

Germany's PSB going online – is there an economic justification for Public Service Media online?

Nadine Lindstädt

September 2010

© University of Southern Denmark, Esbjerg and the author, 2010

Editor: Finn Olesen

Department of Environmental and Business Economics
IME WORKING PAPER 102/10

ISSN 1399-3224

All rights reserved. No part of this WORKING PAPER may be used or reproduced in any manner whatsoever without the written permission of IME except in the case of brief quotations embodied in critical articles and reviews.

Nadine Lindstädt

Department of Environmental and Business Economics

University of Southern Denmark

Niels Bohrs Vej 9-10

DK-6700 Esbjerg

Tel.: +45 6550 1524

Fax: +45 6550 1091

E-mail: nad@sam.sdu.dk

Abstract

Public Service Media (PSM) online is a highly up to date topic. There is no clear consensus among researchers if Public Service Media should have a legitimization online and if so to which extent. Some authors still demand for an extensive role of public service provision in the digital era whereas others either argue against PSM on the internet at all or assign them a restrictive and complementing function at the most. The question has furthermore concerned the European Commission as well as several Member States for many years now. Public service broadcasters have been accused of distorting competition online – an area that up to then seemed to have worked being left to the market. Though the extension of public service providers towards the internet is legitimized by the European Commission it seems appropriate to analyze if there is a true economic justification for having Public Service Media online and if so to which extent. This article contributes to enter into that question against the background that the traditional public service broadcasting system (i.e. television and radio) is taken as given and unchangeable for the analysis. The paper thereby waives to repeat the fundamental discussion of pros and cons of public service provision and, instead, concentrates specifically on elaborating possible cross-media effects.

Keywords: media economics, two-sided markets, competition, public service broadcasting, public service media

JEL-Code: L82, A20, L13, M21

Contents

1. Introduction	7
2. Media Regulation and interventions in media markets.....	9
2.1. The need for media policies	9
2.1.1. The economic perspective: government inter- vention for market failure reasons	12
2.1.1.1. Public goods	12
2.1.1.2. Concentration tendencies and monopoly power	15
2.1.1.3. Information asymmetries.....	17
2.1.1.4. Externalities.....	19
2.1.2. Government intervention from a socio-political perspective	20
2.2. The exceptional position of the broadcasting industry – public service broadcasting in Germany	23
3. Germany’s public service broadcasters on the internet – recent developments.....	28
3.1. The market development with the existence of PSM online	28
3.1.1. The emergence of Germany’s public service providers online	28
3.1.2. How the internet changes the markets and the effects of PSM’s online presence on competition.....	30
3.2. The Co-Evolution of the institutional framework	38
3.2.1. Reactions by the commercial sector on the existence of PSM online	38
3.2.2. Resulting actions by the European Commission.....	40
3.2.3. Dispute resolution between the European Commission and Germany.....	43

4. An economic analysis of the justification for Public Service	
Media online	47
4.1. Literature Review	47
4.2. The existing infrastructure and cross media effects as a justification for PSM online?	50
4.3. Promotion or distortion of competition with PSM online?	57
4.4. Indirect network externalities favoring PSM online?.....	63
4.5. Externality reasons justifying PSM online?	68
4.6. The need for PSM online for media bias reasons?	76
5. Conclusion	80
6. Appendix	82
7. References	83

1. Introduction

Public service broadcasting (PSB) has been existent in most European countries for many decades. The origin of PSB lies in times where frequencies for broadcasting were scarce and a great risk of economic market failure was feared (Motta & Polo 1997: 295). Furthermore, broadcasting was regarded to be too important to be left to the market – due to its suggestive puissance (it is assumed to have a greater impact than other media) and its contribution to democratic, social and cultural goals (Elstein 2000: 14; Syvertsen 2003: 158; Wentzel 2002: 5f.). Since the 1980s Germany has a *dual broadcasting system* where public service broadcasters¹ and commercial broadcasters exist side by side. However, the PSB system remained and still remains quite strong (Humphreys 2008: 2, 4).² With the emergence of the internet, public service broadcasters in Germany have meanwhile gone online as well. Since the financing of their internet presence is carried out solely by license fees and due to the development of PSB's online programs, the commercial sector in Germany has addressed many complaints to the European Commission, accusing public service broadcasters to distort competition online. For many years the question of PSB's online activities within various EU Member States has concerned the European Commission. Consequently, the Commission has taken several actions on this topic.³ For Germany, in particular, the up to now biggest case has just been laid down in 2007 – making Germany responsible to undertake vari-

1 Public Service Broadcasting in Germany thereby involves the governing body ARD [Arbeitsgemeinschaft der öffentlich-rechtlichen Rundfunkanstalten der Bundesrepublik Deutschland] and its regional programs as well as the ZDF [Zweites Deutsches Fernsehen] (see also section 2.2).

2 Next to the BBC the German public service broadcasters ARD and ZDF are regarded as the strongest ones in Europe (Betzel & Ward 2004: 59).

3 Just recently, the Commission has adopted a new “Communication from the Commission on the application of State aid rules to Public Service Broadcasting”. The new Communication replaces the 2001 Communication. It has been published in the Official Journal of the European Union in October 2009 (Broadcasting Communication 2009: C 257/14). This communication in particular copes with the funding of public service broadcasters and handles the questions to which extent the financing coincides with the exception rule regarding state aid in terms of *services of general economic interest* (ibid.).

ous actions in order to be allowed to have public service media (PSM)⁴ online without violating the EC⁵ Treaty. The Twelfth Amendment of the Interstate Treaty on Broadcasting in Germany just came into effect in June 2009.⁶

Though the extension of public service activities towards the internet is legitimized by the European Commission it seems appropriate to analyze if there is a true *economic justification* for having Public Service Media online and if so to which extent. This paper contributes to enter into that question against the background that the traditional public service broadcasting system (i.e. television and radio) is taken as given and unchangeable for the analysis. The paper thereby waives to repeat the fundamental discussion of pros and cons of public service provision and, instead, concentrates specifically on elaborating possible cross-media effects.

The paper is built up as follows: Chapter 2 copes with the need for regulations on media markets and reviews the reasons for the exceptional position of broadcasting and in particular the public service broadcasting system in Germany. Following, Chapter 3 deals with the recent developments regarding PSM online in Germany including the actions by Germany's public service broadcasters, the reactions by the commercial sector and subsequently the regulation actions taken by the European Commission. Chapter 4 forms the analysis of the need for public service media online. Chapter 5 subsequently concludes.⁷

4 According to the recommendation of the Council of Europe public service media is thereby regarded as being technology neutral meaning that services can be offered through various platforms (Aslama 2008: 2).

5 European Community.

6 Among other things it contains a clearer definition of the public service remit, the allowed activities for telemedia as well as it includes the newly introduced 3-step-test for new and modified telemedia (Rundfunkstaatsvertrag 2009).

7 The following remark holds for the rest of the paper: the internet is a huge and diverse market. When this paper is talking about resulting competition effects on the internet due to the existence of PSM online the focus is on online news media sites and its providers.

2. Media Regulation and interventions in media markets

2.1. *The need for media policies*

Most media markets are regulated by the government. Within the European Union (EU) media policies can be found both, on the national level (e.g. Germany) and on the supranational EU level (Gambaro 2008: 6). As long as solely national interests are affected media policies are limited to national actions. However, as soon as the interests of the single market are affected⁸ policy actions would be undertaken by the European Union, more precisely the European Commission and within this the Directorate General (DG) for Competition that takes responsibility for competition issues (Harcourt 2005: 41-44). For many years national policy interests were especially concerned with cultural aspects and goals.⁹ The European Union, on the contrary, has taken its actions within media markets especially from an economic perspective.¹⁰ However, in recent years the European Commission included the peculiar characteristics of media markets (i.e. the interdependencies of economic and cultural aspects) making them different from other sectors. It is assumed that media on the one hand are crucial for society and furthermore that media and welfare of society are inter-related to each other (Harrison & Woods 2001: 479). For this reason public interest concerns as well as pluralism aspects complement the up to then purely economic approach within the decision making process (Dewenter & Haucap 2009b: 5; Harcourt 2005: 45f., 57f.). With special regard to public service broadcasting this can, for example, be observed when taking a look at the *Am-*

8 That is actions that conflict with the creation or maintenance of the single market.

9 This is especially valid for the broadcasting industry (Harcourt 2005: 58; Nitsche 2001: 3).

10 This has been done especially in consideration of the fact that the European Union was once established to follow economic goals and to create one single market. The signing of the Treaty of Rome in 1957 initially created the *European Economic Community (EEC)* or '*Common Market*' (European Union 2010, online). Nevertheless, EU policy makers realized that media plays an active role in enhancing pluralism and shaping views and opinions (Harrison & Woods 2001: 480).

sterdam Protocol (1997) or the *Broadcasting Communication* (2001) and (2009).

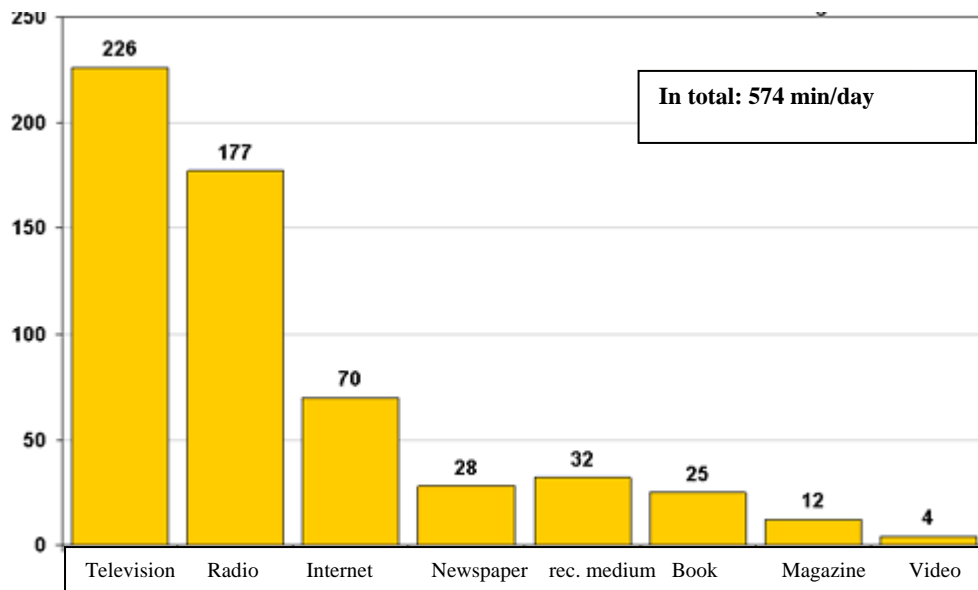
In general media can be characterized by a dual media effect,¹¹ that is media transfer information and knowledge while at the same time being a factor of building up public opinion (Anderson & Gabszewicz 2006: 569; Wentzel 2002: 2). This especially applies for news and political programs. However, also programs which on first sight seem to fulfill a purely entertaining function – providing entertainment is regarded as another function of mass media – can at second glance have an influence on building up public opinion as well (Beck 2005: 5; Wentzel 2002: 2). According to van der Wurff (2007: 114) entertainment programs can thereby accomplish information, news, and public opinion and culture functions. Nevertheless, the extent of regulation depends on the media type. Broadcasting markets, for example, are usually highly regulated – this applies to most countries within Europe (Hargreaves Heap 2005: 113f.; Trappel 2008: 314). Broadcasting is said to have a greater impact than other media and is furthermore consumed on a daily basis – either for entertainment or information (Syvertsen 2003: 158). The print media industry on the other hand is mainly left to the market. The first question is why media markets need to be regulated? Especially since government interventions usually cause high costs – both when establishing regulations and when monitoring them. Furthermore, if applied too intensively where costs exceed benefits, regulations can even lead to government failure (Hoskins et al. 2004: 303f.). However, media plays an important role in our society. People spend a majority of their leisure time with different types of media. In Germany people were found to be using the media¹² for an average of 574 minutes per day in 2009 (+9 minutes compared to 2008) (see figure 1). Secondly, as stated earlier, media provides content that not only informs citizens but at the same time can impart knowledge and therefore shape public opinion (Anderson & Gabszewicz 2006: 569).

11 Also referred to as the Medium Factor Hypothesis (Wentzel 2002: 2).

12 Media in this term includes: television, radio, internet, newspapers, books, magazines, videos, sound recording media (BR-online 2010).

Within media studies scientist furthermore assign information a dual value (Dewenter & Haucap 2009b: 10). On the one hand information has a private value for each consumer by providing him with information. On the other hand information also accounts for a public value which arises for the society in general.

Table 1. Media usage in Germany (in minutes per day)



Source: BR-online 2010.

Reasons for government interventions in media markets can be split up in an economic and a socio-political component (Gambaro 2008: 3). From a socio-political perspective interventions occur due to the above mentioned impact that media can have on society. It is not only the aim to provide enough information (pluralism) but especially to make sure that the information is not biased (ibid. 4). Interventions from an economic viewpoint on the other hand aim to promote competition and protect the consumer. Within the latter one, an essential goal is to prevent a possible market failure.

2.1.1. The economic perspective: government intervention for market failure reasons

Reasons for a market failure to occur can be public goods, monopoly power, information asymmetries or externalities (Dewenter & Haucap 2009b: 4; Hoskins et al. 2004: 288). All these aspects can or could be observed (to some extent) on media markets as will be highlighted in the following. Hence, when the government imposes media policies it is the aim to ensure allocative efficiency; the optimal allocation of resources to produce goods and services (Hoskins et al. 2004: 172, 288).¹³ However, when introducing government interventions the two-sidedness of media markets need to be thoroughly taken into account (see also chapters 3 and 4).¹⁴ Media companies serve two customer groups at the same time – the audience and the advertising side. These two market sides are distinct; however they influence each other (Dewenter 2006: 2). Hence, media behavior and market performance *on all market sides* need to be considered before introducing media policies (Gambaro 2008: 2).

2.1.1.1. Public goods

The media industry is often regarded as showing the characteristics of public goods which therefore need to be at least partly provided or complemented through public service media (Beck 2005: 12; Robinson et al. 2005: 107). Public goods have two peculiar characteristics. First, these goods are characterized by non-rivalry and secondly they face non-exclusivity of consumption (Hoskins et al. 2004: 295, Ward 2006: 54). The latter characteristic means that for the seller of public goods it is not possible to exclude a person who is not willing to pay for it. Non-rivalry, on the other hand, refers to the fact that it is possible for more than one person to use the good simultaneously without disturbing or ex-

13 Thereby it has to be critically highlighted that market failure facts do not automatically justify a provision by the state. Instead the government's responsibility (should) lie in securing the financing.

14 For further literature on multisided media markets please see Anderson & Gabszewicz (2006), Budzinski & Lindstädt (2009), Dewenter (2003), Dewenter (2006), Dewenter & Haucap (2009a), Lindstädt (2010).

cluding others. To illustrate with an example: when company A is selling a car it is possible to exclude all those people who are not willing to pay the suggested price (excludability). Furthermore, when person B finally buys the car it is not possible for person C to buy the exact same car (rivalry). When looking at media markets, however, it is somehow different. Nevertheless, in this context we have to distinguish if we talk about media as a public good or the good information that is transmitted by the media. Media, as for example television, newspapers or the internet, are generally no public goods since *only one* of the two characteristics is fulfilled. That is, we face non-rivalry (people do not disturb each other while watching television at the same time), however people can *nowadays*¹⁵ at least technically be excluded¹⁶ (e.g. excluding people from watching a television program through pay-TV) (Beyer & Beck 2008: 391f.). A private supply is possible through the emergence of conditional access (Armstrong & Weeds 2007: 115; Robinson et al. 2005:107). Furthermore, with advertising financed media products users are charged indirectly or implicit insofar as they are made to watch adverts (Armstrong 2005: 284; Motta & Polo 1997: 314). At most, the public good characteristics “non-excludability” and “non-rivalry” could apply to the actual content, information or even entertainment (Beck 2005: 5-17; Beyer & Beck 2009: 77; Gambaro: 2008: 4). However, it depends on the type of information that is referred to – general or specialized information. The public good reasoning especially refers to general information

15 Broadcasting was for a long time regarded as a public good (Humphreys 1999: 24). The exclusion indeed was not always possible. In the early times of analogue broadcasting it was not or hardly possible to exclude consumers from watching a program they were not willed to pay for (Armstrong 2005: 284; Dewenter & Haucap 2009b: 14). During this time at most, it might have been possible to refer to broadcasting as a public good (Beyer & Beck 2009: 77f.) but not anymore in times of digitalization.

16 However, even though the exclusion is technically possible it is often not practiced. An exclusion of people seems counterproductive due to the two-sidedness of media markets. On the online media market, for example, most of the content is provided for free. Most websites on the internet serve both groups – consumers and advertisers which are connected to each other through indirect network externalities (Dewenter 2003: 2f.). Since advertisers appreciate as many consumers as possible the provider of a certain website (platform) has no incentive to exclude any consumers – especially due to the fact that advertising represents the main source of income for the platform.

like news that is distributed over the media.¹⁷ For example, the announcement of the new chancellor in Germany could be consumed simultaneously by a lot of people. Furthermore, citizens cannot be excluded to get this information – at least not for a long time. Since people talk about it, the news would be soon reaching people who have not yet read the newspaper or watched the news program on television. Hence, this makes information often to be regarded as public goods. Nevertheless, information is never provided alone. A medium to deliver any kind of content is needed. Thus, media companies do not solely provide information but offer a service to their customers.¹⁸

When coping with public goods, the marginal costs to provide one more customer with the good are zero; however, any new consumer receives a positive benefit out of any additional unit (Dewenter & Haucap 2009b: 6, 14; Ward 2006: 57). If the marginal costs are zero, however, the efficient market price for the whole society would be zero as well. This in turn would mean that when pricing a good for zero, no fixed costs would be covered which makes it unprofitable for a (profit-seeking) company to provide the good. Hence, a supply by the private sector would not take place as long as customers cannot be excluded from consumption. Consequently the market would fail. If, however, information is regarded a public good, the question has to be raised, why there are newspapers as well as quite a few existing news channels worldwide (e.g. CNN, N-TV, and N24) that do work? This would countersteer the market failure argument. Instead it is often argued with a non-desirable exclusion from news – e.g. due to the dual value of media (see also 2.1.2) or the greater impact compared to other media types – that let many countries decide that especially television programs should be provided over public service broadcasting or-

17 Specialized information on the contrary does not fulfill the requirements of a public good. Here the market mechanism works and exclusion is desirable and possible. An example would be the provision of expert knowledge - only people willing to pay for this kind of information receive it. If taking entertainment information as another category of information exclusion is likewise desirable and possible. An example would be the first pictures of the new baby of a Hollywood star – just people who buy the magazine that is holding the exclusive rights would profit.

18 The service includes the buying, editing, bundling and delivery of information (Beck 2005: 2).

ganizations (Syvertsen 2003: 158). Nevertheless, in this case we do not face economic market failure but rather a socially desirable decision.

2.1.1.2. *Concentration tendencies and monopoly power*

As stated in 2.1.1, the aim of media policy is to enable allocative efficiency. Usually media markets face high fixed costs and relatively low marginal costs – setting up the infrastructures is quite costly whereas the delivery of content afterwards is fairly inexpensive (Beck 2005: 26-33; Dewenter 2003: 4). This leads to cost efficiencies the higher the production gets since average costs can be reduced – also referred to as *economies of scale*. The same would hold for *economies of scope* – once content (e.g. news information) is produced it can easily and quite cheap be transmitted to other media types (Dewenter & Haucap 2009b: 11). Both characteristics mostly favor monopolies or at least risk severe concentration tendencies. Especially in the broadcasting industry this resulted from high sunk costs and technological bottlenecks (Motta & Polo: 1997: 313). Monopolies usually do not enable allocative efficiency (Hoskins et al. 2004: 300). It is actually the consumer who suffers since the monopolist often sets higher prices than in a competitive environment. Consequently some people (the ones who are not willing to pay the high price) get excluded from consumption (Dewenter & Haucap 2009b: 4). Furthermore, market power on media markets is especially regarded quite severe since it might lead to decreasing pluralism.¹⁹ For these reasons monopolies could cause a market to fail. Consequently, they are usually prevented or at least subject to high regulation. A toleration of monopolies, however, could occur in the case of a natural monopoly. In this case economies of scale are so significant that only the monopolist can be productively efficient which would result in an advantage over a competitive situation (Hoskins et al. 2004: 301). In many EU countries, the broadcasting industry was regarded to be a natural monopoly (Donders & Pauwels 2008: 296). Frequencies were scarce and setting up an infrastructure in the broadcasting

19 Though there is no clear consensus which market form will lead to more pluralism. Please refer to a short literature review on the media bias discussion that is given in Lindstädt 2010: 77-79.

sector was connected with high fixed costs; the variable costs on the other hand were quite low if not even negligible (Beyer & Beck 2008: 393; Motta & Polo 1997: 310). This favored the decision to accept just one provider. It seemed reasonable to let one single provider – after setting up the expensive infrastructure – produce the content. The supplier (e.g. of a broadcasting channel) could reduce costs by producing more programs or minutes. In turn the consumer would also benefit as long as the producer lower its prices as well.

Nevertheless, it has to be questioned if the natural monopoly argument still holds nowadays for the broadcasting sector or even the internet? In times of analogue broadcasting this might have held – meanwhile, however, the costs for setting up the infrastructure decreased significantly; this becomes more important in the era of digital broadcasting (Armstrong & Weeds 2007: 117; Beyer & Carl 2008: 56). Furthermore, high fixed costs should never automatically legitimize government intervention – they can also be observed in several other industries, which are subsequently left to market mechanism – an example even in the media industry could be newspapers which are without restriction of any kind left to the market though setting up the infrastructure is likewise connected with high fixed costs.²⁰ Consequently, high fixed costs do not necessarily call for a governmental content offer. Economies of scope on the other hand indeed have an impact and are intensifying its impact in times of digitalization (Dewenter & Haucap 2009b: 11; Hitchens 2006: 258). For example, once information has been collected and edited for the newspaper it can easily be transferred to other media types such as the internet. Nevertheless, the transformation is always connected with some costs – on the one hand it has to be adapted to the special requirements of the particular media type; on the other hand it has to be adapted insofar as to meet customer's needs, for example for users. In addition to this, it is again doubted that just due to the existence of economies of scope a government intervention is needed. There exist plenty of other areas

20 Also the telecommunication sector was decided to be treated differently in the meaning of the regulation of networks (Beyer & Beck 2008: 393).

(e.g. the whole entertainment industry) that would face the same phenomena and are anyhow not regulated by the government.

Therefore, the question is what kind and extent of intervention would be appropriate – it is not certain that a public service provision – as on the broadcasting sector – would lead to the best results. Most countries meanwhile have dual broadcasting systems where private and public service broadcasters exist side by side. There exist a lot of private TV channels which support functioning competition that furthermore promote pluralism. Furthermore, the well functioning of the print industry shows that media industries can very well be left to the market. Concentration tendencies or market dominance could indeed occur on media markets, nevertheless this account for all industries. It is true, that for the media industry in particular concentration tendencies could not only affect the economic well-being, it could furthermore harm pluralism – due to the connection of competition and diversity of opinion (Doyle 2002: 30). However, it always has to be asked how much government intervention is really necessary. In order to avoid concentration tendencies, it could already be sufficient to have merger controls as helpful instruments instead of having a complete public service instrument.

2.1.1.3. Information asymmetries

Another reason that could cause a market to fail is information asymmetries. In this case the media consumer has not the same information as the media producer and therefore cannot judge the value of the product accurately (Beyer & Carl 2008: 57).²¹ This could lead to the situation that either the consumer is not consuming the good or service at all or – since the producer cannot convince the consumer of the product – the product is produced in a limited way or not even produced at all. With regard to media products it has to be considered that content is an experience good; the consumer cannot accurately judge the true

21 The vice versa situation would occur when the producer (supplier) has not the same information as the consumer – a situation that especially insurance companies have to struggle with.

value of information *before* consumption. As a consequence, he might not be willed to pay more for better quality since he does not know in advance if the quality is indeed better (adverse selection) – hence the results on the market are suboptimal (less or worse quality) due to asymmetric information (Dewenter & Haucap 2009b: 19-21). This in turn could prevent media companies as the producers of information to produce better quality or even induce better quality producers to exit the market.²²

The danger of this market failure argument, however, has to be lessened. First of all, information asymmetries occur in many, if not every industry, nevertheless not every industry is regulated as much as the media sector (Armstrong & Weeds 2007: 103). Secondly, in the media industry in particular competition as well as reputation helps to lessen information asymmetries (Beyer & Beck 2009: 78f.). When facing competition media companies have no incentives to provide worse quality since consumers could easily switch to another competitor. Reputation also plays a crucial role – media are usually not consumed once but on a regular basis. As soon as something is consumed frequently, media companies can and do built up reputation that solves or at least lessens the problem of information asymmetries (Beyer & Beck 2008: 392f.). Thirdly, consumers do multihome, i.e. use different types of media (Lindstädt 2010: 70). All these aspects should nowadays apply to the majority of media industries and lessen the risk of asymmetric information. The print market faces intense competition; this in turn makes reputation an important instrument to be successful on the market. Companies themselves will try to lessen information asymmetries to hold their good reputation. Also the broadcasting market in many countries developed from a monopolistic market structure to competition and multihoming should assumingly apply to all media types. Consequently, these aspects raise the question if there is still a true risk of market failure from this perspective that makes government intervention necessary. Armstrong and Weeds (2007: 116) put it as follows: according to them, the viewer sovereignty in the

22 The here described problem of information asymmetries and its consequences is also known as the lemon problem. It was initially described by Akerlof (1970) with regard to used car markets.

digital world removes the market failure arguments – people get what they want to consume in the unregulated market.

2.1.1.4. Externalities

Externalities occur when an economic transaction does not solely affect the two involved transaction partners but also a third party (Hitchens 2006: 256). The externality can thereby either be a cost or a benefit; neither of it is considered by one of the initially involved parties (Hoskins et al. 2004: 290). In media markets these externalities are quite often observed since information is regarded to present a dual value as stated in section 2.1.1. On the one hand media have an effect directly on the person who is consuming the content. On the other hand the media good or more precisely the content then also has a second effect on the society. A violent television program, for example, could have a negative externality effect on society (here: 3. party) when resulting in a violent behavior by the audience (external cost). A certain educational program, on the contrary, for example if a person watches a particular program (and thereby learning about life-saving skills), could have a positive externality effect on the wider population (that person is probably capable of coping with a future emergency situation) that the person did not consider when watching the program (Armstrong 2005: 289). Since – with externalities – the cost or benefit for the third parties is not considered, the consequence is that either too much or too less is produced or demanded (Dewenter & Haucap 2009b: 4). The aim of introducing media policies is therefore to prevent market failure through both – encouraging the external benefits while limiting the external costs (Armstrong & Weeds 2007: 109). For encouraging external benefits introducing subsidies or standards could be options. Examples would be quotas on European program productions stated in Article 17 in the Audiovisual Media Services Directive (AVMSD) of the European Union (AVMSD 2010: 95/18).²³ Limiting external costs could be reached by imposing certain fines or taxes or stating limits

23 The Audiovisual Media Service Directive introduced in December 2007 amended the Television without Frontiers Directive (European Commission 2008: 1; Gambaro 2008: 9).

(Hoskins et al. 2004: 293). An example would be the limitation of advertising and teleshopping to 20% per hour, stated in Article 23, 1 or the protection of minors stated in Article 27 (AVMSD 2010: 95/19).

Nevertheless, the question has to be raised why actions to prevent possible market failure due to externalities are mainly taken for the audiovisual sector while the printed industry is left to market mechanism. The functioning of the print market let assume that the private sector is able to generate optimal results as well. The only existence of externalities should not automatically call for government intervention. In addition to this, even if government intervention seems reasonable the question is to which extent this should take place. With regard to the broadcasting sector, for example, it should not automatically result in a public broadcasting provision but instead in supporting certain programs with subsidies (Beyer & Beck 2009: 79). Furthermore, a crucial aspect in that discussion is that nowadays, in times of digitalization, it is possible that people avoid unappealing public service programs (Armstrong 2005: 284, 290). Hence, the question is if government intervention actually reaches the desired aim. The externality argument with special regard to PSM online will be furthermore discussed in section 4.5.

2.1.2. Government intervention from a socio-political perspective

In addition to economic arguments, government intervention could also be reasonable due to socio-political reasons. Some industries are regarded to be “too important to be left to the market” (Sawers 2000: 33) especially due to its great influence on society in general and the individual citizen. Within the media industry this especially applied and still applies to the broadcasting market. According to Ward (2006: 54) television and radio platforms are socially, culturally and politically crucial to provide positive social objectives. The broadcasting sector and within this especially the television sector is said to have a certain manipulative potential that is bigger than for example the one within the

print media sector; especially due to its broad effect,²⁴ its suggestive puissance and its characteristic to be very much up to date (Frank & Meyerholt 2009: 367). More precisely, in contrast to printed media, television combines visual elements with audio elements and can be updated more frequently than the newspaper. This is the reason why television in many countries is more severely controlled than other media industries (Wentzel 2002: 5f). However, let us start to elaborate the socio-political reasons to intervene in media markets systematically.

It was already stated earlier that media provides content that not only informs the citizens but at the same time can impart knowledge and therefore shape public opinion (dual effect of media) (Anderson & Gabszewicz 2006: 569; Wentzel 2002: 2). Due to the dual value of media government intervention might be a helpful instrument to maximize these values. Concrete reasons to intervene in the market could lie in the provision and promotion of media pluralism – especially diversity of opinion and cultural diversity (Budzinski 2009: 357, Leurdijk 2007: 71) and to ensure freedom of expression (Nitsche 2001: 4). Another reason to intervene in media markets might be to ensure quality. The importance of quality again is closely connected to the dual effect of media. Hence government interventions aim to ensure positive results both for the individual and the society. In addition to this, government intervention might take place to prevent biased information that could occur, for example, through the influence of the advertising industry on the commercial media providers. That is because the majority of media companies are dependent on the advertising market as their main source of income. As soon as a big advertising client draws his adverts away it could seriously harm the media platform. It could therefore be tempting for a media operator online to not report in a negative way about a company that is simultaneously an important advertiser on his

24 The importance of the media type television is also shown in figure 1 that indicates that television is still the number one medium that is used by the German citizens with an average of 226 minutes per day.

website and therefore create biased information. Having public provision could prevent this bias.

Within media markets government intervention is furthermore often introduced due to paternalistic reasons assuming a negative influence for the public when leaving this industry solely to market mechanisms (van Dijk et al. 2006: 252). This reason of intervention is also referred to as the merit good²⁵ argument. It is assumed that these kinds of goods which are important for society cannot be provided by the market at all or just with the many difficulties (Moe 2009: 190). The traditional concept thereby presumes that people in society do not know what is good for them and hence do not demand these kinds of goods from the market. According to the new concept of merit goods it is presumed that the people do know what is good for them, however for some reason they anyhow do not demand these goods (Dewenter & Haucap 2009b: 4f.). For this reason it is argued that people who know what is good for society (e.g. the government) first of all decide on classifying merit goods and subsequently offer the consumers those kinds of goods (public provision) for a reduced price (ibid.). However, the problematic aspect with merit goods is that it is often connected with paternalism. Why should the government being authorized to decide on what is good and what is bad? Why is it presumed that the consumer is not capable to decide on what is the best for him on his own? Furthermore, is it efficient to intervene in media markets by providing goods that the consumer should consume, but otherwise would not consume – especially with regard to the fact that the consumer cannot be forced to do so? This critic became even more important with the emergence of digitalization. Unappealing programs can nowadays easily be avoided by consumers; there is no way of forcing them to watch certain programs (Armstrong & Weeds 2007: 116f.).²⁶

25 Examples for merit goods outside the media sector would be education, health care or cultural activities (Hitchens 2006: 255).

26 This could have been possible in times of analogue television where there was just a limited amount of programs and the influence of public service broadcasting channels was accordingly higher.

For this reason it is no astonishment that the merit good argument is not really accepted within the economic theory; it is rather a moral and normative rationale (Dewenter & Haucap 2009b: 19; Moe 2009: 190). In addition to this, it has to be questioned if the above listed socio-political arguments require government intervention and if so to which extend? At least it should be doubted that a public provision can bring out better results than imposing appropriate media policies for media markets.

2.2. *The exceptional position of the broadcasting industry – public service broadcasting in Germany*

As in many EU countries, the broadcasting industry in Germany was regarded to be a natural monopoly that furthermore possessed the characteristics of a public good; a government intervention was regarded necessary to prevent market failure (Beyer & Beck 2009: 82f.; Donders & Pauwels 2008: 296; van Dijk et al. 2006: 252). After World War II Germany established a public service broadcasting system, geared to the BBC model in the UK (Nitsche 2001: 42).²⁷ In 1950 the *ARD* was founded – the governing body of nine independent and also government free regional public broadcasting agencies – whose task is to organize and distribute radio and television programs (ARD online 2010a).²⁸ The first public television channel in the Federal Republic of Germany was introduced in 1953 (Motta & Polo 1997: 303). In 1963 the *ZDF* – whose treaty was signed in December 1961 – started its program (ZDF online 2010). Up to the year 1984 the public service broadcasters in Germany had a monopoly posi-

27 Due to the propaganda events during the “Third Reich” it was regarded of major importance to establish an independent broadcasting system for Germany (Nitsche 2001: 42).

28 The nine regional public broadcasting agencies are the following: Bayerischer Rundfunk (BR), Hessischer Rundfunk (HR), Mitteldeutscher Rundfunk (MDR), Norddeutscher Rundfunk (NDR), Radio Bremen (RB), Rundfunk Berlin-Brandenburg (RBB), Saarländischer Rundfunk (SR), Südwestrundfunk (SWR), Westdeutscher Rundfunk (WDR).

tion²⁹ and were the only supplier of television and radio (Beyer & Carl 2008: 53).

Germany's Broadcasting is acknowledged a certain importance within the communication process which is due to its special range of affects it has on the consumer; e.g. being suggestive, up to date and with a spread-effect. (Holznagel et al. 2009: 205; Schulz et al. 2008: 7). The freedom of broadcasting is even anchored in Article 5 of the German Constitution (Grundgesetz).³⁰ The exceptional position of the broadcasting system initially resulted from the existence of scarce frequencies and high entry costs for building up an infrastructure (ibid.). For this reason broadcasting in Germany was acknowledged a special position by the Constitutional Court (*Bundesverfassungsgericht*) (Depypere & Tigchelaar 2004: 19; Holznagel et al. 2009: 205).³¹ The Constitutional Court furthermore stated that broadcasting as a medium and a factor of public opinion³² has to be free of government influence as well as one-sided control and predominant power of opinion (Frank & Meyerholt 2009: 367). In general radio and television broadcasting in Germany lies in the competence of the *Länder* – they adopt acts which are coping with the financing and regime of broadcasting. These acts in turn comprise a number of treaties,³³ however the most important one for this paper is the Interstate Treaty on Broadcasting (Rundfunkstaatsver-

29 The term monopoly thereby embraces *all* public service broadcasters (the *ARD*, including its third programs and the *ZDF*) as *one* supplier in contrast to the commercial broadcasters. If taken separately competition for audience between the public service broadcasters (e.g. *ARD* and *ZDF*) could indeed be observed.

30 <http://www.artikel5.de/> (05.07.2010).

31 Other reasons for the crucial role of the Constitutional Court for broadcasting policy can be explained by Germany's legalistic political culture but also the heavy burden of Germany's past (Humpreys 2008: 5).

32 This wording is also included in the remit of Public Service Broadcasting that is stated in §11 (1) of the Interstate Treaty on Broadcasting.

33 Interstate Treaty on the Broadcasting License Fee, Interstate Treaty on the Financing of Public Service Broadcasting, *ARD Staatsvertrag*, *ZDF Staatsvertrag*, treaties applicable to the individual regional broadcasters (European Commission 2007: 2).

trag)³⁴ that applies to both, private and public broadcasters (European Commission 2007: 2). That is because in 1984 the monopolistic public service broadcasting market was opened up and the first commercial competitors entered the market. From that time on Germany has a dual broadcasting system where public service broadcasting and private broadcasting exist side by side (Nitsche 2001: 42). While the latter one finance its program either over advertising or paid content (i.e. Pay-TV) the financing of the public service broadcasting is based on a dual system. According to §13 Rundfunkstaatsvertrag (RstV) the financing takes place through both – license fees and advertising (as well as other revenues) (Rundfunkstaatsvertrag 2009: 11). The majority of revenues, however, result from license fee that every citizen has to pay who is (just) in possession of broadcasting equipment (Beyer & Carl 2008: 48; Nitsche 2001: 148).³⁵ In the period 2005-2008 84.3% of the income of the ARD was coming through license fees whereas for the ZDF the license fee accounted for 85.4% of the income (KEF 2009: 28). Meanwhile the license fee has been changed to a *media fee* that also has to be paid by people without broadcasting equipment (radio and/or television) but in possession of an internet-connected computer (Jakubowicz 2007: 41).³⁶ In order to guarantee the existence as well as the further development of PSB in Germany, §12 of the Interstate Treaty on Broadcasting

34 The Interstate Treaty on Broadcasting (Rundfunkstaatsvertrag) in Germany forms the legal framework for the tasks of the Public Service Broadcasting (Moe 2009: 198). Since 2007 – with the 9th Amendment of the Interstate Treaty on Broadcasting – the official name was extended to „Staatsvertrag für Rundfunk und Telemedien“ [Interstate Treaty on Broadcasting and Telemedia] which highlights the inclusion of other forms of electronic media. In the short form, however, it is spoken of the Interstate Treaty on Broadcasting. This will also be done throughout this paper.

35 Especially since the emergence of commercial broadcasters the proportion of advertising of the revenue income from the public service broadcasters decreased (Humphreys 1999: 45f.; Humphreys 2008: 19).

36 From 2013 on, however, the license fee system will be fundamentally changed. In June 2010 the ministers of the Federal States agreed that from 2013 on every household will be obliged to pay the license fee of 17,98 Euro, regardless if possessing broadcasting equipment and regardless of the form and amount of technical devices. The decision will now be put into a Broadcasting license fee treaty that will come into effect from January 2013 on. (ARD online 2010b, FAZ.net online 2010; Tagesschau online 2010).

even contains a financing guarantee (Bestands- und Entwicklungsgarantie)³⁷ (European Commission 2007: 7; Humphreys 1999: 25).

Though the commercial broadcasters and channels increased during the last decades the PSB system remained and still remains quite strong in Germany (Humphreys 2008: 2, 4). In May 2010 the public service broadcasting channels³⁸ held a market share of 41.6% on the audience side (KEK online 2010). Quite often, however the question is raised if there is still a need for PSB? This debate intensified with the upcoming of digital broadcasting. The reason is that nowadays, in times of digital broadcasting, an intervention due to spectrum scarcity does not hold anymore (Armstrong 2005: 284; Elstein 2005: 68). Armstrong and Weeds (2007: 82) put it as follows: "...the rationale for public intervention needs to be re-examined. Regulation that was appropriate to the earlier, analogue era may become unnecessary, and even undesirable, in the digital world". Similarly, other arguments of market failure, for example the supposed public good character of broadcasting, are not applicable since it is not the broadcasting that can be regarded as a public good but at most information that is provided over the platform (e.g. television channel) (Beyer & Beck 2009: 77). This is because an exclusion of people from a television program is at least technically possible³⁹ (e.g. over pay TV), hence the two necessary conditions for a public good are not fulfilled. Furthermore, with an advertising financed program an exclusion of consumers would not even be intended by the media platform. The argument of information asymmetries resulting in a market failure also does not seem applicable since reputation and competition act as quality indicators (Beyer & Beck 2009: 78f.) and furthermore the majority of consumers multihome (Dewenter & Haucap 2009a: 42; Lindstädt 2010: 70). So other arguments must hold that justify the continuity of the public service

37 This financing guarantee was decided by the Constitutional Court in their 6th Broadcasting decision in 1991 (Lucht 2009: 26).

38 This includes ARD, ZDF, ARD III, 3sat, ARTE, KIKA, Phoenix (KEK online 2010).

39 However, the argument of non-excludability had been applicable in the early years of broadcasting (Beyer & Beck 2009: 77).

broadcasting system in Germany.⁴⁰ Over the years the existence of public service broadcasting in Germany was subsequently justified and put in law by the Constitutional Court with the need for essential basic provision (*Grundversorgungsauftrag*) of diversity of opinion, pluralism, program range, quality etc. that should be ensured by public service broadcasting (European Commission 2007: 2, Humpreys 2008: 5). Nowadays it is argued that PSB has content obligations (Funktionsauftrag) (Holznagel et al. 2009: 205f.). These obligations⁴¹ can be understood as providing a form of content diversity ensuring objective and impartial reporting, for example with news (Nord 2009: 26). This still holds in times of digitalization and convergence (Holznagel et al. 2009: 206). Furthermore, it is nowadays often argued that having a PSB system with a special credibility that is providing diversity and pluralism is also responsible for the little conditions that are demanded from the private broadcasting sector (Beyer & Carl 2008: 53; Moe 2009: 190; Trappel 2008: 314).

This section should give an overview of the reasons for media policies in general and for the traditional form of public service broadcasting in particular. Since it is the main aim of this paper to focus on public service broadcasting activities *online* and their justification on the internet the rest of this paper will focus on the online market exclusively.

40 As it was stated in the introduction of this paper the main purpose is not to question the traditional form of public service broadcasting in general but to focus on the validation of public service media on the internet. However, the given arguments already point out the problem or challenge to find convincing arguments to uphold the public service system with the media sector in Germany.

41 According to §11, 1 of the Interstate Treaty on Broadcasting (Rundfunkstaatsvertrag) the remit of public service broadcasting is the following: (1) Public service broadcasting must, by producing and broadcasting its programs, act as a medium and a factor in the process of shaping free individual and public opinion; thereby fulfilling democratic, social and cultural needs of the society. Within their programs public service broadcasting has to give a broad overview of international, European, national, and regional events in any essential area of life. By doing so they should encourage the international communication, the European integration and the social coherence on federal and state level. Their programs have to serve education, information, consulting and entertainment. They have to offer programs especially in the area of culture. Entertainment should be included in their remit as well. (Rundfunkstaatsvertrag 2009: 11f.; own translation).

3. Germany's public service broadcasters on the internet – recent developments

3.1. *The market development with the existence of PSM online*

3.1.1. *The emergence of Germany's public service providers online*

Public service broadcasters are legitimated to offer new media services in addition to their TV programs (European Commission 2007: 17).⁴² The Council Resolution from 1999 confirmed the importance of public service broadcasting with respect to social, democratic and cultural life in the European Union – thereby clearly not limiting it to traditional broadcasting platforms but emphasizing the variety of channels (Broadcasting Communication 2009: C 257/3).⁴³ Since the middle of the 1990s public service broadcasters in Germany have extended their traditional presence on television and radio towards the internet (Moe 2009: 189). The *WDR*, for example entered the internet in 1995, the *ARD* launched its website *ard.de* in 1996 (Moe 2008a: 228f.). The possibility for PSB to expand their activities towards the internet was initially legally set down in the 4th Amendment to the Interstate Treaty on Broadcasting in 2000 (European Commission 2007: 3). This amendment made it possible to offer new media services that were offering *primarily program-related* content. In 2004 the 7th Amendment to the Interstate Treaty on Broadcasting lessened the formulation, changing the allowance into *program-related* content (ibid.).

Nowadays every public service broadcasting channel as well as every related radio channel has an online presence. These are on the one hand the nationwide channels *ARD* (*ard.de*), *ZDF* (*zdf.de*), *Deutsche Welle* (*dw-world.de*), *Deutsch-*

42 Due to the principle of technology neutrality public service broadcasters are allowed to expand to new media insofar as all rules in place for television broadcasting are fulfilled (Trappel 2008: 319).

43 The Council resolution states: “[...] broad public access, without discrimination and on the basis of equal opportunities, to various channels and services is a necessary precondition for fulfilling the special obligation of public service broadcasting [...]” (Council Resolution 1999: C 30/1).

landradio (dradio.de). On the other hand there are the regional programs *Norddeutscher Rundfunk (ndr.de)*, *Westdeutscher Rundfunk (wdr.de)*, *Mitteldeutscher Rundfunk (mdr.de)*, *Bayrischer Rundfunk (br-online.de)*, *Saarländischer Rundfunk (sr-online)*, *Südwestrundfunk (swr.de)*, *Hessischer Rundfunk (hr-online.de)* and *Rundfunk Berlin-Brandenburg (rbb-online.de)*. The related radio channels can usually be found through sub-sites of the above mentioned ones; furthermore *Radio Bremen (radiobremen.de)* exists online as well. In addition to this, the public service broadcasters offer special interest programs like *Arte*, *Phoenix*, *3sat* and *KI.KA* – every one of them with an own online presence as well. Subsequently, some programs of the public service broadcasters have their own online presence which, for example, holds for the two most successful news programs of *ARD and ZDF: Die Tagesschau (tagesschau.de)* and *HEUTE (heute.de)*.⁴⁴

With the entrance of public service broadcasters towards the internet the commercial suppliers of online media⁴⁵ within a short time faced an array of new competitors⁴⁶ – all of them competing for the attention of users. The variety of the programs differs a lot. Nevertheless, during the last years more programs and applications were added. In the beginning, it was especially supporting services that were put online, such as television program guides in order to complement the traditional platforms radio and television. However, in the course of time, public service broadcasters expand their offer with new self-contained programs; thereby taking advantage of the special characteristics of the internet and including audio and video formats as well, for example for national news coverage (Dewenter & Haucap 2009b: 112). In addition to this, the program variety ranges significantly – besides news and information chats, recipes and games can be found as well. Dewenter & Haucap (2009b: 99f.), in their study

44 For a detailed overview of content and distribution of public service websites please see KEF 2009: 53-58.

45 This includes traditional broadcasters and publishing houses with an online presence as well as pure internet players.

46 Though not all websites were launched at the same time.

on the economic consequences of public service media programs online tried to classify these diverse offers in ten categories: 1.) Fictional audiovisual on demand entertainment, 2.) General (inter)national information, 3.) Sports content, 4.) Entertainment & Lifestyle, 5.) Economics and Financing, 6.) Regional and local news, 7.) Fictional entertainment for children, 8.) Content on cars and traffic, 9.) Weather information, 10.) Travelling.

Within the period from 2005-2008 public service broadcasters spent in total 284.8 Mio. Euro for online activities (KEF 2009: 123). Thereby they exceeded their self-commitments of not spending more than 0.75% of their total spending for online activities (actual online quotes: ARD: 0.86%, ZDF: 0.94%) (ibid: 257f.). For the period 2009-2012 the public service broadcasters waived their self commitment of limiting their online spending. Within this period, online spending will account for 491.58 Mio. Euro (ibid: 125-127). Compared to the former period public service broadcasters are significantly expanding their spending for online activities.

3.1.2. How the internet changes the markets and the effects of PSM's online presence on competition

In general it can be stated that profound developments within digital technology and growing convergence changed the media landscape dramatically (Burri-Nenova 2009: 1, 7). More precisely and to start with, the emergence of the commercial internet in the 1990s⁴⁷ first of all intensified competition within the media industry. Up to then it was mainly the traditional mass media platforms television, radio and print media⁴⁸ that competed among each other. With the internet each one of these types had another competitor to take into account. Growing competition is no new phenomena – newspapers as well as the radio had to deal with new arising competitors when for example the television entered the market. With the internet, however, it was not only an extension of

47 The World Wide Web was released in 1991 for general usage.

48 Printed media thereby contains magazines as well as newspapers.

competition; furthermore the computer and the internet led to a growth of convergence. Formerly existing borders of media and media markets are diminishing (van der Wurff: 2007: 111). Convergence in general means the coming together of formerly separated industries like information technology, telecommunication and media due to technological developments (Larouche 2001: 1; Gambaro 2004: 8). Media convergence in particular is the merging of formerly separated media markets like television, telecommunication, printed media and the internet (Beck 2005: 334). Therewith, it is possible to provide any content over one transmission medium (Syvertsen 2003: 160). More precisely, the new medium internet was suddenly able to combine the former times mostly separated elements text, picture, audio and video altogether over one single media type.⁴⁹ Larouche (2001: 4) referred to the internet as a converged network that – with the help of the most converged equipment computer – was able to deliver those kinds of services. This in turn means that convergence within the media industry not only led to a broadening of competition but furthermore led to a change of relevant markets. That is because competitors within one market suddenly compete with competitors from a second – formerly separated – market. The above mentioned traditional media types were earlier mostly separated from each other. Nevertheless, they have been in competition with each other to some extent. Consequently two forms of competition can be identified – intermedia competition and intramedia competition (Chyi & Sylvie 1998: 4-12; Lindstädt 2009: 158f.). The term *intermedia competition* refers to the situation when, for example, news programs on television compete with news sections in the newspaper. On the other hand media companies always face *intramedia competition* – this is the competition within a certain media type. This would mean that in Germany for example the national newspaper *Frankfurter Allgemeine Zeitung (FAZ)* competes with the national newspaper *Süddeutsche Zeitung* or that the sport magazine *Sport Bild* is a close competitor to the sport

49 The new options possible with the online media can be subsumed through five features 1) digitality and ubiquity, i.e. universal ability with no time and space restrictions, 2) Immediacy, i.e. the absence of format-determined deadlines, 3) multimediality, 4) interactivity, 5) hypertextuality (Trappel 2008: 316).

magazine *Kicker*. The *intramedia competition* usually consists of the closest competitors. However, depending on how narrow or wide the relevant market is defined *intermedia competition* plays a more or less important role.

Consequently, the emergence of the internet first of all extended *intermedia competition*. That means, nowadays the media types television, radio, printed media and the internet⁵⁰ are competing with each other – on the one hand for the attention of audience, on the other hand for advertising companies due to the two-sidedness of media markets. Depending on the genre (e.g. news, sport, entertainment) that is looked at competition can be more or less intensive. The genre news on the internet, for example, strongly competes with the respective genre on other media types like newspaper or television. Here, *intermedia competition* is apparently affected by the accessory of online media and increases the intensity of competition (Dewenter & Haucap 2009b: 108, 114).

Secondly, and especially interesting for this analysis, *intramedia competition* within the online market intensifies rapidly. Within this new media type it is on the one hand new and pure internet players who provide homepages and content online – e.g. *netzeitung.de* as the first German newspaper that is only distributed online (Netzeitung online 2010). On the other hand traditional existing media providers entered the internet as well. That is, most of the publishing houses set up a website in addition to their existing printed newspaper or magazine. Nowadays there are 661 newspapers⁵¹ with an online presence in Germany (BDZV online 2010). This does not yet include magazines or weekly newspapers like *FOCUS online*, *SPIEGEL online* or *ZEIT online*. Furthermore, broadcasters (radio and television suppliers) set up complementing homepages for their existing offline programs. Consequently, the internet led to the tendency that former separated markets are merging on the internet leading to direct competition – both on advertising and audience market (Depypere & Tigchelaar

50 Meanwhile the internet or more precise online media can be regarded as new and relevant mass media as well (Trappel 2008: 313).

51 Though the extent as well as the content differs significantly.

2004: 20). As a result, former *intermedia competitors* offline were becoming *intramedia competitors* online.

These developments just described can especially be observed as the first steps of the commercial players on the internet where most of them either additionally or newly entered the online market. Nowadays news portals play a significant role (see also the appendix). The BITKOM published a top 20 list and stated that news portals in 2009 boomed as never before. Thereby the list includes websites of traditional newspapers, magazines and television programs. Interestingly even specialized websites – e.g. focusing on sports or computer issues – are included. Spiegel Online (1,327 Mio. visits) and Bild.de (1,196 Mio. visits) hold the first two positions of the ranking far ahead of the following. They hold market shares of 20.33% respectively 18.32% whereas already Chip Online as number 3 of the ranking (564 Mio. visits) holds a market share of only 8.64%. Well known newspapers and magazines with a good reputation on the print market like Focus, Süddeutsche Zeitung, and FAZ only hold middle positions whereas ZEIT online and Handelsblatt.com are even situated at the end of the ranking (BITKOM online 2010).

However, in the middle of the 1990s, public service broadcasters were entering the internet as well (see section 3.1.1). Consequently the up to then already intense competition increased once more.⁵² According to *Nielsen Online* the unique user figures for the two main programs *ard.de* and *zdf.de* are quite impressive. Whereas ZDF has about 3 million unique users per months ARD even reaches around 8 million unique users in the same time (Dewenter & Haucap 2009b: 98). Compared to other well established platforms like *SPIEGEL online* (5.77 million unique users), *faz.net* (2.0 million unique users) and *ZEIT online* (1.64 million unique users) it gets quite obvious that the numbers of PSM sites

52 The program of public service broadcasting sites was and is quite diverse. Therefore, it is not the aim of this section to present a detailed market analysis and observe the relevant competitors who are affected but rather to look at the resulting competition effects in general.

are fairly high (AGOF⁵³ 2009, online). Regarding the visits public service media sites could reach the following figures in 2008:⁵⁴ ARD online: 419 Mio. Visits, regional PSM websites: 437 Mio. visits; ZDF online (incl. Phoenix and 3Sat): 393 Mio. visits (KEF 2009: 58f.). Compared to the figures of the commercial players in 2009 (see the appendix) the PSM websites would consequently rank at fourth place. Hence, the entrance of PSM websites on the internet in Germany had quite a magnificent impact on the commercial sector – especially on the ones which already existed on the internet before the entrance of PSM.⁵⁵

When analyzing resulting competition effects online it is necessary to consider the special characteristics of media markets. It was already stated earlier that media markets in general and the internet in particular are multisided markets. The media platform (here: the provider of a certain website) serves two distinct demand sides simultaneously. This is the audience (here: users of the website) and the advertising industry that is advertising on the website. The distinct customer groups in turn influence each other through indirect network externalities (Dewenter 2006: 2). Since commercial media platforms finance themselves – or at least can do so – both through the audience and the advertising side and due to the interdependencies of the market sides, resulting competition effects always need to be considered on *both* demand sides.

The multi-sidedness of the internet market becomes clearer when first looking at the commercial sector. Here the companies on the internet need to finance their programs mainly through advertising revenues and a small portion of paid

53 Arbeitsgemeinschaft Online Forschung [Association for online research].

54 Unfortunately the KEF report does only provide figures until 2008. Newer figures were not available at the point where this paper was written.

55 Whereas traditional public service broadcasters especially form close competitors to other broadcasters offline, they affect online a much wider set of commercial suppliers (i.e. online newspapers or magazines, pure online players, and broadcasting providers).

content.⁵⁶ Up to now, paid content is just rarely observed due to the low acceptance of users to pay for content. According to a survey of the Forsa Institute only 16% responded to be willed to pay for journalistic content (Reglitz 2009, online). Consequently, commercial providers online are highly dependent on advertising revenues. In a similar way this would apply for the *traditional* public service broadcasters since those platforms in Germany have a dual financing system (advertising and license fees), though the main source of income is the license fee. However, when looking at public service media platforms online they are – according to the Interstate Treaty on Broadcasting – *not* allowed to finance its online programs over advertising and hence fund *everything* over the obliged license fee (Beyer & Carl 2008: 48, 53; Rundfunkstaatsvertrag 2009). According to this, the question arises how the multi-sidedness of the internet market holds for PSM online that is solely financed over license fees? In fact, within PSM *online* we solely face one demand side – the user side. With regard to changing competition structures online – which include both commercial and public service sector – however both demand sides come into play and get affected which will be shown in the following.

In particular it is the aim of this section to observe how the competitive structure changed for commercial online media platforms with the entrance of public service providers. However, if websites like *ard.de* or *zdf.de* are solely financed over license fees, how can *both demand sides* of commercial online competitors be affected? Here it has to be considered that the user and the advertising side are distinct demand sides, nevertheless they are connected to each other through indirect network externalities which can be positive or negative (Dewenter & Haucap 2009a: 36). Like in any other media type (e.g. newspaper, television) the user side always exerts a positive externality on the advertising side (Dewenter 2007: 55). This is because companies who are placing advertising in

56 However, since providers on the internet from the early days on provided their content for free and due to the meanwhile intense competition the willingness to pay online for certain content (e.g. news content) is hardly existent (Dewenter & Haucap 2009b: 114).

media appreciate to reach a preferably large audience.⁵⁷ Hence, the larger the number of participants that are on a certain website, the more attractive it gets for the advertising side to place their ads there. For the user side on the other hand the indirect externalities that the advertising side exerts on the user side are ambiguous – they can be positive or negative (Ferrando & Gabszewicz 2003: 1f). As long as users like or even appreciate advertising (positive externality) they would profit from a larger number of advertisers as well. This means they would prefer the website of a provider with a large number of advertising due to getting helpful information, for example. However, if users regard advertising as a nuisance the externality would be negative – the more advertising is aired on the corresponding website the fewer users would be willing to use it. Even though the question – if facing a positive or a negative externality – cannot be answered in a lump sum the literature often assumes that advertising on the internet causes in the majority of cases a more negative externality⁵⁸ than a positive one (Anderson & Gabszewicz 2006: 571). Popup-banners on the internet, for example, have to be clicked away and disturb the user in what he was currently doing whereas advertising in newspaper can be more easily skipped over.

With regard to the emergence of the PSM websites there is first of all an increase in providers that compete for users. It was already stated in section 3.1.1 that with the entrance of public service broadcasters on the internet suddenly an array of new competitors entered the market and competes with the existing commercial ones. Though some of the traditional broadcasting programs were only regionally aired (e.g. *NDR*, *WDR*, *BR*) these boundaries blurred on the internet. As long as users have internet access they can easily access those sites

57 However, this audience for sure has to be consistent with the target group (customers or at least potential customers) to reach the superior goal of profit maximization.

58 The same applies for television.

from all around the world.⁵⁹ Since every person has just a limited amount of time per day to spend, hence also for media, every provider of online media competes for users' attention (*primary market*). The newly entered providers (here: public service broadcasters) make this competition for attention more intense. Consequently users (most probably) spread more over the internet and might move away from other commercial websites.⁶⁰ This is the most obvious effect on the user side. Let us now turn to the advertising side (*secondary market*): assuming positive externalities from the user on the advertising side this would result in a decrease of advertising spending for commercial websites. Fewer users make it less attractive for advertisers to stay with that particular platform they have advertised on until now. Although this does not result in advertisers moving to PSM sites,⁶¹ advertisers would move to websites with the most clicks and users – measured in unique users and page impressions. Consequently, it would mostly be small providers – e.g. websites of smaller newspapers or smaller online players – that suffer the most. This would mean that after competition was initially extended it could get reduced in the end leaving a small amount of big players plus public PSM providers online while the smaller providers are crowded out. Taking a second look from the advertiser side and assuming that advertisers exert a negative externality on the user side the existence of PSM could even draw users away from existing commercial websites. This would be due to the fact that users can consume content on PSM sites without any nuisance – in form of advertising – that they face on commercial websites. This would be a clear disadvantage for the commercial platforms since it is mostly the only or at least the most important source of income whereas the public sector solely finances its activities over the mentioned obliged license fees.

59 However, since the public service broadcasting sites are solely in German the worldwide presence mainly plays an essential role for German speaking countries or German speaking people abroad (Hills & Michalis 2000: 489).

60 Though the mentioned multihoming of users should not be neglected.

61 Since advertising is not allowed for PSM online as already stated earlier.

It is certain, that competition online has been quite intense for many years. With the emergence of public service media platforms online this situation has strengthened once more. Since – as stated earlier – every provider online competes for audience and within the commercial sector additionally for advertisers it seems interesting how the reaction of the commercial sector has been once public service broadcasters had entered the online market and thereby directly affected the audience market as well as indirectly affected the advertising side. The reactions will be the issue in the following section.

3.2. The Co-Evolution of the institutional framework

3.2.1. Reactions by the commercial sector on the existence of PSM online

In former years private broadcasting players in Germany but also in many other Member States oftentimes accused public service broadcasters to have an advantage over them within the traditional broadcasting sector (Betzel & Ward 2004: 47f.; Michalis 2007: 4, 8). This holds especially for programs that are hardly different to the ones commercial suppliers offer (O'Hagan & Jennings 2003: 53). The reason specifically lies in the fact that public service broadcasters are mainly financed over license fees. The commercial sector on the other hand has to finance its program over advertising revenues and/or through pay TV. As a consequence the European Commission already in the 1990s faced various complaints from the private sector of different countries regarding the national financing of public service broadcasters (Harcourt 2005: 55).

When public service broadcasters subsequently entered the online market, private competitors were sending many complaints to the European Commission accusing public broadcasters to distort competition in an industry that up to then seemed to have worked being left to the market, i.e. to private providers (Depypere & Tigchelaar 2004: 20). Thereby, the majority of complaints came from non-broadcasting companies like publishing houses and new media companies that had entered the online media market and felt to be facing a disad-

vantage (*ibid.*). Most complaints have been sent to the European Commission since 2002.⁶² The complaints from German private suppliers were especially directed to the form of financing of German PSB (European Commission 2007: 1). In general private competitors were complaining about the unfair competitive advantage public service broadcasters have in an area that should be better left to the market and accused them to overstep their public service remit (Humphreys 2008: 8, 12). In particular, the association *VPRT*,⁶³ for example, accused public service broadcasters of the lack of transparency between public and commercially funded activities as well as of a cross-subsidization of e-commerce offers through license fees (Moe 2009: 195). Due to the fact that public service broadcasters finance their online content exclusively over license fees whereas commercial competitors have to finance their programs either through charging the user, advertising, or both it was regarded as a form of discrimination towards commercial competitors. For this reason, private media companies argued that license fees represent an illegal state aid that does not coincide with the rules of promoting a common market (Syvertsen 2003: 162). More precisely, it was argued that private media companies encounter a high pressure to find sources of income whereas the financing of the public service providers is guaranteed which in turn leads to an uncatchable advantage of competition for them. Due to the high amount of license fees private competitors could not profit in the same way from digitalization as the public broadcasters (Frank & Meyerholt 2009: 367f.). Furthermore, and closely going together with the argument of financing, was the accusation that public service broadcasters overstep their remit when entering online media (Trappel 2008:

62 This included among others an informal complaint against the financing of the online activities by public service broadcasters in October 2002. In April 2003 the *VPRT* sent a general complaint against the financing system of public service broadcasters. In March 2004 Kabel Baden-Württemberg complained that PSB would distort competition through not charging market prices when providing the access to transmission facilities. In July, October and November 2004 further complaints were sent to the Commission criticizing both the acquisition and use of sports rights by public service broadcasters. (European Commission 2007: 18f.).

63 Verband privater Rundfunk und Telemedien e.V. [Association of private broadcasting and telemedia].

318). In particular this applies for programs that do not differ from the ones already offered by the private sector (Moe 2009: 195). All in all, it was suspected that public service media could crowd out private players.

3.2.2. Resulting actions by the European Commission

It was already stated that complaints and accuses that PSB would distort competition are no new issue (see section 3.2.1). The European Commission already published in 2001 its *Communication on the application of state aid rules to public service broadcasting*.⁶⁴ This communication – leaned to the Amsterdam Protocol⁶⁵ on the system of public broadcasting in the Member States – stated that as long as competition is not affected in a way that is contrary to the common market interest, the financing system should be left to the Member State; by doing so they furthermore admitted the importance of public service broadcasting to maintain pluralism (Harcourt 2005: 56). The aim of the communication was to limit the case by case analysis by clarifying how state aid rules should be applied with regard to public service broadcasting (Michalis 2007: 5). Nevertheless, the communication should not exclude the possibility of case-by-case-decisions in case of complaints from the private sector regarding the financing of PSB (Harcourt 2005: 56).

After the various complaints from the commercial sector regarding the activities by German public service broadcasters on the internet the European Commission therefore needed to take actions and started to examine if the common market interests might in fact be violated. They checked and analyzed the German PSB system in more detail. As a consequence, the Commission concluded in March 2005 that Germany through its financing system of public service broadcasters was acting incompatible with the EC Treaty and thus opened a ma-

64 This Communication was just amended in 2009.

65 Interestingly enough the initiative of annexing this protocol to the EC Treaty by the Treaty of Amsterdam came from Germany. The idea behind it was to maintain the Member States' responsibility of defining remit and funding for public service Broadcasters (Nitsche 2001: 152).

jour inquiry (European Commission 2007: 1, 19, Humphreys 2008: 12). All together, the license fee funding, the unlimited state guarantee, and potentially the tax treatment of commercial activities of public service broadcasters was regarded to constitute State Aid that is generally prohibited according to Article 87 (1) of the EC Treaty.⁶⁶

Concretely Article 87 (1) of the EC Treaty states the following:

“Save as otherwise provided in this Treaty, any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods shall, insofar as it affects trade between Member States, be incompatible with the common market”.

(EC Treaty 2006: 76)

Basically the funding of public service broadcasters in any Member State within the European Union is regarded to constitute state aid that gives an unfair financial advantage to the public service broadcasters which in turn strengthens their position towards the private sector (European Commission 2007: 40; Moe 2009: 193). However, in particular cases the usually prohibited state aid might be justified if it can be regarded as a *service of general economic interest*. It is assumed that there are certain societal goals that could not adequately be reached with a pure market approach (Harrison & Woods 2001: 488). This includes for example services like transport, energy or health services which are regarded to be socially important; therefore everybody should have access to it (Moe 2008b: 309). The exception of services of general economic interest is stated in Article 86 (2) of the EC Treaty:

⁶⁶ However there exists an exception when state aid is regarded to be compatible with the Treaty. These exception is stated in Article 86 (2) of the EC Treaty (EC Treaty 2006). It thereby has to be ensured that the aid is not opposing internal market and competition rules of the EC Treaty (Michalis 2007: 2).

Undertakings entrusted with the operation of services of general economic interest or having the character of a revenue-producing monopoly shall be subject to the rules contained in this Treaty, in particular to the rules on competition, in so far as the application of such rules does not obstruct the performance, in law or in fact, of the particular tasks assigned to them. The development of trade must not be affected to such an extent as would be contrary to the interests of the Community. (EC Treaty 2006: 76)

However, in the Commission's opinion the services that Germany's public service broadcasters were offering in the new media did not fulfill the conditions of a service of general economic interest (European Commission 2007: 50). In particular, the European Commission accused Germany of the following offences: Firstly, the public service remit was regarded to not be defined sufficiently enough.⁶⁷ Secondly, the adequate entrustment of the public service remit was doubted with regard to new media services. Thirdly, and consequently the Commission also missed an effective control of the obligations of public service broadcasters. By comprising purely commercial activities within the public service remit it could not be ensured that those activities do not benefit from state funding as well. Furthermore, the European Commission accused Germany of lacking mechanisms which guarantee that only as much state funding is spent that is needed for fulfilling the public service remit. Last but not least, the Commission determines insufficient safeguards for the public service broadcasters' commercial activities that are supposed to meet market principles.

(European Commission 2007: 19, 62f.)

After the European Commission had sent the state aid accuse, Germany was authorized to react and give its statement on this issue. The correspondence between the Commission and Germany continued for a certain time since Germany was not agreeing on all accuses being made (European Commission

⁶⁷ According to this, it was for example doubted in how far online games or chat rooms online can be subsumed under the public service remit (Moe 2009: 195).

2007: 20-27).⁶⁸ Germany was for example not regarding the license fee to constitute state aid and they considered their public service mission being defined precisely enough. In addition to Germany, it was also possible for the complainants to send further observations to the European Commission before the Commission came to its final assessment also stating appropriate measures for the case to be closed down (ibid: 27-65). In order to ensure compatibility with the common market principles the European Commission proposed Germany to undertake actions for fulfilling the following measures: 1) *Clear Definition of the public service remit as regards new media activities*, 2) *Entrustment and Control*, 3) *Proportionality*, which includes separation of accounts, exclusion of overcompensation and cross subsidization of commercial activities, respect of market principles for purely commercial activities as well as safeguards against financing of sports rights which remain unused (ibid: 63-65).⁶⁹

3.2.3. Dispute resolution between the European Commission and Germany

The Interstate Treaty on Broadcasting was already amended several times, especially since new media services came up which were since the 9th Amendment to the Interstate Treaty on Broadcasting subsumed under the term *telemédia* (European Commission 2007: 4f.). The last Amendment to the Treaty has just taken place in June 2009 (12th Amendment to the Interstate Treaty on Broadcasting) and was the result of the compromise between Germany and the European Commission regarding the state aid accuse discussed in the previous section. With this amendment the public financing of public service broadcasters in Germany regarding their new audiovisual media services correspond to the EC State aid rules (Repa & Tosics 2009: 1).

68 A complete overview on all correspondence on this issue would go beyond the scope of this paper. Therefore please refer to European Commission (2007).

69 The three mentioned aspects represent categories. These categories in turn contain exact measures that have to be undertaken by Germany which will be partly listed in section 3.2.3.

With regard to the European Commission's accusation, Germany gave certain commitments concerning the financing system of public service broadcasters that were submitted in December 2006 to the Commission (Humphreys 2008: 12). Thereupon, the European Commission submitted its letter with the acceptance of the commitments in April 2007. From that time on Germany was obligated to submit the legal framework into action within two years in order to comply with the EC state aid rules regarding the financing of public service broadcasters (European Commission 2007: 79f.; Repa & Tosics 2009: 1). More precisely, Germany and the European Commission agreed on actions that needed to be undertaken in order to fulfill the Commission's demand for 1) *a clear definition of the public service remit as regards new media activities*, 2) *its entrustment and control* as well as 3) *its proportionality*: The most important actions that affected the online activities are listed below.⁷⁰

- *Legislative provision for a further substantiation of the remit for “telemedia” and additional digital offers according to binding criteria plus laying down criteria to trigger the evaluation procedure. Public service broadcasters further need to specify the criteria that trigger the evaluation procedure and carry out the procedure. The mentioned procedure then ends with the examination and declaration by the Federal States (Länder) as part of their legal supervision.*
- *Establishment of a 3-step-test as an evaluation procedure for all new or modified digital offers of public service broadcasters that is laid down by law. These three steps include:*
 - 1) *Evaluation if the offer is covered by the public service remit and serves the democratic, social and cultural needs of society.*
 - 2) *Evaluation if the offer contributes in a qualitative way to “editorial competition” (publizistischer Wettbewerb).*

70 The agreed on measures for the online sector are listed shortly and are not complete. For a detailed and complete description please refer to European Commission 2007: 65-79.

3) *Specifying the financial impact of the evaluated offer.*

Thereby the term editorial competition will be further explained in the future Interstate Treaty, taking existing freely available offers and the relevant impact of the planned offer on the market into consideration.

- *Public service broadcasters will have to provide concrete explanations of their offers. This will be followed by an evaluation where the relevant supervision as well as third parties have the opportunity to evaluate the offer and give views on it.*
- *Inclusion of telemedia activities within the new Interstate Treaty stating that they are covered by the public service remit. For doing so public service broadcasters need to present an overall concept on media services in advance.*
- *Existing telemedia activities which, after the new Interstate Treaty comes into action, are not meeting the newly introduced legal requirements and restrictions could not be offered by public service broadcasters.*
- *Telemedia offers will be subject to the entrustment procedure (see 3-step test) for the further specification of the public service remit for telemedia.*
- *The public service remit of telemedia will be limited to edited offers (journalistisch-redaktionelle Angebote).*
- *Establishment of an illustrative list of telemedia services which would normally (not) be covered by the public service remit (positive/negative list). Thereby activities like e-commerce would therefore be part of the negative list since not being part of the public service remit.*

- *Inclusion of criteria which online offers need to serve in the Interstate Treaty.*
- *The public service remit shall not cover local reporting.*
- *Continued prohibition of sponsoring and advertisement for telemedia*

(European Commission 2007: 65-79)

These measures have been taken into the 12th *Amendment to the Interstate Treaty on Broadcasting* that came into effect on 1 June 2009. Within this, it is especially § 11 RStV. that is drastically affected and which was complemented by certain additional numeric (Rundfunkänderungsstaatsvertrag 2009: 2, 6-12). §11, for example, further specify the public service remit, §11d contains a further explanation of the term telemedia and what it comprises. §11f eventually copes with the telemedia concepts and the 3-step test for new or modified telemedia (Rundfunkstaatsvertrag 2009: 11-14).

The question is if the stated measures are appropriate and how the interaction between private media operators and public service broadcasters on the internet will develop in the future. Generally the presence of public service broadcasters online is acknowledged – both by Germany as well as the European Commission. Nevertheless, the following chapter will now analyze if there is an economic justification for public service media to operate online and if so to which extent this should take place.

4. An economic analysis of the justification for Public Service Media online

4.1. Literature Review

Public Service Media online is a highly up to date topic and many researchers already coped with this issue. There is no clear consensus among researchers if PSM should have a legitimization online and if so to which extent. Some authors still demand for an extensive role of public service provision in the digital era whereas others either argue against PSM on the internet at all or assign them a restrictive and complementing function at the most. The following literature review will show that the different viewpoints mainly result from different objectives as well as different disciplinary backgrounds. Those authors who favor and support a continuous public service provision online mainly argue from a media scientific or sometimes media economic perspective and primarily aim for reaching societal and democratic goals. The authors that claim for a restrictive and complementing function at the most on the other hand mainly argue from a purely economic perspective and thereby predominantly follow economic welfare goals.

Many authors including Armstrong & Weeds (2007),⁷¹ Beyer & Beck (2008 & 2009), Depypere & Tigchelaar (2004), Dewenter & Haucap (2009b), Donders & Pauwells (2008)⁷² argue that economic market failure arguments – once faced on the traditional broadcasting market – cannot be found anymore in the digital era and hence not on the internet. These authors consequently rather argue against a PSM role online. According to Depypere & Tigchelaar (2004), Dewenter & Haucap (2009b) and Rebmann (2003) the barriers of entry are low; competition is quite intense and hence favors pluralism. Beyer & Beck (2008 & 2009) emphasize that no economic arguments exist that legitimize public ser-

71 Though rather with a focus on digital broadcasting.

72 Though rather with a focus on digital broadcasting.

vice media on the internet; they see merit good reasoning as the only *plausible* argument for having PSM online. Nevertheless, they argue *against* an endless financial extension of PSB activities and instead rather argue for a shift towards online at most. The mentioned authors claiming for restrictive roles of PSM agree that *at the utmost*, PSM online should concentrate on certain areas exclusively if there is a need for it and thereby fulfilling a *complementing function* that does not distort competition.

Other authors, however, assign PSM still a remaining and sometimes even strong rationale online. Some researchers thereby see certain market failure facts to be still existent on the internet. Jakubowicz (2007) regards market failure as a civic and culture issue und argues for PSM in order to counteract the trend of the undermining of social cohesion especially with regard to the internet. Supporting this, Nord (2009) and Rüter (2002) argue for an existence of PSM online to attract an audience that is becoming more individualized, to reach previously difficult audiences and providing public orientation. Nevertheless, Nord thereby sees the possible problem of distortion of competition and a possible misuse of the dominant position of PSB whereas Rüter emphasizes the need for appropriate measures to ensure that no unproductive copying of commercial players takes place. Bardoel & Lowe (2007) argue for a demand-driven PSM culture with an interactive society and see the need for PSM online to produce positive externalities, public value and subsequently also to counter fragmentation and creating social cohesion. Moe (2008a, 2008b, 2009)⁷³ subsumes the aspects participation, access and quality under the merit good argument. PSM online should have even more than just a complementing function which is also supported by Wiedemann (2004) who even regards a certain distortion of competition as unavoidable and tolerable. Nissen (2006) sees a new way of market failure through the lack of national and cultural diversity with only commercial providers and assigns PSM to fulfill educational obligations and to work against digital divide. Many other authors as well favor a remain-

73 Based on an empirical analysis of PSB systems in Norway, Germany, and the UK.

ing rationale due to promoting (cultural) diversity, pluralism and quality, including Aslama (2008), EBU (2008), Hills & Michalis (2000),⁷⁴ Karppinen (2009), Leurdijk (2007), Murdock (2004), and Trappel (2008).⁷⁵ According to van der Wurff (2007)⁷⁶ markets – especially in areas of news and information – fail with regard to independence and quality. Consequently, PSM online is necessary to compensate for market failure; nevertheless, he argues for a complementing role with respect to services the market cannot or does not provide. In a similar direction, Frank & Meyerholt (2009) in their paper about Germany argue for an ongoing existence of PSM online. To their mind, it is not a lack of pluralism online but rather the reason to provide basic supply without political and economic influence. Nevertheless, the authors thereby see the need to work against the commercialization of PSM.

To my best knowledge, no paper – dealing with Public Service Media online – however, up to now analyzed the question of the justification for PSM online against the background of the inevitable existence of the traditional PSB system (television and radio). It is the aim of this article to fill this gap. The paper thereby does not question or discuss the fundamental existence and idea of PSB in general.⁷⁷ Discussing the legitimization of public service media provision online very often puts the general PSB system in question.⁷⁸ However, it can be assumed that both, due to political and economic reasons, a complete abolition of the public service broadcasting system will not take place in the near future. Therefore, this paper takes the existing PSB system as given and unchangeable,

74 Though these two authors take the view that market failure arguments cannot be found on the internet.

75 Based on an empirical analysis of Germany, Switzerland and Austria.

76 Who argues from a media economic perspective.

77 For the general discussion of public service provision please refer to Armstrong (2005) Armstrong & Weeds (2007), Betzel & Ward (2004), Beyer & Beck (2009), Hargreaves Heap (2005), Harrison & Woods (2001), O'Hagan & Jennings (2003), Jakubowicz (2007), van Dijk et al. (2006), Ward (2006).

78 At this point it shall be highlighted that I am not favoring the PSB system in the way it exists now. However, discussing this would go beyond the scope of this article.

waives to repeat the fundamental discussion of pros and cons of public service provision and instead concentrates specifically on cross-media effects that might result when having both online and offline offers provided by PSM.

The following analysis discusses if there is an *economic justification* for having Public Service Media online. Within this, the chapter focuses on the aspects: existing infrastructure, competition, indirect network externalities, externalities and media bias. Thereby each section first argues from the point of view that supports a public service provision online before the contra arguments are discussed and hold up against it.

4.2. The existing infrastructure and cross media effects as a justification for PSM online?

A fairly convincing argument for having PSM online could be the existing infrastructure; more precisely taking advantage of economies of scale and scope as well as resulting cross-media effects. As Ward (2006: 57) put it: “Publicly funded broadcasters [...] must achieve size in order to maximize value for public money and ensure public funding is invested efficiently in programming”.

Public service broadcasting has been existent in Germany for many decades; thus the technical equipment, existing broadcasting programs and formats as well as people’s expertise and competencies are already available. Especially the latter ones can play a major role in this regard. The ARD and the ZDF, for example, have a fully developed correspondent network with experienced journalists from which they can make use for their online news as well. Especially in media markets which face high fixed costs and relatively low marginal costs this could play a significant role (Dewenter 2003: 4). Doyle (2002: 31) states in her book about Media Ownership that as soon as a media company grows, the more productive it can use its resources due to increasing economies of scale and economies of scope. That is, the higher the production gets, cost efficiencies can be achieved since average costs can be reduced (*economies of scale*).

This especially holds for websites and Depypere & Tigchelaar (2004: 20) emphasize that most of the production costs are already covered by the broadcasting task of PSM. The same would hold for *economies of scope* – once content (e.g. news, information, education programs, documentaries) is produced it can easily and quite cheap be transmitted to other media types (Dewenter & Haucap 2009b: 11). The process of researching and collecting information is done once but can be used manifold. This especially holds for products which are most closely related to each other with regard to production or distribution (Doyle 2002: 40). A news program on television, for example, can be formatted for a website as well – either as a video-file, a podcast or a written article. Online media thereby gives a great advantage to do so since audio, video and textual elements converged on the internet. In particular economies of scope have quite an impact and are intensifying its impact in times of digitalization (Beyer & Beck 2008: 393; Dewenter & Haucap 2009b: 11). This would mean that – through the interaction of economies of scale and economies of scope – the joint production of broadcasting (radio and television) and internet by PSM providers could result in a cheaper production than compared with the existence of a multitude of separate media companies (Doyle 2002: 34). A cheaper production in turn would benefit the consumer if prices (here in the form of license fees) could thereby be reduced or at least kept constant while the benefits (additional media platform with content) increase. Albarran & Dimmick (1996: 43) refer to *economies of multiformity* – meaning the gain of efficiencies as soon as a company expands its operations cross-sectoral. With regard to PSM these *economies of multiformity* could hold as well since the company expanded cross-sectoral – from the initial radio and television sector towards the internet – and thereby used the existing infrastructure (Doyle 2002: 40f.). Thus taken the inevitable existence of their radio and television infrastructure as given it might seem reasonable to have a public service provision online as well. By taking advantage of the existing infrastructure, media formats and expertise they would produce more effective operations compared to the situation where a pure online supplier newly enters the market and needs to build up a complete

infrastructure and competencies from the scratch. This would in particular concern people's expertise and existing (correspondent) networks.

Cross Media strategies could furthermore lead to more effective operations (Leurdijk 2007: 80). This would favor an extension of public service providers towards the internet; in other words not using their existing infrastructure could create sunk costs. By using the platforms television, radio and internet altogether, however, public service providers could create synergies. Hills & Michalis (2000: 478f.) refer to synergies with respect to the distribution of content especially due to the ongoing process of convergence between broadcasting services and websites. Concretely, the authors argue in terms of *programming* (e.g. added-value to offline programs, new programs, thereby meeting the needs of minorities that cannot be done by broadcasts), *packaging* (e.g. add-on content) and *transmission and access* (e.g. gateway to other websites after a vetting process). In addition to this, further synergies can be gained through cross-promotions. Budzinski & Wacker (2007: 298-302) talk about three different types of cross media strategies – price discrimination in cross-media advertising, content-related cross-promotion and cross-media advertising campaigns. Since – according to the Interstate Treaty on Broadcasting – PSM websites are *not* allowed to finance their online programs over any form of advertising, public service providers can only pursue a content-related cross-promotion strategy (Rundfunkstaatsvertrag 2009). With this strategy, the promotion takes place within the edited content (Budzinski & Wacker 2007: 299). Assuming that audiences online and offline are not 100% identical, this in turn would mean that further audiences for the respectively other media type can be won. Viewers of PSM programs on television, for example, could be attracted by a cross promotion on television (e.g. in a news program) for a continuative discussion on a certain issue on the belonging website. The other way round users on PSM websites could, for example, be made aware of an interesting (political) program that will be aired on television in the evening. In the end this could even result in an increased customer loyalty that would benefit the standing and importance of PSM. By using cross-media strategies public service broadcasters

can also bring in a certain *brand experience* from their origin field of activity (Leurdijk 2007: 80). With concrete reference to Germany this would, for example, hold for the established brand names *Tagesschau* and *HEUTE* – both initial news programs on the TV channels *ARD and ZDF* and meanwhile with an online presence as well.

At this point it seems interesting what impact the expansion towards online and cross media strategies could have on consumer welfare. Very often, the argument is brought up that consumers have to pay license fee anyway which does not only hold for television and radio but (meanwhile) also when owning an internet capable computer (Schulz et al. 2008: 19).⁷⁹ In that case consumers should also have the option to consume PSM content online – a platform they subsequently pay for (Frank & Meyerholt 2009: 374). Due to the inevitable existence of the PSB system the advantage for the consumer would be that he receives as many benefits as possible for paying license fees. It is not anymore just receiving a PSB provision on television and radio but additionally also on the internet. Secondly, by additionally operating online public service providers adapt to a changing media environment and *follow their audience* – by doing so adapting to changing or developing customer needs and habits – which in turn benefits the consumer. In general it can be observed that people in Germany nowadays do not use one media type exclusively. Instead, it is rather the combined use of different types of media. The *ARD/ZDF Online study 2009* showed that people in Germany, being online, still use various kinds of media types for consuming, for example news and information (van Eimeren & Frees 2009: 343). Hence, it cannot be observed yet that people substitute television or radio towards the internet. A joint use of all these platforms seems reasonable. By using and transferring the existing experience and knowledge from the traditional broadcasting sector, PSM could better serve the citizens. Users could for exam-

79 This argument, however, seems fairly unconvincing. That is because the decision to make citizens pay for internet capable computers (as a newly broadcasting device) was enforced down stream *after* the expansion of PSM towards the internet. Nevertheless, the inevitable existence of the PSB system might give arguments in this regard.

ple, receive the same quality programs (e.g. news content) online that up to then could only be consumed on television and radio. Furthermore, cross media strategies could act as an information and orientation function for users. They can easily find out about suitable programs (search costs would decrease) and even find additional suitable programs they probably would not have considered otherwise. Hence, consumer preferences could be better matched.

The existing infrastructure and economies of scale and scope indeed give good arguments for a legitimization of PSM online. However, the question is if these arguments (must) have its limits at some point – especially regarding the *ongoing* expansion of public service activities online. First of all, high fixed costs have been lessened in times of new technologies and digitalization; they are not as high on the internet as once on television, costs for setting up the infrastructure decreased significantly (Beck 2005: 28f.; Beyer & Beck 2009: 83; Beyer & Carl 2008: 56). This in turn gives certain advantages to commercial companies who newly enter the market like pure online players – though they still lack knowledge, expertise or correspondent networks that were mentioned earlier. In addition to this, other existent media companies (e.g. publishing houses, commercial broadcasters) profit from their existing infrastructure, like their expertise or journalist networks as well. Consequently, economies of scale can be realized in the same way as by public service broadcasters on the internet. Thus, in the online world it does not seem essential anymore to foster on just one (or few) providers which was probably advisable in times of analogue broadcasting and scarce frequencies. However, economies of scope indeed have an impact and are intensifying its impact in times of digitalization (Beyer & Beck 2008: 393; Dewenter & Haucap 2009b: 11). For example, once information has been collected and edited for a news program on television it can easily be transferred to other media types such as the internet. Thus, the inevitable existence of the PSB system would mean that economies of scale can be reached by PSM providers but not by pure online providers solely operating online. However, economies of scope can be realized in the same way by other existing media companies – like publishing houses that are online as well – and are not solely

limited to PSM providers. With regard to newspapers, for example, it holds as well that as soon as information is gathered and edited for the newspaper it can easily be transferred to the internet. Nevertheless, the transformation of content is always connected with some costs; particular adoptions are indispensable. On the one hand these adoptions concern special requirements of the particular media type internet; on the other hand adoptions are necessary to meet the users' needs which differ from the needs on television and radio.⁸⁰ Another important issue is the effect of a possible substitution. Even if it is possible and at first sight seems profitable to transfer all content from one media type to another (using economies of scope) the company always bears the risk that at some point users substitute medium A (e.g. the newspaper or news program of company x) towards medium B (e.g. the website of company x). In that case the demand would only be shifted from one medium to another instead of generating additional demand. Then, however, a shift of financial resources from broadcasting towards online would rather be advisable instead of an unlimited expansion online, as Beyer & Beck (2008: 397) suggest.

In the first place it is public service broadcasters that profit from an online presence and possible resulting cost efficiencies. Also the consumer might face certain advantages that were already highlighted.⁸¹ However, does the consumer *only* profit from PSM online content? Their utility might be negative if the costs exceed the benefits. Though the consumer does not have to pay a *direct price* (paid content) for PSM websites it is not totally for free either. It always needs to be considered that each German citizen with a broadcasting capable equipment is obliged to pay a monthly license fee of currently 5.76 Euro for radio and/or a newly broadcasting device,⁸² respectively 17.98 Euro if additionally in

80 The majority of existing media companies soon realized that the attempts of a 1:1 identical transfer from the initial media type towards the internet did not work but that adoption to the peculiarities of the internet were inevitable.

81 The resulting negative effects on commercial competitors due to the existence of PSM providers online, however, will be the concrete issue in section 4.3.

82 According to the GEZ a newly broadcasting device is a device that does not have a broadcasting receiver (e.g. a radio or TV card), however the reception of broadcasting is possible through new ways

possession of a television (GEZ⁸³ online 2010a). As soon as consumers have to face higher costs for consuming additional content the effect on consumer welfare is negative unless they receive benefits that exceed the costs. The *KEF*,⁸⁴ however, include a figure on their homepage⁸⁵ that indicates that the license fee for public service broadcasting continuously increased throughout the last decades.⁸⁶ The question now is, if the consumer with every single price increase received a greater benefit out of the programs? In this respect, it even needs to be asked if PSM companies truly have incentives to work efficiently by using economies of scope and scale. After all, their financial resources are secured – §12 of the Interstate Treaty on Broadcasting contain a financing guarantee (Bestands- und Entwicklungsgarantie)⁸⁷ (European Commission 2007: 7; Humphreys 1999: 25). Hence, due to their secured license fees public service providers in contrast to commercial ones do not necessarily have to consider costs in the first place. I would therefore suppose that commercial existing media suppliers who in the same way can realize economies of scale and scope from their traditional field of expertise (e.g. from the broadcasting or printed media sector) have greater incentives to realize cost efficiencies.

To conclude, I suggest that an expansion of PSM providers towards online is legitimized to a certain point – against the background that the main infrastruc-

of distribution or new receivers. This includes among others internet capable computers since they can show offers from the internet. The GEZ thereby does not restrict their description to broadcasting content (e.g. audio and or video) only (GEZ online 2010b).

83 Gebührereinzugszentrale [License fee collecting agency].

84 *Kommission zur Ermittlung des Finanzbedarfs für Rundfunkanstalten* [Commission for the determination of the financial requirements for the public service broadcasters].

85 <http://www.kef-online.de/inhalte/entwicklung.html> (05.07.2010). The figure thereby indicates the basic fee (for radio and nowadays newly broadcasting devices), the television fee and the total fee.

86 This increase in the majority of cases also holds for the inflation-adjusted figures that I calculated from 1979 until 2009 with the exception of the price increase in 1988, 2005 (at least for the basic fee and the total fee whereas the television fee increased) and 2009.

87 This financing guarantee was decided by the Constitutional Court in their 6th Broadcasting decision in 1991 (Lucht 2009: 26).

ture, expertise and competencies are existent anyhow. Nevertheless, this does not justify an unlimited spread online. An expansion seems to make sense only in areas where economies of scope and scale can *truly* be achieved and in turn cost savings are passed over to the citizen. Consumer welfare would increase either through decreased license fees or at least license fees that are kept constant while receiving additional content benefits at the same time. An expansion to completely new programs, on the other hand, where cost efficiencies cannot be gained is from the viewpoint of the existing PSB system needless and inadvisable. This could rather be left to the market. Nevertheless, in order to control public service providers in this regard and to check if interventions are successful in reaching their desired objectives, appropriate measures to monitor PSM providers are indispensable as Hargreaves Heap (2005: 135f.) already concluded for the television industry.

4.3. Promotion or distortion of competition with PSM online?

Another argument that could justify the presence of PSM online is the promotion of competition. Therefore this section analyzes if – assuming the existing presence of the traditional PSB system – the expansion towards online is rather promoting or distorting competition. Bardoel & Lowe (2007: 16) state that public service providers have to compete successfully in order to defend their legitimacy and their license fee funding. The extension of PSM towards new media platforms and in particular the internet might therefore be a necessary step to follow the audience, by doing so staying competitive and in turn defending their justification. However, this should not go to the expense of competition in general. Before analyzing the impacts on competition it first of all needs to be considered that the internet market is a multisided market (see also section 3.1.2). With regard to commercial media providers the media platform (provider of a certain website) serves two distinct demand sides simultaneously – the audience (users) and the advertising industry that is advertising on the website. The distinct customer groups in turn influence each other through indirect network externalities which can be positive or negative (Dewenter 2006: 2).

This in turn influences the media platform's behavior – more precisely their pricing, production, and investment strategies (Lindstädt 2010: 70).

The expansion of PSM providers towards online activities at first sight promotes competition. With their entrance there exists a multiplicity of new websites in Germany (see section 3.1.1). Greater competition could thereby contribute to more pluralism and diversity of opinion.⁸⁸ In addition to this, greater competition also implies that competitive pressure within online media increases which in turn leads to the situation that provider (public and commercial ones) have incentives to improve their existing products. Some authors furthermore point out that PSM provider might create more innovation. Motta & Polo (1997: 298) – though with regard to public service television – highlight the uncertainty of potential revenues with regard to new and innovative programs. O'Hagan & Jennings (2003: 37f.) also see the risk that commercial players might not create enough innovative program whereas public service providers can since they are not preferential profit orientated. Consequently, there is a chance that PSM providers contribute to more innovation online. With license fees they have a secured income and hence do not have to cope with the uncertainty of potential revenues for innovative programs in the first run. Armstrong & Weeds (2007: 126) state that incentives for innovations with advertising-funded broadcasting are weak. This is because advertisers prefer to reach as many potential customers as possible (positive indirect network externality from users towards advertisers). However, innovative programs always bear the risk that not the mass audience but instead probably just a niche group is attracted. Consequently, in order to please their advertisers and by doing so securing revenues commercial broadcasters might focus on mass-audience programs exclusively. It should be assumed that the same holds for online programs since advertising revenues play an even more important role on the internet – paid content hardly works which results in a great dependence on advertising revenues. Hargreaves Heap (2005: 128) emphasizes this aspect and highlights that

88 Pluralism and diversity aspects will be further discussed in section 4.5.

building an audience requires more time with innovative programs. In the first run, commercial providers might not want to take the risk of innovating programs when taking the risk of not securing a large user base which in turn endangers their advertising revenues. In the second run, however, innovation efforts by public service providers might even spur commercial providers to produce innovative programs as well. This in turn would promote competition for innovation. With special regard to the inevitable existence of the traditional PSB system the existence might help PSM providers to better promote competition. More precise, their existing expertise and knowledge helps them on the one hand to contribute with similar existing programs from the broadcasting sector; on the other hand their expertise in inventing innovative programs for the broadcasting sector might help to contribute to innovation on the online sector as well. This in turn would spur commercial ones to increase their efforts in order to stay competitive. If innovation efforts, improved products – which can lead to better and cheaper products – and increased variety can truly be reached consumer welfare would increase as well and the presence of having PSM providers online would have a positive effect.

Nevertheless, having PSM sites online could also create a risk of distorting competition. Armstrong (2005: 288) speaks of the danger of market distortion and inefficiencies – mainly due to the fact that PSM providers are publicly funded and rely on secured license fees. In the end this could even result in a reduction of pluralism or the risk that innovation is not ensured with having PSM providers – especially when they copy existing programs from the commercial ones and crowd out commercial players. The financing guarantee might result in a lack of true incentives to contribute to pluralism and innovation. A distortion of competition in general has negative effects on consumer and producer welfare and hence harms society. I will start with the *effects on producers* (commercial providers online): first of all it has to be considered that commercial and public service providers do not compete under the same conditions due to their different forms of financing. Whereas commercial providers have to finance themselves mainly through advertising revenues public service providers

have their secured financing source. Prior to the existence of PSM online, both economic competition⁸⁹ and editorial competition were already quite intense with pure commercial providers (Dewenter & Haucap 2009b: 12; Rebmann 2003: 2f.). There is a great risk that the promotion of pluralism and innovation by commercial providers gets restricted if having too much PSM content online – especially in an area that up to then seemed to have worked being left to the market (Beyer & Beck 2008: 397). Thereby, the existence of the traditional PSB system might reinforce this effect. PSM providers could easily use their powerful position on the broadcasting market and transfer it to the online sector. They could even cross-subsidize online programs with license fees and advertising revenues⁹⁰ they receive on their traditional platforms. Since public service providers already have a powerful position on the broadcasting sector⁹¹ they might rather focus to spend money on online activities in order to achieve an equivalent powerful position there as well. At the moment there are no limitations on how much of their money public service providers have to spend on which media type.⁹² In addition to this, PSM online spending will account for 491.58 Mio. Euro during the current period from 2009-2012 (KEF 2009: 125-127). In comparison to the previous period 2005-2008 (online spending: 284.8 Mio. Euro), public service broadcasters are therewith significantly expanding their spending for online activities.

89 This is especially due to the fact that high fixed costs have lessened in times of new technologies and digitalization and are not as high on the internet as once on television (Beck 2005: 28f.). Studies show, for example, that setting up a website on the internet is quite inexpensive (Dewenter & Haucap 2009b: 22; Lindstädt 2007: 97) which facilitates the entrance of new competitors.

90 Advertising is permitted to a certain extent for PSB on the broadcasting sector though the main source revenue is license fees.

91 In May 2010 the public service broadcasting channels (ARD, ZDF, ARD III, 3sat, ARTE, KIKA, Phoenix) held a market share of 41.6% on the audience side. The RTL group at the same time held a market share of 26.5% and Pro7Sat1 a market share of 21.9% (KEK online 2010).

92 For the current period 2009-2012 the public service broadcasters even waived their self-commitment of limiting their online spending to 0.75% that was still valid for the previous period 2005-2008 but was anyhow exceeded (actual online quotes: ARD: 0.86%, ZDF: 0.94%) (KEF 2009: 257f.).

Consequently, having PSM providers online could in worst case result in commercial providers – assumingly smaller ones – being forced to leave the market. This could occur when the powerful PSM providers with their presence online draw users from smaller online platforms away. It would initially harm smaller providers. Since the internet market is a multisided market and due to the positive indirect network externalities that users exert on advertisers this negative effect would be reinforced. Due to fewer users on those platforms advertisers would most probably transfer their online spending to websites with a greater audience.⁹³ Depending on the concrete effects, this could even go to such lengths that dominant positions on the market occur where some big commercial websites and powerful PSM sites remain while smaller providers get crowded out. Due to blurring boundaries on the internet this distortion of competition could thereby not only affect Germany’s online market and its providers but technically even harm companies from other countries.⁹⁴ With regard to innovation, there is a risk that the existence of PSM sites could slow down innovation attempts by commercial ones. Though the development of new programs got cheaper on the internet (compared to broadcasting) costs do incur. Whereas PSM providers do not have to regard the costs in first place, and even have the opportunity of cross-subsidization, the commercial ones have to do so. Inefficient cost strategies of public service providers could harm innovation efforts by commercial players. Burri-Nenova (2009: 16) on the contrary argues the other way around and highlights that new products will actually be provided by the market and refers to the great number of existing diverse media as well as consumer’s selection. From this point of view, it should be argued that commercial providers in the same way are capable of bringing out innovative programs. This in turn diminishes the obligation of having PSM programs for se-

93 Assuming homogenous websites and presuming multihoming, i.e. the use of different types of media at the same time to advertise on (nevertheless advertisers concentrate their multihoming rather on audience rich websites).

94 In particular German speaking countries like Austria and Switzerland since (the majority of) German websites (commercial & public service ones) are mainly in German language exclusively.

curing innovation online; instead having them could unnecessarily distort competition.

However, it is not only the commercial providers that would suffer from a distortion of competition. Also *consumer welfare* could get negatively affected. The effects would be negative if the initial increase in competition (more providers online) results in the contrary and smaller commercial providers would be forced to leave the market. In particular, if PSB takes advantage of its powerful position in the broadcasting sector and cross-subsidizes their online programs. Pluralism and innovation efforts by commercial ones could decrease and negatively affect consumers. In addition to this, consumers would be harmed if PSM providers do not actually contribute to innovation (lack of incentives due to financing guarantee). If, however, they do contribute to innovation there is a risk that by doing so they aim for agency maximization (O'Hagan & Jennings 2003: 38). PSB providers might have incentives at first to create a powerful position on the internet and secondly by doing that securing and extending their powerful position in general. By focusing on agency maximization (instead of profit maximization) they might lose sight of the costs and create cost inefficiencies. This, in turn, could make increased license fees necessary. If then quality and variety (Motta & Polo 1997: 314) do not outweigh this price increase, consumer welfare would subsequently decrease.

To conclude: It is true, as Wiedemann (2004: 15) put it, that a certain distortion of competition is unavoidable when having PSM providers online. Every entrance of new competitors change competition structures and might harm existent platforms to a certain extent. Nevertheless, the distortion of competition should be limited. In particular, it should not result in PSM providers transferring their powerful position from the broadcasting sector to their online platforms just because they have the opportunity to do so due to secured license fees and the possibility of cross-subsidization. Furthermore, cost inefficiencies with the production of PSM programs must be avoided in order to not hinder commercial providers to make a contributing as well. Instead of offering the

same content as commercial providers, PSM providers should *at most* complement existing programs or formats (e.g. innovative programs) and by doing so use their existing expertise and competences from the broadcasting sector. In turn, this would additionally spur commercial providers and promote competition. All other areas, however, should be left to the market. It should be regarded counterproductive if PSM websites copy existing formats of commercial competitors. Those areas could and should be easily left to the competitive market – particularly by reason of not unnecessarily hinder efforts by commercial providers and thus distort competition. The development of powerful positions of PSM on the internet should be prevented in order to countervail an augmented crowding out of commercial providers.

4.4. Indirect network externalities favoring PSM online?

It was stated in the previous section that media markets are multisided markets – indirect network externalities play a significant role. However, when looking at German PSM websites they are *not* allowed to finance their online programs over advertising. On first sight, therefore, it seems that indirect network externalities have no impact with regard to the question of the justification for PSM online. At second glance, however, network externalities appear to play a role.

In fact, with regard to PSM platforms online we solely face one demand side – the users. Nevertheless, when analyzing competition structures online – including commercial and public service providers – both demand sides come into play and get affected. The user and the advertising side are distinct demand sides, nevertheless they are connected to each other through indirect network externalities (Dewenter 2006: 2; Dewenter & Haucap 2009a: 36). Like in any other media type (e.g. newspaper, television) users always exert positive externalities on the advertising side (Dewenter 2007: 55). This is because companies who are placing advertising on media platforms appreciate to reach a preferably

large audience.⁹⁵ Hence, the larger the number of participants on a certain website, the more attractive it gets for the advertising side to place their ads there. For the user on the other hand the indirect network externalities that the advertising side exerts on users are ambiguous – they can be positive or negative (Ferrando & Gabszewicz 2003: 1f). As long as users like or even appreciate advertising they would profit from a larger number of advertisers as well (positive indirect network externality). They would, for example prefer the website of a provider with a large number of advertisements due to receiving helpful information that influence purchase decisions – in addition to consuming the actual media content. However, if users regard advertising as a nuisance the indirect network externality would be negative – the more advertising is aired on the corresponding website the fewer users would be willing to use it and rather prefer websites with less or no advertising at all. Even though the answer – if facing positive or negative externalities – cannot be answered in a lump sum, the literature often expects that advertising on the internet in the majority of cases causes a more negative indirect network externality on users (Anderson & Gabszewicz 2006: 571).⁹⁶ Popup-banners, for example, have to be clicked away and disturb the user in what he is currently doing whereas advertising in newspaper can be more easily skipped over.

The question now is how these indirect network externalities interact with the existence of PSM sites online and how this in turn affects each demand side – users and advertisers as well as commercial competitors. If PSM providers operate online it might have a positive effect on users. Due to the user's assumed dislike of online advertising they now have the option to rather stick to PSM websites *without* advertising. Users could draw their attention away from commercial websites (especially those with much annoying advertising) towards

95 However, and as mentioned in section 3.1.2, this audience for sure has to be consistent with the target group (customers or at least potential customers) to reach the superior goal of profit maximization.

96 Therefore the assumption for the following section is predominantly that the indirect network externality from the advertisers towards the users is negative.

PSM websites and thereby experience increased consumer welfare.⁹⁷ Furthermore, since the financing of PSM websites is not at all dependant on advertising revenues their providers do not have to consider advertisers as a second demand side. Consequently, they can exclusively focus on their users' interests (e.g. providing more minority programs rather than focusing on advertiser catching mass audience programs) which in turn would increase user's welfare once more. With regard to advertisers as the second demand side, it was already stated that they appreciate websites with a large user base. One can assume, they would rather appreciate fewer providers online with larger user bases (larger network size) than many providers with smaller ones. At the moment competition is quite intense online – many websites exist offering news and information – thus users have a large choice and spread over a multitude of websites. This in turn could be suboptimal for advertisers – they face many websites with smaller user bases instead of fewer websites with larger amounts of users. Thus, in order to reach anyhow as many potential customers as possible they might be forced to advertise on a multitude of less audience rich websites instead of a few bigger ones – this, however, might increase costs (e.g. handling and transaction costs). At first glance, this could change with the existence of PSM websites. First of all and as stated above, the existence of PSM sites could draw users away from certain commercial sites – on the one hand due to the dislike of advertising, on the other hand due to the fact of having an additional news provider (increased or better choice). For some commercial platforms the network size on the user side would consequently decrease. Due to positive network externalities users exert on advertisers, the latter ones in turn would draw their ads away from the hitherto websites (with a decreasing user base) to websites with a larger user base in order reach more people (potential customers) with their advertising.⁹⁸ Advertisers would subsequently try to center on platforms that possess high(er) amounts of users. By doing so they might experience a greater welfare. Though they had to face transaction costs when changing the platform

97 On the contrary: In case that consumers regard advertising as a positive measure, for example through receiving helpful information, welfare for consumers on PSM websites would decrease.

98 Smaller providers would not only loose users but at second step also advertisers.

they might now have less handling and management costs through advertising on a smaller amount of websites. Assuming negative indirect network externalities from advertisers towards users the latter ones might probably experience a benefit as well. There might be some websites with more advertising than others, thus disturbing advertising might be easier to avoid.⁹⁹ At this point, however, it has to be considered that commercial platforms with less advertising need to finance their sites over other sources of income. Paid content (paid by the user) might increase on those websites and might lead to decreasing welfare if benefits do not outweigh the costs.

Nevertheless, these assumptions are rather optimistic and neglect certain circumstances. First of all, these arguments imply that both advertisers and users *singlehome* – i.e. use one website to consume or advertise on exclusively. This premise however seems fairly unrealistic. Both demand sides rather *multihome* (using a multitude of websites). The advertising industry almost always multi-homes – both *intermedial* that is on different media types, (e.g. internet and television) and *intramedial* that is on different platforms (e.g. websites) within one media type (here the internet) (Chyi & Sylvie 1998: 4-12; Lindstädt 2010: 96). By doing so companies try to maximize their media coverage, i.e. try to reach as many (potential) customers as possible. Moreover, the audience can and does multihome as well. The majority of consumers stick to different websites and different media types in addition to the internet. Secondly, the need for advertisers to switch to more frequented platforms is always connected with transaction costs. They have to be proportionate to the benefits the advertiser achieves. In this context, it furthermore needs to be considered that the size of the user base is not the only selection criteria; instead quality criteria become more important. In addition to this, even *if* fewer platforms to advertise on are assumed, it always means that those platforms have a larger margin to set their prices. In worst case the movement from advertisers to audience-rich sites could

99 However, depending on the strength of network externalities there might be a feedback loop. If smaller platforms (now with less advertising) get more users again, also the attractiveness for advertisers might increase again.

thus lead to concentration tendencies; big commercial media platforms could take a dominant position on the advertising market which harms advertisers. Thereby, PSM online providers could not even counter steer against this trend since they are not allowed to include advertising. In the end this would result in higher costs for advertisers to pay for their adverts online. Taking a look at the effects on commercial providers: due to the commercial providers' high dependence on advertising revenues the existence of PSM sites could even result in smaller commercial platforms being forced to leave the market (due to drifting away users in first place and drifting away advertisers in second place) or to charge for content. This in turn could have a reinforcing effect on the user side – they might face decreased pluralism (incl. innovation and diversity) if commercial providers exit the market or as stated above might have to face paid content on certain commercial sites.

The analysis of PSM's online presence on indirect network externalities up to now did not specifically take the existing broadcasting system into account. However, when taking a closer look it gets clear that this existence does not change the above stated argumentation. By asking for an economic justification for PSM online with regard to indirect network externalities it does not seem to make a difference if the traditional broadcasting system does exist or not. This mainly has to do with the fact that PSM websites are not allowed to contain advertising. The existence of PSB (radio and television) would probably become considerable *if* online advertising was allowed for PSM providers. Therefore, it would be important for PSM providers to be able to transfer their existing broadcasting audience to their own websites. Their established reputation and quality might indeed convince the audience to use the belonging online offers. In that case public service providers could make use of the positive indirect network externality that viewers (or listeners) exert on advertisers. Having a big(ger) network size on the user side would make this platform attracting to advertisers. In that case, at least advertisers might profit. However, this does not yet consider the impact on users and commercial providers which I assume would be rather negative: on the one hand the negative indirect network exter-

nality for users due to their expected dislike of advertising and on the other hand the negative effect on commercial providers due to drifting away advertisers.

To conclude, with regard to indirect network externalities it would at the most be users who profit from the existence of PSM websites – mainly due to advertising-free content and possibly getting more minority programs. For the advertising side on the other hand the effects of having PSM online would rather be negative especially with regard to the risk of facing harmful concentration tendencies on the advertising market of the commercial platforms. Furthermore, if the existence of PSM websites results in less – especially smaller – commercial providers (crowding out) it could in turn have a negative impact on consumers. They could suffer from decreased choices, hence less pluralism which would result in decreased user welfare and outweigh the positive effect on users in the first place. The inevitable existence of the traditional broadcasting system thereby does not change the above discussed effects.¹⁰⁰

4.5. *Externality reasons justifying PSM online?*

The traditional form of public service broadcasting has to a large part been argued on the basis of risking market failure when not intervening into the market. In the same way as the broadcasting industry the internet is oftentimes accused of being an industry with a great risk of market failure. However, many authors do not see market failure arguments – due to monopoly power, public goods, information asymmetries or externality reasons – to be anymore existent in the digital era and hence on the internet.¹⁰¹ As Armstrong & Weeds (2007:

100 However, it could be interesting to further analyze *if* in total positive effects could result from permitting PSM providers to include advertising online. This, however, would go beyond the scope of this paper and demand for further research.

101 As already stated in the introduction, this article waives to repeat the fundamental discussion of pros and cons of the public service provision and, instead, concentrates on the specific cross-media effects. For a detailed argumentation why market failure arguments do not hold anymore in the digital

82) put it: “[...] digital broadcasting greatly mitigates traditional market failures and, in this context, the market will give people broadly what they want to watch. In this sense, the ‘market failure’ basis for public service broadcasting falls away”.

Notwithstanding, other authors still argue with externality reasons as a remaining rationale for having PSM in the digital era (e.g. Bardoel & Lowe 2007: 14; van Dijk et al. 2006: 274f.). In media markets externalities are quite often observed since information is regarded to present a dual value (Dewenter & Haucap 2009b: 10). On the one hand media have an effect directly on the person who is consuming content. On the other hand content then also has a second effect on society. If a person watches a particular program (thereby learning about life saving skills, for example) this could have an impact on the wider population (that person is probably capable of (better) coping with a future emergency situation) that the person did not consider when watching the program (Armstrong 2005: 289). In order to have positive effects on society the aim is to promote positive externalities (benefits) while limiting or preventing negative ones (costs) (Armstrong & Weeds 2007: 109). Hargreaves Heap (2005: 125-127) speak of *horizon-stretching programs* which contribute to positive external effects – first to the individual and secondly to society. Thus, externality reasons could legitimize the presence of PSM online, especially with regard to the fact that the traditional form of PSB, including present programs, expertise and competences are anyhow existent. Positive externalities (e.g. providing certain educational programs) that are generated on television and radio can be transferred and used online as well (cross media effects). By doing so, cost efficiencies could be reached since the transfer and adaption of an existing broadcasting program to the online requirements should be cheaper than the production of a fully new program for the internet. To illustrate with an example: documentations or an educational program on television could be adapted to a

era and on the internet please refer to Armstrong & Weeds (2007), Beyer & Beck (2008 & 2009), Depypere & Tigchelaar (2004), Dewenter & Haucap (2009b), Donders & Pauwells (2008).

short video-file on the corresponding website. Furthermore, the once collected information for the program can be used to create an article or even a special edition on this topic.

According to Leurdijk (2007: 83) PSM online could produce public value, especially by giving universal access, ensuring *quality* standards as well as educating the audience in digital skills. By doing so, they would furthermore work against fragmentation and enclosure of information and create social cohesion on the internet (Bardoel & Lowe 2007: 20; Karppinen 2009: 164). This is crucial online – an area where users can easily decide on their own what content to consume – this risks that they just watch what interests and confirms their own beliefs (Karppinen 2009: 161f.). Having programs and content with high quality online would as well promote positive externalities. With special regard to quality, van der Wurff (2007: 108) states that in certain areas like news and information quality cannot rely on market forces alone. Going one step further, the existence of PSM online could thereby even be regarded as a reprehension function for commercial providers online, for example in the form of quality insurance how O’Hagan & Jennings (2003: 38) already stated for the broadcasting market. PSM sites could fulfill a monitoring and signaling function; their quality content would bring commercial providers to provide quality as well. Here, again, the advantage of having the inevitable existence of the traditional public service broadcasting system becomes apparent. For the broadcasting sector it is often argued that having a public service broadcasting system with a special credibility that is providing diversity and pluralism is also responsible for the little conditions that are demanded from the private broadcasting sector (Beyer & Carl 2008: 53; Moe 2009: 190; Trappel 2008: 314). If this is the case, PSM providers could on the one hand transfer their existing quality programs to the online sector. On the other hand they already have competence and experience in reprehending and monitoring; consequently they could easily transfer and use these knowledge also on the internet. In that case, the inevitable existence of the traditional PSB system would save costly set-up costs as well as costly learning periods that would be necessary for commercial providers – es-

pecially those who newly enter the market. Closely connected to this, PSM sites could thereby additionally give the user orientation in an area where the information flood is enormous (Rüter 2002: 144). Furthermore some researchers also subsume *innovation* as well as promoting *media pluralism* and *cultural diversity* under the externality argument (e.g. Donders & Pauwells 2008: 297; Hargreaves Heap 2005: 137, 141; Murdock 2004: 17f.; van Dijk et al. 2006: 252).

If subsuming those aspects under the externality argument, this area is to my point of view closely connected with the merit good reasoning. As stated in section 2.1.2 merit goods are those goods that are important to society, which however, people consume to a lesser extent than is good for them and are not provided by the market at all or just with many difficulties (Moe 2009: 190; Robinson et al. 2005: 108). For this reason it is argued that people who know what is good for society (e.g. the government) first of all decide on classifying merit goods and subsequently offer those kinds of goods the consumers (public provision) for a reduced price (Dewenter & Haucap 2009b: 4f.). In the broadcasting industry this is especially assumed for certain programs like news, documentaries or educational programs (Robinson et al. 2005: 108).¹⁰² Media indeed have a public function, they transfer information and knowledge while at the same shaping public opinion which is particularly valid for news (Anderson & Gabszewicz 2006: 569; Beck 2005: 15). Thus, PSM could also online fulfill the function of providing merit goods. Among others this includes the assurance of minority programs, thereby serving all citizens, promoting to pluralism (cultural diversity and diversity of opinion) and not just focus on mass audiences exclusively. These areas might not sufficiently be served by commercial markets (Bardoel & d'Haenens 2008: 343). Again, due to the two-sidedness of the internet market media companies might be tempted to focus on mass audiences only since they in turn guarantee a better perception towards the advertising industry. Providing minority (e.g. cultural programs) and niche programs (e.g. special

102 Ward (2006: 62) even argues with market failure with respect to the lack of providing certain goods that benefit society.

news programs) might therefore be neglected by commercial providers since they do not seem profitable (Moe 2009: 190). Consequently, it might be reasonable to have PSM providers online to fill this gap. They should be offering content and programs that aim at specific minority groups or even geographical regions not met by the commercial ones (Aslama 2008: 20; Hills & Michalis 2000: 479). In particular the consequential contribution to pluralism is highlighted by authors who are supporting PSM online. It is the importance of pluralism and cultural diversity to contribute to democracy and cultural citizenship (Hills & Michalis 2000: 477, Leurdijk 2007: 71; Murdock 2004: 18). Aslama (2008: 20) and Syvertsen (2003: 161) furthermore highlight fostering culture and protecting national and regional identity in times of globalization. This could especially be an important issue on the internet where boundaries are blurring. This paper's assumption of the inevitable existence of the traditional public service broadcasting system might give good reasons that this task should be better taken over by PSM than commercial players. Contributing to pluralism and cultural diversity is already their task on radio and television. Consequently, the expertise and knowledge that was gained in this field can be transferred and used for the online sector as well. This could concretely apply to minority or niche programs that are either fairly similarly transferred (e.g. short video file) or adapted to other formats. The built up reputation of PSB (e.g. regarding quality) could take over a signaling function and convince people to consume PSM online content as well. Moreover, PSM providers could take the position of monitoring and reprehending commercial players.

The question is, however, why it necessarily has to be PSM providers who generate positive externalities, limit negative ones and contribute with merit goods¹⁰³ to society. Motta & Polo (1997: 296, 321-323) though with regard to public television, emphasize that the justification for minority programs might be overcome through the opening of the markets and argue for public service provision in areas where pluralism of opinions is put in danger and with a focus

103 The arising problematic questions with merit goods were already highlighted in section 2.1.2.

on programs that are otherwise not offered by commercial ones. Hargreaves Heap (2005: 146f.) even regards diversity arguments in times of a multi-channel era dispensable. Barriers of entry are fairly low, thus competition online is quite intense¹⁰⁴ and hence favors pluralism (Depypere & Tigchelaar 2004: 21; Dewenter & Haucap 2009b: 24; Rebmann 2003: 3). Thus, also commercial providers could and do make a contribution with goods that are desirable for the society (e.g. quality,¹⁰⁵ minority and innovation programs). As stated in section 4.3, new products will actually be provided by the market due to a great number of existing diverse media as well as consumer's selection (Burri-Nenova 2009: 16). Also programs do exist which are contributing, for example, to the education of society – not least because there is demand for it (Dewenter & Haucap 2009b: 19). Furthermore, with (intense) competition a media company has no incentive to provide worse quality since consumers could easily switch to competitors. Competition has as a monitoring function; thus monitoring the providers on the market could also be taken over by competition itself. In this regard it might be even sufficient that PSB is taking a re-pression and monitoring function on the traditional broadcasting sector *exclusively* instead of expanding towards online. Furthermore, Range & Schweins (2007: 7f.) found out that with many publishing houses, where the traditional product newspaper is regarded to have a high journalistic quality also their online websites are said to be journalistically discerning. This argument is closely connected with reputation – media are usually not consumed once but on a regular basis. As soon as something is consumed frequently, reputation is

104 Traditional broadcasting suppliers (television and radio), providers from the printed media industry (newspapers and magazines) as well as pure online players can be found – offering media content online.

105 Another interesting aspect brought up by Motta & Polo (1997: 323) – though with regard to public television – is that quality reasons do not necessarily demand for a public service *provision*. Instead, it could be the production of quality content that is taken over by public service agencies whereas the distribution takes place over private channels – this would also give the private suppliers enough incentives to provide high quality (ibid). In principal, it has to be anyhow asked what quality is. It is not really possible to measure “quality” (Hargreaves Heap 2005: 146). Judging quality will to some point always be subjective.

built up; hence it can be expected that no media company has an incentive to lose its good reputation by providing non-quality content (Beyer & Beck 2008: 392f.).

Going one step further and taking the powerful position of public service providers into consideration it could even be argued that the existence of PSM websites limits and restricts commercial players to enfold their true attempts (e.g. regarding quality and minority programs) which might hinder them to contribute to pluralism and diversity. They might not be able to compete with PSM providers, mainly due to the different form of financing and therefore decide to not produce such programs at all. PSM providers thereby have the advantage of the secured license fee on the one hand but also the opportunity of cross-subsidization on the other hand. The initial advantage of the existing PSB system might soon become a problem – at first for commercial competitors (being forced to waive the production of certain programs) and secondly for users as well (decreasing pluralism and diversity). Consequently, it is not only the risk of distortion of economic competition that was discussed in section 4.3 but also a distortion of quality competition.

A quite crucial argument that especially holds for the internet is, if public service provision really achieves the desired effect. It needs to be seriously questioned if it is efficient to intervene in media markets by providing goods that the consumer should consume, but otherwise would not consume? Subsequently, the digital world makes it possible that people avoid unappealing public service programs (Armstrong 2005: 284, 290).¹⁰⁶ Against this background it needs to be doubted that the existence of PSM online actually helps working against fragmentation, individualization and the enclosure of information or even fostering culture and national identity. The same holds for the claimed orientation function. This would mean that the user directly navigates to a PSM site when looking for something in particular. However, it seems rather the search engine sites

106 Once the television market was still a monopoly the availability of TV-channels was limited, however, it was possible to get people to watch desired programs (Armstrong 2005: 290).

(e.g. google) that determine which particular websites users visit; hence it would be fairly them who provide orientation at most (Karppinen 2009: 159). Thus, even *if* PSM sites include appropriate measures on their websites to achieve the mentioned desirable effects, it would require ensuring that users actually visit those sites and consume the desired content. In the end, however, consumers cannot be forced to consume information from PSM sites. The internet is bringing the consumer from a fairly passive to an active role – users surf to sites that provide what they are looking for and not anymore the other way round (Prado & Fernandez 2006: 52). In contrast to the traditional mass media types the internet can therefore be characterized as a lean-forward medium (van Eimeren & Frees 2006: 412).¹⁰⁷ Karppinen (2009: 152) characterize it as a demand and search driven media environment. Positive effects (e.g. positive externalities) therefore can only be promoted if people *actively* visit PSM websites. Then, however, the question is which audience actually consumes PSM content? According to van der Wurff (2007: 112-114) studies show that especially higher educated audiences use a variety of media whereas lower educated ones rather stick to television and within this focus on commercial channels. In that regard a public service provision should even be regarded counterproductive; it then benefits those audiences that probably would be willed to pay a (higher) price for those programs. Hence, the cross-subsidization would go into the wrong direction. Consequently, van der Wurff (2007) concluded that PSM online should focus on lower educated audiences whereas serving the higher educated ones could be left to the market. However, again, this seems fairly impossible when users cannot be forced to watch desirable content. It gets even more complicated with regard to preventing or limiting negative externalities. Nearly everybody can broadcast on the internet and people can consume any content available on the World Wide Web due to blurring national boundaries (Karppinen 2009: 155; van Dijk et al. 2006: 254, 275). Users face boundless possibilities, the next website is *just a click away*. Consequently, even if public service websites limit or prevent negative externalities (e.g. violent programs) it

107 Whereas television and radio are regarded as lean-back media (van Eimeren & Frees 2006: 412).

cannot be assured that no violent program is shown or watched on the internet at all. As Hargreaves Heap (2005: 139) puts it: “If the source of a market failure is something on the demand side, like the possible negative externalities associated with watching excessively violent programmes, then in a multi-channel world there is little or no sense in addressing this problem through a targeted supply side intervention [...]”.

To conclude: promoting positive externalities while limiting negative ones seems hardly impossible online. Nevertheless, against the background that the traditional form of PSB exists, promoting positive externalities online should be allowed for PSM providers where *possible*. Content can fairly easily be transferred from broadcasting to online and furthermore be used manifold; consequently cross media effects (e.g. cost efficiencies) can be achieved. By doing so PSM would in turn contribute to pluralism and diversity. Nevertheless, as already concluded in section 4.3, the extent of PSM activities should be limited to areas that are not yet offered to a large scale by commercial players but instead on *complementing offers*. PSM online should not follow the goal of producing mass audience programs. Instead it is completely legitimate to reaching just niche groups with minority programs.¹⁰⁸ By doing so, it could furthermore be ensured that PSM is not exploiting its powerful position towards the internet and thus that commercial platform attempts to generate positive externalities and to contribute to pluralism and diversity does not get unnecessarily hindered or restricted.

4.6. *The need for PSM online for media bias reasons?*

As stated in section 2.1 media can be characterized by a dual media effect; that is media transfer information and knowledge while at the same time being a factor of building up public opinion (Anderson & Gabszewicz 2006: 569; Wentzel 2002: 2). A convincing argument for PSM websites online could there-

108 This however, requires in turn the understanding that PSM’s success should not be measured according to audience figures and quotas.

fore be to ensure non-biased information.¹⁰⁹ Biased information became more critical with the emergence of the internet. It is nowadays not only the risk of biased information from providers within national boundaries, for example Germany. Blurring national boundaries on the internet make the problem of biased information from all over the world an essential issue. The bias could occur from two different sides. It can be caused by users itself who express opinions and distribute information on forums or own websites. As Karppinen (2009: 153) puts it, citizens nowadays compete with journalists on the production and distribution of political information which makes it harder to control what is regarded as news. On the other hand the bias could result from media providers – in particular the commercial ones. Media bias is a fairly broad area and coping with all forms of media bias would go beyond the scope of this paper.¹¹⁰

Therefore, this section focuses on a particular form of media bias – the biased reporting towards advertisers. This bias is closely connected to the two-sidedness of the internet market. As it was stated earlier, the majority of revenues from commercial websites come from advertisers which imply a high dependence on them. If a big advertising client draws his adverts away it could seriously harm the accordant media platform. It could therefore be tempting for

109 This for sure depends on the organization of the public service system and in this case concretely refers to Germany. In Germany the public service system is organized in a way without political influence. Therefore, the danger of biased reporting should be relatively low (though a 100% unbiased reporting should even here be not realistic. In the end no media can ensure to report totally unbiased – neither commercial nor public service ones). However, in countries where the political and governmental influence is very high or the public service system is even state-owned (e.g. China) the risk of biased reporting from public broadcasting systems should be regarded as quite high and severe. In the latter case it might rather be the commercial providers that would have incentives to provide unbiased information in order to counter steer the political biased reporting of state owned media companies.

110 Regarding media bias in general there is no clear consensus among researchers if it is competition or concentration tendencies that lead to more biased media coverage. For a short literature overview of recent works dealing with the issue of media bias please refer to Lindstädt (2010: 77-79). To my point of view, this general discussion on media bias is furthermore difficult to separate accurately with the discussion of externality reasoning (see section 4.5).

online media operators to not report in a negative way about a company that is simultaneously an important advertising client. According to van der Wurff (2007: 108) markets fail in areas of news and information since independence and quality cannot be assured by the market only. Thus, a PSM provision on the internet could be helpful – at least in certain areas. Lambert (2007: 62f.) concretely sees the function of public service providers to offer balanced and comprehensive news reporting. In the same way Bardoel & d’Haenens (2008: 343) see the need for public service provision in order to provide reliable information, and also van Dijk et al. (2006: 274) especially point out the areas of news and opinion. PSM providers on the internet might indeed represent a helpful complementation of existing offers in order to balance or even avoid biased reporting towards advertisers. First of all, PSM websites are not allowed to contain any form of advertising on their websites – thus the problem of biased reporting towards advertisers is no issue. This in turn might balance a possible bias resulting from advertising financed online media. Secondly, PSM websites would thereby take a reprehension and monitoring function. The purely existence of unbiased PSM sites bears the risk that a possible biased reporting from commercial players could immediately be detected by consumers. As a consequence, consumers would drift away from those websites and the affected commercial provider might lose reputation it has built up before. Thus, the incentives for commercial suppliers to bias certain information might decrease. The inevitable existence of the traditional broadcasting system might reinforce the advantage of having unbiased PSM websites. Public service providers can transfer their experience and expertise they have gained on the traditional broadcasting sector in taking over a monitoring and reprehension function in this regard towards the online sector.¹¹¹ The reputation that public service providers have built up on the television and radio sector represents a further advantage. It could be transferred to PSM websites as well and thus work as a signaling function for users.

111 Even though public service providers are allowed to contain a certain amount of advertising the risk of biased reporting towards advertisers should be regarded quite low since the majority of revenue is gained over license fees which lessens the dependence on advertising revenues.

However, the question is, if the risk of biased information is that serious in order to legitimize public service providers to operate on the internet. First of all, it has to be considered that biased information can differ regarding their impact on society. Not any biased information has the same negative impact on users. For example, biased reporting within the celebrity section of a website assumingly has a less significant impact than a biased reporting about a sensible international political matter. Van der Wurff (2007: 108) highlighted in particular areas of news and information and did not refer to all fields of content. Dewenter & Haucap (2009b: 24) put an even more narrow emphasis – on those areas that have a high political and societal relevance where furthermore a biased reporting cannot easily and immediately being observed by users. Apart from that, both reputation as well as competition hold against biased reporting – if they work well public service provision can be limited (Beyer & Beck 2008: 392; van Dijk et al. 2006: 274). Media providers that have built up a good reputation online would assumingly have no incentives to risk this reputation only to keep an advertising client. Furthermore, existing media companies operating online can in the same way take advantage of transferring their good reputation from their original media platform towards the internet. Hence the above stated advantage is not limited to PSM providers. According to Rebmann (2003: 2) many newspapers transfer their reputation and reliability towards online. In addition to this, users most probably will find out fairly soon about this biased reporting since most people *multihome* and not use one media platform exclusively. As a result they might drift to competitors to avoid unbiased reporting. Moreover, and as stated in section 4.5, competition itself has a monitoring function (Dewenter & Haucap 2009b: 20). Companies monitor each other; if there is a competitor that would provide false or biased information, other companies would leverage this by drawing customers away to their own websites.

To conclude: Commercial media companies' incentives to bias information should be quite low with intense competition – which is the case on the internet

–the risk to lose their reputation and users’ multihoming.¹¹² A PSM offer on the internet should *at the utmost* be legitimized with regard to *complementing offers* – thereby in areas with a fairly high political and societal value where the identification of a possible bias is fairly difficult for users, as Dewenter & Haucap (2009b: 24) suggested. Thereby, the inevitable existence of the traditional PSB system could be helpful. The already built up reputation can be transferred to their websites and work as a signaling function for users. Furthermore, the existing expertise and experience with taking over a reprehension and monitoring function on the broadcasting sector in this regard can be transferred to the online sector as well. Apart from those mentioned areas it is, however, without much doubt that mechanisms like reputation of commercial providers, competition and users’ multihoming work against biased reporting.

5. Conclusion

Many researchers have already dealt with the very controversial topic of PSM online and the question if they should have a legitimization online and if so to which extent. No paper, however, up to now analyzed this question against the background of the inevitable existence of the traditional PSB system and possible resulting cross media effects. It was the aim of this article to fill this gap. The analysis has shown that there is a certain justification for having PSM online especially due to their gained expertise and competencies that might be transferred to their corresponding websites. Nevertheless, the paper concluded that PSM should not expand unlimited; in particular the expansion of their already existent powerful position should be prevented. The internet and digitalization in general have changed the media environment and things once possible on broadcasting (e.g. making people watch desirable content) cannot be ensured on the internet anymore. For this reason, it is reasonable to use the existing in-

112 In addition to this, it must be questioned if it can be totally ensured having unbiased information on PSM sites. As stated earlier, no media can ensure to report totally unbiased – neither private nor public ones. However, this question would lead into the general discussion of media bias which would go beyond the scope of this paper.

frastructure, in particular expertise and competencies to produce content where cost efficiencies can be gained which in turn benefits consumers. In this regard, the remaining rationale should lie in the *complementation* of commercial programs (e.g. minority programs) in order to contribute to more pluralism and diversity. With regard to preventing biased information the focus should be on areas where the risk of advertising biased information has an impact on society (in particular news areas). All other areas, however, should be left to the market in order to not unnecessarily hinder accordant efforts by commercial providers, thus risk an unnecessary distortion of competition which in turn would entail negative effects on consumers.

6. Appendix

Rank	Title Online Media	Visits (in Mio. per year)	Market Share (of Top 20 in %)
1	Spiegel Online	1,327	20.33
2	Bild.de	1,196	18.32
3	Chip Online	564	8.64
4	Kicker Online	345	5.28
5	Heise Online	310	4.75
6	Sport1.de	294	4.5
7	Focus online	281	4.3
8	Sueddeutsche.de	270	4.16
9	Welt.de	265	4.06
10	n-tv Online	232	3.55
11	FAZ.net	215	3.3
12	Stern.de	194	2.98
13	Computerbild.de	184	2.82
14	PC-Welt	173	2.66
15	N24 Online	146	2.24
16	Zeit online	128	1.97
17	Handelsblatt.com	116	1.77
18	Rp-online	102	1.56
19	FTD.com	99	1.51
20	Finanzen.net	88	1.35

Top 20 News portals of the Year 2009, source: own graph according to BITKOM 2010 online.

7. References

Agof online (2009): internet facts – counting tool, URL: <http://www.agof.de/index.600.html> (27.10.2009).

Akerlof, G.A. (1970): The Market for “Lemons”: Quality Uncertainty and the Market Mechanism, *Quarterly Journal of Economics* 84, 488-500.

Albarran, A.; Dimmick, J. (1996): Concentration and economies of multi-formity in the communication industries, in: *Journal of Media Economics* 9(4): 41-50.

Amsterdam Protocol (1997): Protocol on the System of Public Broadcasting in the Member States, annexed to the Treaty on European Union, Amsterdam, 2 October 1997, URL: <http://www.eurotreaties.com/amsterdamprotocols.pdf> (05.07.2010).

Anderson, S. P.; Gabszewicz, J. J. (2006): The media and advertising: a tale of two-sided markets, in: Victor A. Ginsburgh and David Throsby (ed.) *Handbook of the Economics of Art and Culture.*, Elsevier Science, Vol. 1: 567-614.

ARD online (2010a): ARD Organisation, URL: <http://www.ard.de/intern/organisation/-/id=8036/rnvfb8/index.html> (05.07.2010).

ARD online (2010b): ARD, ZDF und Deutschlandradio begrüßen Entscheidung der Länder für neuen Rundfunkbeitrag, Press Release, URL: <http://www.ard.de/intern/presseservice/-/id=8058/nid=8058/did=1486728/xy9qgh/index.html> (05.07.2010).

Armstrong, M. (2005): Public Service Broadcasting, in: *Fiscal Studies*, Vol. 26, Nr. 3: 281-299.

Armstrong, M.; Weeds, H. (2007): Public service broadcasting in the digital world, in: P. Seabright, J. von Hagen (ed.), *The Economic Regulation of Broadcasting Markets*, Cambridge University Press, Cambridge: 81-149.

Aslama, M. (2008): Policies of inertia or innovation? European Public Service in transition from PSB to PSM, Working Paper at the Donald McGannon Communication Research Center: 1-24.

AVMSD (2010): Directive 2010/13/EU of the European Parliament and of the Council of 10 March 2010 on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services (Audiovisual Media Services Directive), in: *Official Journal of the European Union*: L 95/1-L 95/24, URL: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:095:0001:0024:EN:PDF> (05.07.2010).

Bardoel, J.; d'Haenens, L. (2007): Reinventing public service broadcasting in Europe: prospects, promises and problems, in: *Media, Culture & Society* 30(3): 337-355.

Bardoel, J.; Lowe, G. (2007): From Public Service Broadcasting to Public Service Media, in: G.F. Lowe & J. Bardoel (ed.), *From Public Service Broadcasting to Public Service Media*, Göteborg, Nordicom: 9-26.

BDZV online (2010): Bundesverband Deutscher Zeitungsverleger, Zeitungswebsites, URL: <http://www.bdzv.de/zeitungswebsites.html> (05.07.2010).

Beck, H. (2005): Medienökonomie: Print, Fernsehen und Multimedia, 2. Edition, Springer Verlag, Berlin et al.

Betzel, M., Ward, D. (2004): The Regulation of Public Service Broadcasters in Western Europe, in: Trends in Communication, 12 (1), 47-62.

Beyer, A.; Beck, H. (2008): Brauchen wir eine öffentlich-rechtliche Zeitung?, in: Wirtschaftsdienst 2008, 6: 391-397.

Beyer, A.; Beck, H. (2009): Brauchen wir öffentlich-rechtliche Medien?, in: D. Wentzel (ed.), Medienökonomik: Theoretische Grundlagen und ordnungspolitische Gestaltungsalternativen, Veröffentlichung des 41. Forschungsseminar Radein 2008, Stuttgart: Lucius & Lucius, 2009: 75-99.

Beyer, A.; Carl, P. (2008): Einführung in die Medienökonomie, 2. Auflage, UVK Verlagsgesellschaft, Konstanz 2008.

BITKOM online (2010): Internetjahr 2009: Newsportale boomen wie nie zuvor, URL: http://www.bitkom.org/files/documents/PI_Nachrichtenportale.pdf (05.07.2010).

Broadcasting Communication (2001): Communication from the Commission on the application of State aid rules to public service broadcasting (Text with EEA relevance) (2009/C 320/04) in: Official Journal of the European Communities: C 320/5- C 320/11, URL: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2001:320:0005:0011:en:pdf> (05.07.2010).

Broadcasting Communication (2009): Communication from the Commission on the application of State aid rules to public service broadcasting (Text with EEA relevance) (2009/C 257/01) in: Official Journal of the European Union: C 257/1- C 257/14, URL: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2009:257:0001:0014:en:pdf>

lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2009:257:0001:0014:EN:PDF (05.07.2010).

BR-online (2010): Medienforschung Nutzungsdauer der Medien in Deutschland, URL: <http://www.br-online.de/br-intern/medienforschung/mediennutzung/ueberblick/ueberblick3.shtml> (05.07.2010).

Budzinski, O. (2009): Europäische Medienmärkte: Die Rolle der Wettbewerbspolitik, in D. Wentzel (ed.), Medienökonomik: Theoretische Grundlagen und ordnungspolitische Gestaltungsalternativen, Veröffentlichung des 41. Forschungsseminar Radein 2008, Stuttgart: Lucius & Lucius, 2009: 337-361.

Budzinski, O. & Lindstädt, N. (2009): Neuere Entwicklungen in der Medienökonomik: Das Konzept der mehrseitigen Märkte, SSRN Working Paper Series: 1-36, URL: <http://ssrn.com/abstract=1403137> (05.07.2010).

Budzinski, O. & Wacker, K. (2007): The Prohibition of the Proposed Springer-ProSiebenSat.1-Merger: How much Economics in German Merger Control?, in: Journal of Competition Law and Economics, Vol. 3 (2): 281-306.

Burri-Nenova, M. (2009): Cultural Diversity and the EC Audiovisual Media Services Directive: Beyond the Handsome Rhetoric, in: NCCR Trade Working Paper Series, No. 2009/9: 1-27.

Chyi, H.I.; Sylvie, G. (1998): Competing with Whom? Where? And How? A Structural Analysis of the Electronic Newspaper Market, in: The Journal of Media Economics, 11(2): 1-18.

Council Resolution (1999): Resolution of the Council and of the Representatives of the Governments of the Member States, meeting within the Council of 25 January 1999 concerning public service broadcasting, in: Official Journal of

the European Communities: C 30/1, URL: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:1999:030:0001:0001:En:PDF> (05.07.2010).

Depypere, S.; Tigchelaar, N. (2004): The commission's state aid policy on activities of public service broadcasters in neighbouring market, in Competition Policy Newsletter No. 2, Summer 2004: 19-22.

Dewenter, R. (2003): The Economics of Media Markets, Helmut Schmidt Universität, Fächergruppe Volkswirtschaftslehre, Diskussionspapier Nr. 10, Juni 2003:1-27.

Dewenter, R. (2006): Two-sided markets, MedienWirtschaft, Zeitschrift für Medienmanagement und Kommunikationsökonomie, 2/2006: 57-62.

Dewenter, R. (2007): Crossmediale Fusionen und Meinungsvielfalt: Eine ökonomische Analyse, in: F. Fechner (Hrsg.), Crossmediale Fusionen und Meinungsvielfalt, Ilmenau: Universitätsverlage, 47-89.

Dewenter, R.; Haucap, J. (2009a): Wettbewerb als Aufgabe und Problem auf Medienmärkten: Fallstudien aus Sicht der ‚Theorie zweiseitiger Märkte‘, in D. Wentzel (ed.), Medienökonomik: Theoretische Grundlagen und ordnungspolitische Gestaltungsalternativen, Veröffentlichung des 41. Forschungsseminar Radein 2008, Stuttgart: Lucius & Lucius, 2009: 36-73.

Dewenter, R.; Haucap, J. (2009b): Ökonomische Auswirkungen von öffentlich-rechtlichen Online-Angeboten. Marktauswirkungen innerhalb von Drei-Stufen-Tests. Gutachten im Auftrag des VPRT e.V., Juli 2009: 1-166.

Donders, K.; Pauwels, C. (2008): Does EU Policy Challenge the Digital Future of Public Service Broadcasting? An Analysis of the Commission's State Aid Approach to Digitization and the Public Service Remit of Public Broadcasting

Organizations, in: *Convergence: The International Journal of Research into New Media Technologies*, Vol 14(3), SAGE Publications: 295-311.

Doyle, G. (2002): *Media Ownership – The economics and politics of convergence and concentration in the UK and European Media*, London, Thousand Oaks, New Delhi, SAGE Publications.

EBU (European Broadcasting Union) (2008): *Broadcasters and the Internet, Executive Summary*, in: European Broadcasting Union, Strategic Information Service, 1-21.

EC Treaty (2006): *European Union, Consolidated Versions of the Treaty on European Union and of the Treaty establishing the European Community*, in: *Official Journal of the European Union*, 29.12.2006: C 321 E/1 - C 321 E/331.

Elstein, D. (2000): *Competing with the public sector in broadcasting*, in: *Economic Affairs*, Vol. 20 (4), December 2000: 13-20.

Elstein, D. (2005): *Public Service Broadcasting in the digital age*, in: *Economic Affairs*, Vol. 25 (4), December 2005: 68-70.

European Commission (2007): *State aid E 3/2005 (ex- CP 2/2003, CP 232/2002, CP 43/2003, CP 243/2004 and CP 195/2004) – Financing of public service broadcasters in Germany*, pp. 1-83, URL: http://ec.europa.eu/competition/state_aid/register/ii/doc/E-3-2005-WLWL-en-24.04.2007.pdf (05.07.2010).

European Commission (2008): *TV, online, on-demand – Modern Rules of Audiovisual Europe*, in: European Commission, *Information on Society and Media, General Factsheet 68: 1-2*, URL: http://ec.europa.eu/avpolicy/docs/reg/avmsd/fact_sheet_en.pdf (05.07.2010).

European Union online (2010): The history of the European Union, URL: http://europa.eu/abc/history/index_en.htm (05.07.2010).

FAZ.net online (2010): Ab 2013 wird pro Haushalt bezahlt, URL: <http://www.faz.net/s/RubFC06D389EE76479E9E76425072B196C3/Doc~E1C9C933CAB32467183BCE34862AC03E9~ATpl~Ecommon~Scontent.html> (05.07.2010).

Ferrando, J.; Gabszewicz, J. J. et al. (2003): Two-sided Network Effects and Competition: An application to Media Industries; Working Paper: 1-23, URL: [http://atom.univ-paris1.fr/documents/seance_4_\(texte\)_Pierre.pdf](http://atom.univ-paris1.fr/documents/seance_4_(texte)_Pierre.pdf) (05.07.2010).

Frank, G.; Meyerholt, U. (2009): Online Rundfunk – Der gebührenfinanzierte öffentlich-rechtliche Rundfunk im Internet, in: Lothar Bisky, Konstanze Kriese, Jürgen Scheele (ed.), Medien – Macht – Demokratie. Neue Perspektiven, Karl Dietz Verlag, Berlin: 366-376.

Gambaro, M. (2004): The evolution of Public Service Television, Methods of Financing and Implications for the Consumer, Università di Milano Working Paper No. 2004.02, URL: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=536582 (05.02.2010).

Gambaro, M. (2008): Media Policy: An economic contribution, Working Paper n. 2008-28, Dipartimento di Scienze Economiche Aziendali e Statistiche, Luglio 2008: 1-13.

GEZ online (2010a): GEZ Gebühreneinzugszentrale, URL: <http://www.gez.de/> (05.07.2010).

GEZ online (2010b): GEZ Gebührenlexikon, URL: <http://gez.de/gebuehren/gebuehrenlexikon/> (05.07.2010).

Harcourt, A. (2005): *The European Union and the regulation of media markets*, Manchester University Press, Manchester and New York.

Hargreaves Heap, S. P. (2005): *Television in a digital age: what role for public service broadcasting?*, in: *Economic Policy*, Vol. 20 (41), Great Britain 2005: 113-157.

Harrison, J.; Woods, L.M. (2001): *Defining European Public Service Broadcasting*, in: *European Journal of Communication*, Vol. 16(4), Sage Publications 16; 477-504.

Hills, J.; Michalis, M. (2000): *The Internet: A challenge to Public Service Broadcasting*, in: *International Communication Gazette*, Vol. 62(6), Sage Publications: 477-493.

Hitchens, L. (2006): *Broadcasting, Pluralism and Diversity – A comparative Study of Policy and Regulation*, Oxford and Portland, Oregon, Hart Publishing: 1-342.

Holznagel, B.; Jahn, E.; Simon, I. (2009): *Der öffentlich-rechtliche Rundfunk zwischen Garantieansprüchen und IKT-getriebenem Wettbewerbsdruck*, in D. Wentzel (ed.), *Medienökonomik: Theoretische Grundlagen und ordnungspolitische Gestaltungsalternativen*, Veröffentlichung des 41. Forschungsseminar Radein 2008, Stuttgart: Lucius & Lucius, 2009: 203-220.

Hoskins C.; Mc Fadyen S.; Finn A. (2004): *Media Economics Applying Economics to New and Traditional Media*, California, Sage Publications.

Humphreys, P. (1999): *Germany's dual Broadcasting System: Recipe for Pluralism in the Age of Multi-Channel Broadcasting*, in: *New German Critique*, No. 78, Special Issue on German Media Studies (Autumn 1999): 23-52.

Humphreys, P. (2008): Digital convergence, European competition policy and the future of public service broadcasting: the UK and German cases, Paper presented at the annual meeting of the International Communication Association, TBA, Montreal, Quebec, Canada, May 22, 2008: 1-22.

Jakubowicz, K. (2007): Public Service Broadcasting in the 21st Century, in: G.F. Lowe & J. Bardoel (ed.), From Public Service Broadcasting to Public Service Media, Göteborg, Nordicom: 29-49.

Karppinen, K. (2009): Rethinking media pluralism and communicative abundance, in: Observatorio (OBS*) Journal 11 (2009), 151-169.

KEF, Kommission zur Ermittlung des Finanzbedarfs der Rundfunkanstalten (2009): 17. Bericht der Kommission zur Ermittlung des Finanzbedarfs der Rundfunkanstalten, Mainz 2009: 1-388.

KEK, Kommission zur Ermittlung der Konzentration im Medienbereich, online (2010): Zuschaueranteile der Fernsehprogramme der öffentlich-rechtlichen Rundfunkanstalten und der Fernsehsender, die der RTL Group oder der ProSiebenSat.1 Media AG zugerechnet werden, URL: <http://www.kek-online.de/kek/medien/zuschauer/2010.pdf> (05.07.2010).

Lambert, R. (2007): The Future of the news in the digital era, in: Economic Affairs, Vol. 27 (2), June 2007: 56-63.

Larouche, P. (2001): Communications Convergence and Public Service Broadcasting, SSRN Working Paper Series: 1-25, URL: <http://ssrn.com/abstract=832444> (05.07.2010).

Leurdijk, A. (2007): Public Service Media Dilemmas and Regulation in a Converging Media Landscape, in G.F. Lowe & J. Bardoel (ed.), From Public Service Broadcasting to Public Service Media, Göteborg, Nordicom: 71-85.

Lindstädt, N. (2007): Klassisches Printmedium vs. Onlinezeitung – Substitutionseffekte, Komplementaritäten, Entwicklungspotentiale, Diplomarbeit [Masterthesis] at Pforzheim University, Germany: 1-132.

Lindstädt, N. (2009): Klassisches Printmedium vs. Online-Zeitung – Substitutionseffekte oder Komplementaritäten?, in D. Wentzel (ed.), Medienökonomik: Theoretische Grundlagen und ordnungspolitische Gestaltungsalternativen, Veröffentlichung des 41. Forschungsseminar Radein 2008, Stuttgart: Lucius & Lucius, 2009: 157-181.

Lindstädt, N. (2010): Multisided Media Markets: Applying the Theory of Multisided Markets to Media Markets, in: Zeitschrift für Wettbewerbsrecht (ZWeR) No. 1/2010, RWS Verlag: 53-80.

Lucht, J. (2009): Öffentlich-rechtlicher Rundfunk in der Demokratie, in: Öffentlich-rechtlicher Rundfunk, Aus Politik und Zeitgeschichte (APuZ) 09-10/2009: 26-32.

Michalis, M. (2007): PSB, market failure, and new technologies: the view from the EU; presented at the International Association for Media and Communication Research (IAMCR) conference “Media, Communication, Information: Celebrating Years of Theories and Practices”, 25.-25.07.2007, Paris: 1-25.

Moe, H. (2008a): Public Service Media Online? Regulating Public Service Broadcasters’ Internet Services – a comparative analysis, in: Television & New Media, Vol. 9 (3), Sage Publications: 220-238.

Moe, H. (2008b): Between Supra-National Competition and National Culture? In: I. Bondebjerg & P. Madsen (ed.), Media, Democracy and European Culture, Bristol & Chicago, Intellect: 307-324.

Moe, H. (2009): Status und Perspektiven öffentlich-rechtlicher Onlinemedien, in: Media Perspektiven 4/2009: 189-200.

Motta, M.; Polo, M. (1997): Concentration and public policies in the broadcasting industry: the future of television, in: Economic Policy, Great Britain 1997: 295-334.

Murdock, G. (2004): Building the Digital Commons: Public Broadcasting in the age of the internet, University of Montreal, The 2004 Spry Memorial Lecture: 1-20.

Netzeitung (2010): URL: <http://www.netzeitung.de/ueberuns/> (05.07.2010).

Nissen, C.S. (2006): Public service media in the information society, Report prepared for the Council of Europe's Group of Specialists on Public Service Broadcasting in the Information Society, 1-48.

Nitsche, I. (2001): Broadcasting in the European Union – The Role of Public Interest in Competition Analysis, The Hague, TMC Asser Press.

Nord, L. (2009): What is Public Service on the Internet? Digital Challenges for Media Policy in Europe, in: Observatorio (OBS*) Journal, 9(2009): 24-39.

O'Hagan, J.; Jennings, M. (2003): Public Broadcasting in Europe: Rationale, Licence Fee and Other Issues, in: Journal of Cultural Economics, Kluwer Academic Publishers: 31-56.

Prado, E.; Fernández, D. (2006): The Role of Public Service Broadcasters in the Era of Convergence – A Case Study of Televisió de Catalunya, in : Communications & Strategies, No. 62, 2nd quarter 2006, 49-69.

Range, S.; Schweins, R. (2007): Klicks, Quoten, Reizwörter: Nachrichten-Sites im Internet, Gutachten im Auftrag der Friedrich Ebert Stiftung, Berlin: 1-120, URL: <http://library.fes.de/pdf-files/stabsabteilung/04417.pdf> (01.09.2007).

Rebmann, R. (2003): Online-Dienste als wettbewerbswidrige Angebote des öffentlich-rechtlichen Rundfunks, in: Arbeitspapiere des Instituts für Rundfunkökonomie an der Universität zu Köln, Heft 182: 1-8.

Reglitz, E. (2009): Internet Use in Germany, URL: http://www.magazine-deutschland.de/en/artikel-en/article/mdissue/096.html?tx_ttnews%5Btt_news%5D=9246&tx_ttnews%5BbackPid%5D=75&cHash=daad498c9f&tx_ttnews%5Bissue%5D=096 (05.07.2010).

Repa, L.; Tosics, N. (2009): Commission and Germany agree on better control for the use of State aid in the broadcasting sector, in Competition Policy Newsletter 2009-1: 1-4.

Robinson, B.; Raven J.; Low, L.P. (2005): Paying for Public Service Television in the Digital Age in: D. Helm et al. (ed.) Can the Market deliver ? Funding Public Service Television in the Digital Age, Eastleigh, John Libbey Publishing, 2005: 101-128.

Rundfunkstaatsvertrag (2009): Staatsvertrag für Rundfunk und Telemedien (Rundfunkstaatsvertrag – RStV -), URL: http://www.lfk.de/fileadmin/media/recht/12_RStV_Juni09.pdf (05.07.2010).

Rundfunkänderungsstaatsvertrag (2009): Zwölfter Staatsvertrag zur Änderung rundfunkrechtlicher Staatsverträge (Zwölfter Rundfunkänderungsstaatsvertrag), URL: http://www.rlp.de/fileadmin/staatskanzlei/rlp.de/downloads/medien/12_rundfunkaenderungsstaatsvertrag.pdf (05.07.2010).

Rüter, K. (2002): Medienrechtliche und -politische Aspekte von Rundfunk online, in: Media Perspektiven 3/2002: 144-147.

Sawers, D. (2000): Public Service Broadcasting: a paradox of our time, in: Economic Affairs, Vol. 20 (4), December 2000: 33-35.

Schulz, W.; Held, T.; Dreyer, S. (2008): Regulation of Broadcasting and Internet Services in Germany – A brief overview, in: Working Paper Series of the Hans-Bredow-Institute at the University of Hamburg, Nr. 13: 1-21.

Syvertsen, T. (2003): Challenges of Public Television in the Era of Convergence and Commercialization, in: Television & New Media, Vol. 2, No. 2, May 2003, Sage Publications: 155-175.

Tagesschau Online (2010): Ein Haushalt, eine Rundfunkgebühr, URL: <http://www.tagesschau.de/inland/rundfunkgebuehr108.html> (05.07.2010).

Trappel, J. (2008): Online Media Within the Public Service Realm?: Reasons to Include Online into the Public Service Mission, in: Convergence: The International Journal of Research into New Media Technologies, Vol. 14(3), Sage Publications: 313-322.

Van der Wurff, R. (2007): Focus on Audiences – Public Service Media in the Market Place, in: G.F. Lowe & J. Bardoel (ed.), From Public Service Broadcasting to Public Service Media, Göteborg, Nordicom: 105-117.

Van Dijk, M.; Nahuis, R.; Waagmeester, D. (2006): Does Public Service Broadcasting serve the public? The future of television in the changing media landscape, in: De Economist 154, No. 2, Springer, 2006: 251-276.

Van Eimeren, B.; Frees, B. (2006): Schnelle Zugänge, neue Anwendungen, neue Nutzer?, in: Media Perspektiven 8/2006: 402-415.

Van Eimeren, B.; Frees, B. (2009): Der Internetnutzer 2009 – multimedial und total vernetzt?, in: Media Perspektiven 07/2009: 334-348.

Ward, D. (2006): Can the market provide? Public Service Media, market failure and public goods, in: C.S. Nissen (ed.), Making a Difference: Public Service Broadcasting in the European Landscape, Eastleigh, John Libbey Publishing: 51-63.

Wentzel, D. (2002): Medien im Systemvergleich Eine ordnungsökonomische Analyse des deutschen und amerikanischen Fernsehmarktes, Band 69, Lucius & Lucius, Stuttgart.

Wiedemann, V. (2004): Public Service Broadcasting, State Aid and the Internet: Emerging EU Law, in DIFFUSION online, 2004/47: 1-15.

ZDF online (2010): ZDF Geschichte, URL: <http://www.unternehmen.zdf.de/index.php?id=66&artid=106&backpid=10&cash=b5f4e11931> (05.07.2010).

Department of Environmental and Business Economics
Institut for Miljø- og Erhvervsøkonomi (IME)

IME WORKING PAPERS

ISSN: 1399-3224

Issued working papers from IME

Udgivne arbejdsrapporter fra IME

No.

1/99	Frank Jensen Niels Vestergaard Hans Frost	<i>Asymmetrisk information og regulering af forurening</i>
2/99	Finn Olesen	<i>Monetær integration i EU</i>
3/99	Frank Jensen Niels Vestergaard	<i>Regulation of Renewable Resources in Federal Systems: The Case of Fishery in the EU</i>
4/99	Villy Søgaard	<i>The Development of Organic Farming in Europe</i>
5/99	Teit Lüthje Finn Olesen	<i>EU som handelsskabende faktor?</i>
6/99	Carsten Lynge Jensen	<i>A Critical Review of the Common Fisheries Policy</i>
7/00	Carsten Lynge Jensen	<i>Output Substitution in a Regulated Fishery</i>
8/00	Finn Olesen	<i>Jørgen Henrik Gelting – En betydende dansk keynesianer</i>
9/00	Frank Jensen Niels Vestergaard	<i>Moral Hazard Problems in Fisheries Regulation: The Case of Illegal Landings</i>
10/00	Finn Olesen	<i>Moral, etik og økonomi</i>

11/00	Birgit Nahrstedt	<i>Legal Aspect of Border Commuting in the Danish-German Border Region</i>
12/00	Finn Olesen	<i>Om Økonomi, matematik og videnskabelighed - et bud på provokation</i>
13/00	Finn Olesen Jørgen Drud Hansen	<i>European Integration: Some stylised facts</i>
14/01	Lone Grønbæk	<i>Fishery Economics and Game Theory</i>
15/01	Finn Olesen	<i>Jørgen Pedersen on fiscal policy - A note</i>
16/01	Frank Jensen	<i>A Critical Review of the Fisheries Policy: Total Allowable Catches and Rations for Cod in the North Sea</i>
17/01	Urs Steiner Brandt	<i>Are uniform solutions focal? The case of international environmental agreements</i>
18/01	Urs Steiner Brandt	<i>Group Uniform Solutions</i>
19/01	Frank Jensen	<i>Prices versus Quantities for Common Pool Resources</i>
20/01	Urs Steiner Brandt	<i>Uniform Reductions are not that Bad</i>
21/01	Finn Olesen Frank Jensen	<i>A note on Marx</i>
22/01	Urs Steiner Brandt Gert Tinggaard Svendsen	<i>Hot air in Kyoto, cold air in The Hague</i>
23/01	Finn Olesen	<i>Den marginalistiske revolution: En dansk spire der ikke slog rod?</i>
24/01	Tommy Poulsen	<i>Skattekonkurrence og EU's skattestruktur</i>
25/01	Knud Sinding	<i>Environmental Management Systems as Sources of Competitive Advantage</i>
26/01	Finn Olesen	<i>On Machinery. Tog Ricardo fejl?</i>
27/01	Finn Olesen	<i>Ernst Brandes: Samfundsspørgsmaal - en kritik af Malthus og Ricardo</i>
28/01	Henrik Herlau Helge Tetzschner	<i>Securing Knowledge Assets in the Early Phase of Innovation</i>

29/02	Finn Olesen	<i>Økonomisk teorihistorie Overflødig information eller brugbar ballast?</i>
30/02	Finn Olesen	<i>Om god økonomisk metode – beskrivelse af et lukket eller et åbent socialt system?</i>
31/02	Lone Grønbæk Kronbak	<i>The Dynamics of an Open Access: The case of the Baltic Sea Cod Fishery – A Strategic Approach -</i>
32/02	Niels Vestergaard Dale Squires Frank Jensen Jesper Levring Andersen	<i>Technical Efficiency of the Danish Trawl fleet: Are the Industrial Vessels Better Than Others?</i>
33/02	Birgit Nahrstedt Henning P. Jørgensen Ayoe Hoff	<i>Estimation of Production Functions on Fishery: A Danish Survey</i>
34/02	Hans Jørgen Skriver	<i>Organisationskulturens betydning for vidensdelingen mellem daginstitutionsledere i Varde Kommune</i>
35/02	Urs Steiner Brandt Gert Tinggaard Svendsen	<i>Rent-seeking and grandfathering: The case of GHG trade in the EU</i>
36/02	Philip Peck Knud Sinding	<i>Environmental and Social Disclosure and Data-Richness in the Mining Industry</i>
37/03	Urs Steiner Brandt Gert Tinggaard Svendsen	<i>Fighting windmills? EU industrial interests and global climate negotiations</i>
38/03	Finn Olesen	<i>Ivar Jantzen – ingeniøren, som beskæftigede sig med økonomi</i>
39/03	Finn Olesen	<i>Jens Warming: den miskendte økonom</i>
40/03	Urs Steiner Brandt	<i>Unilateral actions, the case of international environmental problems</i>
41/03	Finn Olesen	<i>Isi Grünbaum: den politiske økonom</i>
42/03	Urs Steiner Brandt Gert Tinggaard Svendsen	<i>Hot Air as an Implicit Side Payment Arrangement: Could a Hot Air Provision have Saved the Kyoto-Agreement?</i>

43/03	Frank Jensen Max Nielsen Eva Roth	<i>Application of the Inverse Almost Ideal Demand System to Welfare Analysis</i>
44/03	Finn Olesen	<i>Rudolf Christiani – en interessant rigsdagsmand?</i>
45/03	Finn Olesen	<i>Kjeld Philip – en økonom som også blev politiker</i>
46/03	Urs Steiner Brandt Gert Tinggaard Svendsen	<i>Bureaucratic Rent-Seeking in the European Union</i>
47/03	Bodil Stilling Blichfeldt	<i>Unmanageable Tourism Destination Brands?</i>
48/03	Eva Roth Susanne Jensen	<i>Impact of recreational fishery on the formal Danish economy</i>
49/03	Helge Tetzschner Henrik Herlau	<i>Innovation and social entrepreneurship in tourism - A potential for local business development?</i>
50/03	Lone Grønbæk Kronbak Marko Lindroos	<i>An Enforcement-Coalition Model: Fishermen and Authorities forming Coalitions</i>
51/03	Urs Steiner Brandt Gert Tinggaard Svendsen	<i>The Political Economy of Climate Change Policy in the EU: Auction and Grandfathering</i>
52/03	Tipparat Pongthanapanich	<i>Review of Mathematical Programming for Coastal Land Use Optimization</i>
53/04	Max Nielsen Frank Jensen Eva Roth	<i>A Cost-Benefit Analysis of a Public Labelling Scheme of Fish Quality</i>
54/04	Frank Jensen Niels Vestergaard	<i>Fisheries Management with Multiple Market Failures</i>
55/04	Lone Grønbæk Kronbak	<i>A Coalition Game of the Baltic Sea Cod Fishery</i>

56/04	Bodil Stilling Blichfeldt	<i>Approaches of Fast Moving Consumer Good Brand Manufacturers Product Development “Safe players” versus “Producers”: Implications for Retailers’ Management of Manufacturer Relations</i>
57/04	Svend Ole Madsen Ole Stegmann Mikkelsen	<i>Interactions between HQ and divisions in a MNC - Some consequences of IT implementation on organizing supply activities</i>
58/04	Urs Steiner Brandt Frank Jensen Lars Gårn Hansen Niels Vestergaard	<i>Ratcheting in Renewable Resources Contracting</i>
59/04	Pernille Eskerod Anna Lund Jepsen	<i>Voluntary Enrolment – A Viable Way of Staffing Projects?</i>
60/04	Finn Olesen	<i>Den prækeynesianske Malthus</i>
61/05	Ragnar Arnason Leif K. Sandal Stein Ivar Steinshamn Niels Vestergaard	<i>Actual versus Optimal Fisheries Policies: An Evaluation of the Cod Fishing Policies of Denmark, Iceland and Norway</i>
62/05	Bodil Stilling Blichfeldt Jesper Rank Andersen	<i>On Research in Action and Action in Research</i>
63/05	Urs Steiner Brandt	<i>Lobbyism and Climate Change in Fisheries: A Political Support Function Approach</i>
64/05	Tipparat Pongthapanich	<i>An Optimal Corrective Tax for Thai Shrimp Farming</i>
65/05	Henning P. Jørgensen Kurt Hjort-Gregersen	<i>Socio-economic impact in a region in the southern part of Jutland by the establishment of a plant for processing of bio ethanol</i>
66/05	Tipparat Pongthapanich	<i>Options and Tradeoffs in Krabi’s Coastal Land Use</i>

67/06	Tipparat Pongthana-panich	<i>Optimal Coastal Land Use and Management in Krabi, Thailand: Compromise Programming Approach</i>
68/06	Anna Lund Jepsen Svend Ole Madsen	<i>Developing competences designed to create customer value</i>
69/06	Finn Olesen	<i>Værdifri samfundsvidenskab? - nogle refleksioner om økonomi</i>
70/06	Tipparat Pongthana-panich	<i>Toward Environmental Responsibility of Thai Shrimp Farming through a Voluntary Management Scheme</i>
71/06	Finn Olesen	<i>Rational Economic Man og Bounded Rationality – Nogle betragtninger over rationalitetsbegrebet i økonomisk teori</i>
72/06	Urs Steiner Brandt	<i>The Effect of Climate Change on the Probability of Conservation: Fisheries Regulation as a Policy Contest</i>
73/06	Urs Steiner Brandt Lone Grønbæk Kronbak	<i>Robustness of Sharing Rules under Climate Change. The Case of International Fisheries Agreements</i>
74/06	Finn Olesen	<i>Lange and his 1938-contribution – An early Keynesian</i>
75/07	Finn Olesen	<i>Kritisk realisme og post keynesianisme.</i>
76/07	Finn Olesen	<i>Aggregate Supply and Demand Analysis – A note on a 1963 Post Keynesian Macroeconomic textbook</i>
77/07	Finn Olesen	<i>Betydningen af Keynes' metodologi for aktuel makroøkonomisk forskning – En Ph.D. forelæsning</i>
78/08	Urs Steiner Brandt	<i>Håndtering af usikkerhed og betydningen af innovationer i klimaproblematikken: Med udgangspunkt i Stern rapporten</i>
79/08	Lone Grønbæk Kronbak Marko Lindroos	<i>On Species Preservation and Non-Cooperative Exploiters</i>

80/08	Urs Steiner Brandt	<i>What can facilitate cooperation: Fairness, inequity aversion, punishment, norms or trust?</i>
81/08	Finn Olesen	<i>Heterodoks skepsis – om matematisk formalisme i økonomi</i>
82/09	Oliver Budzinski Isabel Ruhmer	<i>Merger Simulation in Competition Policy: A Survey</i>
83/09	Oliver Budzinski	<i>An International Multilevel Competition Policy System</i>
84/09	Oliver Budzinski Jürgen-Peter Kretschmer	<i>Implications of Unprofitable Horizontal Mergers: A Positive External Effect Does Not Suffice To Clear A Merger!</i>
85/09	Oliver Budzinski Janina Satzer	<i>Sports Business and the Theory of Multisided Markets</i>
86/09	Lars Ravn-Jensen	<i>Ecosystem Management – A Management View</i>
87/09	Lars Ravn-Jensen	<i>A Size-Based Ecosystem Model</i>
88/09	Lars Ravn-Jensen	<i>Intertemporal Choice of Marine Ecosystem Exploitation</i>
89/09	Lars Ravn-Jensen	<i>The Stock Concept Applicability for the Economic Evaluation of Marine Ecosystem Exploitation</i>
90/09	Oliver Budzinski Jürgen-Peter Kretschmer	<i>Horizontal Mergers, Involuntary Unemployment, and Welfare</i>
91/09	Finn Olesen	<i>A Treatise on Money – et teoriehistorisk case studie</i>
92/09	Jurijs Grizans	<i>Urban Issues and Solutions in the Context of Sustainable Development. A review of the literature</i>
93/09	Oliver Budzinski	<i>Modern Industrial Economics and Competition Policy: Open Problems and Possible limits</i>

94/09	Thanh Viet Nguyen	<i>Ecosystem-Based Fishery Management: A Critical Review of Concepts and Ecological Economic Models</i>
95/09	Finn Olesen	<i>History matters – om især den tyske historiske skole</i>
96/09	Nadine Lindstädt	<i>Multisided Media Markets: Applying the Theory of Multisided Markets to Media Markets</i>
97/09	Oliver Budzinski	<i>Europäische Medienmärkte: Wettbewerb, Meinungsvielfalt und kulturelle Vielfalt</i>
98/10	Niels Vestergaard Kristiana A. Stoyanova Claas Wagner	<i>Cost-Benefit Analysis of the Greenland Off-shore Shrimp Fishery</i>
99/10	Oliver Budzinski Jurgen-Peter Kretschmer	<i>Advertised Meeting-the-Competition Clauses: Collusion Instead of Price Discrimination</i>
100/10	Elmira Schaimijeve Gjusel Gumerova Jörg Jasper Oliver Budzinski	<i>Russia's Chemical and Petrochemical Industries at the Eve of WTO-Accession</i>
101/10	Oliver Budzinski	<i>An Institutional Analysis of the Enforcement Problems in Merger Control</i>
102/10	Nadine Lindstädt	<i>Germany's PSB going online – is there an economic justification for Public Service Media online?</i>