Annex 11: Market failure in broadcasting

1.1 This annex builds on work done by Ofcom regarding market failure in a number of previous projects. In particular, we discussed the types of market failure that affect traditional public service broadcasting in the first Public Service Broadcasting Review. More recently, the Digital Dividend Review set out a framework for considering market failure with particular reference to the broader social value of some media and communications services.

Market failure definition

1.2 Economic theory suggests that perfectly competitive markets deliver efficient outcomes that maximise social value. However, economists recognize that certain factors, such as the presence of market power, can prevent this. To describe the outcome where factors are present that stop the market working efficiently, economists use the term market failure.

1.3 Often, where a market is judged to fail, according to a specific test, there is the potential for government intervention to act to resolve the failure and improve welfare and efficiency. It is a standard tool for guiding government intervention in the economy, underlying policies such as environmental taxes and congestion charging. In such circumstances, a market failure can be defined as an inefficient outcome where the market does not exhaust all the possible gains from trade given individuals' preferences and the costs involved.

1.4 Market failure is therefore about efficiency, and the definition of efficiency usually adopted is that no individual could be made better off without making at least one other person worse off. One example of inefficiency under this definition is where prices are set above costs thus deterring marginal consumers from purchasing even though they value the product more than its cost of production.

1.5 Economists have identified a number of specific causes of market failure, such as market power and externalities[1], and intervention needs to be guided by a careful assessment of the specific factors involved. Inappropriate intervention may simply make matters worse. Most markets are imperfect according to a strict assessment, but are not subject to intervention for this reason.

1.6 The nature of the response to a market failure may also be complex, and there is a variety of tools available to intervene to address market failures. The appropriate approach will depend on the exact nature of the failure being addressed.

1.7 Broadcasting is an industry with many special characteristics and there are a number of reasons why a completely unregulated market may lead to market

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[1] An externality occurs when a transaction between two parties has an impact on a third party who is not involved. The transacting parties will typically not take this impact into account. An example is pollution.

failures. Intervention in public service broadcasting has traditionally been the solution to these failures. Changing technology may eliminate some of these reasons for intervention, but some may remain and, indeed, new ones may emerge. This annex discusses some of these issues.

1.8 In the DDR[2], we argued that when a market fails to maximise total value, this can indicate the presence of a market failure. Within the concept of total value there are two key elements of value. The first is private value, which is the value consumers and firms derive from their interaction in a market. The second is external value, which is value that results from services provided by a market but which is not fully reflected in the choices of consumers or firms. Example of external effects are network effects and broader social value, which captures value which we derive as citizens as a result of the availability and consumption of services which are important to society as a whole. In the DDR we identified the following sources of broader social value:

- access and inclusion – for example value derived from universal access and facilitating access to public services;
- quality of life – for example value derived from providing access to services which promote quality of life, perhaps by helping to support or promote work-life balance or family life;
- belonging to a community – for example value derived from allowing people with similar interests to communicate or from participating in your local community;
- educated citizens – for example value derived from services with educational content or child-oriented services;
- cultural understanding – for example value derived from services which reflect and strengthen cultural identities or promote diversity and understanding of other cultures;
- informed democracy – for example value from services which provide information which facilitates democratic debate; and
- social bads – this can include negative value derived under any of the headings set out above

1.9 All of these broader social values can be captured within an economic framework of welfare analysis as they represent externalities. That is, they represent the preferences of citizens around the provision of a service to other members of society. These services produce value that is separate from an individual's private value or their own consumption. As individuals do not take such values into account when making consumption decisions, it fits under the heading of externalities.

[2] http://www.ofcom.org.uk/consult/condocs/ddr/

Market failure in traditional broadcasting

1.10 In Phase 1 of the first Public Service Broadcasting Review, Ofcom considered the rationale for PSB, laying out the main reasons used to justify intervention in the broadcasting market[3]:

- The search for large scale **advertising revenues** will mean companies cluster in the centre ground

- **Restricted access** to spectrum makes entry impossible on market grounds and without competition the ability of the market to deliver the most efficient solution is impaired

- Broadcasting is an **experience good**, whereby consumers have limited information before consumption and limited opportunity to correct decisions taken at a later date

- Programmes are **non-excludable**, meaning there is an inability to charge for access. Traditionally, broadcasting has not made access conditional on payment of optional charges. Hence, the market under-provides such goods

- Several individuals can consume broadcast content without diminishing its value to others. Programming is said to be **non-rivalrous.** The marginal price (and efficient price) is zero, resulting in under-provision by the market

- There are significant **positive externalities** from certain kinds of broadcasting, which society as whole benefits from. Viewers are willing to pay for public service delivery in order to ensure that it is available to society

1.11 We also argued in the PSB review that high quality programming is a merit good, which consumers would not place the correct value on and would therefore cause the market to under-provide. Merit goods are controversial and perhaps belong outside the realms of conventional market failure. We discuss these and other issues at the end of this document.

1.12 These considerations are not uniformly distributed amongst the various interventions. Certain genres may rest heavily on externality – based market failures, e.g., current affairs, while others are more general. All interventions in broadcasting draw heavily on the non-rival nature of market failure, but nonetheless as there are different natures of market failure, so also the nature of any resolution will also be different.

The evolution of market failure in broadcasting

1.13 As a result of technological change, the nature and extent of these traditional market failures is changing. The growth of multichannel and pay television has mitigated many of these problems and the growth of online content markets may eliminate some of them altogether. A wide range of revenues and suppliers creates a competitive marketplace, so market power becomes less likely. Time-shifting, rapid repeat cycles and on demand viewing allow

[3] Ofcom, *Review of Public Service Broadcasting Phase 2* (2004)

consumers a greater range of ways of accessing content at different points, reducing information problems. Encryption and pay models allow broadcasters to limit access to their content based on consumer preferences, so the public good nature of broadcasting caused by non excludability disappears.

1.14 The market will thus be more effective in meeting the private demands of the viewer and will provide a greater variety and volume of content,. Some of this will inevitably have wider social value. For instance, the growing penetration of multichannel platforms has made it commercially viable to broadcast specialist channels such as the Discovery channels and Sky Arts. This absence of structural barriers could be seen – simplistically – to mean that no market failure remains. However, a number of characteristics of broadcasting provide an enduring rationale for public service interventions.

1.15 Content continues to be non-rivalrous: regardless of how it is distributed, the marginal cost for the extra unit is still zero; the efficient price to provide the service is still zero as before. This is not a possible market outcome, as fixed costs would not be covered, but might suggest a need for intervention from a strict welfare maximising point of view. However, it is true that there are many markets where prices diverge from marginal costs and this is not regarded as a sufficient reason for intervention. The key issue which distinguishes broadcasting from other markets in this respect is the nature and consequence of the inefficient exclusion that results from prices being above marginal cost. The exclusion is not only inefficient with respect to the private value of viewing but is also socially undesirable. Many of the positive externalities from broadcasting, such as those mentioned above are significantly more valuable when content is widely viewed Therefore, exclusion of viewers, especially in some genres such as news and current affairs (although this may also apply to other genres, particularly those that give a sense of belonging to a community), has a greater impact than a failure to capture some consumer's private willingness to pay.

1.16 However, this does not imply that content should be free-to-view whenever the marginal cost of making the content available is zero. Although consumer and social welfare would be enhanced through this approach, this would need to be balanced against the costs involved - e.g. the potential market impact on commercial provision of similar services.

1.17 There are also large positive externalities, quantifiable and unquantifiable, which will continue to arise from provision of content by digital means, although the benefits may be reduced as a result of fragmentation and increased choice. These include the orthodox externalities as well as the wider social benefits described in the main document for phase one of this review.

1.18 In addition, there may be new and different market failures arising with respect to online content. The internet undoubtedly provides consumers with massive opportunities. However there is the need to match individuals to the most appropriate content, because it cannot always be easily located . Consumers may have difficulty locating the right content and, when they do, there is no guarantee that the content is trustworthy. Existing search engines and other navigational aides may help but, as commercial entities, their incentives may not necessarily be aligned with that of the consumer, especially as it is hard for a consumer to judge the quality of search results.

1.19 In standard economic terminology, this can be described as a problem of information deficiency – i.e. lack of knowledge of the location of content - combined with an inability to judge the quality of the guidance provided by many online navigational tools[4].

Broader social value

1.20 The strongest remaining market failure case for public service broadcasting is around externalities, and the enduring presence of externalities in broadcasting is at the heart of any discussion of market failure in this area. Individuals recognise that there are social benefits to public service broadcasting and are willing to pay for these wider benefits. Deliberative research carried out for this review found that the majority of individuals support payment for public service broadcasting, even for parts they do not use. Human Capital's study on the BBC licence fee came to a similar conclusion.

1.21 In interpreting the results of research such as this, it is important to bear in mind that the justification for the scale of the main instrument of intervention within broadcasting– the licence fee – does not rest solely on social or public considerations. While the licence fee provides a solution to externalities in broadcasting, the revenue it generates should not be judged according to the size of these market failures alone. This is because many individuals would be willing to pay for at least some of the BBC's content for their own use and would do so in a market without intervention. As such a proportion of the BBC's revenue from this source is more properly considered private value, although it is monetised by means of the licence fee rather than subscription, as this can be a more efficient funding mechanism in the presence of externalities such as broader social value, the realisation of which is negatively effected by the exclusion which can occur under alternative approaches to funding. Thus, in assessing the appropriate level of the licence fee, in a situation where that is the sole source of income, it is necessary to consider both the private and social value created.

1.22 Although this argument is framed in economic terms, these factors are at the heart of the citizenship-based rationale for intervention to support content with broader social value. The concept of a positive externality is an economics-based way of expressing the point that an individual's viewing of content can have additional benefits for society as a whole, for instance through his or her engagement in the democratic process as a more educated citizen. The purposes and characteristics of public service content defined by Ofcom are intended to address these citizenship issues – and so address the problem that the market is unlikely to provide the full set of content and services that will maximise the benefit to society.

Other rationales

1.23 The rationale for intervention in public service broadcasting does not rest exclusively on quantifiable, preference-led, market failures. For this reason, the broader decisions around the level and nature of public service broadcasting are political and taken within a broader context than expressed preferences alone.

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[4] Goods or services with the characteristic that quality cannot be judged even after consumption are known as credence goods.

1.24 We might discuss this with reference to a number of key concepts, for example the role of the public service broadcasting as a leader not a follower of public opinion, perhaps in relation to democratic engagement. Elsewhere a wide range of policy areas, such as environmental policy, healthcare or criminal justice are determined by calculations often independent of stated consumers preferences and willingness to pay.

1.25 Within an economic context, these rationales have been termed merit goods, where individuals are unable – for a variety of reasons – to recognise the real value to themselves from such decisions. Although at least potentially valid, attempting to quantify such an approach is likely to be very difficult, hence they have been mediated through the public policy and political decision-making process.

1.26 Intervention of this nature may be of several forms: it may ensure support for types of intervention that is not broadly supported, e.g., the specific activity needed to deliver impact in disengaged communities; equally, it may suggest a general will to support intervention beyond the level justified by classic market failure.

Conclusion

1.27 These rationales are multiple and overlapping. In essence, rationales exist for intervention in the broadcasting market both relating to conventional market failure and also social and political rationales for intervention.

1.28 Many of the historical market failures identified in the first PSB review are diminishing in magnitude as a result of changes in the market. Whereas, previously, the structure of the market made a strong case for the intervention on that basis alone, this no longer applies in the digital and online markets.

1.29 However, some major market failures endure, the main ones being the non-rivalrous nature of broadcasting combined with high levels of externalities, such as the opportunity to create broader social value. In addition, the structure of the online market is far from perfect and (minor) market failures may exist in online markets.

1.30 Finally, we stress that market failure is far from the only rationale for intervention in broadcast markets. Wider questions of public and social policy have historically driven the decision to intervene, and will continue to do so.