REGULATING ONE SIDE OF A TWO-SIDED MARKET: THE FRENCH ADVERTISING BAN ON PRIME-TIME STATE TELEVISION

Lapo Filistrucchi^a, Luigi Luini^b, Andrea Mangani^c

Preliminary and Incomplete

This Draft: 19-6-2011

Abstract

We analyse the effects of the advertising ban on French public television, which came into effect on the 5^{th} of January 2009. The ban forbid commercial advertising on public TV in the time slot 20.00-6.00.

We focus our analysis on the advertising market. Preliminary evidence would seem to suggest that advertising which was previously broadcasted on public TV in the time slot 20.00-6.00 did not switch to private channels in the same time slot (nor did the price in that time slot on private channels rise). Rather advertising partly switched to public TV in the time slot 6.00-20.00 and only slowly migrated towards digital TV channels. The common expectation that the ban would favour private TV channels at the expense of public ones was therefore wrong. Possible explanations for the finding are explored.

JEL Classification: L82, D18, M7.

Keywords : two-sided markets, media markets, advertising caps. advertising ban,

public television

^a Department of Economics, CentER and TILEC, Tilburg University and Department of Economics, University of Florence

^b Department of Economics, University of Siena

^c Department of Economics, University of Pisa

1. Introduction

Whether public TV should be financed by licence fees and public transfers only or also by commercial advertising is a long lasting debate in many countries. Supporters of a public TV financed only by licence fees and public transfers claim that this would guarantee a higher quality of the programs by freeing public TV stations to Those against

Whereas the BBC is a well-known and successful example of a public TV financed only by licence fees and public transfers, in most other European countries commercial advertising revenues constitute a substantial part of the budget of public TVs. Another exception has however been Germany, where advertising on public TV after 20.00 has been forbidden since 1991.¹

We do not address here the debate of whether public TV should or should not be financed by advertising. We focus instead on the impact of a regulatory intervention banning ads on public TV starting from a situation where public TV was financing itself also and therefore potentially competing with private commercial TV not only on the audience side but also on the advertising side of the market.

Following the earlier German example, the French government decided to ban commercial advertisements on State controlled TV stations starting from January 5, 2009. The ban initially applies to programs broadcasted between 20.00 and 6.00 and it is planned that it will be gradually extended to all broadcasting time.²

The ban, announced by President Sarkozy in a press conference held on 8 January 2008, came completely as a surprise to both the French government and the management of French public TV^3 . The current paper will use this "natural experiment" to estimate the

¹ The ban was confirmed also in 2010. See Rundfunkstaatsvertrag, 1991, and Rundfunkstaatsvertrag, 2010. Note however that it is still allowed to sponsor programs broadcasted after 20h. Recently proposals have been put forward to ban adopt spomsoring after 20h on public TV stations except for sport events, and to ban advertising from public TV stations even before 20h.

² Ministère de la culture et de la communication, 2009

³ According to Le Monde Diplomatique (2008), the announcement of President Sarkozy was completely unexpected. Neither the prime minister Francois Fillon, Mrs Christine Albanel (ministre de l'audiovisuel public) nor Patrick de Carolis (president of France Télévisions) knew anything about this decision. According to the article only Henri Guaino (who apparently writes the TV speeches for Sarkozy) and Alain Minc (consultant of the industrialist Vincent Bolloré) were informed about Sarkozy's plans. The last one is supposed to be involved in the development of Sarkozy's plan. Also according to Le Canard enchaîné (2008) and The Economist (2008) the announcement of the advertising ban on public television

impact of the regulatory change on the advertising market, by analysing how quantity, price and advertising revenues have changed on both public and private TV channels. The first objective is to analyse the impact of such an advertising ban on competition between public and private TV channels. Since theoretically the impact of such a regulatory intervention is likely to depend on the features of competition in the market, the analysis is also likely to shed some light also on these features. As such it might provide some guidance on the most appropriate methods of financing the vanishing of advertising revenues for State-controlled channels. More generally, it might have policy implications for regulatory interventions on the media market which aim at setting limits to advertising concentration in a given media product (e.g. the EU Audiovisual Media services directive) or aim at defending pluralism by setting limits to concentration in the advertising market.

The regulation of the maximum amount of advertising during television programming in the EU is decided by the European Commission through the Directive "Television without Frontiers", implemented by each Member State. The Directive⁴ imposes advertising floors of 12 minutes per hour and 3 hours per day.⁵ However, single Member States are free to adopt stricter rules. In this context, even before President Sarkozy's decision, France had one of the most restrictive legislations in Europe. Probably in order to prepare the advertising ban on public TV stations, the decree approved on December 19th, 2008 and coming into force on the 1st of January 2009, established the extension of the average daily length of advertising from 6 to 9 minutes per hour for the most important private channels TF1 and M6 (however, the rule regarded also cable, satellite and DTT stations).⁶ As of 1st of January 2009, the average length of advertising decreased from 8 to 6 minutes per hour for the public television channels (France 2, France 3, France 5).⁷ Furthermore, the decree established the shift from the "glissante" to the "exact" hour as the reference to calculate the maximum advertising time permitted in an hour, which remained at 12 minutes.⁸ These new

was unexpected. According to the Guardian (2008) states the announcement was unexpected and even the culture minister did not know anything about the plan.

⁴ See <u>http://ec.europa.eu/avpolicy/reg/tvwf/index_en.htm</u>

⁵ Ministère de la culture et de la communication, 2008

⁶ Légifrance, 2010

⁷ SNPTV, 2010

⁸ SNPTV, 2010

constraints conformed to the new European Directive, "Audiovisual Media Services"⁹, which had partially modified the previous one. It abolished in particular the daily limit of 3 hours of advertising but kept the established hourly limit of 12 minutes for advertising and teleshopping spots.¹⁰

As already mentioned above, the first step of the reform consisted of banning commercial advertisements on public French TV stations (France 2, France 3, France 4, France 5 and others, all controlled by France Televisions) between 20pm and 6am starting from January 5th, 2009.¹¹ The very same reform includes setting at zero the advertising in all time slots of France Télévisions by the end of 2011⁻

Also the Spanish government decided to follow the German and French examples announcing a drastic reduction in advertising on public TV (RTVE) on April 14, 2009 and on May 8 proposing the complete ban of advertising. The law banning ads from public TV on all time slots was approved by the Spanish parliament on July 29 of 2009.

This law came into effect as of September 1, 2009 but allowed Spanish public TV to broadcast until the end of 2009 the advertising contracted before this date. As from the first of January of 2010, advertising is banned, except for self-promotion advertising, corporate communications campaigns and informational campaigns with social purposes. Moreover, RTVE is not allowed to charge for these exceptional ads. To finance its operations, the public corporation would continue receiving state subsidies, in addition to proceeds from new specific taxes to private television stations and telecommunications companies, and an important percentage of the revenues from the fee on airwaves usage.

The modalities of the gradual phase out of advertising on France Télévisions are laid out in the new law on the reform of French public television adopted in March 2009.¹²

From a strictly arithmetical viewpoint and considering only the daily average duration of advertising interruptions, private stations (TF1 and M6) could take up completely the advertisers' demand in the 20pm-6am time slot, because of the increase of advertising

⁹ See <u>http://eur-lex.europa.eu/LexUriServ/site/fr/oj/2007/1_332/1_33220071218fr00270045.pdf</u>

¹⁰ European Commission, 2008

¹¹ SNPTV, 2010

¹² Ministère de la culture et de la communication, 2009 and Journal Officiel de la République Française, 2009

time from 6 to 9 minutes per hour as mentioned above¹³. However, taking into account the advertising time across different slots, the slots 12am-14pm and 19pm-22pm show that the advertising time on private stations was close to the maximum allowed (12 minutes), because of the consumption habits of French viewers.¹⁴

These informal observations can be combined with theoretical predictions based on previous analytical work on the theme. This will be done in Section 3, while the next section briefly reviews those studies that deal with advertising caps in media markets. Section 4 describes the data while Section 5 shows the results of the empirical analysis. Section 6 concludes discussing the policy implications of our main results.

2. Related literature

Following the seminal works by Steiner (1952), Corden (1953) and Reddaway (1963), quite a rich theoretical literature developed on the media markets, e.g. Spence and Owen (1977) and Beebe (1977). These studies have in the recent years merged into the wider literature on two-sided markets, as first defined by Parker & Van Alstyne (2002), Rochet & Tirole (2003, 2006) and Armstrong (2006). As discussed in detail in Anderson and Gabszewicz (2005), in a two-sided market a media firm typically sells content to readers/viewers/listeners and advertising space to advertisers and it knows that the number (and possibly the characteristics) of viewers/readers/listeners influences the demand for advertising space/time while, on the other hand, the quantity (or concentration) of advertising slots affects the demand from readers/viewers/listeners. In other words, a media firm recognises and internalizes the existence of indirect network effects between the two-sides of the market as it knows that in such a market the viable business strategy requires bringing "both sides on board". Whereas clearly the higher the number of readers/listeners/viewers the higher the demand for ads all else equal, vice versa it is not clearly established what is the attitude of readers/listeners/viewers towards advertising.

¹³ Conseil Supérieur de l'Audiovisuel, 2009

¹⁴ Conseil Supérieur de l'Audiovisuel, 2009

Most advanced countries regulate the maximum amount (e.g., minutes per hour of programming) of TV advertising, In addition, policy makers believe that some (de)merit goods must not be advertised and paternalistic considerations suggest advertising bans on specific products. Rather surprisingly, economic scholars focused the second point, while the economic analysis on advertising ceilings is extremely thin¹⁵.

Anderson (2007) uses a two-sided market model to investigate the effects of advertising caps on social welfare. The disutility that consumers as readers or viewers derive from advertising may be particularly high with respect to the benefits accruing to advertisers. With high ad aversion the level of advertising in equilibrium may be excessive with respect to the social optimum. The opposite circumstance of over provision of advertising takes place if the advertising cap is socially beneficial in the first case and harmful in the second. Anderson (2007) studies the advertising choice of a monopolist platform. With low advertising nuisance, the monopolist determines a level of advertising cap is a further reduction of social welfare. If we consider the opposite scenario with high advertising nuisance, the level of advertising is over the social optimum. This means that an advertising cap will increase social welfare. However, the monopolist profits will fall as well, and this may reduce the incentives for other firms to enter the market and increase the variety of programming.

Although these results are quite reasonable, they refer to a monopolist platform/editor. In case of more than one firm in the market, strategic considerations play a major role in shaping the equilibrium outcome. In addition, the equilibrium changes according the assumptions on viewers' behaviour, profit functions of media outlets and advertising demand function. Anderson (2007) also studies the effects of advertising caps on the quality of programming and on the degree of diversity between competing platforms. The results in terms of content quality and variety are mixed and, once more, related to a monopoly market.

In Australia television advertising was deregulated in September 1987 (with the aim of reducing the rate of interruption to programs) by allowing stations more flexibility in

¹⁵ A correct and complete evaluation of the effects of advertising caps on producers, consumers and media should include a broad discussion about the role of advertising in modern economies. See Anderson (2007).

their scheduling of ad time. Wright (1994) claims that deregulation caused an increase in the amount of non-program content. To explore this issue, Wright (1994) puts forward a duopoly model where commercial TV stations compete and shows that the regulation of the number of advertisements per unit of time both below the joint profit maximizing level (for appropriate parameters) and below the Nash equilibrium level (for different appropriate parameters) can reduce program quality. Therefore, depending on the parameters of the model, fostering competition may be preferable to regulating the amount of advertisements per unit of time.

Finally, Stuhmeier and Wenzel (2010) analyse the effects of advertising bans. The main assumptions of their theoretical model are the following: two TV channels, horizontal program differentiation, a continuum of TV viewers. They assume that there is a continuum of advertisers with measure 1, with a utility function given by

$$U = A(a_1 + a_2) - \frac{1}{2}(a_1^2 + a_2^2 + 2ba_1a_2)$$

where A is the size of the advertising market and a_i is the demand of advertising on channel *i*. This assumption leads to an indirect demand of advertising given by

$$p_i = A - a_i - ba_j$$

where p_i is the price of an advertising unit and the parameter *b* measures the differentiation of the channels in the eyes of the advertisers. Stuhmeier and Wenzel (2010) stress that this approach allows for a correct description of "pecuniary externalities", that is, the effect on the advertising price caused by the advertising decisions of each media outlet¹⁶. The main objective of Stuhmeier and Wenzel (2010) is to explore the effect of an asymmetric advertising cap, that is, un upper bound imposed only to the advertising time of a single broadcaster. The model of Stuhmeier and Wenzel (2010) predicts that and advertising level if advertising is a strategic substitute and decreases its advertising level if advertising is a strategic complement; ii) strengthening the cap will make the price of advertising rise on both TV channels; iii) after the introduction of the advertising cap, the unregulated TV station gain higher profits if the degree of differentiation in the eye of advertisers is over a given level;

¹⁶ However, the utility of advertisers is not affected by the number or characteristics of each channel's viewers; in other words, they abstract from indirect network effects that typically characterize two sided markets.

otherwise, the profits of the unregulated private channel decrease; iv) for moderate levels of regulation, the profit of the regulated channel may increase after the introduction of advertising caps.

The theoretical approach of Stuhmeier and Wenzel (2010) is very close to the theme that this paper wants to investigate empirically. Thus, the next section will try to generalize the results of Stuhmeier and Wenzel (2010) and other authors in order to propose a theoretical background for the empirical analysis described in the fourth and fifth Section.

3. Theoretical background

Although this paper deals with two-sided markets, the theoretical and empirical analysis will focus on the advertising market. In fact, broadcasting televisions derive the bulk of their revenues from selling advertising time, given the nature of public good of TV programs on the viewers' side¹⁷. We first formalize a theoretical argument in general terms, then we apply the very same argument to the total suppression of advertising on a single TV station. In particular, we study the effects produced by a change of the level of advertising of a single TV station competing with a private station. In particular, we assume a public TV station which reduces its level of advertising because of an advertising cap; in other words, we have a "regulated" public station competing with a multic TV station will produce the following effects.

 The first effect derives from cross network externalities. If we assume viewers adverse to advertising¹⁸, the audience of the public station raises and, ceteris paribus, the audience of the private station decreases. This effect increases the

¹⁷ In many countries a possession fee is levied to finance the TV channels controlled by the State.

¹⁸ Most contributions of media economics, for example Anderson (2005); Mangani (2003), Anderson and Coate (2005); Ambrus and Reisinger (2005); Choi (2006); Crampes et al. (2004); Gabszewicz et al. (2004); Kind et al. (2009); Kohlschein (2004); Kremhelmer and Zenger (2008); Peitz and Valetti (2008) assume that consumers dislike advertising. Exceptions are Hackner and Nyberg (2000), who assume that readers like advertising in print media, and Sonnac (2000), who considers feedbacks from advertising to circulation under the two alternative assumptions of consumer advertising aversion and advertising appreciation. Also Armstrong (2005), considers alternative scenarios, characterized by aversion, love or indifference towards advertising.

demand for advertising of the public station or, in other words, the willingness to pay of advertisers to advertise on the public TV increases.

2) The second effect is sometimes described "pecuniary externalities" (Reisinger et al., 2009) and goes in the opposite direction, at least partially: the reduction of advertising on the public station determines a reduction of total supply of advertising. If we assume an inverse demand function for advertising taking the form of $p_A=f(W)$ with f'<0, where p_A is the price per viewer-time and W is the total supply of viewers-time units, the price of advertising will increase after an advertising ban.¹⁹

There are two crucial points in the pecuniary externalities argument. First, the price of advertising needs to be unique. This contrasts with the causal observations of frequent price differentiation in the advertising market. Second, the economic rationale behind the argument may not hold when a TV station *decreases* its advertising level. Here, the competitor has no interest in stabilizing the increasing advertising price.

Broadly speaking, the reduction of advertising quantity determines ambiguous effects on the price of advertising. These effects depend on the structure of the market (namely, the number of broadcasting firms), the degree of product differentiation across media outlets (Reisinger et al., 2009), etc.

The relative importance of network and/or pecuniary effects affects the definition of advertising levels as strategic substitutes or strategic complements. Since advertising is an implicit price for viewers, the levels of advertising can be seen as strategic complements: when a TV station increases the advertising quantity, the other does the same, and the other way round. However, when we consider pecuniary externalities, the picture is more complex. In fact, when a (public) TV station increases the level of advertising, the price of advertising decreases. As a reaction, the competitor has an incentive to reduce its level of advertising to stabilize the price; from this perspective, the advertising levels may be seen as strategic substitutes.

¹⁹ The "modern" studies on media markets focus on the first effect to highlight the importance of cross network externalities. Only Reisinger et al (2009) and Stuhmeier and Wenzel (2010) treat explicitly the pecuniary externalities. In reality, Masson et al. (1990) analyzed the second and direct effect of "advertising supply" on price, and then showed the importance of advertising aversion and network externalities for the market equilibrium.

The decision to ban advertising completely in a given time slot is an extreme case of this theoretical framework. In fact, when a broadcaster eliminates advertising in a given time slot it substantially exits the market, because the "effective" market of broadcasting television is on the side of advertisers. The competitor becomes a monopolist on the advertisers' side, although it may finds itself without a relevant audience that has shift to the station without advertising. Potentially, this circumstance creates a large inefficiency. The market outcome is therefore ambiguous. For example, if the degree of program differentiation is relatively large with respect to advertising aversion, the absence of advertising on a single TV station will not shift the audience from its competitor. If the pecuniary effect prevails upon the cross network effects, the private/monopolist/unregulated broadcaster keeps positive levels of advertising and increase its revenues. Conversely, if advertising aversion prevails upon program differentiation, viewers may abandon the private and unregulated TV channel which, although monopolist on the advertisers' side, cannot exploit its market power. Advertising aversion of TV viewers and product differentiation between media outlets are difficult to estimate directly. Therefore, the empirical analysis regarding the French experience has the objective to explore these issues by focusing on the consequences of the ban in the advertising market.

4. Empirical analysis

The dataset contains data on quantity of advertising (number of spots and seconds) and advertising revenues per channel (aerial, satellite, cable and digital) for each week in the seasons 2007-2008 and 2008-2009 (excluding the summer months, i.e. July and August)²⁰. We are therefore able to calculate the average price per spot and price per second, in addition to the length of a spot.

We also added data on the stock market performance of the firms owning Tv channels in the periods above.

As already mentioned, starting from the 6th of January 2009, advertising was banned on public aerial television ("hertziennes channels") in the time period 20.00-6.00, which includes prime-time.

²⁰ The data were obtained from TNS France.

A preliminary analysis of the data, and a comparison of the seasons 2007-2008 and 2008-2009, shows that

- overall, nominal advertising revenues in the season 2008-2009 were more or less at the level of those of the season 2007-2008; the number of advertising slots in the season 2008-2009 were slightly higher than those in the season 2007-2008 before January 6th and more or less at the same level afterwards; the same is true for the number of seconds of advertising; the price of an ad, and even more the price per second, in the season 2008-2009 were lower than those in the season 2007-2008 before January 6th and more or less at the same level after January 6th.

- on hertziennes channels, advertising revenues in the season 2008-2009 were lower than those in the season 2007-2008. There appears to be, maybe, a further slight decline just after January 6th. Advertising spots in the season 2008-2009 more or less at the same level than those in the season 2007-2008. They become slightly lower just after January 6th. A similar result is found looking at seconds. The price of an ad in the season 2008-2009 was slightly lower than in the season 2007-2008 before January 6th and more or less at the same level after January 6th. The difference between the months before and after the ban is less evident looking at the price per second.

-on cable & satellite channels, advertising revenues in the season 2008-2009 were more or less at the level of the season 2007-2008. There appears to be no particular increase just after January 6th. Advertising slots in the season 2008-2009 were slightly higher than those in the season 2007-2009 before January 6th and more or less at the same level , or slightly lower, January 6th. A similar result is found looking at seconds. The price of an ad in the season 2008-2009 was lower than in the season 2007-2008 before the ban and more or less at the same level after the ban. A similar result is found looking at seconds.

-on digital channels, advertising revenues for in the season 2008-2009 have more or less doubled with respect to those in the season 2007-2008. However, there is no particular increase just after January 6th, not even in the time slot 20.00-6.00. Advertising slots in the season 2008-2009 were higher than those in the season 2007-2009 before January

6th and more or less at the same level, or only slightly higher, after January 6th. This finding does not depend on the time slot. A similar result is found looking at seconds. The price of an ad, or the price per second, in the season 2008-2009 were higher than those in the season 2007-2008 and always growing. There is no change in trend at the time the ban came into effect, not even in the slot 20.00-6.00 or in the slot 6.00-20.00.

All this seems to suggest that, while advertising on digital television is growing, its growth has not been affected by the ban coming into effect on January 6th. Similarly, advertising does not seem to have switched to cable and satellite.

An effect seems present at the aggregate level in that after the ban the average price seems to have declines while the quantity declined. To that extent part of the advertising might have ceased rather than switched as a consequence of the shift.

All in all, however, it would seem justified to focus our attention on the competition between public and private aerial TV channels. To this regard the following can be observed:

-on public channels, advertising revenues have overall declined in the season 2008-2009 with respect to the season 2007-2008. However, the decline with respect to the previous season is lower after the advertising ban, despite the lack of advertising revenues from the time slot 20.00-6.00. In fact, the time slot 6.00-20.00 advertising revenues for public channels have slightly increased with respect to the previous season after the ban cam into effect, as before the ban they were much lower than in the previous season. Advertising slots have declined in the season 2008-2009 with respect to the season 2007-2008 after the ban came into effect. This is due to the ban of advertising in the time slot 20.00-6.00. However, in the time slot 6.00-20.00 advertising was lower before the ban in the season 2008-2009 with respect to the season 2007-2008 but after the ban it grew to the same level. The latter is more evident looking at seconds. The price per ad and the price per second were initially much lower even after the ban came into effect. However, in the time slot 6.00-20.00 the price per ad and the price per second after the

ban in the season 2008-2009 were at the same level of the prices in the season 2007-2008.

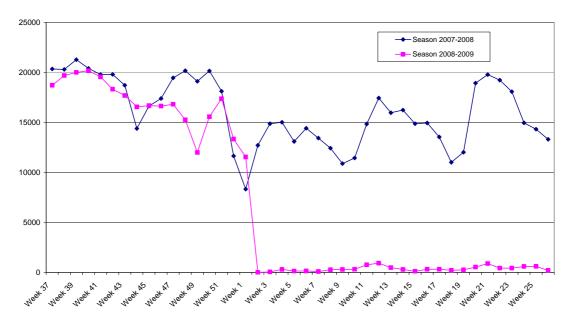
-on private channels, advertising revenues have remained more or less stable for private channels in the season 2008-2009 with respect to the season 2007-2008 before the ban on advertising on public tv came into effect. However, after the ban came into effect, advertising revenues seem to have declined a bit; this effect seems due to a decline in advertising revenues in the time slot 20.00-6.00 and maybe also in the time slot 6.00-20.00. Advertising slots have remained more or less stable for private channels in the season 2008-2009 with respect to the season 2007-2008 before the ban on advertising on public tv came into effect. However, after the ban came into effect, advertising slots seem to have declined a bit; this effect seems due to a decline in advertising slots in the time slot 6.00-20.00. A similar result is found looking at seconds. The price of an ad and the price per second have remained more or less stable for private channels in the season 2008-2009 with respect to the season 2007-2008 before the ban on advertising slots in the time slot 6.00-20.00. A similar result is found looking at seconds. The price of an ad and the price per second have remained more or less stable for private channels in the season 2008-2009 with respect to the season 2007-2008 before the ban on advertising on public tv came into effect. However, after the ban came into effect, the price per second have remained more or less stable for private channels in the season 2008-2009 with respect to the season 2007-2008 before the ban on advertising on public tv came into effect. However, after the ban came into effect, the price per second has declined a bit; this effect seems due to a decline in the price per ad, and per second, in the time slot 20.00-6.00.

All this seems to suggest that advertising which was previously broadcasted on public TV in the time slot 20.00-6.00 did not switch to private channels in the same time slot (nor was the price in that time slot on private channels increased). Rather advertising switched to public TV in the time slot 6.00-20.00.

This might imply that from the point of view of advertisers viewers are more differentiated between public and private channels than they are across time slots: a person watching public TV in the 6.00-20.00 time slot is a better subistitute for one who watches public TV in the time slot 20-00-6.00 than one who watches TV on a private channel.

All in all, the preliminary evidence shown above would seem to suggest that the common expectation that the ban would favour private TV channels at the expense of public ones was not fullfilled.

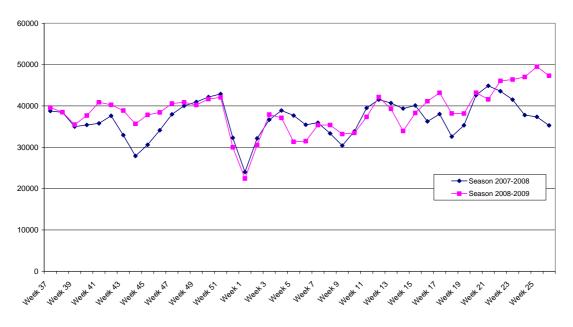
Ad Seconds Public 20.00-6.00



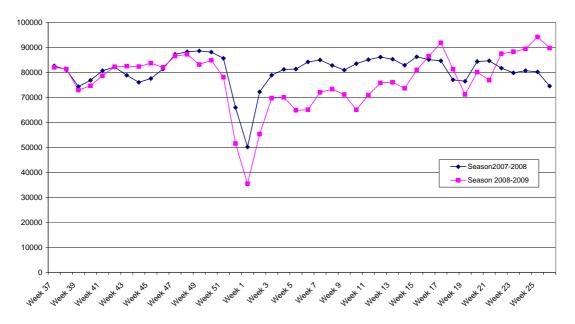
Ad Seconds Public 6.00-20.00



Ad Seconds Private 20.00-6.00



Ad Private Seconds 6.00-20.00



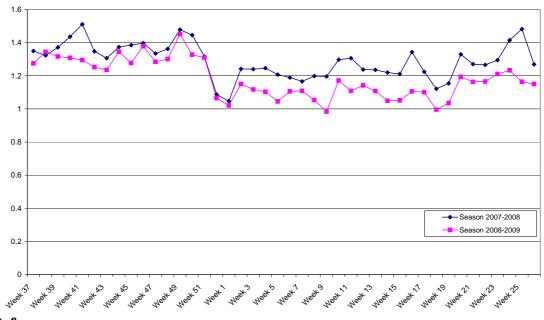




Price per Second Private 6.00-20.00



Price per Second Private 20.00-6.00





Ambrus, A. and M. Reisinger (2005), Platform competition and welfare: media market reconsidered, mimeo.

- Anderson P. (2007), The regulation of advertising, in *The Economic Regulation of Broadcasting Markets Evolving Technology and Challenges for Policy*, Edited by Paul Seabright and Jorgen von Hagen, Cambridge University Press.
- Anderson S. e Gabszewicz (2005), The media and advertising: A Tale of two-sided markets, CEPR Discussion Papers, n. 5223.

- Anderson S.P., Coate, S. (2005), Market Provision of Broadcasting: A Welfare Analysis, Review of Economic Studies, 72(4), 947-972.
- Armstrong M., 2005. Competition in Two-Sided Markets, RAND Journal of Economics, 37(3), 668-691, Autumn.
- Beebe, Jack H. (1977). Institutional structures and program choices in television markets. Quarterly Journal of Economics 91(1): 15-37.
- Choi, J.P., Broadcast Competition and Advertising with Free Entry: Subscription vs. Free-to-Air; Information Economics and Policy, June 2006, 18, 2, 181-96.
- Crampes C., Haritchabalet C., Jullien B. (2009), Advertising, competition and entry in media industries, Journal of Industrial Economics, 57 (1), 7-31.
- Gabszewicz, J.J., D. Laussel and N. Sonnac (2004), Programming and advertising competition in the broadcasting industry, Journal of Economics and Management Strategy 12, 291-335.
- Häckner J, Nyberg S. 2000. Price Competition, Advertising and Media Market Concentration, Stockholm University, Department of Economics Research Papers in Economics 2000-3.
- Kind H.J., Nilssen T., Sorgard L. (2009), Business models for media firms: Does competition matter for how they raise revenue? Marketing Science, 28(6), 1112-1128.
- Kohlschein, I. (2004) Economic Distortions Caused by Public Funding of Broadcasting in Europe, WP.
- Kremhelmer, Susanne; Zenger, Hans Advertising and the Screening Role of Mass Media Information Economics and Policy, June 2008, 20(2), 107-19.
- Mangani, A. (2003), Profit and audience maximization in broadcasting markets, Information Economics and Policy, 15(3), 305-315.
- Masson, R.T., Mudambi, R. and R.J. Reynolds, 1990, Oligopoly in advertiser-supported media, Quarterly Review of Economics and Business 30, pp. 3-16.
- Parker GG, & amp; Van Alstyne MV. 2002. Two-Sided Network Effects: A Theory of Information Product Design, Management Science, 51(10):1494–1504.
- Peitz, M. and Valletti, T.M., Content and Advertising in the Media: Pay-TV versus Free-to-Air, International Journal of Industrial Organization, July 2008, 26(4), 949-65.
- Reisinger, M., Ressner, L., and Schmidtke, R. (2009). Two-sided markets with pecuniary and participation externalities. Journal of Industrial Economics, 57(1):32-57.
- Rochet J.-C. and Tirole J. (2006), Two-sided markets: a progress report, Rand Journal of Economics, 37, 3, 645-667.
- Rochet, J.-C. and Tirole, J. (2003). Platform competition in two-sided markets. Journal of the European Economic Association, 1:990-1029.
- Sonnac, N. (2000), Readers Attitudes Towards Press Advertising: Are They Ad-Lovers or Ad-Averse? Journal of Media Economics 13(4), 249-259.
- Spence, Michael A. and Owen, Bruce (1977). Television programming, monopolistic competition and welfare. Quarterly Journal of Economics 91: 103-126.
- Steiner, Peter (1952). Program patterns and preferences, and the workability of competition in radio broadcasting. Quarterly Journal of Economics 66:194-223.
- Stuhmeier T. and T. Wenzel (2010), Regulating Advertising in the Presence of Public Service Broadcasting, WP, Dusseldorf Institute for Competition Economics.

Wright, D.J. (1994), Television Advertising Regulation and Program Quality, The Economic Record, 70. 211, 361-367.

Le Canard enchaîné (2008), *Audiovisuel publique: pourquoi Nicolas Sarkozy veut-il supprimer la publicité ?*, 19 janvier 2008, available at http://www.politique.net/2008011902-audiovisuel-public-pourquoi-sarkozy-supprime-pub.htm

Le Monde Diplomatique (2008), *La télévision publique libérée de ses chaînes* ?, February, 2008, par Marie Bénilde, available at <u>http://www.monde-</u>diplomatique.fr/2008/02/BENILDE/15587

The Ecnomist (2008), A fuzzy picture – Plans to abolish advertising on public televisions are proving unpopular, 21 February 2008, available at http://www.economist.com/node/10727792

The Guardian (2008), *Sarkozy to ban advertizing from state television*, Angelique Chrisafis, 10 January 2008, available at http://www.guardian.co.uk/world/2008/jan/10/france.advertising

Conseil Supérieur de l'Audiovisuel (2009), *Le marché publicitaire télévisuel français en 2009 : (r)évulotion ?*, Février 2009, available at <u>http://www.csa.fr/upload/publication/CoproVpublicationv12-07publie.pdf</u>

European Commission (2008), *TV*, *online*, *on demand* – *Modern Rules for Audiovisual Europe*, Fact Sheet, October 2008, available at http://ec.europa.eu/avpolicy/docs/reg/avmsd/fact_sheet_en.pdf

Journal Officiel de la République française (2009), *Cahier des charges de la société nationale de programme France Télévisions*, Decret no 2009-796 du 23 juin 2009, published 25 June 2009, available at http://www.csa.fr/upload/dossier/cahier%20des%20charges.pdf

Légifrance (2010), *Rapport relatif au décret n° 2008-1392 du 19 décembre 2008*, available

at <u>http://www.legifrance.gouv.fr/affichTexte.do;jsessionid=DECC6A7055BE90CF007</u> <u>A7173B3A3D86A.tpdjo03v_2?cidTexte=JORFTEXT000019986589&dateTexte=&old</u> Action=rechJO&categorieLien=id

Ministère de la culture et de la communication (2009), *Loi n°2009-258 du 5 mars 2009 relative à la communication audiovisuelle et au nouveau service publique de la télévision*, La réforme de l'audiovisuel public, mise à jour le 03/08/2009, available at http://www.ddm.gouv.fr/article.php3?id_article=1447

Ministère de la culture et de la communication (2008), La directive services de médias audiovisuels (SMA), mise à jour le 10/03/2008, available at http://www.ddm.gouv.fr/rubrique.php3?id_rubrique=143

SNPTV (2010), Syndicat National de la Publicité Télévisée, Reglementations, available at <u>http://www.snptv.org/generalites/faq.php?theme=1</u>, accessed 14/09/2010

Rudfunkstaatsvertrag (2010), Institut für Urheber- und Medienrechte, available at http://www.alm.de/fileadmin/Download/Gesetze/RStV_aktuell.pdf

Rundfunkstaatsvertrag (1991), Institut für Urheber und Medienrechte, available at http://www.urheberrecht.org/law/normen/rstv/RStV-00b-1991/text/1991_02.php3

W&V (2010a), *ARD/ZDF: Kurt Beck macht Ernst mit Werbeverbot*, Werben und Verkaufen, 15.03.2010, available at:

http://www.wuv.de/nachrichten/medien/ard_zdf_kurt_beck_macht_ernst_mit_werbever bot

W&V(2010b), *Werbeverbot für ARD und ZDF rutscht von der Tagesordnung*, Werben und Verkaufen, 07.06.2010, available at:

http://www.wuv.de/nachrichten/medien/werbeverbot_fuer_ard_und_zdf_rutscht_von_d er_tagesordnung