**	**Wednesday**	**Thursday**	**Friday**	**Sunday**	**Total**
Broadchurch	3	0	0	0	0	3
DCI Banks	3	0	0	0	0	3
Grantchester	3	0	0	0	0	3
Law & Order: UK	0	0	0	7	0	7
Scott & Bailey	5	1	0	0	0	6
The Bletchley Circle	1	0	2	0	0	3
Vera	0	0	0	0	3	3
Total	**15**	**1**	**2**	**7**	**3**	**28**

Source: Oxera analysis of BARB data.

There were far fewer crime drama clashes between ITV1 and BBC Two, and between ITV1 and Channel 4 (see Table 13 and Table 14).

Table 13: Crime drama schedule clashes between BBC Two and ITV

Date	Start time	ITV1 programme title	BBC Two programme title	BBC Two subgenre
12-Mar-14	21:00	Law & Order: UK	Line Of Duty	Crime drama
19-Mar-14	21:00	Law & Order: UK	Line Of Duty	Crime drama

Source: Oxera analysis of BARB data.

Table 14: Crime drama schedule clashes between Channel 4 and ITV

Date	Start time	ITV1 programme title	Channel 4 programme title	Channel 4 subgenre
04-Aug-13	21:00	Law & Order: UK	Southcliffe	Crime drama
11-Aug-13	21:00	Law & Order: UK	Southcliffe	Crime drama
18-Aug-13	21:00	Law & Order: UK	Southcliffe	Crime drama

Source: Oxera analysis of BARB data.

Over the period there were 21 crime drama schedule clashes between Channel 5 and ITV1 (see Table 15). In contrast to the BBC One crime dramas, which are all first to air series produced by or for the BBC, the Channel 5 crime dramas are pre-produced series imported from the USA.

Table 15: Crime drama schedule clashes between Channel 5 and ITV

Date	Start time	ITV1 programme title	Channel 5 programme title	Channel 5 subgenre
17-Feb-12	21:00	Law & Order: UK	The Mentalist	Crime drama
03-Apr-13	21:00	Scott & Bailey	NCIS	Crime drama
10-Apr-13	21:00	Scott & Bailey	NCIS	Crime drama
17-Apr-13	21:00	Scott & Bailey	NCIS	Crime drama
24-Apr-13	21:00	Scott & Bailey	NCIS	Crime drama
01-May-13	21:00	Scott & Bailey	NCIS	Crime drama
08-May-13	21:00	Scott & Bailey	NCIS	Crime drama
22-May-13	21:00	Scott & Bailey	NCIS	Crime drama
25-Sep-13	21:00	Whitechapel	CSI - New York	Crime drama
02-Oct-13	21:00	Whitechapel	NCIS	Crime drama
12-Mar-14	21:00	Law & Order: UK	NCIS	Crime drama
19-Mar-14	21:00	Law & Order: UK	NCIS	Crime drama
26-Mar-14	21:00	Law & Order: UK	NCIS	Crime drama
02-Apr-14	21:00	Law & Order: UK	NCIS	Crime drama
16-Apr-14	21:00	Law & Order: UK	NCIS	Crime drama
23-Apr-14	21:00	Law & Order: UK	NCIS	Crime drama
13-Oct-14	21:00	Grantchester	Gotham	Crime drama
20-Oct-14	21:00	Grantchester	Gotham	Crime drama
27-Oct-14	21:00	Grantchester	Gotham	Crime drama
03-Nov-14	21:00	Grantchester	Gotham	Crime drama
10-Nov-14	21:00	Grantchester	Gotham	Crime drama

Source: Oxera analysis of BARB data.

The general model specification, discussed next, allowed the separate impact of the above drama subgenre clashes on ITV's audience to be tested. A model was also estimated using a broader level of clash; for example between any ITV1 drama and any BBC One drama. However, the impact was found to be diluted, and not statistically significant in the main models estimated. For dramas, it was necessary to model clash effects at the subgenre level in order to uncover any impact of scheduling clashes.

8.2.2 The approach

The theoretical general model adopted as a starting point was based on a US study by Shamsie *et al.*,[249] and adapted it to the specific UK context and nature of the dataset. The approach was also adjusted to focus on the primary issue of interest: the impact of scheduling clashes between BBC One and ITV1 on ITV1 audience.

The US study identified that, in theory and in practice, the audience for a given show will depend on a number of factors. These include its previous week's airing (a "lagged dependent variable"), the effect leading in from the show immediately preceding it (what is often referred to in the literature as a "flow" or "inheritance effect"), the stability of the time slot, the series tenure, and, as discussed in the previous section, competition from other channels offering a series of a similar subgenre at the same time.

Testing these hypotheses using US micro data, the study found that, for a given show, its audience from the previous week and tenure, and the rating of the preceding show had a positive and statistically significant effect on the show's audience (at the 5 per cent significance level). In contrast, the number of main networks providing content at the same time, and the similarity of competing shows sharing the same time slot, were both found to have a negative and statistically significant impact on a show's ratings. The similarity of the preceding show, and the stability of a show's time slot *per se*, were not found to be statistically significant drivers of audience ratings.

---

[249] Shamsie *et al.* (2006).

An advantage of using micro data is that a number of variables can be included in the regression (that are reasonably independent), in a way that the impacts of each variable can be meaningfully determined. Aggregated data may not pick up these relationships as readily.

A further advantage of a panel of micro data (with observations over time and across shows) is that variation within shows over time, and variation between shows, can be used to fit the model. ITV1 shows that did not experience genre clashes with BBC One can be compared with those that did, while controlling for other factors. For any given ITV1 show, its audience before and after any clash can be taken into account, again controlling for other factors.

Another advantage is that, by taking advantage of observations across shows and over time, panel data analysis can remove the impact of unobservable factors that are specific to each ITV1 show and which do not vary over time – such as the scale of the show and its core loyal audience who rarely switch. The US study used a "random effects" framework to do this.[250] This assumes that the unobservable effects for each show can be represented by a shift in the error term. In our approach, we again explored using a random effects model (albeit a static model, for the reasons set out further below). However, our main approach was to use a "fixed effects" framework. Fixed effects models assume that the unobservable effects for each show are represented by shifts in the constant term. These generally rely on less assumptions than random effects models.[251]

Given the context for this study, our study focused on the impact on selected ITV1 dramas of scheduling clashes with BBC One (and other channels), while controlling for other factors. This differs somewhat to the US study, which examined the impact of scheduling clashes on various network providers. In our analysis, dummy variables were included for each channel to indicate when clashes with ITV1 occurred. When a clash with ITV1 occurred, a dummy variable of 1 was assigned, and 0 otherwise. The "other factors" included in our specifications were audience for the show at its previous airing, flow, tenure and slot stability.

Audience ratings on other channels, either at the given time slot or for the time slot of the preceding show, were not included as explanatory factors, as this might have led to statistical problems.[252] Likewise, the US study did not include these variables, possibly for the same reason.

There were some further departures from the US approach.

- The US study used a "random effects" model as its core specification. However, with our UK dataset the static "fixed effects" model was identified as preferential over the static "random effects" model.[253] In any case, for the most part the magnitude of the estimates on the BBC One clash variable were similar across both specifications.

- A natural log specification was used since this enables the coefficients obtained to be readily interpreted in terms of percentage changes.[254] In contrast, the US study used a linear model.

[250] Random effects models assume that, for each show, there is a time invariant jump in the error term included in the regression. Generalised least squares estimation seeks to remove these unobservable effects by taking account of variation in the data for each show over time ("within group" variation) and between shows at any given point in time ("between group" variation). Random effects models assume that individual specific effects are uncorrelated with the explanatory variables.
[251] Fixed effects models assumes that, for each show, there is a time invariant jump in the constant or intercept term included in the regression. Within group estimation seeks to remove these unobservable effects by taking account of variation in the data for each show over time.
[252] While audience ratings on other channels, at the same time as the ITV1 broadcast, might be seen as a useful predictor of ITV1 audience – in so far as channels compete for audience share – a problem with including these factors as explanatory variables in the analysis is that the audience for other channels will be simultaneously determined with one another and with ITV's audience. The audience for the preceding show for a given channel will also be simultaneously determined with the audience for the preceding show for other channels (including ITV1 "flow"). It is important that the scale explanatory variables included in the model are reasonably independent, and for causality to flow from the explanatory variables to the dependent variable, not vice versa.
[253] Our choice of the fixed effects model as the favoured approach was based on the results of Hausman tests, running a comparison of static fixed effects and static random effects models. Fixed effects models have the further advantage that they are less sensitive to the inclusion of additional model dynamics through the inclusion of a lagged dependent variable.
[254] The US study employed a levels regression. Interpretation of the coefficients as percentages then requires a transformation based on the observed data.

- The similarity of the preceding ITV1 show was not included as an explanatory variable, since this did not vary across the dataset. (In practice the preceding show was never of the same genre or subgenre as the ITV1 drama in question.)
- The number of main competing networks was excluded as a variable. This was because, in practice, all five broadcasters included in the study transmitted at the times that were studied.

With the growth in on-demand viewing, and the convergence of traditional broadcasting and new media, the strength of the variables discussed above may have changed since the US study was undertaken in 2005. UK viewing habits may also be different to those in the USA. Nevertheless, real time scheduling decisions are likely to be important for the first airing of new drama in the UK. Empirical analysis enables us to ascertain how important this is. The current analysis used a dataset with total (live plus catch-up) audience figures. In line with the above discussion, the general model took the following form:

$$\ln(ITVAud\_4)_{it} = \beta_1 + \beta_2\ln(Aud\_lag)_{it} + \beta_3\ln(ITVAud\_prev)_{it} + \beta_4 D1_{it} + \beta_5 D2_{it} + \beta_6 D4_{it} + \beta_7 D5_{it} + \beta_8\ln(seriesITV)_{it} + \beta_9 slot\_move_{it} + \gamma_i + u_{it}$$

Equation 8.1

The above variables are as follows (for ITV1 show i at time t):

- $\ln(ITVAud\_4)_{it}$ = natural log of ITV1 audience (live + catch-up, ages 4+)
- $\ln(Aud\_lag)_{it}$ = natural log of audience for prior airing of the ITV1 show (the lagged dependent variable)
- $\ln(ITVAud\_prev)_{it}$ = natural log of ITV1 preceding show (i.e. flow)
- D1 = 1 if there is a clash between BBC One and the ITV1 drama (0 otherwise)
- D2 = 1 if there is a clash between BBC Two and the ITV1 drama (0 otherwise)
- D4 = 1 if there is a clash between Channel 4 and the ITV1 drama (0 otherwise)
- D5 = 1 if there is a clash between Channel 5 and the ITV1 drama (0 otherwise)
- $\ln(seriesITV)_{it}$ = natural log of series number for ITV1 drama
- slot_move =1 if the time slot is different to that at the start of the dataset (0 otherwise)
- γ_i is an unobservable time invariant effect specific to each ITV1 show
- u_{it} is a random error term.

We implemented our analysis in a systematic way.

- **Broad versus narrow clashes** – we first analysed Equation 8.1 using a broad definition of scheduling clashes (e.g. D1 = clash1 = 1 if "any BBC drama" clashes with "any ITV1 drama"). We then repeated the estimation adopting a narrower definition of clashes at the subgenre level (e.g. D1 = Dgt1 = if "any BBC crime drama" clashes with "any ITV1 crime drama").
- **General versus specific models** – we implemented Equation 8.1 as a "general" model, including all variables of potential relevance, and ascertained the impact of the BBC ONE clash variable. We then also estimated more "specific" models, which included fewer variables (e.g. the lagged dependent variable, flow, and the BBC One clash dummy as the key variable of interest). This sensitivity tested the stability of the BBC One clash variable across the general and specific specifications.
- **Estimation approaches** – our preferred approach was to use a fixed-effects framework rather than a random-effects framework. Fixed effects models use variation within ITV1 shows over time to fit the model. Within this fixed effects framework we estimated a dynamic model. The inclusion of a lagged dependent variable (i.e. the audience for the prior airing of the ITV1 show) allowed the identification of

dynamics and legacy impacts of clashes. However, this also potentially introduces bias into the model - notably, that the coefficient on the lagged dependent variable may be too low. Other model specifications were also considered to try and address this downwards bias (such as generalized method of moments (GMM) specifications). However, the methods available for this are very data intensive and were therefore found to be unsuitable for this dataset. In addition, fixed effects models with a lagged dependent variable are “consistent” as the number of time period in the panel increases. Therefore, a dynamic fixed effects model, with a lagged dependent variable, was adopted as the preferred specification.

As sensitivity tests, we also estimated static random effects models (this time excluding the lagged dependent variable). In addition, ordinary least squares (OLS) models were tested, to provide a cross check on the true value of the coefficient on the lagged dependent variable, since this specification will provide an upwards-biased estimate in contrast to the downwards biased estimate from the fixed effects model. The true coefficient for the lagged variable can therefore be assumed to fit somewhere between the two. In general, the estimates from this model need to be interpreted with caution, due to this bias, and also since pooled OLS models do not account for unobservable heterogeneity (time invariant group-specific effects).

In all cases, robust standard errors were applied.

In what follows, four key summary tables are presented: drama broad, drama narrow; entertainment broad, entertainment narrow.

8.2.3 Drama results

8.2.3.1 Drama – broad scheduling clash

The main approach was to use a fixed effects model. The reasons for this were essentially twofold.

First, a random effects model, while potentially more “efficient” than a fixed effects model, depends on certain assumptions being fulfilled. We tested a static random effects model against a static fixed effects model, and found that these assumptions were not upheld. This validated the use of a fixed effects framework as the preferred approach. Fixed effects models produce “consistent” estimates.[255]

Second (and for similar reasons), fixed effects models tend to be less sensitive than random effects models to the additional modelling of dynamics – through the inclusion of a lagged dependent variable. Modelling these helps us to understand the persistence effects of any scheduling clashes over time. Therefore, within the fixed effects framework, we included a lagged dependent variable in the estimation. However, when using a random effects model – as a sensitivity check – we excluded this variable from the estimation, so that a static – rather than a dynamic – random effects model was estimated. Given that the dynamic fixed effects model may underestimate the impact of the lagged-dependent variable, we also employed a pooled OLS model as a cross check (these models may overestimate the impact of the lagged-dependent variable).

First a general fixed effects model was estimated, including a number of the variables specified in Equation 8.1. A more specific model was then estimated, including only the broad BBC One clash1 variable and flow. The results are presented in columns 1 and 2 of Table 16 below. The coefficient estimates provide the magnitude of the impact of the variable concerned (in percentage terms), while the probability values (in parentheses) show statistical significance. The key variable of interest is clash1.[256] This is slightly negative in the fixed effects model (at -1 per cent) and is not statistically significant.

[255] In each case, the static random effects model failed the Hausman test at a 10 per cent confidence value, confirming that a static fixed effects model was preferential to a static random effects model.
[256] A high probability value implies low statistical significance. A probability value of 0.1 indicates significance at 10 per cent, and a probability value of 0.05 significance at 5 per cent.

Table 16: Drama – broad scheduling clash results

	Fixed effects		Random effects		OLS	
	1	2	3	4	5	6
	General	Specific	General	Specific	General	Specific
constant	3.562***	3.671***	7.773***	7.822***	0.085	-0.017
	(0.000)	*(0.000)*	*(0.000)*	*(0.000)*	*(0.686)*	*(0.922)*
lnITVAud_lag	0.526***	0.532***			0.950***	0.977***
	(0.000)	*(0.000)*			*(0.000)*	*(0.000)*
lnITVAud_prev	0.063**	0.048	0.101***	0.095**	0.036**	0.024
	(0.021)	*(0.133)*	*(0.004)*	*(0.040)*	*(0.033)*	*(0.135)*
clash1	-0.015	-0.013	-0.003	-0.001	-0.016	-0.017
	(0.456)	*(0.502)*	*(0.863)*	*(0.941)*	*(0.173)*	*(0.156)*
clash2	0.005		0.064		-0.049*	
	(0.859)		*(0.282)*		*(0.082)*	
clash4	0.071***		0.093***		0.040***	
	(0.004)		*(0.000)*		*(0.009)*	
clash5	0.032		-0.003		0.034**	
	(0.262)		*(0.950)*		*(0.035)*	
lnseriesITV	0.021		-0.023		0.026**	
	(0.704)		*(0.813)*		*(0.011)*	
slot_move	-0.019		0.004		-0.015	
	(0.654)		*(0.953)*		*(0.399)*	
R sqr within	0.457	0.416	0.144	0.087		
R sqr between	0.979	0.986	0.239	0.339		
R sqr overall	0.925	0.926	0.257	0.241	0.936	0.932
No. obs (NT)	202	202	222	222	202	202
No. groups (N)	20	20	20	20		
Min obs per group	4	4	5	5		
Average obs per group	10.1	10.1	11.1	11.1		
Max obs per group	26	26	27	27		

Note: The values in parentheses are a measure of the estimates reliability. Values below 0.1 are said to be statistically significant. *** indicates statistical significance at 1 per cent. ** indicates statistical significance at 5 per cent. * indicates statistical significance at 10 per cent.

Source: Oxera analysis of BARB data.

The fixed effects model illustrates the importance of prior airing audience for a particular ITV1 show (the lagged dependent variable). This is positive and statistically significant, and explains around 50 per cent of the ITV1 audience in a given week (although note the discussion below on the sensitivity testing of this finding). Including the lagged dependent variable results in a high overall R squared. Flow is also a key driver in the fixed effects model – a 10 per cent increase in the immediately preceding ITV1 show audience leads to a 0.5 per cent increase in ITV1 audience (an even higher estimate is obtained in the random effects model).

Columns 3 and 4 of Table 16 show the results from the random effects model when a lagged dependent variable is excluded – a static panel data model. Within this framework, clash1 is again negative and small and is not statistically significant. The overall R squared in the random effects model is low, as the coefficient estimates are small, and because most of the variation in ITV1 audience share is explained by other factors.

In both the random and fixed effects frameworks, ITV1 slot stability is not found to be significant (this was also the finding in the US study). This may be because slot moves may be for the better or worse, depending on the circumstances. Series number is also not statistically significant, implying that series tenure is less important than other factors, and, perhaps, that new breakthrough shows can pick up a significant audience.

An interesting finding is that Channel 4 scheduling clashes seem to have a positive and statistically significant relationship with ITV1 audience share. It is not clear why this would be the case, and it is perhaps a consequence of the broad definition of clashes that has been adopted. Both Channel 4 and ITV1 dramas may, for example, be targeted at days and time slots that are likely to pick up a peak audience of viewers who already watch their respective channels. The clash4 variable may be picking up this effect, rather than any genuine complementarity between the two channels.

A potential issue of including lagged dependent variables in a fixed effects model is that this can result in downward bias on the coefficient obtained for the lagged dependent variable, with consequences for the remaining coefficients. This is mainly a problem if the length of time period modelled for each group (i.e. show) is small while the number of groups is large. As shown in Table 16, in the sample of 20 shows, the time periods for each show range from 5 to 27, with an average of 11 observations per show. Hence we have both small and large time periods, and a medium sized number of groups (20).

To undertake a sensitivity analysis of the fixed effects model results, we estimated a dynamic ordinary least squares (OLS) model. This model should be biased in the opposite direction to the fixed effects dynamic model, and therefore the true coefficient for the lagged variable can be assumed to fall somewhere in between the two—though not necessarily a straight average. The remaining coefficients in the OLS model should be interpreted with caution, due to this bias, and since pooled OLS models do not remove unobservable heterogeneity.

Columns 5 and 6 of Table 16 present the results. Here, the coefficient on the lagged dependent variable increases sharply compared with the fixed effects model. The magnitude of the clash1 variable stays roughly the same, and remains statistically insignificant.

As the coefficient estimate on the lagged dependent variable in the pooled OLS model is particularly high, and given the aforementioned issues with the model, a conservative assumption would be to instead adopt the value offered by the fixed effects model. As noted, this estimate becomes more reliable as T increases. Hence the preferred coefficient estimate adopted for the lagged-dependent variable is around 0.5.

8.2.3.2 Drama – narrow scheduling clash

As noted earlier, it was not immediately obvious that a drama on one channel (e.g. a crime drama) would necessarily be in direct competition with a drama of a different kind on another channel (e.g. a period drama), and the previous US study had analysed the issues at the subgenre level.[257]

Therefore, we repeated the analysis, this time using a narrow definition of scheduling clashes – that a clash occurred only if the subgenres of the channels were the same: crime, medical, comedy, period, history, fantasy, adventure, or life story. As noted in section 8.1, on this basis, 28 clashes between BBC One and Channel 4 occurred in the dataset. All of these were accounted for by crime drama clashes.

Again, the preferred approach was to employ a dynamic fixed effects model. The results from estimating this are shown in columns 1 and 2 of Table 17 below.

---

[257] Shamsie, Miller and Greene (2006).

Table 17: Drama narrow clash results

	Fixed effects		Random effects		Crime	OLS	
	1	2	3	4	5	6	7
	General	Specific	General	Specific	Specific	General	Specific
constant	3.632***	3.602***	7.611***	7.629***	7.894***	0.050	-0.047
	(0.000)	*(0.000)*	*(0.000)*	*(0.000)*	*(0.000)*	*(0.788)*	*(0.788)*
lnITVAud_lag	0.511***	0.514***				0.965***	0.977***
	(0.000)	*(0.000)*				*(0.000)*	*(0.000)*
lnITVAud_prev	0.076**	0.074**	0.122***	0.118**	0.097**	0.026	0.027
	(0.026)	*(0.033)*	*(0.004)*	*(0.010)*	*(0.041)*	*(0.163)*	*(0.117)*
Dgt1	-0.079***	-0.074***	-0.073**	-0.072**	-0.062**	-0.025*	-0.024*
	(0.000)	*(0.000)*	*(0.025)*	*(0.013)*	*(0.022)*	*(0.090)*	*(0.090)*
Dgt2	-0.055*		-0.024			-0.057	
	(0.098)		*(0.677)*			*(0.200)*	
Dgt4	0.032		0.079**			-0.013	
	(0.337)		*(0.040)*			*(0.607)*	
Dgt5	0.038		0.024			0.022	
	(0.403)		*(0.727)*			*(0.324)*	
lnseriesITV	-0.015		-0.029			0.024**	
	(0.796)		*(0.770)*			*(0.016)*	
slot_move	-0.023		-0.004			-0.018	
	(0.603)		*(0.945)*			*(0.343)*	
R-sqr within	0.471	0.454	0.138	0.120	0.142		
R-sqr between	0.952	0.969	0.117	0.270	0.419		
R-sqr overall	0.898	0.912	0.164	0.253	0.174	0.934	0.932
No. obs (NT)	202	202	222	222	121	202	202
No. groups (N)	20	20	20	20	10		
Min obs per group	4	4	5	5	5		
Average obs per group	10.1	10.1	11.1	11.1	12.1		
Max obs per group	26	26	27	27	23		

Note: The values in parentheses are a measure of the estimates reliability. Values below 0.1 are said to be statistically significant. *** indicates statistical significance at 1 per cent. ** indicates statistical significance at 5 per cent. * indicates statistical significance at 10 per cent.

Source: Oxera analysis of BARB data.

In this general model (column 1), the findings on flow, tenure and slot stability are for the most part the same as those observed in Table 16, as might be expected. For example, the ITV1 flow variable (ITVAud_prev) is once more positive and significant. What is of particular note is that, in stark contrast to the broad clash variable clash1 in Table 16, the narrow clash variable Dgt1 in Table 17 is negative and statistically significant. The general dynamic fixed effects model predicts that a genre clash between ITV1 and BBC One drama results in 8 per cent less ITV1 audience than would otherwise be the case.

Column 1 also shows that the clash variables for other channels have varying signs, and that these are not statistically significant. Removing non-significant variables resulted in a more parsimonious specification. In column 2, both ITV1 flow and the clash variable are significant, at least at 5 per cent. The overall R squared increases, and the omission of non-significant factors does not appear to bias the results. The model predicts that, where a scheduling clash occurs between a particular subgenre of BBC One drama and ITV1 drama, this results in 7 per cent less ITV1 audience than would otherwise have been the case.

Static random effects models were also estimated. Columns 3, 4 and 5 of Table 17 present the results. The random effects model again predicts that, where a scheduling clash occurs between a particular subgenre of drama and BBC drama, this results in 7 per cent less ITV1 audience than would otherwise be the case. The overall R squared in the random effects model is low, as the coefficient estimates are small, and because most of the variation in ITV1 audience share is explained by other factors. This in itself is not a weakness of the model, given the statistical significance of the core variables of interest. Given that all 28 clashes observed were in relation to BBC One versus ITV1 crime dramas, we repeated the random effects analysis using observations on “crime dramas only” (121 observations in total). The results, shown in column 5, imply that, where a BBC One crime drama clashes with an ITV1 crime drama, this results in 6 per cent less ITV1 audience than would otherwise have been the case.

Finally, given the potential issues that may be present in estimating fixed effects models with a lagged dependent variable (downward bias on the coefficient obtained on this variable), estimation was again undertaken using an OLS dynamic model. Columns 6 and 7 show, once more, how the coefficient on the lagged dependent variable increases compared with the fixed effects model. In the OLS model the only statistically significant coefficients are the lagged dependent variable and the clash variable for BBC One. The estimate on the clash variable is smaller than that predicted by the fixed effects model but remains negative, at around -2.5 per cent. Less weight is applied to the magnitude of this estimate due to the issues with this specification, as described above.

Taken together, the results indicate that when a BBC One drama of a particular subgenre (e.g. crime) is broadcast at the same time as an ITV1 drama of the same subgenre, the ITV1 audience is 6 to 8 per cent lower than otherwise. This finding of a negative impact is robust across all the main effects based estimation methods applied, and across a range of specifications. The omission of other explanatory variables does not bias the results.

The 6 to 8 per cent range may also be an underestimate of the impact on live viewing, as the audience figures modelled included both live and catch-up viewing.

As noted above, the OLS model produces a particularly high estimate for the coefficient on the lagged dependent variable. A conservative assumption would be to instead adopt the value obtained from the dynamic fixed effects model. This indicates an impact of prior-airing ITV1 audience on current ITV1 audience of around 0.5. This means that, if ITV1 audience falls for a given drama episode in one week by 7 per cent due to a subgenre clash with a BBC One episode, the impact on the subsequent week’s airing is to reduce ITV1 audience by 4 per cent, followed by a reduction of 2 per cent and 1 per cent in each of the two following weeks, respectively. Adding up all these reductions over the subsequent weeks gives an equivalent total impact of 14 per cent audience loss if concentrated in the first week. If, however, clashes were to persist over time, the model predicts a long-run reduction in audience of 13 per cent in each week.

8.3 Weekend entertainment analysis

As a supplementary analysis, we explored the impact of scheduling on ITV1 weekend entertainment series, consisting mainly of Saturday shows, but also some Sunday shows.

8.3.1 The data

Table 18 lists the ITV1 entertainment shows analysed. These are core ITV1 entertainment programmes that have usually been broadcast between 7pm and 10pm on a Saturday evening. In some limited instances shows have been broadcast earlier on Saturday, or on a Sunday.

Table 18: ITV1 weekly entertainment shows examined

ITV1 programme title	Date	ITV1 audience ('000s)	ITV1 subgenre
Ant and Dec's Saturday Night Takeaway	23-Feb-13	7,767	Quiz/panel/game show
Britain's Got Talent	24-Mar-12	10,616	Music/dance contest
Take Me Out	07-Jan-12	5,214	Quiz/panel/game show
The Cube	14-Apr-12	4,163	Quiz/panel/game show
The Jonathan Ross Show	07-Jan-12	3,090	Chat show
The X Factor	18-Aug-12	8,761	Music/dance contest
Through The Keyhole	31-Aug-13	6,118	Quiz/panel/game show

Source: Oxera analysis of BARB data.

Like drama, clashes were considered in both a broad (genre) and narrow (subgenre) sense. At the broad level, a clash occurred with BBC One if a BBC One entertainment show was shown at the same time as the ITV1 entertainment show. There were 98 clashes in total, out of 244 ITV1 entertainment episodes (as shown in Table 19). By this broad measure, more than 40 per cent of ITV1 entertainment shows experienced a clash with BBC One entertainment shows.

Table 19: BBC One broad clashes with ITV1 weekly entertainment shows

	BBC One subgenre				
ITV1 subgenre	**Chat show**	**Comedy/family**	**Music/dance contest**	**Quiz/panel/ game show**	**Total**
Chat show	0	7	4	0	11
Music/dance contest	1	0	24	5	30
Quiz/panel/game show	0	7	47	3	57
Total	**1**	**14**	**75**	**8**	**98**

BBC One programme title	Number of clashes with ITV1 entertainment shows
Britain's Brightest	1
Catherine Tate's Nan	1
Let's Dance For Comic Relief	6
Let's Dance For Comic Relief	4
Live At The Apollo	1
Michael McIntyre's Comedy Roadshow	1
Mrs Brown's Boys	5
Pointless Celebrities	7
Strictly Come Dancing	28
Strictly Come Dancing: The Results	1
The Eurovision Song Contest	2
The Magicians	6
The Voice UK	34
When Miranda Met Bruce	1
Total	**98**

Note: No clashes occurred between reality shows in the dataset used.

Source: Oxera analysis of BARB data.

The issue is more nuanced when defined at the narrower level of entertainment subgenre. These were defined as chat show, comedy/family, music/dance contest, and quiz/panel/game show, reality. Table 20 below shows that there were 27 occasions, out of 244 ITV1 episodes, when BBC One entertainment shows – narrowly defined – clashed with ITV1 shows. This is more than 10 per cent of ITV's entertainment episodes. The vast majority of these were accounted for by clashes between rival music/dance talent contests: *Britain's Got Talent* versus *The Voice*, and *The X Factor* versus *Strictly Come Dancing*. However, there were also some quiz/game show clashes.

Table 20: BBC One narrow clashes with ITV1 weekly entertainment shows

Date	Start time	ITV1 programme title	BBC One programme title	Subgenre type
24-Mar-12	20:00	Britain's Got Talent	The Voice UK	Music/dance contest
31-Mar-12	20:00	Britain's Got Talent	The Voice UK	Music/dance contest
07-Apr-12	20:00	Britain's Got Talent	The Voice UK	Music/dance contest
14-Apr-12	20:00	Britain's Got Talent	The Voice UK	Music/dance contest
12-May-12	19:30	Britain's Got Talent	The Voice UK	Music/dance contest
13-Oct-12	20:15	The X Factor	Strictly Come Dancing	Music/dance contest
20-Oct-12	20:15	The X Factor	Strictly Come Dancing	Music/dance contest
09-Feb-13	20:00	Take Me Out	Britain's Brightest	Quiz/panel/game show
16-Mar-13	19:30	Ant and Dec's Saturday Night Takeaway	Pointless Celebrities	Quiz/panel/game show
23-Mar-13	19:30	Ant and Dec's Saturday Night Takeaway	Pointless Celebrities	Quiz/panel/game show
13-Apr-13	19:30	Britain's Got Talent	The Voice UK	Music/dance contest
07-Sep-13	20:00	The X Factor	Strictly Come Dancing	Music/dance contest
28-Sep-13	20:15	The X Factor	Strictly Come Dancing	Music/dance contest
05-Oct-13	20:00	The X Factor	Strictly Come Dancing	Music/dance contest
12-Oct-13	20:00	The X Factor	Strictly Come Dancing	Music/dance contest
19-Oct-13	20:00	The X Factor	Strictly Come Dancing	Music/dance contest
26-Oct-13	20:00	The X Factor	Strictly Come Dancing	Music/dance contest
02-Nov-13	20:00	The X Factor	Strictly Come Dancing	Music/dance contest
30-Nov-13	20:00	The X Factor	Strictly Come Dancing	Music/dance contest
14-Dec-13	20:00	The X Factor	Strictly Come Dancing	Music/dance contest
18-Oct-14	20:00	The X Factor	Strictly Come Dancing	Music/dance contest
25-Oct-14	20:00	The X Factor	Strictly Come Dancing	Music/dance contest
01-Nov-14	20:00	The X Factor	Strictly Come Dancing	Music/dance contest
15-Nov-14	20:15	The X Factor	Strictly Come Dancing	Music/dance contest
22-Nov-14	20:00	The X Factor	Strictly Come Dancing	Music/dance contest
29-Nov-14	20:00	The X Factor	Strictly Come Dancing	Music/dance contest
06-Dec-14	20:00	The X Factor	Strictly Come Dancing	Music/dance contest

	Day	
Programme Title	**Saturday**	**Total**
Ant and Dec's Saturday Night Takeaway	2	2
Britain's Got Talent	6	6
Take Me Out	1	1
The X Factor	18	18
Total	**27**	**27**

Source: Oxera analysis of BARB data.

8.3.2 The approach

The approach followed for entertainment was broadly similar to that adopted for drama: The preferred approach was a dynamic fixed effects framework, which was sensitivity tested against a static random effects framework and a dynamic pooled OLS framework. However, the series of each ITV1 show was not modelled, nor the stability of the schedule slot. This was because these factors were not found to be statistically significant in the case of drama. Time slot stability was tested in some entertainment specifications, but was again found to be not statistically significant.

8.3.3 Entertainment results

8.3.3.1 Entertainment – broad scheduling clash

Following the methodology adopted for drama, we first explored the impact of BBC One (and other channels) on ITV1 entertainment audience using a broad definition of a clash. The results of the dynamic fixed effects model are presented in columns 1 and 2 of Table 21. These indicate that an effect of BBC One clashes on ITV1 audience is around -2 per cent, and that this is not statistically significant. Similar results for a small negative (and not statistically significant) impact are obtained in the static random effects model (columns 3 and 4).

Table 21: Entertainment broad clash results

	Fixed effects		Random effects		OLS	
	1	2	3	4	5	6
	General	Specific	General	Specific	General	Specific
constant	4.948***	4.956***	6.788***	6.783***	0.149	0.065
	(0.001)	*(0.001)*	*(0.000)*	*(0.000)*	*(0.710)*	*(0.868)*
lnITVAud_lag	0.235*	0.231*			0.964***	0.966***
	(0.094)	*(0.098)*			*(0.000)*	*(0.000)*
lnITVAud_prev	0.186***	0.189***	0.219***	0.220***	0.020	0.026
	(0.001)	*(0.001)*	*(0.000)*	*(0.000)*	*(0.506)*	*(0.370)*
clash1	-0.018	-0.016	-0.006	-0.004	-0.019	-0.013
	(0.319)	*(0.342)*	*(0.717)*	*(0.785)*	*(0.371)*	*(0.543)*
clash2	0.000		-0.003		-0.001	
	(1.000)		*(0.912)*		*(0.984)*	
clash4	-0.017		-0.011		-0.046	
	(0.391)		*(0.587)*		*(0.136)*	
clash5	0.025**		0.021		0.016	
	(0.013)		*(0.213)*		*(0.710)*	
R-sqr within	0.388	0.385	0.333	0.332		
R-sqr between	0.489	0.476	0.448	0.456		
R-sqr overall	0.464	0.453	0.076	0.075	0.899	0.898
No. obs (NT)	237	237	244	244	237	237
No. groups (N)	7	7	7	7		
Min obs per group	13	13	14	14		
Average obs per group	33.9	33.9	34.9	34.9		
Max obs per group	76	76	77	77		

Note: The values in parentheses are a measure of the estimates reliability. Values below 0.1 are said to be statistically significant. *** indicates statistical significance at 1 per cent. ** indicates statistical significance at 5 per cent. * indicates statistical significance at 10 per cent.

Source: Oxera analysis of BARB data.

What is significant is ITV's lead in effect/flow and its audience for a given show from its previous airing. This effect is stronger for entertainment than for drama, but the prior week audience effect is weaker. This may indicate, for entertainment, less planning ahead to watch a given ITV1 show or less loyalty effect (a lower prior week effect), and more inertia once watching a particular channel (higher flow effect) compared with drama.

Using OLS estimation indicates a similar size effect to the fixed effects model at around -1 or -2 per cent and not statistically significant, as shown in columns 5 and 6. As with the drama modelling, the lagged-dependent variable in the OLS model has a higher coefficient estimate than in the fixed effects model.

The conclusion on the broad definition of a clash is therefore similar for entertainment as it was for drama: no statistically significant negative effect is detected in any of the models.

8.3.3.2 Entertainment – narrow scheduling clash

We also explored the impact of BBC One and other channels using a narrow definition of a clash – between particular subgenres of entertainment. The results of the dynamic fixed effects model are presented in columns 1 and 2 of Table 22. The analysis indicates that a clash between BBC One and ITV1 results in a reduction in ITV1 audience of around 1 per cent, and that this estimate is not statistically significant. Similarly, the static random effects framework results in an estimate of around -1 per cent, as shown in columns 3 and 4. This is again not statistically significant.

Table 22: Entertainment narrow clash results

	Fixed effects		**Random effects**		**OLS**	
	1	2	3	4	5	6
	General	Specific	General	Specific	General	Specific
constant	4.930***	4.942***	6.760***	6.794***	0.027	0.109
	(0.003)	*(0.002)*	*(0.000)*	*(0.000)*	(0.945)	(0.779)
lnITVAud_lag	0.227	0.229			0.958***	0.955***
	(0.122)	*(0.108)*			(0.000)	(0.000)
lnITVAud_prev	0.195***	0.192***	0.222***	0.218***	0.038	0.031
	(0.000)	*(0.000)*	*(0.000)*	*(0.000)*	(0.192)	(0.275)
Dgt1	-0.014	-0.013	-0.009	-0.008	0.032*	0.034*
	(0.354)	*(0.366)*	*(0.172)*	*(0.174)*	(0.097)	(0.074)
Dgt2	0.017		0.030		-0.102**	
	(0.855)		*(0.734)*		(0.021)	
Dgt4	-0.128***		-0.109***		-0.116***	
	(0.000)		*(0.000)*		(0.000)	
Dgt5	[Dropped]		[Dropped]		[Dropped]	
R-sqr within	0.393	0.383	0.341	0.332		
R-sqr between	0.449	0.481	0.440	0.466		
R-sqr overall	0.432	0.445	0.075	0.079	0.899	0.898
No. obs (NT)	237	237	244	244	237	237
No. groups (N)	7	7	7	7		
Min obs per group	13	13	14	14		
Average obs per group	33.9	33.9	34.9	34.9		
Max obs per group	76	76	77	77		

Note: The values in parentheses are a measure of the estimates reliability. Values below 0.1 are said to be statistically significant. *** indicates statistical significance at 1 per cent. ** indicates statistical significance at 5 per cent. * indicates statistical significance at 10 per cent.

Source: Oxera analysis of BARB data.

On this occasion, as shown in columns 5 and 6, OLS estimation results in an estimate of +3 per cent, which is slightly statistically significant. The bias in this model is clear, with the lagged variable becoming large and statistically significant. Less weight is applied to the magnitude of this estimate due to the issues with this specification (the lagged-dependent variable bias issue, and since pooled OLS models do not remove unobservable heterogeneity unlike effects based models).

Hence, across specifications, the impact of scheduling clashes between subgenres of ITV1 and BBC One entertainment – such as clashes between core music/dance contests including *The X Factor* and *The Voice* – does not explain ITV1 audience performance.

The lack of statistical significance (or positive coefficient) of the BBC One clash variable may in part be due to the low number of entertainment shows that clash compared with drama. However, it suggests that, for entertainment, ITV1 is harmed much less relative to (crime) drama by BBC One scheduling decisions.

Also, across the models estimated, clashes between ITV1 and Channel 4 programmes are shown to have a statistically significant negative impact on ITV. However, these clashes occurred on only 4 occasions out of 244 ITV1 episodes – between Channel 4's *The Million Pound Drop Live* and ITV1 game shows.

8.4 Conclusions

For dramas, there is little impact on ITV's audience when BBC One schedules a drama at the same time, as long as the subgenres of the two programmes are different. In contrast, the econometric results consistently indicate that when clashes occur between BBC One and ITV1 drama subgenres, ITV1 audience figures are up to 8 per cent lower than would otherwise be the case. This may also understate the impact as the audience data used included live, same day and 7 day catch-up viewing.[258] In addition, because it is also found that any given week's viewing figures for a particular show are highly dependent on those of the prior week, the effect is likely to persist over a number of weeks.

For instance, assuming that, at the beginning of a month, there is a single clash in week 1, this has an initial impact on ITV1 drama audience of around -7 per cent. With an audience persistency week-to-week of 50 per cent,[259] the initial clash would translate into a reduction in ITV1 audience in each of the subsequent weeks of 3 per cent (week 2), 2 per cent (week 3), 1 per cent (week 4) and then very small impacts after this. Adding up the impacts over these subsequent weeks means that the total impact of the clash is comparable to a 14 per cent reduction in audience concentrated in the first week. While, in this scenario, audience numbers eventually recover, this is not the case if clashes persist week-on-week. In this alternative scenario there would be around a 13 per cent reduction in ITV1 drama audience each week over the longer term. However, Table 15 illustrates that the extent to which repeat clashes occur in practice varies by ITV crime drama.

In practice, over the three-year period the clashes occur between crime dramas only – for 28 out of 121 ITV1 crime drama episodes (or just less than a quarter). This is a small but significant number of clashes, which in turn will have commercial implications for ITV. However, clashes emerge in practice as a result of action by both the BBC and ITV. Both parties place a major emphasis on crime drama. It is not clear that the BBC has deliberately sought to schedule its own crime dramas against ITV. The 9pm watershed also means that, in practice, there is a limited time slot for the channels to schedule any given adult drama on a given day. Hence, some scheduling clashes are unavoidable. It may simply be that the abundance of crime drama per se, squeezed into a tight schedule, is driving the clashes between BBC One and ITV1 programmes. However, it is also of note that half of the clashes occur on a Monday.

As regards weekend entertainment viewing, weaker effects are found of clashes between BBC One and ITV1 shows. At a broad level, scheduling clashes between a BBC One entertainment programme and an ITV1 entertainment programme mean that ITV's audience is around 1 per cent lower than would otherwise be the case. However, this effect is not statistically significant. At a more granular level, there are 27 clashes (out of a total of 244 ITV1 episodes), mainly in music/dance entertainment, but also in the quiz/panel/game show subgenre. The magnitude of the effect is again around -1 per cent, and is once again not statistically significant.

Throughout much of the analysis, the scheduling and content decisions of the other channels examined (BBC Two, Channel 4, Channel 5) are found not to have a statistically significant negative impact on ITV's audience. Also throughout, prior episode audience for the ITV1 show (often the previous week's airing) and the audience of the preceding ITV1 show ("lead in" or "flow") are the main drivers of ITV's audience for any given show. Channel 4 entertainment clashes with ITV, defined narrowly, are found to have a significant and negative impact on ITV1 audience, but this accounts for only a few observations.

[258] Based on BARB data from the O&O dataset.
[259] This takes the coefficient for the lagged dependent variable from the fixed effects model of around 0.5, which is a lower bound estimate.

The analysis described in this report focuses on impacts on ITV. It took as its starting point key ITV1 drama and entertainment shows. It compared, conditional on these shows having been selected, what happens to ITV's audience when there are scheduling clashes with BBC One with instances when there are no clashes. Given the way in which the data has been shaped to explore this issue, it has not been possible to explore the impact on total BBC One and ITV1 audience with and without clashes.[260] However, if it is assumed that the effect is symmetric, it would be expected that BBC One audience would be lower when drama subgenre clashes occur than would otherwise be the case. This would be worthy of further analysis.

[260] This is because ITV's audience observations always involve dramas, with clashes and without clashes. The BBC One observations, by contrast, involve particular types of drama when there is a clash, and other dramas (and indeed non-drama programmes) when there is no clash. Examining total BBC One and ITV1 audience impacts on this basis would give rise to sample selection effects (dramas often secure higher ratings than non-dramas). In addition, fixed effects would not be removed. To examine total clashes, it would be necessary to undertake the opposite analysis: a conditional analysis based on selecting a number of BBC One drama and entertainment shows, looking at BBC One audience with and without clashes with ITV.

9 Quantitative analysis of online advertising

In this Annex we present the analysis of advertising impacts summarised in section 6.6.1. As noted in that chapter, our approach estimates how much the revenues of UK online news publishers might increase as a result of a *reduction* in the BBC's online news content output. Below we discuss our approach in detail (section 9.1), after which we present our results (section 9.2).

The hypothesis of a BBC output reduction does not reflect any view as to how advisable or realistic such a development might be; rather, it reflects the practical need for an analytical tool that allows us to consider the magnitude of the BBC's commercial footprint. Practical considerations also underlie our use of a "static" analysis (which does not consider how industry players might react to a BBC output reduction), as well as the adoption of further simplifying assumptions that we discuss in section 9.3. Accordingly, our approach should be read as providing an analytical framework to assess the likely gross impact on UK commercial publishers of BBC's online news activities. As such, the results should be considered as approximate orders of magnitude rather than precise estimates.

9.1 Our approach in detail

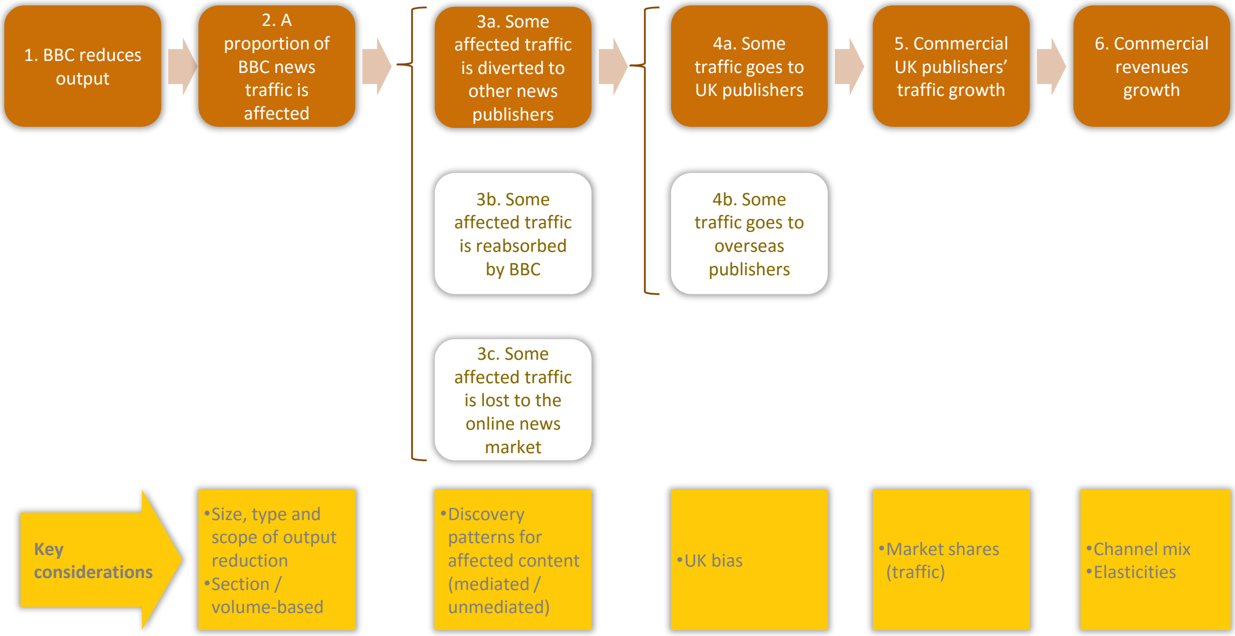
At a high level, our approach establishes a numerical multiplier, *M*, linking the volume BBC of online traffic affected by a given reduction in BBC News' online output, expressed as a proportion of all BBC news traffic, to the increase in UK online news publishers' online advertising revenues, expressed as a proportion of current online advertising revenues. Thus, for example, if we find that *M* equals 0.3, an output reduction affecting 10 per cent of BBC news traffic would lead to a 3 per cent increase in advertising revenues. As we shall see, *M* will depend on several factors, including:

- the type of content affected – what output is reduced (hard news, soft news, etc.);
- the scale and nature of the output reduction – whether it is a reduction in the number of articles published; the closure of a section in BBC News online; or the closure of the entire BBC News website;
- how much of this traffic might transfer to the UK commercial sector; and
- the commercial sector's ability to convert this traffic into revenues.

Obtaining precise impact estimates for each of these factors would require a large amount of data and hard evidence, which has not always been possible to obtain or ascertain in the time available to conduct this analysis. Accordingly, at various steps in the analysis below we introduce assumptions, typically in the form of ranges or scenarios, which in turn have the consequence that *M* will vary by scenario.

The steps of our analysis are illustrated in Figure 64 and discussed in detail below.

Figure 64: Modelling approach for online news advertising impacts



9.1.1 From content reduction to affected traffic (steps 1 to 2)

As noted in Box 1, the main driver of online advertising revenue is *page views* or *traffic* – the number of times that specific web pages (e.g. articles) are viewed – rather than the number of times a website is visited, or the number of people who visit. The first task is therefore to relate a given *output* reduction to BBC *traffic*.

First, we need to consider the **affected traffic**, which we define as the page views that would have accrued to the content/output affected under an output reduction. Thus, for example, if web pages within the BBC's Business section (news articles and the section index) accounted for 20 per cent of BBC news traffic and the output reduction were to consist of the closure of the entire Business section, the affected traffic would account for 20 per cent of all BBC news traffic. For our estimation exercise, we take this proportion as a given – that is, as an input to our stylised model. The ultimate task will thus be to assess how an output reduction affecting *x* per cent of BBC news traffic would affect commercial advertising revenues.

The degree to which affected traffic will result in a drop in BBC traffic or a transfer of traffic to the commercial sector depends on the content in question. For reasons that we explain in the next section, we expect that there may be meaningful differences depending on whether:

- a content reduction is **section based** (the closure of a section or a subsection in the BBC's news website) or **volume based** (a reduction in the number of articles published in per month, either across the website or in specific areas);
- the reduction, where volume based, represents a reduction in the **breadth** or **depth** of coverage – fewer news events are covered (*breadth*), or the same number of events but in less detail (*depth*);
- the reduction is marginal or **major** – in particular, we consider **marginal** reductions (affecting, say, up to 10 to 20 per cent of page views) and **major** reductions (affecting 50 per cent or more of traffic).

Thus we consider the likely impact of five content reduction scenarios in our stylised modelling exercise.

Table 23: Output reduction scenarios

	1. Marginal depth reduction	2. Marginal breadth reduction	3. Marginal section closure	4. Multi-section closure[261]	5. Website closure[261]
Volume/section	Volume	Volume	Section	Section	n/a
Breadth/depth	Depth	Breadth	Both	Both	Both
Scale (% of traffic affected)	Marginal 10%	Marginal 10%	Marginal 10%	Major 50%	Major 100%

9.1.2 From affected traffic to traffic diversion to other publishers (steps 2 to 3)

Next we consider the proportion of affected traffic that would be diverted to commercial news publishers. Not all of the traffic affected by an output reduction will transfer to alternative publishers. Some audiences might spend the same amount of time reading BBC news pages as before the output reduction, but simply read different articles (this might be particularly likely for small reductions in BBC output). Some audiences might simply consume less online news. More specifically, we distinguish between affected traffic that:

(a) diverts to other news publishers;
(b) is reabsorbed within the BBC's website (including non-news parts);
(c) is lost to the online news market (including reduced internet use and absorption by non-news-publisher services, such as social networks).

Our aim is to assess the likely relative size of (a); or, if (a) to (c) are interpreted as percentages adding up to 100%, we aim to assess the value of (a), which we refer to as the **commercial transfer rate**.

Drawing on our discussion of online consumption in section 6.4, we can divide the affected traffic into traffic due to mediated and unmediated consumption. For reasons that we give below, we expect traffic that is due to mediated consumption to be more likely to transfer to commercial websites than unmediated traffic.

We start by considering what kinds of content reduction are likely to be particularly over- or underexposed to unmediated traffic. Among the five scenarios, we expect that the first (a marginal depth reduction) would be particularly *under*exposed to mediated traffic, since we would expect discovery of these articles to rely (more than for other content) on on-site navigation. For all other reduction scenarios, we expect unmediated consumption to account for a share of affected traffic in line with overall website average – which for the case of UK visitors to BBC News we have estimated at around 59 per cent (see Figure 53). We lack equivalent figures for overseas audiences, but expect unmediated consumption would be less common, given the relatively smaller profile of the BBC's brand overseas (as compared with its domestic presence); specifically, for modelling purposes we assume that 40 per cent of page views are unmediated.

9.1.2.1 Unmediated consumption (users who intentionally visit the BBC News website)

Under unmediated consumption we consider mainly regular visitors to the BBC's news website whose visits start at the website's front page and then browse for news items of interest. We understand that unmediated visits on average consist of around 5 pages per visit.[262] Given that the BBC publishes enough stories each day to keep all its multiple sections up to date, this means that an average unmediated visitor reads only a very small proportion of the available output, and may not even be aware of the content available in more than a few sections. This all suggests that a small content reduction may have a small effect.

More specifically, we consider the following cases.

[261] Included for completeness; modelling approach not designed for large scale reductions.
[262] Direct visits to the front page of bbc.co.uk/news on average consist of 4.9 page views (source: discussions with BBC).

- Audiences with a general interest in news and who normally devote a regular amount of time each week to reading the news at the BBC's website. For them, a content reduction, if noticed at all, is likely to lead to other BBC content substituting for the removed content, with only minimal impact on BBC or commercial traffic (**low commercial transfer rate, under either volume or section based reductions**).

- For other audiences, time spent at the BBC may depend on the number of articles of interest found. These would be audiences who either:

  - have one or more specific interests (e.g. technology) for which they can easily check the relevant BBC output (e.g. by navigating to the relevant section). If output of the relevant content is reduced or stopped, these audiences would be unlikely to substitute other BBC content for the affected content, so that affected traffic would not be reabsorbed within the BBC. Moreover, they might increase their usage of other websites (**medium commercial transfer rate, for subject interest audiences, under section based reductions**);

    - in extreme cases, if output across an entire section or topic is stopped, some of these audiences might stop their BBC news usage altogether, potentially taking more than just the affected traffic to the commercial sector. This would be unlikely except for content that audiences go especially to the BBC *for* – *e.g.* breaking news, politics, world affairs – and we find it implausible that any of these would be significantly reduced except under a radical scenario **(high commercial transfer rate under major/core section closures; unlikely for marginal reductions)**;

  - have broader interests cutting across multiple areas of the website. Page views would decrease only among those audiences who normally check all the available articles and read all those they find interesting (high volume but selective readers; high volume readers who select articles at random would be affected unless they normally read *all* the articles in the website or in multiple key categories). We would not necessarily expect this to result in a transfer to the commercial sector; rather, barring major reductions, we would expect some of the traffic simply to be lost to the industry (**medium transfer rate, under volume or section based reductions)**;

In short, under marginal output reductions (whether volume or section based) we generally expect the transfer rate for unmediated traffic to be small.

As for major reductions, audiences might stop visiting the BBC's website if the reduction is substantial enough to make the website less attractive overall. Again, this can result in a **high transfer rate to the commercial sector under major reductions**, both volume or section based. However, even in this case, the transfer rate would be mitigated by two factors:

- **multi-sourcing**, which is common (as we saw in section 6.3.2.3 is common, with online news users on average claiming to use 2.1 sources) and which may result in audiences not turning to additional websites. However, even with multi sourcing, under reduced BBC coverage audiences may view more pages at websites of which they are already frequent visitor

- **diversion to non-publishers**, such as social media and other players catering to undirected news consumption (see section 6.4). Although this may in turn lead to mediated traffic to other news publishers, some the traffic might also go to non-news publishers, or might stay within the intermediary (i.e. if users do not follow links). Thus, unmediated diversion to online intermediaries would likely result in a partial, but not full, transfer of traffic to commercial publishers.

Although both of these mitigating factors have their caveats, together we expect to have a role, so that under major content reductions we would expect the **commercial transfer rate under unmediated consumption to be moderately high, not complete**.

9.1.2.2 Mediated consumption (users who are referred to specific articles by third parties)

Under **mediated** consumption, as per our discussion in 6.4.3, the decision of what links will replace links BBC content affected by the output reduction will be made by intermediaries. Although we understand that some key intermediaries tend to prioritise links to content from large and trusted publishers, in general we would not necessarily expect that a link to affected BBC content would necessarily be replaced by other BBC content (for example, a user searching in Google for news about a specific event would likely be offered links to coverage by other providers, rather than a link to unrelated BBC articles). More specifically, we consider two cases:

- for affected traffic originating in search engines and news aggregators, we would expect nearly all of the affected traffic to be "lost" to the BBC *and* transferred to commercial publishers, since users would simply be offered links to alternative news coverage[263] (**high diversion to commercial sector, in all cases**);

- for traffic originating in social networks and email, this is less clear. We might expect that affected BBC content will be substituted by alternative coverage of the same events, but some of it may also be replaced by links to other content. Moreover, in the case of social networks the question ultimately may depend on proprietary ranking algorithms; in particular, when algorithms prioritise large, trusted websites like the BBC, as both Facebook and Google are understood[264] to do, then links to affected content might be replaced by links to other BBC news items. This may be the case particularly under marginal reductions that would be unlikely to alter intermediaries' treatment of the BBC (**medium commercial diversion under marginal reductions; high under major reductions**).

In both of these cases we would expect the impact not to depend significantly on whether the content reduction was section- or volume- based, or on the magnitude of the output reduction.

9.1.2.3 Summary and implications

Thus, it appears that in general mediated traffic affected by a reduction in BBC content is more likely to be lost to the BBC, and to be transferred to commercial publishers, than unmediated traffic. This contrast is likely to be strongest under marginal content reductions, and weaker under radical reductions (where the diversion normally high rate under mediated consumption may fall somewhat, while the normally low rate under unmediated consumption is likely to increase). Our discussion so far is summarised in Table 24.

Table 24: Proportion of affected traffic likely to be diverted to commercial websites under different types of output reduction

Type of consumption	Volume based reduction	Section based reduction	Major reductions (volume or sections)
Unmediated	• Visitors with non-specific needs: **low** (audiences likely to switch to other BBC webpages) •High-volume readers: **medium**	•Visitors with non-specific needs: **low-medium** (audiences likely to switch to other BBC webpages) •Subject-interest visitors: **medium**/**high** (visitors may turn to other websites to satisfy need) •High-volume readers: **medium**	•**High**: some audiences may abandon BBC service altogether
	Diversion to 3rd parties moderated by multi-sourcing and diversion to intermediaries		
Mediated	•Search engines, news aggregators: **high** •Social media, email: **medium**		•**High**

Modelling these considerations in a rigorous quantitative way would require a degree of effort and empirical data that are beyond the scope of this study. However, for the purposes of our stylised model we can consider likely values of the **commercial transfer rate, *X*** – that is, of the proportion of affected traffic that would likely go to commercial publishers. Specifically, we use the following assumptions:

[263] Loyal users of BBC news visiting a news aggregator may choose to omit news stories for which no BBC coverage is offered; however, we expect this to be a marginal case.
[264] Based on discussions with publishers.

Table 25: Parameters for modelling (commercial transfer rates)

	Marginal depth reduction	Marginal breadth reduction	Marginal section closure	Multi-section closure	Website closure
Affected traffic					
Affected traffic as % of BBC news traffic	10%	10%	10%	50%	100%
Transfer to other news websites					
Unmediated consumption					
Min	0%	10%	25%	40%	50%
Max	20%	30%	48%	65%	75%
Mediated consumption					
Min	50%	50%	50%	50%	60%
Max	75%	75%	75%	80%	85%
Net effect					
Importance of unmediated(*)	85%	59%	59%	59%	59%
Min	8%	26%	35%	44%	54%
Max	28%	48%	59%	71%	79%
UK bias in absorbing BBC traffic (1= full bias; 0=no bias)					
Min	0.50	0.50	0.50	0.50	0.50
Max	1.00	1.00	1.00	1.00	1.00

Note: (*) We use the same parameters for overseas audiences, except for "importance of unmediated traffic" which is set to 40% in all cases; and "UK bias", which is set to range from 0 to 0.5.

Based on these assumptions, our estimates for the proportion of affected traffic that would transfer to other publishers (including overseas based publishers) are shown in Table 26.

Table 26: Proportional increase in commercial traffic as a factor of proportion of BBC traffic affected

	Marginal depth reduction	Marginal breadth reduction	Marginal section closure	Multi-section closure	Website closure
UK audiences					
Min	0.08	0.26	0.35	0.44	0.54
Max	0.28	0.48	0.59	0.71	0.79
Overseas audiences					
Min	0.20	0.34	0.40	0.46	0.56
Max	0.42	0.57	0.64	0.74	0.81

9.1.3 How much of the diverted traffic will accrue to UK publishers'? (steps 3-4)

Not all of the traffic that is diverted to commercial publishers would necessarily benefit UK based publishers. Indeed, today a percentage of English language online news consumption is to non-UK publishers; this percentage is small for UK based audiences but high for overseas audiences (8 per cent vs 94 per cent, by our estimations). In the event of an output reduction by the BBC, we might expect traffic to be diverted to UK and overseas publishers in their current proportions; or, alternatively, we might expect a degree of **UK bias** reflecting the degree to which UK based publishers would be closer substitutes of the BBC than overseas websites would be. At a high level, we expect that

- UK audiences would likely have a strong UK bias; however, given the small percentage of UK traffic that is to overseas publishers, any UK bias would have an immaterial impact on the results (i.e. even without a UK bias, we could expect 94 per cent of diverted traffic to go to UK based publishers)
- Overseas audiences might have a lower UK bias in general. A high UK bias might apply to specific audience segments such as UK expatriates (who in the BBC's absence might turn to other UK publications), but for other audiences the BBC might be seen as closer to other global brands such as CNN, the New York Times, etc.

Given the absence of quantitative evidence on this point, in terms of our modelling exercise, we employ a parameter, ***U***, with values ranging from 0 to 1 to capture the degree of UK bias exhibited by traffic diverted to the commercial sector. If *U* is 0 then commercially diverted traffic would go to UK and overseas publishers following current traffic patterns, whereas if *U* is 1 then all diverted traffic would accrue to UK publishers. Specifically, the proportion of commercially diverted traffic that accrues to UK based publishers is given by $F_U = S_U + U(1 - S_U)$, where S_U denotes the current share of English language online news traffic that currently goes to UK based publishers (including the BBC). We use the following parameters:

Parameters for modelling (UK bias): For UK based audiences, we set the UK bias *U* to range from 0.5 to 1.0 (implying that F_U ranges from 96 per cent to 100 per cent), while for overseas based audiences, *U* ranges from 0.0 to 0.5 (implying that F_U ranges from 6 per cent to 53 per cent).

The steps so far would provide us with the proportion of BBC traffic that would transfer to UK commercial publishers. Hence, if T_B denotes the proportion of BBC traffic that is affected by a given content/ output reduction (say 10 per cent), then the product of T_B, X, and F_U would provide us with this figure.

9.1.4 From UK diversion to UK traffic growth (steps 4-5)

Once we have obtained the proportion of BBC traffic affected by an output reduction that would transfer to UK commercial publishers, we need to express this in terms of a percentage increase in traffic for these publishers. To obtain this percentage growth we use the relative sizes of the BBC's and UK commercial publishers' traffic. Thus, for example, if the BBC accounts for 1/3 of UK news traffic and UK publishers for the remaining 2/3, then a BBC output reduction affecting 10 per cent of BBC news traffic (and assuming all of this traffic diverts to the UK commercial sector) would lead to an increase in UK commercial traffic of 5 per cent ($10\% \times \frac{1/3}{2/3} = 10\% \times 0.5 = 5\%$). Hence, if T_c denotes the proportional increase in commercial UK traffic, we have that

$$T_c = T_B X F_U \frac{S_B}{S_{UK}} \quad (1)$$

where S_B and S_{UK} denote respectively the shares of news traffic accounted by the BBC and by commercial UK based publishers, and X and F_U have been defined above.

Based on an analysis of the information in Figure 48 and Figure 49, we have estimated the following

Parameters for modelling (traffic shares): we use:

For UK based audiences, $S_B = 37\%$ and $S_{UK} = 55\%$.
For ex-UK based (overseas) audiences, $S_B = 0.9\%$ and $S_{UK} = 4.6\%$.

To estimate these figures from Figure 48 and Figure 49, we have (a) reapportioned news and non-news BBC traffic as discussed in section 6.3.2.3 (see the discussion of this after Figure 48, p 153); (b) considered only traffic to English language websites; and (c) attributed a proportion of unassigned traffic to UK based and non-UK based English language websites in line with shares of traffic for known websites (excluding the BBC). We note that for ex-UK audiences, given the high share of traffic that is unclassified in Figure 49, this approach can only be considered as indicative.

The result of our considerations so far is summarised in Table 27, which shows the likely proportional increase in commercial traffic as a factor of the affected BBC traffic ($\frac{T_c}{T_B}$) for UK audiences, in the case of the five hypothetical output reduction scenarios we considered.

Table 27: Proportional increase in commercial traffic to UK publishers as a factor of proportion of BBC traffic affected

	Marginal depth reduction	Marginal breadth reduction	Marginal section closure	Multi-section closure	Website closure
UK audiences					
Low diversion, low UK bias	0.05	0.17	0.22	0.28	0.34
Low diversion, high UK bias	0.05	0.17	0.23	0.29	0.36
High diversion, low UK bias	0.18	0.31	0.37	0.45	0.50
High diversion, high UK bias	0.19	0.32	0.39	0.47	0.52
Overseas audiences					
Low diversion, low UK bias	0.00	0.00	0.00	0.01	0.01
Low diversion, high UK bias	0.02	0.04	0.04	0.05	0.06
High diversion, low UK bias	0.00	0.01	0.01	0.01	0.01
High diversion, high UK bias	0.05	0.06	0.07	0.08	0.09

These results can also be expressed in terms of the proportional growth in commercial traffic, if we set the proportion T_B of BBC affected traffic as per the scenarios specified earlier in Table 28.

Table 28: Proportional increase in commercial traffic to UK publishers as proportion of current commercial traffic by UK publishers

	Marginal depth reduction	Marginal breadth reduction	Marginal section closure	Multi-section closure	Website closure
UK audiences					
Low diversion, Low UK bias	0.5%	1.7%	2.2%	14.0%	34.4%
Low diversion, High UK bias	0.5%	1.7%	2.3%	14.6%	35.8%
High diversion, Low UK bias	1.8%	3.1%	3.7%	22.6%	50.3%
High diversion, High UK bias	1.9%	3.2%	3.9%	23.6%	52.4%
Overseas audiences					
Low diversion, Low UK bias					
Low diversion, High UK bias	0.0%	0.0%	0.0%	0.3%	0.6%
High diversion, Low UK bias	0.2%	0.4%	0.4%	2.5%	6.1%
High diversion, High UK bias	0.0%	0.1%	0.1%	0.4%	0.9%

9.1.5 From UK commercial traffic growth to revenue growth (steps 5-6)

Next, we consider the degree to which the extra traffic gained by commercial publishers as a result of a reduction in BBC traffic would translate into incremental revenues.

As discussed in Box 1 (p 152) in section 6.3.2, advertising revenues are driven mainly by page views. However, this link is not necessarily a linear one – that is, a 10 per cent increase in commercial traffic need not lead to a 10 per cent increase in revenues. The increase of revenues may be proportionally smaller than that of traffic if (a) publishers are forced to monetise the additional traffic via a less profitable mix channels than existing traffic; and/or (b) industry-level advertising unit prices fall as a result of there being more advertising inventory. We discuss these points separately below:

9.1.5.1 Publishers' mix of ad sales channels

As we noted in Box 1, publishers typically sell their inventory (individual ad impressions to consumers) through a variety of mechanisms. These range from directly negotiated sales, to "programmatic" sales mediated by intermediaries with varying degrees of control over which websites will show their ads (and to whom they should be shown), to bulk sales in which buyers have little or no visibility over where ads appear.

Faced with an increase in traffic, publishers may or may not be able to monetise the additional inventory in a way reflective of their existing mix of sales channels and CPMs. It could be argued that the existence of non-premium channels today (in particular, bulk channels) means that publishers *already* struggle to find enough advertiser demand for all their inventory; if so, we could expect that they might be forced to sell a significant proportion of the new inventory at relatively low CPMs. Alternatively, today's current mix of channels might reflect the capabilities of publishers' sales forces for the current level of revenues, in which case additional traffic might allow publishers to invest in a stronger sales operation so as to maintain the current mix of sales channels. If the latter argument were correct, we could expect that in the short term, publishers would struggle to monetise additional traffic maintaining the current channel mix, but over time, it might be possible for them to do so.

It is difficult to say with certainty which of these scenarios would likely play out. For the purposes of our modelling exercise, we have assumed

- a simplified typology of sales channels with direct, programmatic and bulk categories;
- a set of relative CPM levels corresponding to each sales channel;
- a set distribution of advertising inventory volumes, assigning proportions to each channel, reflecting typical distributions for currently sold inventory before the BBC reduces its output;
- a likely channel mix for additional inventory transferred from the BBC, expressed in terms of how the proportions of additional inventory would be allocated across direct, programmatic and bulk channels. We consider two extremes:
  - a high impact scenario, in which current proportions are maintained for all marginal reduction scenarios except major reductions and full site closure (in these cases, we assume that not all inventory can be sold at current rates, even in a high impact scenario);
  - a low impact scenario (in which a significant proportion shifts to lower-priced CPMs).

The following assumptions have been used, based on industry discussions and our own understanding. We acknowledge that these parameters represent a range of assumptions that may not fully hold at a detailed level; nonetheless, we expect the net effect of these assumptions to yield reasonable estimates for the *range* of plausible *proportional* changes in ad yield stemming an increase in inventory.

Table 29: Parameters for modelling (sales mix, UK case)

	1. Marginal depth reduction	2. Marginal breadth reduction	3. Marginal section closure	4. Multi-section closure	5. Website closure
Current share of inventory					
Direct	33%	33%	33%	33%	33%
Premium programmatic	33%	33%	33%	33%	33%
Bulk	33%	33%	33%	33%	33%
Channel mix for new inventory (high impact case)					
Direct	33%	33%	33%	25%	17%
Premium programmatic	33%	33%	33%	25%	17%
Bulk	33%	33%	33%	33%	67%
Channel mix for new inventory (low-impact case)					
Direct	10%	9%	8%	6%	5%
Premium programmatic	20%	18%	15%	13%	10%
Bulk	70%	74%	78%	81%	85%
CPM discounts (relative to direct sales)					
Premium programmatic	50%	50%	50%	50%	50%
Bulk	25%	25%	25%	25%	25%

For overseas ad sales, we have assumed that the channel mix remains unchanged with the addition of BBC inventory, given the relatively small share of the global market accounted for by the BBC.

9.1.5.2 The impact of extra inventory on CPM levels

In the UK, where audiences do not see advertising in BBC websites, an increase in commercial traffic would lead to a corresponding increase in the available inventory that publishers can sell to advertisers – not only at the level of each publisher but also at an *overall industry level*. In other words, supply would increase, and as a result prices (i.e. CPMs) can be expected to fall. In extreme cases, this fall could be enough to outweigh any increases in revenue due to increased sales. Whether and to what extent this occurs depends on the relevant *price elasticities of demand*. Specifically, for a given *small* proportional growth $\Delta Q/Q$ in inventory, we have that the corresponding proportional growth in revenue, $\Delta R/R$ is given by

$$\frac{\Delta R}{R} = \frac{\Delta Q}{Q}\left(1 - \frac{1}{\varepsilon}\right) \qquad (2)$$

Where $\frac{1}{\varepsilon}$ is the *inverse* of the price elasticity of demand and is given by $\varepsilon = -\frac{\Delta Q}{\Delta P}\frac{P}{Q}$.

We are not aware of publicly available estimates of the price elasticity of demand for online advertising, nor are we in a position to provide an original estimate. However, in general we would expect products with many close substitutes that are abundant to have highly elastic demands so that price would be insensitive to changes in supply. This would result small inverse elasticities, and hence, the proportional change in revenue would be roughly the same as the proportional change in supply. In the context of online advertising inventory in news websites, we would expect this to be the case to the extent that advertisers are indifferent to whether their ads appear in news websites versus other types of online content, noting that online news accounts for only around 20% of relevant advertising revenues.[265] In terms of the types of sales channels discussed above (which we acknowledge represent a simplification), we would expect that:

- **for bulk inventory**, demand should be highly elastic,[266] since such inventory is typically sold with limited or no control over what websites ads appear in;
- **for programmatic inventory,** similar considerations should apply whenever advertisers primarily “buy an audience” rather “a context” – i.e. when their priority is to ensure that an advertisement is shown to certain individuals, with less importance attached to where the advertisement is shown. Based on discussions with industry experts, we understand that the rise of programmatic selling is leading to a decrease in the importance of context (which has traditionally been used partly as a means of targeting audience segments rather than for its own sake);
- **for directly sold inventory,** demand should be more inelastic; however, experts have also told us that even in this case buyers often see online news as substitutable with other online categories such as sport, social media, magazines etc.

Given this, for the purposes of our calculations we have assumed broad plausible ranges for inverse elasticities; for bulk inventory, these range from zero (as a rough approximation to a very high price elasticity of demand) to -0.25 (implying a price elasticity of demand of -4); for direct inventory, inverse elasticities are assumed to be between -0.5 and -1.0 (implying price elasticities of demand of between -2 and -1); whereas for programmatic inventory the corresponding inverse elasticities are -0.25 to -0.63 (implying price elasticities of demand of between -4 and -1.6). These assumptions are summarised in Table 30.

---

[265] Based on Ofcom (2015d). In 2014, “press brands” had £655m online advertising revenues, which is approx. 9% of overall online advertising revenues of £7,194m, and 19% of non-search revenues of £3,421m.

[266] More precisely, we do not necessarily expect that in the overall market for UK bulk inventory demand would be elastic. Rather, we expect that the own-price elasticity of bulk inventory *in news websites* (a variant of bulk advertising) would be very high given the (assumed) very high substitutability between news and non-news bulk inventory. (Technically, the market in question here is that of remnant advertising sold by publishers to ad networks for re-sale to advertisers in bulk).

Table 30: Parameters for modelling (inverse elasticities, UK case)

	1. Marginal depth reduction	2. Marginal breadth reduction	3. Marginal section closure	4. Multi-section closure	5. Website closure
Inverse elasticities (high-impact case)					
Direct	-0.50	-0.50	-0.50	-0.50	-0.50
Premium programmatic	-0.25	-0.25	-0.25	-0.25	-0.25
Bulk	0.00	0.00	0.00	0.00	0.00
Inverse elasticities (low-impact case)					
Direct	-1.00	-1.00	-1.00	-1.00	-1.00
Premium programmatic	-0.63	-0.63	-0.63	-0.63	-0.63
Bulk	-0.25	-0.25	-0.25	-0.25	-0.25

Given a set of assumptions of elasticity and channel mix, we have estimated the proportional increase in commercial revenues as follows. First, we have estimated the proportional increase in UK commercial traffic as per equation (1). Then we have multiplied the result by the posited proportion of BBC traffic that is affected by a content reduction (e.g. 10 per cent), so that Table 27 yields the traffic increases experienced by UK publishers, as a percentage of their current traffic. Then we

- allocate this increase in traffic to different sales channels, as specified in Table 29;
- calculate the resulting proportional growth in inventory supply under each of the tree sales channels
- apply formula (2) to each sales channel separately using the elasticity values in Table 28, to obtain the proportional revenue change for each channel
- take a weighted average of the proportional revenue changes in each channel, using as weights the different channels pre-change shares of revenue (themselves calculated on the basis of relative prices and shares of volume, as per Table 29).

The application of elasticities in the third step above is valid only for small variations in inventory. For more significant variations (as in our scenarios 4 – 5), our approach is likely to over-estimate the revenue impact[267] – a point that should be borne in mind when considering our results.

Finally, we note that for the case of overseas advertising the issue of elasticity does not apply in our framework, since a transfer of traffic to the commercial sector would only amount to a change in market shares rather than an increase in overall supply, given that the BBC's website already shows advertisements to overseas audiences.[268]

9.2 Results

As noted earlier, the aim of our modelling exercise is to provide an estimate for the multiplier M linking the proportion of BBC news traffic affected by a reduction in output with a proportional increase in UK commercial revenues. Thus, for example, $M = 0.5$ would mean that an output reduction affecting 10% of BBC news traffic is expected to lead to a 5 per cent (= 0.5 x 10%) increase in commercial revenues.

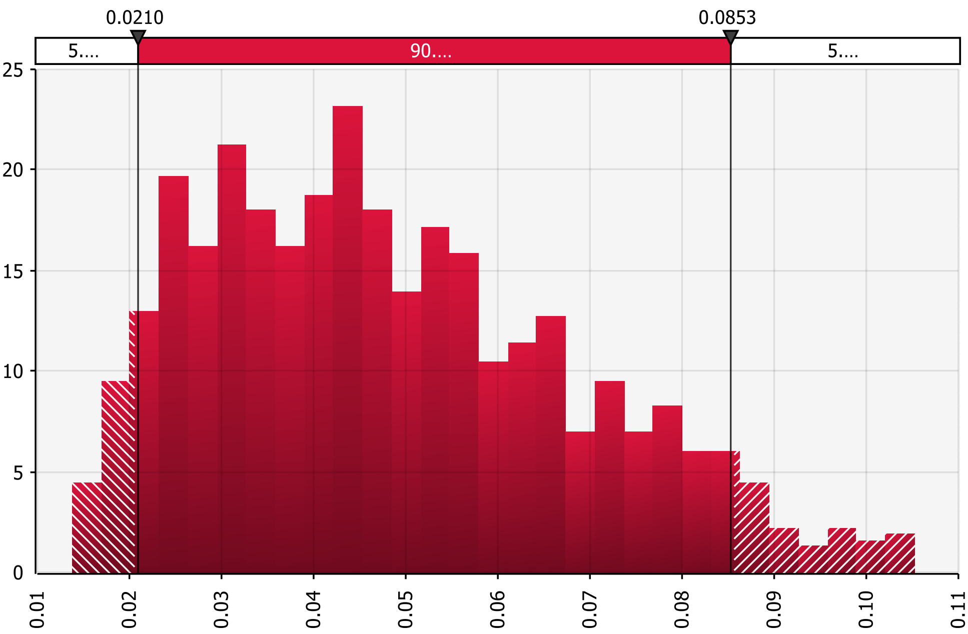
However, as our discussion above shows, at four different points we have met uncertainty on the value of parameters that we should use, which has led us to consider plausible ranges rather than point estimates as parameters to our model. These parameters are: the UK bias (*U*); the commercial diversion ratio (*X*); the different scenarios of channel mix under which new inventory would be monetised; and the relevant price elasticities of demand for each channel. In each of these cases we have considered two possible cases (a high- and low-impact case), so that if all possible combinations are considered this leads to 16 (2x2x2x2) estimates of M. Moreover, since we are considering five output reduction scenarios, this would yield 80 different estimates (5 x 16).

[267] Assuming a linear demand function, under which elasticity would increase as supply grows.
[268] In doing this we assume that, from the advertisers' point of view, UK based and non-UK based news websites are perfect substitutes.

Presenting all of these estimates would be not only unwieldy but also uninformative, so that a summary view is required. This should include, for each of our five scenarios, the results corresponding to the lowest and highest possible combination of assumptions (a “minimum” and a “maximum”) estimate. However, further consideration shows that neither of these end-points is particularly realistic, as they would imply a compounded pessimistic or optimistic perspective at both ends.

To focus on more probable results, we consider the relative probabilities of different points in the range between the minimum and maximum value of our estimates of *M*. If we assume that for each of the parameters that we have estimated in the form of ranges, all intermediate points are equally probable, then we can ask what the most probable value for our overall result is. We have conducted a statistical simulation exercise which has revealed that under the assumption of equi-probability across each of our ranges the average results are skewed towards the lower end of possible ranges, as shown in Figure 65.

Figure 65: Frequency distribution for *M* under for scenarios 1 (UK)



In view of these considerations, for our final outputs we present:

- **Min** and **max:** The minimum and maximum ends of the result range – noting that these are both implausible values as they represent four-times compounded pessimistic or optimistic assumptions
- **Minimum and maximum plausible**: This covers 95 per cent of the simulation results – this should be interpreted as a reasonable minimum and maximum for discussion purposes
- **Mean**: the statistical mean of the simulated results – this should be interpreted as the most plausible value

It should be stressed that the validity of all of these values is subject to the validity of all the parameters we have used (as well as of all the implicit assumptions in our model), which we discuss below.

9.2.1.1 Impact presented in terms of proportionality factor

The results are presented in terms of *M* below; Table 31 presents the results for UK advertising and overseas advertising:

Table 31: Proportional increase in commercial revenues as a factor of proportion in BBC traffic affected

	Marginal depth reduction	Marginal breadth reduction	Marginal section closure	Multi-section closure	Website closure
UK advertising					
Minimum	0.01	0.04	0.05	0.05	0.09
Maximum	0.12	0.21	0.25	0.24	0.28
Mean	0.05	0.10	0.13	0.14	0.17
Minimum plausible	0.02	0.06	0.08	0.09	0.12
Maximum plausible	0.08	0.15	0.19	0.20	0.23
Overseas advertising					
Minimum	0.00	0.00	0.00	0.01	0.01
Maximum	0.05	0.06	0.07	0.08	0.09
Mean	0.02	0.03	0.03	0.04	0.04
Minimum plausible	0.00	0.01	0.01	0.01	0.01
Maximum plausible	0.04	0.05	0.06	0.07	0.07

9.2.1.2 Proportional impact presented in terms of absolute growth proportion

Our results can also be presented in terms of the proportional growth in commercial revenues, if we set the proportion T_B of BBC affected traffic as per the scenarios specified earlier. The results for UK and overseas advertising are presented in Table 32.

Table 32: Proportional increase in commercial revenues as a proportion of current revenues

	Marginal depth reduction	Marginal breadth reduction	Marginal section closure	Multi-section closure	Website closure
UK advertising					
Minimum	0.1%	0.4%	0.5%	2.6%	9.2%
Maximum	1.2%	2.1%	2.5%	12.2%	28.1%
Mean	0.5%	1.0%	1.3%	7.0%	17.1%
Minimum plausible	0.2%	0.6%	0.8%	4.3%	12.0%
Maximum plausible	0.8%	1.5%	1.9%	10.0%	22.9%
Overseas advertising					
Minimum	0.0%	0.0%	0.0%	0.3%	0.6%
Maximum	0.5%	0.6%	0.7%	4.0%	8.8%
Mean	0.2%	0.3%	0.3%	1.8%	4.1%
Minimum plausible	0.0%	0.1%	0.1%	0.5%	1.1%
Maximum plausible	0.4%	0.5%	0.6%	3.3%	7.4%

This suggests that the impact on international commercial revenues from BBC traffic is likely to be small (for example, for an output reduction affecting 10 per cent of BBC News international traffic, UK commercial publishers would see an uplift of at most 0.6 per cent), even allowing for a degree in “UK bias”. This is intuitive, since in a world in which UK providers are fully undifferentiated vs their overseas competitors, the BBC’s importance to UK players is limited by its share of the global market, which we saw (Figure 49, p 154) to be of the order of 1 per cent. Nonetheless, it cannot be ruled out that international audiences might have a higher UK bias than we have allowed. We have not had access to empirical evidence that would allow us to clarify this.

9.2.1.3 Absolute impact in pounds

The figures above can be translated into absolute pound values if we start from an estimate of industry-wide advertising revenues. Such an estimate is provided in (Mediatique 2014), which estimates that for 2013 UK online news advertising revenues were £387m. Based on industry discussions, we understand that international revenues account for only a small proportion of industry revenues, so that for simplicity we assume that all of the £387m corresponds to domestic revenues (on the other hand, revenues are likely to have grown since 2013, which might compensate for any overestimation involved). Based on this, Table 32 can be re-presented in absolute terms for UK advertising, as shown in Table 33.

Table 33: Estimated industry-wide gains in £m per annum (UK advertising)

	Marginal depth reduction	Marginal breadth reduction	Marginal section closure	Multi-section closure	Website closure
UK advertising					
Minimum	0.4	1.4	1.9	10.2	35.7
Maximum	4.7	8.0	9.7	47.2	108.6
Mean	1.9	3.9	4.9	27.0	66.2
Minimum plausible	0.8	2.2	2.9	16.6	46.4
Maximum plausible	3.3	5.9	7.3	38.5	88.8

Absolute figures in pounds sterling cannot be provided for international advertising, as we have not had access to reliable estimates of publishers' current international revenues. Nonetheless, industry discussions suggest that currently these revenues are far smaller than their domestic counterparts, so that the net impact of BBC traffic might be small not only in proportional terms but also in absolute terms, compared with the UK impact.

9.3 Limitations of this approach

The approach used in this Annex shares all the limitations common to static impact assessments; in particular, it does not consider how industry players would react to actions by the BBC, and vice versa.

Moreover, even within the limitations of any static approach, for practical reasons our approach omits consideration of several important factors which might affect results; these include:

- audience heterogeneity – particular audience segments might be more likely than others to turn to other websites following a reduction in the BBC's output. The resulting commercial impact might then be higher if, for example, there is scarcity in advertising inventory that can reach these segments;
- publisher heterogeneity – similarly, traffic transferred from the BBC to other online providers might be concentrated on certain specific news sites. This would mean that the revenue impact would be likewise concentrated on certain players, and the magnitude of the impact might vary significantly depending on different players' ability to monetise content.

These and other limitations point to the fact that our approach is intended to provide a broad indication of the BBC's financial footprint rather than an exact estimate. Within these parameters, however, we believe that our approach serves its purpose.

Bibliography

Analysys Mason (2010) An econometric analysis of the TV advertising market. Ofcom

American Press Institute/Belden Interactive (2009 Revenue initiatives 2009. At http://it.ejo.ch/wp-content/uploads/API-ITZBelden-Revenue-Initiatives-Survey1.pdf [Accessed 28.01.2016] American Press Institute/Belden Interactive

Armstrong, Mark et al (2007) Public Service *Broadcasting in the Digital World.* In: The Economic Regulation of Broadcasting Markets. Cambridge University Press

Bania, Konstantina (2011) State Aid in the Broadcasting Sector: Has the Right Balance Been Struck between Competition and Public Service Broadcasting [Paper to be presented at the International Workshop on the Law and Economics of Media and Telecommunications] European University Institute

Barwise, Patrick (2004) *Independent Review of the BBC's Television Services.* DCMS

Barwise, Patrick (2015) *Response to DCMS Consultation on BBC Charter Review.*

Barwise, Patrick (2015) *Market Impacts of BBC TV and Radio.* IPPR

Barwise, Patrick and Picard, Robert (2014) *What if there were no BBC Television? The net impact on UK viewers.* Reuters Institute for the Study of Journalism

BBC (2004), *Submission to the Burns Review on the Market Impact of the BBC's analogue radio services*. BBC

BBC (2005) *BBC Spectrum Review: Rationale for promotional activities.* BBC

BBC (2007a) *BBC Trust approves bbc.com proposal* At: http://www.bbc.co.uk/pressoffice/bbcworldwide/worldwidestories/pressreleases/2007/10_october/bbc.com.shtml [Accessed 28.01.2016] BBC

BBC (2007b) *BBC on-demand proposals: Public Value Test final conclusions*. BBC.

BBC (2007c) *BBC strikes Google-YouTube deal* At: http://news.bbc.co.uk/1/hi/business/6411017.stm [Accessed 28.01.2016] BBC

BBC (2011) *Synergies within BBC Radio 1, Radio 2, IXtra and 6 Music: A report by John Myers.* BBC

BBC (2012a) *The ups, downs and ups of BBC News online*. BBC

BBC (2012b) *Review of BBC Local Radio: A report by John Myers.* BBC

BBC (2013) *The Economic Value of the BBC: 2011/12.* BBC

BBC (2014a) *30 day catch-up window comes to BBC iPlayer and BBC iPlayer Radio*. At: http://www.bbc.co.uk/mediacentre/latestnews/2014/iplayer-30-days

BBC (2014b), *Performance against public commitments 2013-14.* BBC

BBC (2015a) *British Bold Creative – The BBC's programmes and services in the next Charter*. BBC.

BBC (2015b) *BBC Annual Report and Accounts 2014/15*. BBC

BBC (2015c) *BBC Three to move online from February* At: http://www.bbc.co.uk/news/entertainment-arts-34932688. [Accessed 28.01.2016] BBC

BBC (2015d) *Annual Report and Accounts 2014/2015*.

BBC Trust (2007), *BBC on-demand proposals: Public Value Test final conclusions*. BBC Trust

BBC Trust (2008a) *BBC Trust suspends BBC Jam* At: http://www.bbc.co.uk/bbctrust/news/press_releases/2007/bbc_jam [Accessed on 2015.10.23]. BBC Trust

BBC Trust (2008b) *BBC Trust rejects local video proposals*. BBC Trust

BBC Trust (2008c) *Service review: bbc.co.uk*. BBC Trust

BBC Trust (2008d) *On-Screen and On-Air Talent.* BBC Trust

BBC Trust (2009a) *Findings and Conclusions of the BBC Trust Finance and Compliance Committee: Appeal Regarding the BBC's Online Formal Learning Activities*. BBC Trust

BBC Trust (2009b) *Findings and Conclusions of the BBC Trust Finance and Compliance Committee Fair Trading Appeal Investigation: Appeal Regarding the BBC's acquisition of the Radio Broadcasting Rights to the FA Cup for the period 2008/9 to 2011/*12. BBC Trust

BBC Trust (2009c) *Trust rejects BBC proposal for online federation of public service broadcasters*. Last updated 23.09.2014. BBC Trust

BBC Trust (2010a) *BBC On-demand Performance review*, BBC Trust

BBC Trust (2010b) *BESA appeal process.* BBC Trust

BBC Trust (2010c) Service Review: *Radio 2 and 6 Music.* BBC Trust

BBC Trust (2010d) *BBC Trust Review of Radio Content Supply.* BBC Trust

BBC Trust (2010e) *Canvas Proposals: final conclusions*. BBC Trust

BBC Trust (2011a) *Service Review: The BBC's National Radio Stations in Northern Ireland, Scotland and Wales*. BBC Trust

BBC Trust (2011b) *Approval of BBC Online strategy.* BBC Trust

BBC Trust (2012a) *Service Review: BBC Local Radio*. BBC Trust

BBC Trust (2012b) *The Third Review of the WoCC.* BBC Trust

BBC Trust (2012c) *Assessment Processes – Guidance*. BBC Trust

BBC Trust (2012d) Service Review of BBC Radio 3, Radio 4 and Radio 7. BBC Trust

BBC Trust (2013) *Service Review of BBC Online and Red Button*. BBC Trust

BBC Trust (2014a) *Review of BBC television services (BBC One, Two, Three, and Four)*. BBC Trust

BBC Trust (2014b) *TV, Radio, and Online – Review of BBC News and Current Affairs*. BBC Trust

BBC Trust (2015a) *The supply arrangements for the production of the BBC's television content, radio content, and online content services*. BBC Trust

BBC Trust (2015b) Service *Review of Radio 4, Radio 4 Extra, Radio 5 Live and Radio 5 Live Sports Extra*. BBC Trust

BBC Trust (2015c) *Distribution Framework for BBC Services: Report*. BBC Trust

BBC Trust (2015d) *Service Review of BBC Music Radio: Radio 1, 1Xtra, Radio 2, Radio 3, 6 Music and Asian Network.* BBC Trust

Benedetta, Brevini (2013) *European Commission Media Policy and its Pro-market Inclination: The Revised 2009 Communication on State Aid to PSBs and its Restraining Effect on PSB Online.* In: European Journal of Communication 2013

Brand Republic (2005) *BBC World takes first step towards rolling news in the US*. At: http://www.brandrepublic.com/article/525680/bbc-world-takes-first-step-towards-rolling-news-us [Accessed 28.01.2016]

British Internet Publishers Alliance, BIPA (2008) *Memorandum submitted to the Department for Culture Media and Sport*. BIPA

Bush, Anthony (2002) *On the Substitutability of Local Newspaper, Radio, and Television Advertising in Local Business Sales. Staff Research Paper 2002-10.* FCC

Business Insider (2014) *News UK: Our paywalls are working. Here are the numbers to prove it* At: http://uk.businessinsider.com/the-times-swings-back-into-profit-and-posts-digital-subscriber-uplift-2014-12?r=US&IR=T [Accessed 28.01.2016]

Channel 4 (2015a) *Britain's Creative Greenhouse: Channel Four Television Corporation Report and Financial Statements 2014.* Channel 4

Channel 4 (2015b) *Channel 4's response to DCMS BBC Charter Review consultation*. Channel 4

Competition Commission (2001) *Johnston Press Plc and Trinity Mirror Plc, Competition Commission Report on the Proposed Merger.* HMSO

Competition Commission (2003a) *Carlton Communications Plc/Granada Plc: A report on the proposed merger.* HMSO

Competition Commission (2003b) *Scottish Radio Holdings Plc and GWR Group Plc and Galaxy Radio Wales and the West Limited: A Report on the Merger Situation.* HMSO

Competition Commission (2009) *BBC Worldwide Limited, Channel Four Television Corporation and ITV plc: A Report on the Anticipated Joint Venture between BBC Worldwide Limited, Channel Four Television Corporation and ITV plc Relating to the Video on Demand Sector*. HMSO

Competition Commission (2013) *Global Radio Holdings Limited and GMG Radio Holdings Limited: A Report on the Completed Acquisition by Global Radio Holdings Limited of GMG Radio Holdings Limited*. HMSO

Congdon, Tim *et al* (1995) *Paying for Broadcasting: The Handbook.* Routledge

Crisell, Andrew (2002), *An Introductory History of British Broadcasting*. Psychology Press

Department for Culture, Media and Sport (1999) *The Future Funding of the BBC: Report of the independent review panel.* DCMS

Department for Culture, Media and Sport (2014) *Digital Radio Action Plan.* DCMS

Department for Culture, Media and Sport (2015) *BBC Charter Review Public Consultation.* DCMS

Department for Transport (2013) *The Transport Business Cases.* Department for Transport

Ekelund, Robert *et al* (1999) *Is Radio Advertising a Distinct Local Market? An Empirical Analysis.* In: Review of Industrial Organization, vol. 14(3) pages 239-256. Springer

Enders Analysis (2015) *The BBC, The Press and Online News.* Enders Analysis

European Audiovisual Observatory (2015) *The development of the European market for on-demand audiovisual services.* OBS

European Commission (2002) *State Aid No N 631/2001 – United Kingdom: BBC Licence Fee.* European Commission

European Commission (2003) *State Aid No N 37/2003 – United Kingdom: BBC Digital Curriculum.* European Commission

European Commission (2009a) *Communication from the Commission on the Application of State Aid Rules to Public Service Broadcasting.* European Commission

European Commission (2009b) *Impact Assessment Guidelines*. European Commission

European Commission (2015) *The development of the European market for on-demand audiovisual services*. European Commission

Frontier Economics (2015) *The Economic Impact of the BBC on the Creative Industries*. BBC

FTI (2010) *Competitive Impact Assessment of Bitesize, Learning Zone Broadband and Learning Portal: a report for the BBC Trust.* BBC Trust

Gardam, Tim (2004) *Independent Review of the BBC's Digital Radio Services.* DCMS

Graf, Philip (2004) *Independent Review of the BBC's Online Services.* DCMS

Grant Goddard (2010) *Independent Radio Productions Commissioned by the BBC.* BBC Trust

Harvard Neiman Journalism Lab (2014) *If my newspaper puts up a metered paywall, how many people will pay? Here's some data.* At: http://www.niemanlab.org/2014/05/07/ [Accessed 03.02.2016]

Harvey, Sylvia (2010) *No Jam Tomorrow? State Aid Rules and the Legitimacy of Public Service Media: The Closure of the BBC's Digital Curriculum Project ("Jam") [Draft paper for RIPE conference]* Institute of Communication Studies, University of Leeds

HM Treasury (2011a) *The Green Book Appraisal and Evaluation in Central Government.* HM Treasury

HM Treasury (2011b) *The Magenta Book Guidance for Evaluation.* HM Treasury

Home Office (1986) *Report of the Committee on Financing the BBC*. Home Office.

Human Capital (2004) *Measuring the Value of the BBC.* BBC

Inflection Point (2013) *Public and Private Broadcasters across the World – the Race to the Top*. BBC

ITV (2015) *Response to the DCMS Green Paper Questions.* ITV plc

KPMG (2003) *Market Impact Assessment of BBC's Online Service.* BBC

KPMG (2015) *An Economic Review of the Extent to which the BBC Crowds Out Private Sector Activity.* BBC Trust

Kantar Media (2012) *Measuring News Consumption and Attitudes.* Kantar Media

LEK (2016) *Perennial Millennials: A Viral Phenomenon.* LEK

Levy, David A L (2012) *Negotiating Europeanization: State Aid Guidelines, Public Broadcasting and New Services in Three Major Member States* [OXPO Working Papers]

McKinsey & Company (2004) *Review of Public Service Broadcasting around the World.* Ofcom

Mediatique (2013) *Implications of a change in the BBC's TV on-demand permissions*. BBC Trust

Mediatique (2014a) *The provision and consumption of online news – current and future*. BBC

Mediatique (2014b) *PSB review: investment in TV genres*. Ofcom

Monopolies and Mergers Commission (1998) Capital Radio Plc and Virgin Radio Holdings Limited: A Report on the Proposed Acquisition, cm 3817. HMSO

MTM (2015) *Life without the BBC: Household Study.* At: www.bbc.co.uk/mediacentre/latestnews/2015/life-without-the-BBC

Myers, John (2009) *Independent Review of Radio Services and the Existing Localness Legislation*. DCMS

National Audit Office (2014) *Managing the BBC's estate. Report by the Comptroller and Auditor General presented to the BBC Trust Value for Money Committee.* BBC Trust

NERA (National Economic Research Associates) (1985) *Report to the Committee on Financing the BBC The Peacock Committee.* HMSO

Nieman (2015) *Newsonomics: 10 numbers on The New York Times 1m digital-subscriber milestone* At: http://www.niemanlab.org/2015/08/newsonomics-10-numbers-on-the-new-york-times-1-million-digital-subscriber-milestone/ [Accessed 28.01.2016]

Ofcom (annual) *Communications Market Report.* Ofcom

Ofcom (2004) *Assessment of the Market Impact of the BBC's New Digital TV and Radio Services*. Ofcom

Ofcom (2005a) *Radio – preparing for the future.* Ofcom

Ofcom (2005b) *Review of public service television broadcasting.* Ofcom

Ofcom (2006a) *Digital Local – Options for the Future of Local Video Content and Interactive Services*. Ofcom

Ofcom (2006b) *BBC New on-demand proposals*. Ofcom

Ofcom (2006c) *Review of the television production sector*. Ofcom

Ofcom (2006d) *Radio Advertising Market Research*. Ofcom

Ofcom (2007a) *Methodology for Market Impact Assessments of BBC Services*. Ofcom

Ofcom (2007b) *The BBC's High Definition Television Proposals*. Ofcom

Ofcom (2007c) *The Future of Radio: The future of FM and AM services and the alignment of analogue and digital regulation.* Ofcom

Ofcom (2007d) *BBC new on-demand proposals: Market Impact Assessment.* Ofcom

Ofcom (2008a) *Channel 3 and Channel 5: Proposed Programming Obligations*. Ofcom

Ofcom (2008b) *Market Impact Assessment of the BBC's Local Video Service*. Ofcom

Ofcom (2008c) *Second Public Service Broadcasting Review: The Digital Opportunity*. Ofcom

Ofcom (2008d) *The Future of Radio: Localness on Analogue Commercial Radio and Stereo and Mono Broadcasting on DAB*. Ofcom

Ofcom (2008e), Communications Market Report 2008. Ofcom

Ofcom (2009), Communications Market Report 2009. Ofcom

Ofcom (2010a), Communications Market Report 2010.Ofcom
Ofcom (2010b) *No investigation into Project Canvas* At:
http://media.ofcom.org.uk/news/2010/no-investigation-into-project-canvas/ [Accessed 28.01.16]

Ofcom (2011) *Competition issues in the UK TV advertising trading mechanism*. Ofcom

Ofcom (2012a) *BBC Trust Significance Test – Delivering Quality First: BBC Local Radio*. Ofcom

Ofcom (2012b) *Communications Market Review 2012*. Ofcom

Ofcom (2013) *BBC Trust Significance Test – Links between BBC public services and BBC Store*. Ofcom

Ofcom (2014a) *Public service content in a connected society*. Ofcom

Ofcom (2014b) *BBC Trust Significance Test - iPlayer catch-up window extension*. Ofcom

Ofcom (2015a) *PSB Annual Report Output and Spend Annex.* Ofcom

Ofcom (2015b) *Third Public Service Broadcasting Review: Public Service Broadcasting in the internet age.* Ofcom

Ofcom (2015c) *The Communications Market: Digital Radio Report, Ofcom's sixth annual digital progress report*. Ofcom

Ofcom (2015d) *Communications Market Report 2015*. Ofcom

Ofcom (2015e) *Strategic review of digital communications: discussion document*. Ofcom

Ofcom (2015f) *News consumption in the UK: research report.* Ofcom

Ofcom (2015g), *International Communications Market Report 2015*. Ofcom

Ofcom (2015h) *Proposed changes to BBC Three, BBC iPlayer, BBC One, and CBBC.* Ofcom

Ofcom (2015i) *Review of the operation of the television production sector.* Ofcom

Office of Fair Trading (2008a) *Completed Acquisition by Global Radio UK Limited of GCap Media plc*. Office of Fair Trading

Office of Fair Trading (2008b) *Joint Venture between BBC Worldwide Limited, Channel Four Television Corporation and ITV plc.* Office of Fair Trading

Office of Fair Trading (2012) *Completed Acquisition by Global Radio Holdings Limited of GMG Radio Holdings Limited.* Office of Fair Trading

Oliver & Ohlbaum Associates (2003) *UK Television Content in the Digital Age*. BBC

Oliver & Ohlbaum Associates (2004a) *An Assessment of the Market Impact of the BBC's Digital Radio Services (BBC 6 Music, BBC 1xtra, BBC Asian Network, BBC7 and BBC Five Live Sports Extra).* BBC

Oliver & Ohlbaum Associates (2004b) *An Assessment of the Market Impact of the BBC's Digital TV Services (BBC Three, BBC Four, CBeebies, CBBC).* BBC

Oliver & Ohlbaum Associates (2004c) *The contribution of the BBC's core radio services to the overall UK radio market to 2014.* BBC

Oliver & Ohlbaum Associates (2008) *On-screen and on-air talent: An assessment of the BBC's approach and impact.* BBC Trust

Oliver & Ohlbaum (2010) *Paywalls and online news*. Presentation by Oliver & Ohlbaum at the Westminster Media Forum, 2 December 2010g

Oliver & Ohlbaum Associates (2014) *A New Age of UK TV Content Creation and a New Role for the BBC*. Pact

Oliver & Ohlbaum Associates (2015a) *A Review of the BBC's Arrangements for Managing On-screen and On-air Talent.* BBC Trust

Oliver & Ohlbaum Associates (2015b) *UK News Provision at the Crossroads – The News Market in the 21st Century and the Likely Implications for the BBC's role.* News Media Association

Peacock Committee (1986) *Report of the Committee on Financing the BBC.* HMSO

Prospero (2015) *The impact of rising BBC radio audience share on commercial radio.* RadioCentre

PwC (2002) *Market Assessment of the BBC's Digital Curriculum Proposition.* DCMS

PwC (2004) *Economic analysis of the TV advertising market.* Ofcom

PwC (2008) *The economic impact of the BBC on the UK creative broadcasting sector.* BBC Trust

PwC (2015) *The Impact of a Change in the BBC's Licence Fee revenue.* BBC

RadioCentre (2015) *Response to DCMS Green Paper on BBC Charter Review.* RadioCentre

Redburn (Europe) Limited (2015), *investor note.* Redburn

Reinemann, C. *et al* (2012) *Hard and soft news: A review of concepts, operationalizations and key findings.* Journalism, 13(2) 221–239.

Reuters (2015) *Digital News Report 2015*. RISJ

Sadler Enquiry (1994) *Enquiry into BBC Cross-Promotion.*

Sandvine (2014) *Global internet phenomena report 1H 2014.* At: https://www.sandvine.com/downloads/general/global-internet-phenomena/2014/1h-2014-global-internet-phenomena-report.pdf [Accessed 28-01-16]

Shamsie, Jamal, *et al* (2006) *A question of timing: strategies for scheduling television shows*. In J. Lampel, J. Shasmie and T. Lant (eds), *The Business of Culture, Strategic Perspectives on Entertainment and Media*. Lawrence Erlbaum Associates.

Silk, Alvin *et al* (2001) *Intermedia substitutability and market demand by national advertisers: Working Paper 8624.* National Bureau of Economic Research

Spacey, Kevin (2013), *James MacTaggart Memorial Lecture. Speech*

Sparkler Consultancy (2014) *BBC Trust Review of News & Current Affairs - Final Report of Qualitative & Quantitative Research.* BBC Trust

Techcrunch (2010) *The Times UK lost 4m Readers to its Paywall Experiment* At: http://techcrunch.com/2010/11/02/times-paywall-4-million-readers/ [Accessed 28-01-16]

The Telegraph (2014), *Netflix chief Reed Hastings takes on telcos, cinemas and global expansion*. At: http://www.telegraph.co.uk/finance/newsbysector/mediatechnologyandtelecoms/media/11141864/Netflix-chief-Reed-Hastings-takes-on-telcos-cinemas-and-global-expansion.html [Accessed 28-01-16]

Thomson, Mark (2010) *James MacTaggart Memorial Lecture. Speech at the Media Guardian Edinburgh International Television Festival*

Time (2015) *Here's How Facebook's News Feed Actually Works*. At http://time.com/3950525/facebook-news-feed-algorithm/ [Accessed 28-01-16]

UK Music (2015) *Response to BBC Charter Review DCMS Public Consultation.* UK Music

UTV (2015) *BBC Charter Review. Increasing listener choice and plurality.* UTV plc

Various (2000) *e-Britannia: The Communications Revolution.* University of Luton

The Week (2010) *The media's risky paywall experiment: A timeline* At: http://theweek.com/articles/492336/medias-risky-paywall-experiment-timeline [Accessed 28-01-16]

Wired (2013) *BBC plans iPlayer-only drama films*. At: http://www.wired.co.uk/news/archive/2013-03/22/bbc-iplayer-original-drama [Accessed 28-01-16]

Work Foundation (2006) *Willingness to pay for the BBC during the next Charter period.* DCMS