Regulation for Pluralism in the Media Markets*

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Abstract

This paper analyzes the private incentives and the regulatory policies to ensure pluralism in the media markets. We propose a double definition of pluralism: External pluralism (EP - a diversified supply of political views in the market) and Internal pluralism (IP - the diversified political positions presented within each single media). We first analyze if the market and private incentives are able to provide EP and/or IP. Our conclusion is that although a differentiation of contents characterizes the market equilibrium, this feature not necessarely extends to the representation fo political views; moreover persistent concentration, driven by the uprise in the cost of the more attractive contents, remains a major limit to the realization of EP. Private provision of IP seems weak as well, due to the widespread partizan or lobbying motivations of the media owners. Due to these market failures to provide pluralism we consider the main regulatory policies used in Europe and propose a list of possible interventions. EP should be assessed looking at the concentration in the audience/readership, with more concentrated markets calling for stricter regulation. Antitrust policy can be of great help but cannot substitute regulation for pluralism. Regarding EP regulation and merger controls should limit concentration and multimedia operators in the same market, although allowing for cross market activities. Concerning IP, limits to investors active in heavily regulated industries, a regulation of contents during electoral campains and a public TV channels should be the main tools. Finally, an independent authority should enforce this regulation.

Keywords: Pluralism, Content Differentiation, Natural Oligopoly, Multimedia Operators

1 Introduction

Pluralism - the fair, balanced and unbiased representation of a wide range of political opinions and views, is a fundamental component in the working of

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modern democracies. Assuring pluralism in modern economies, characterized by a well developed set of media markets, requires political and social actors from across the spectrum to have proper access to the different media.

The last two decades have seen an impressive development in the number and range of media that today contribute to form public opinion, with technological innovations and new policies leading the process. Cable and satellite transmission during the 1980s relaxed the constraint of limited frequencies over the hertzian spectrum that had previously restricted the number of TV channels. Moreover these technologies, together with encrypted signals over the air, enabled exclusion of non-payers, and thereby contributed to the development of pay-TV services, adding a new source of revenues for private operators. At the same time, public policies more favourable to private companies promoted wide reforms of broadcasting markets in Europe, where commercial channels financed with advertising started to erode the audience of the incumbent public channels. Today there are many more channels available to the public than two decades ago. The current phase of development of digital broadcasting will further increase the number and nature of TV services offered to the public, with a convergence between media and telecommunication industries. Finally, the Internet has offered a new and potentially cheap channel of diffusion of ideas and contents that adds to the other processes. Considering these developments, therefore, we might argue that the realization of pluralism is today in much better shapes than two decades ago, with an incomparably larger number of media available for the diffusion of ideas.

If we look at these media markets in the main European countries, however, we observe in most cases very high levels of concentration. In the table below we present the C3 concentration ratio¹ by media company in the main markets, caluclated according to the distribution of viewers, readers or listeners.

Table 1: Concentration ratio (C3) in the media markets 2002-2003

		Media		
	National press	Regional press	free to air TV	Radio
France	70.0	46.7	80.7	59.1
Germany	87.4	27.9	90.9	56.8
Italy	44.8	-	88.7	58.7
Spain	-	47.3	71.4	76.6
$\mathbf{U}\mathbf{K}$	70.6	51.6	69.9	72.3

Source: Ward (2004)

Free-to-air television is the most concentrated segment while the regional press ranks relatively low, although it should be considered that the national data do not fully portray concentration in an industry that is characterized by a large set of very concentrated local markets. It is difficult to interpret these

 $^{^{1}}$ The C3 concentration ration computes the sum of the market shares or the largest three firms. In the table the market shares are computed according to the distribution of the viewers (TV's), readers (press) or listeners (radio).

data, and the implicit problems for pluralism that they might imply, given that the process of development of new media markets is far from concluded. Innovations in telecommunications and the media, moreover, suggest that the picture might change even more. Hence, in order to establish how the objective of pluralism should be pursued we cannot refer simply to the status quo, and we need to rely also on some theoretical considerations that allow us to identify the leading forces of the process in the early future.

Although pluralism is a political more than an economic objective, its realization today (and in the near future) will depend first of all on the outcome of market forces. Since today most of the suppliers in media markets are private companies, and these markets are characterized by persistent concentration and risks of foreclosure, we need an economic analysis of the functioning of the media markets in order to evaluate whether the new technological opportunities will lead to the realization of pluralism. This chapter analyzes whether private incentives in the media markets are sufficient to realize pluralism, or whether it needs to be an explicit objective of regulation.

The chapter is organized as follows. In Section 2 we introduce a double definition of pluralism, distinghishing between external pluralism (which characterizes the range of content in a given media market) and internal pluralism (which characterizes the range of content supplied by a single media company). In Section 3 we ask whether the market can be expected to provide enough external pluralism, pointing out some key reasons for caution. The more analytical features are treated in subsections, marked with *, that can be skipped by less technically minded readers. Section 4 then considers whether private incentives are sufficient to provide internal pluralism, identifying further reasons for market failures in this case. Section 5 reviews the main regulatory tools that are used in European countries, evaluating whether they can remedy the kinds of market failures that have been identified, and discussing a set of open issues. Section 6 concludes the paper.

2 Pluralism: a double definition

When we define pluralism as the objective of ensuring a balanced, fair and unbiased access of all political opinions and views to the media we leave unspecified an important part of the question: do we want citizens to find a full range of political views expressed among the existing media outlets in an overall media market, or do we want individual media outlets to host a variety of opinions across the ideological spectrum? The former characteristic is usually called External pluralism (EP). The latter is called Internal pluralism (IP).

The distinction between External and Internal pluralism suggests looking separately at how whole markets provide for the expression of political opinions and views, and how such provision is made by individual media companies. In both cases we need to clarify further how pluralism should be measured. It might simply refer to the availability of all political views, with no reference as to how (and when) they are made available; or we might desire to check that the general public can have access to them on equal terms (for instance, at similar viewing times, or within the same programs). In other words, the realization of pluralism can be assessed by looking at the mere availability of different views, or instead by focusing on the actual choices of the public among the available contents.

If we refer to availability, we look at the supply of political views and information by the media companies; we might assess, for instance, whether newspaper shops carry the full range of publications and do not refuse to sell some of them. Or whether there exist the full range of TV channels received by the whole population during prime time, when the largest audience is reached. Under this approach, the central quantitative measure for External pluralism would be the number of media (TV channels, newspapers, radio stations) and the number of media companies (TV broadcasters, publishers, communication groups).

When instead the actual choices of viewers and readers is the central issue for pluralism, the simple availability of access may be not enough if most of the public patronizes a limited subset of the available media. In this case some measure of concentration applied to audience or readership, such as for instance the Herfindhal Index, might be used to assess market concentration and the lack of External pluralism.

If we think that the general public is in the position to make informed and independent choices on the media or program/article to patronize, availability of different views should be all that matters; if we presume that the public always chooses its preferred political contents, the ex-post observation of actual choices should simply reflect the distribution of preferences, over which we should be neutral.

If, however, there are frictions and lock-in effects in the way the different media are chosen, actual choices will not necessarily reflect preferences over political information. Lock-in effects can occur, for instance, in TV since programs on different channels do not start exactly at the same time. Suppose, for instance, that a TV channel has a very popular program during prime time just before the news, so that a large portion of the public watches the program and goes on to watch the news on the same channel.² Even when the news programs are announced at the same time (say, at 8 pm) on two rival channels, there is usually some slight difference in the starting time of newsflashes, or previews may be offered some minutes before the official time. This creates a lock-in of the viewers The high audience of a news channel, therefore, may derive from the popularity of the previous scheduling rather than from an appreciation of

²This effect may be quite important. In 2005, the main Italian public TV channel, Rai1, decided to insert an advertising break between a very popular quiz show and the prime time news at 8 pm. Since the break interrupted the sequence of programming, viewers had time to switch to other channels for the news. The leading commercial channel, Canale 5, broacasts its news at the same time; due to the commercial break on the rival channel, Canale 5 improved its audience share by around 5%.

the news itself.

Lock-in effects may occur for different reasons in newspapers. Since local news-gathering requires a dedicated staff of journalists and a local editorial office, national newspapers cannot usually cover them as local newspapers do. But given the limited dimension of the market, only a few local newspapers, and quite often only one or two, can survive in a given area, a tendency that we observe in many countries including the US. Since most newspapers must be purchased, most readers buy just one. The concentration of local readership will be due to the nature of local news-gathering rather than to the political positioning of these media.

Lock-in effects, as described in the discussion above, are likely to be relevant when we look at External Pluralism, since the choice of a reader's preferred political content might require switching from one media outlet to another (incurring some costs). If there is Internal Pluralism, with a variety of opinions expressed within the same media outlet, readers may be much less affected by such lock-in effects. Therefore, our discussion of the measurement of pluralism with respect to the available contents or to the actual choices of the public refers mainly to the implementation of an EP objective.

While the choice between internal and external pluralism objectives is beyond the scope of economic analysis, we think that the implementation of either policy objective, and therefore the success in pursuing the general goal of pluralism, requires a careful analysis of what can be expected from the private incentives of media companies. If we are pursuing an EP goal, the relevant issues are the degree of differentiation among media companies and the features of the media market structure under free entry. If instead we follow an internal notion of pluralism, we need to understand whether a media company finds it profitable to offer multiple policy positions, an issue related to the choices of firms in other industries between single and multiple product lines.

The next sections will therefore address three main questions, drawing on the existing literature on media markets:

- 1. Do media companies tend to offer in equilibrium a differentiated supply of contents (including policy positions)?
- 2. What are the possible long run equilibrium market structures (in terms of the number of firms and the distribution of their audience or readership) and their determinants in the media industries?
- 3. What are the incentives of a single media company to offer a variety of contents (including different policy positions)?

While the first two issues are relevant for the assessment of EP market provision, the last one focusses on the private incentives for IP.

3 Does the market provide enough External Pluralism?

Before looking at the equilibrium degree of differentiation and at the equilibrium market structure, it is useful briefly to review some modelling issues in media markets. The media include today a very diversified set of industries, including the written press, television and radio broadcasting, and electronic communications over the Internet. It is hard to analyze the main features of equilibrium in these markets in general, as industry specificities may play a role in driving the results. In this section, therefore, we will focus mainly on the features of the television broadcasting industry and, to a certain extent, to the press industry, which are arguably the most influential today in forming public opinion.

3.1 Modelling media (broadcasting and press) markets

The economic literature on the television industry is relatively small. Early works ³ focussed on the choice of program variety between competing broadcasters, using a horizontal differentiation or monopolistic competition framework. More recently, the interplay between the broadcasting market and that for advertising has been modelled, addressing issues like the over or under-provision of advertising (Anderson and Coate (2000)) or the degree of differentiation among channels (Gabszewicz et al (1999), Gabszewicz et al (2001) and Gal-Or and Dukes (2001)). The links between product market rivalry, as influenced by advertising, and equilibria in broadcasting markets is further explored in Nilssen and Sørgard (2001) and, again, Gal-Or and Dukes (2001)). Finally, long run equilibria under free entry are analyzed in Motta and Polo (2001). We can summarize the main features of these models as follows:

- Media industries, including TV and radio broadcasting and the press, in which advertising is an important source of revenue, are two-sided markets⁴: media outlets can be considered as platforms linking the market for audience (viewers, listeners, readers) and the market for advertising.
- Audience exerts a positive externality on advertising, as the larger is the
 audience the more effective are expected to be the commercials. On the
 other hand, in most cases advertising creates a negative externality on
 the audience, by interrupting and fragmenting the content of the media.
 This negative effect is usually recognized and empirically documented in
 the marketing literature for TV and radio broadcasting, since the viewer
 cannot exclude the commercial breaks by turning immediately back to the
 program he was watching or listening. The externality of advertising on

 $^{^3}$ See Steiner (1952) on program differentiation in radio broadcasting, and Spence and Owen (1977), who use a monopolistic competition set up to analyze program diversity in TV broadcasting.

⁴See for a review Rochet and Tirole (2003) and (2004).

the readers of the press is more debated ⁵: press advertising is often more informative, providing a service to the reader⁶; moreover, the reader is not constrained to read the messages, and can simply skip the pages of advertising and moving to the articles of interest. For these reasons, we might have some readers who like and others who suffer from advertising in the press. In any case, these effects create *intermarket network externalities*, as the larger is one market, the stronger is the externality on the other market.

• Both markets are characterized by heterogeneity of the agents: viewers/readers have different preferences over the varieties and the quality of the contents, and advertisers have different willingness to pay for advertising space or time. We can therefore obtain from these preferences a demand for audience and a demand for advertising. The specification of preferences of the two groups of agents (viewers/readers and advertisers) draws heavily from the literature on product differentiation. The specific features, and their important consequences for market equilibria, lead to two main approaches, whicht we discuss in the following paragraphs, highlighting their implications for market equilibria.

3.2 Do media companies offer differentiated contents?

Our first question on the supply of differentiated contents can be addressed within the so-called Monopolistic Competition approach (MC) to media markets. It assumes that viewer/reader preferences are characterized by a taste for variety or by heterogeneous tastes for specific varieties, which is usually defined as horizontal product differentiation: that is, either every viewer likes a mixture of entertainment, sport, movies, information, or there are audience niches each patronizing a particular variety. There is no variety that is always preferred by all viewers, although there might be a concentration of tastes over the more popular varieties (e.g. movies or sports). As a result, offering a mixture of different contents is the best way to reach a significant fraction of the audience. In this setting, the main decision of the media companies is to select the (mixture of) varieties of contents it is willing to offer to its potential public. Political views, information and opinions are an additional dimension over which the media company has to choose its positioning.

⁵See for instance Gabszewics, Laussel and Sonnac (2001) and Sonnac (2000).

⁶Consider for instance the submarket of magazines focussed on a female public, in which huge amounts of advertising come from the dress and fashion industry. It seems natural to consider that the images of the advertising messages convey a substantial amount of information to the public of readers.

⁷The general case of tastes for variety is treated for instance, in Dixit and Stiglitz (1977) while the preference for (heterogeneous) single varieties was first introduced by Hotelling (1929).

⁸It is important to stress that when dealing with political information a variety might be the presentation of a single political opinion (for instance on a fact or on an issue), but also a particular mixture of views that gives a certain weight to some (or all) the political views. In this latter case, moreover, some positions might be presented under a positive light

Turning back to preferences, all viewers (but not necessarily all readers) dislike advertising, which therefore plays a role similar to an implicit price for watching the program. Finally, advertisers' willingness to pay depends on the audience reached by the media (and by their profit expectations from advertisements⁹).

In this framework, media companies choose their varieties in order to attract an audience, exploiting a larger audience in the advertising market through larger quantities of advertising and/or higher prices for the commercials. The key point in this setting is that if two media companies offer relatively similar programs, the viewers/readers are relatively willing to switch from one channel/newspaper to the other if the former increases its advertising time/space. Hence, a low degree of differentiation constrains adversely the sales of advertising and the profits of the media company.

Our discussion leads to the main result of this approach: the media companies facing a public of viewers/readers characterized by different preferred varieties of programs and disliking advertising messages will choose maximally differentiated program schedules. (Gabszewicz, Laussel and Sonnac (1999)).

The maximum differentiation outcome might suggest that the media companies will choose to differentiate their contents also over the political dimension, in order to attract different political niches of the public. Before jumping to this conclusion, however, it is worth noting that a media company usually offers a wide range of varieties in a bundle (entertainment, movies, sport, news, etc.), calibrating them to reach its targeted public. If, for instance, a TV channel is focussed mainly to a public of teenagers, it will choose the distribution of programming time among movies, music, sports, entertainment, news, etc., and, for each of these types, the programs that better match the tastes of the public of young people. Not all the varieties included will be equally important to the public of viewers. This affects the choice of whether or not to differentiate from the offerings of competing media.

In particular, by differentiating their contents over the more relevant varieties the media companies create loyalty and reduce audience mobility, while by offering more similar (popular) contents on less important varieties they further increase the audience and the value of their advertising space. In our previous example, differentiation might occur on some dimensions that are more relevant for the targeted viewers/readers (for instance, the kind of music or movies in the case of teenagers) while convergence occurs on other dimensions that are less important for teenagers, such as the news. That is to say that the result of Maximum Differentiation does not necessarily imply that media companies will differentiate over all the varieties, and in particular over the political views

while others critically. Hence, when we refer to the notion of varieties in political information we have a very wide range of different opportunities. A fair and balanced representation of political views should correspond to messages that convey the key positions of political parties without judgements and embellishments.

⁹This element creates a further link with product market competition, as a more competitive market, implying lower profits, will reduce the willingness to pay for advertising of the firms. See on this point Gal.Or and Dukes (2001) and Nilssen and Sørgard (2001).

they express, since these might be a relatively unimportant component of the overall contents offered.

Putting the point another way, if the public is highly concerned with politics, we might expect Maximum Differentiation to occur in political positioning, as arguably in the broadsheet press. If, however, most viewers of commercial TV or popular newspapers are much less interested in politics than in entertainment or sport, then we might expect differentiation in the letter dimensions not in political views, which might converge to a "median" political position.

So, to answer our first question, competition among media companies financed by advertising revenues induces them to offer diversified contents, as long as advertising exerts a negative externality on the audience and increases the gross profits of the advertising firms in the product market (as seems to be true for commercial TV channels and at least in part, for the written press). Whether Maximum Differentiation extends also to the political views expressed by the media companies is however an open question; this may be so only for those media whose audience is strongly interested in politics. We can therefore conclude that the market provides sufficient incentives for media companies to offer a diversified range of contents along some dimensions, but this feature does not necessarily extend to political viewpoints.

3.2.1 The MC Approach: analytical results (*)

The typical representation of preferences in the MC approach is:

$$U(x_i, a_{i,p_{i,t}}) = v^* - \lambda a_i - p_i - \psi(x_i - t)^2$$

where v^* is the willingness to pay for the media, that is decreased by the amount¹⁰ of advertising a_i (with weight λ), the price (subscription fee) paid p_i (if any) and the mismatching of actual (x_i) vs preferred (t) variety.

In the MC approach the equilibrium degree of differentiation, our first question, can be properly addressed within a multistage game framework where program (political) variety x_i is chosen first, and then advertising quantity a_i (or rates) are chosen taking into account the viewers/readers' and the advertisers' demand.

In the simpler case the media companies obtain revenues only by selling advertising time/space, while giving for free the contents to the viewers/readers. In this setting we obtain:

Proposition 1 The media companies facing a public of viewers/readers characterized by different preferred varieties of programs and disliking advertising messages will choose maximally differentiated program schedules. (Gabszewicz, Laussel and Sonnac (1999)).

¹⁰It is worth noticing that advertising quantities play the same role as product prices in the standard Hotelling model, i.e. the two media companies play in strategic complements when setting the amount of advertising space. The reason is that when media 1 sells more ads, it creates a shift in the audience towards media 2, that will sell more ads as well.

Hence, the Principle of Maximum Differentiation established in D'Aspremont et al. (1979) within the simpler Hotelling model still holds true in the more complex two-sided markets framework that takes into account the specific features of the media industry. It is important to contrast this result with alternative outcomes that suggest a lower degree of differentiation, in order to evaluate the robustness of our conclusion.

A Minimum Differentiation result can be obtained if we ignore the negative externality of advertising on viewers and readers: in this case the intermarket externalities work in one direction only, with a larger audience increasing the willingness to pay of advertisers. The design of program variety in this case is driven by the pursuit of a large audience, that is better accomplished once more "central" or popular varieties are selected: since the viewers are not negatively affected by the amount of ads, moving to the center has only the positive effect of eroding the rival media audience. This set-up, and the resulting conclusion that very similar contents will be offered in the media market, can be found in the pioneering works of Steiner (1952) on radio broadcasting.

More recently, Gabszewicz, Laussel and Sonnac (2001) find similar conclusions regarding the press industry: they consider press editors who raise revenues from both the sale of newspapers and of advertising space. Readers are interested in the policy position of the newspaper but not in the amount of advertising. The revenues coming from newspaper sales provide an incentive to follow the ideological position of the readers, pushing toward a strong differentiation of the media companies. Conversely, advertising revenues depend on total audience, which can be reached by locating more centrally. When the readers are not heavily concerned about the political positions taken by the newspaper while the advertising market is large, the latter effect dominates and minimum differentiation emerges¹¹. On the contrary, when the readers pay more attention to the policy position taken by the newspapers and the advertising market is a less important source of revenues, the usual Maximum Differentiation result occurs. ¹²

We think that the negative effect of advertising on the audience is a fundamental (empirical) fact of the TV industry, and it seems to be relevant in many submarkets of the press industry as well. Hence, the outcome of Minimum Differentiation obtained by ignoring the negative impact of advertising on the audience cannot be considered a general result in media markets.

A second case in which Minimum Differentiation occurs is shown in the Gal-Or and Dukes (2001) paper. In this case the link between advertising and product market competition plays a central role: since the authors consider only informative advertising, a larger quantity of advertising makes customers in the product market more informed and mobile, with an increase in competition and

¹¹ Notice that the usual problem of non- existence of equilibrium that arises in the standard Hotelling model does not occur here, where firms have a double source of revenue: locating at the center, in fact, will force media companies to give the newspapers for free to the readers, but will maximize the revenues from advertising.

¹²This paper can shed some light also on the pay-TV market, in which media companies collect revenues both from advertising and from subscription fees.

a fall in the advertizers' gross profits. In this case media companies, by selecting more similar contents, reduce the amount of advertising in equilibrium (as in the Proposition above), making the product market less competitive. The higher gross profits resulting in the product market allow media companies to increase their profits as well when selling advertising time¹³. Hence, Minimum Differentiation occurs. Although the paper by Gal-Or and Dukes is interesting, highlighting a further link between the advertising market and the product market, it seems that the overall result is driven by the assumption of informative advertising. If ads increase consumer loyalty, reducing (instead of increasing) product market elasticity¹⁴, the result would be reversed, since more differentiation, inducing more advertising, allows an increase in product market gross profits and the advertising revenues of the media companies.

While the nature of advertising (informative, loyalty enhancing or both) is first of all an empirical matter, experience suggests that, in particular for TV commercials, advertising messages are more focussed on loyalty enhancement or information about product characteristics than on prices, in contrast with the assumptions of Gal-Or and Dukes (2001). We argue, therefore, that in this case too the Minimum Differentiation outcome cannot be considered a general result for the media markets.

However, a final remark on equilibrium differentiation seems important. The following proposition summarizes the result.

Proposition 2 If firms have to differentiate their products over several dimensions (characteristics), in equilibrium the firms will maximally differentiate on the characteristics more important for the consumers, while converging to minimum differentiation on the other (less important) characteristics (Irmen and Thisse (1998)).

With multiple characteristics, product differentiation can be realized with more degrees of freedom. By diverging on the key characteristics (those with a higher ψ) the firms relax advertising competition, while convergence on the other dimensions is driven by the desire to maximize total demand (once Bertrand competition is avoided).

¹³ Gal-Or and Dukes (2001) obtain this result by assuming that media companies and advertisers bargain over advertising prices, using a Nash Bargaining solution. It seems, however, that a similar result could be obtained by assuming the media companies set a price along the advertisers' demand function for commercials.

¹⁴Moreover, informative advertising can focus on particular elements of firms' supply, as prices or varieties. In a Hotelling duopoly with a fraction of consumers uninformed, the equilibrium prices fall below the full information price when consumers observe prices but not variety, while the price increases above the full information benchmark when varieties but not prices are observed. Hence, even within informative advertising the content of the messages can have opposite effects on firms' gross profts. See Polo (1991).

3.3 Do media industries tend towards concentration or fragmentation?

Our second relevant question regarding media market concentration has not been properly addressed so far in the MC approach. Moreover, although the MC approach to the media industry has the important merit of highlighting the forces that lead to differentiation in the supply of contents among market operators, it leaves aside an important element of the picture. The supply of contents requires firms not only to choose a particular variety (or mix of varieties), but also to invest in the scarce inputs that make a program (within a given variety) attractive for viewers/readers, something that we can in general describe as talent. For instance, a TV channel has not only to choose whether to focus more on sport events or movies - a typical horizontal differentiation decision. Once it has chosen, for instance, to focus on sports, it has to decide between the major sport events, as the Champions League or the Olympic Games, or a less attractive programme based on minor sports or less important international matches. In the same vein, a channel more specialized in movies might decide to collect and broadcast the seasonal blockbusters or less popular movies.

This observation leads us to recognize that viewers/readers have both a taste for variety and for the attractiveness ("quality") of the contents transmitted or published: going back to the product differentiation literature, the audience demand reacts to both the horizontal (variety) and vertical (attractiveness) decisions of the media companies.

Targeting contents according to both variety and attractiveness has dramatic effects not only on the revenue side (more attractive programs, more audience, more advertising revenues) but also on the cost side, as the more popular programs tend to be more expensive, reflecting their larger revenue potential¹⁵. The fixed costs therefore increase with the attractiveness of the contents provided.

We define as the Natural Oligopoly (NO) approach to the analysis of the media market one that stresses the double role of investing in the attractiveness of contents: increasing the revenues (from advertising, through a larger audience, or from subscriptions) and the (fixed) costs of the operators. The NO approach offers a richer description of the interaction among media companies, which can compete for audience not only by moderating their advertising space, but also by investing in programming.

In this framework the long run equilibria under free entry, our second key question, are described in the following statement: when viewers/readers have both a taste for the variety and for the attractiveness of the contents, and more attractive contents imply higher fixed costs, the maximum number of firms sustainable in a free entry equilibrium, N, is bounded above for any dimension of the advertising market. Moreover, the market in the limit is more fragmented

¹⁵ For instance, the transmission rights of the major sport events and of the more popular movies are priced according to the number of TV sets and the value of the advertising investments in the country.

the more horizontally differentiated are the contents across media companies. (Motta and Polo (2001)).

The intuition of this result should be straightforward once the basic mechanisms of the NO model have been understood: N is determined by the free entry condition once the fixed costs of programming are strictly covered by advertising revenues. A larger advertising market increases the revenue potential from advertising, increasing the incentives to compete for the audience through a higher level of attractiveness of the contents. This pushes up both advertising revenues and fixed programming costs, with no room, at some point, for further entry¹⁶. If there is scope, given the viewers/readers preferences, for more horizontal differentiation of contents, competition for audience is realized by targeting different contents and is therefore relaxed, and the mechanism that pushes up the fixed costs of programming slows down, with lower fixed costs in equilibrium. This is consistent, for given dimension of the advertising market, with a higher number of firms.

Summing up, the NO approach identifies some elements that govern the equilibrium market structure under free entry. Suppose the tastes of the viewers/readers are concentrated on a limited number of varieties (say, sport, movies and entertainment and, within them, on the more popular versions of the different types, say soccer, comedies and quiz shows) - what we might label as the case of the popular viewer/reader. Then the media companies have limited scope for horizontal differentiation. Competition for audience then forces them to target the same attractive contents, which pushes up the costs of programs, creating endogenously high fixed costs and resulting in a concentrated industry, even with large advertising markets. An alternative scenario, that we might label as that of the sophisticated viewer/reader, corresponds to an audience with very diversified tastes, or one that likes to mix and match programs from different schedules and channels. In this case media companies can easily differentiate their contents, and competition for attractiveness (and the fixed costs of the best programs) is reduced.

A similar case can be found looking at an important segment of readership that is interested in local news, and is ready to patronize the local press even if it has a more limited coverage of national and international events. In this case the prevalent dimension that influences the reader's choice is the coverage of local news rather coverage of international events. The "attractiveness" dimension loses importance in favour of the "variety" dimension. The local press segment will be therefore fragmented, with many small newspapers selling in different areas. When the importance of variety is strong, therefore, many small size media companies (e.g. small thematic TV channels or local newspapers) can cohexist in a fragmented market.

¹⁶This process has been described at a qualitative level according to the paradigm of *circulation spiral* in Gustafsson (1978). In his description the effects come through readers who like advertising rather than through more attractive contents. However, the argument works quite consistently with our story: "the larger of two competing newspapers is favoured by a process of mutual reinforcement between circulation and advertising, as a larger circulation attracts advertisement, which in turn attracts (..) more readers".

The popular and the sophisticated viewer/reader examples represent two polar cases that induce very different market structures. Intermediate situations, in which we might have a core market with few large operators covering the more popular varieties and a fringe of small ones focussed on diversified market niches, can also be imagined and seem to fit well with the case of the press market. While the evolution of TV broadcasting seems so far closer to the popular viewer case, it seems plausible that the drift in the future is toward the sophisticated viewer scenario. However, the speed of the process and whether it will completely replace the popular tastes is something very difficult to predict¹⁷.

What we can conclude according to the NO approach is that the real challenge to EP comes from the persistent concentration of many media markets, in particular in the free-to-air TV broadcasting industry, dominated by relatively undifferentiated tastes of the public for a limited number of content varieties. This concentrated situation creates a strong limit to the possibility of offering a diversified range of political views in the TV industry supply. Hence, once we consider the escalation of fixed costs that characterizes these markets, our trust in the market provision of external pluralism is much weakened.

3.3.1 The NO approach: analytical results (*)

We define the Natural Oligopoly (NO) approach to the media market with reference to two distinctive modelling choices: first, viewers/readers have a taste for both the variety and the attractiveness of the contents; second, more attractive contents, while increasing the audience, require higher fixed costs. The NO approach has been proposed in Motta and Polo (2001), that analyze the free entry equilibrium structure of the media markets, in Nilssen and Sørgard (2001), who study the effects of product market competition on the broadcasting market equilibrium, and in Amstrong (2004) focussing on the choice of programme quality of pay-TV's vs. advertising financed TV's.

A typical linear specification of the share of viewers that can be found in these models is:

$$s_i = \alpha(N) + \beta(N)(v_i - \lambda a_i - p_i) - \sum_{\substack{j=1\\j\neq i}}^{N} \gamma_j(N)(v_j - \lambda a_j - p_j)$$

where s_i is the share of audience, N is the number of media, v_i is the quality of media i's contents, a_i is the amount of advertising and p_i the subscription fee (if any). The parameters $\alpha(N)$, $\beta(N)$ and $\gamma_j(N)$ can be obtained once specified the underlying preferences.¹⁸ Improving the attractiveness of the contents boosts

¹⁷We may notice that in the US market, after more than 20 years of harsh competition from a large number of small pay-TV channels, the 4 main commercial networks still obtain around half of the audience in the prime time.

 $^{^{18}}$ Different approaches can be chosen: a Hotelling type specification giving localized effects among adjacent varieties (Amstrong (2004), i.e. $\gamma_j \neq 0$ only for j=i-1,i+1; a quadratic utility specification that admits generalized substitution patterns, i.e. $\gamma_j > 0, \ \forall j \neq i;$ and a discrete choice approach. For this latter case, see Motta and Polo (2001), Appendix.

the fixed (programming) costs of the media company, a mechanism reminiscent of the endogenous sunk cost case proposed in Sutton (1991) and (1998).

In all these models the choice of the variety is not addressed, assuming an exogenous degree of product differentiation among media companies. ¹⁹. Hence, the models that have followed the NO approach cannot help to answer the first question about EP, that is whether in equilibrium there will be sufficient differentiation of contents among media companies. However, the NO paradigm seems particularly suited to consider the second relevant issue, namely the equilibrium market structure, which is not adequately considered in the MC approach

The basic effects that work in equilibrium can be described as follows. First, when media companies set their advertising space given advertising demand, they compete in strategic complements, as already observed for the MC models: increasing the amount of advertising space shifts some audience to the rival company and increases its demand for advertising, inducing the other company to increase its advertising space as well. Secondly, a company offering more attractive contents exploits its advantage in the audience by selling more advertising time (and collecting higher prices). Hence, more attractive contents pay off in terms of higher advertising revenues. Third, the marginal effect of an increase in attractiveness on advertising revenues is more pronouced the more similar are the contents in terms of varieties: with very similar programming, offering more attractive contents leads to a sharp increase in audience and the advertising revenues²⁰. Hence, the incentive to invest in attractive programs is higher the more similar are the varieties chosen by the media companies. Horizontal contents differentiation, on the other hand, reduces the incentive to invest in attractive programs.

For a given degree of substitutability among media contents, the optimal level of attractiveness is determined by equating the marginal benefit (as described above) and the marginal cost of program quality. Overall, the less horizontally differentiated the program schedules, the more intense the competition for attractive programs and the higher the level of fixed (programming) costs in equilibrium.

The following proposition describes the equilibrium market structures:

Proposition 3 When viewers/readers have both a taste for variety and for the attractiveness of contents, and more attractive contents imply higher fixed costs, the maximum number of firms sustainable in a free entry equilibrium, N, is bounded above for any dimensione of the advertising market. N is larger

¹⁹This might be rationalized by referring to the results of Maximum Differentiation of the MC approach, in the sense that the supply of contents exploits the maximum differentiation allowed by viewers/readers tastes. This is obviously not an analytical result, but simply an educated guess that the results obtained in the MC approach extends to a more complex horizontal+vertical model of viewers' behaviour. See also Neven and Thisse (1988) and Ireland (1987).

²⁰This effect holds when preferences are characterized by a generalized substitution pattern: in this case, increasing attractiveness steals viewers from all the rival channels. When substitution is localized, as in the Hotelling-type specification, closer varieties reduce the equilibrium advertising revenues since the channel cannot steal viewers from "distant" channels. See Amstrong (2004).

the more horizontally differentiated are the contents across media companies. (Motta and Polo (2001)).

3.4 Vertical integration and foreclosure

So far we have focussed our analysis on the segment of the media industries corresponding to the packaging of contents and the sale of advertising space. Some media segments, and in particular TV broadcasting, have a relatively rich vertical structure in which the production of contents can be separated from that of packaging, followed by other phases such as the packaging of channels and the delivery of them (in particular for the pay TV segment).

Vertical integration upstream can create serious foreclosure concerns when a TV broadcaster cumulates the production of several key varieties. Exclusive rights of transmission may have a similar effect even without formal integration. Pay-TV broadcasting is a good example. The more popular channels in a bundle are usually sport and movie channels, and competition for the most attractive contents is very intense in this segment. Movies can be diversified by type (comedies, adventures, thriller, etc.) and can be exploited on a multiple-window programming schedule. We might therefore expect more than one thematic channel specialized in movies to survive in equilibrium. Sporting events seem more problematic: they usually display much more concentrated tastes (the public is usually interested in no more than a few sporting disciplines and a few international events, though these may differ by country) and require direct transmission, while multiple windowing has almost no value. So what matters in sports broadcasting is to obtain the transmission rights of a few major sporting events. This process is self-reinforcing, as a channel that already owns some major sports and a large base of subscribers is often able to offer more for the transmission rights of other disciplines and events. The emergence of the BSkyB position in the UK market, thanks to the rights of transmission of the Premier League, or the consolidation of the two pay-TV Italian channels under the umbrella of the Murdoch group and the progressive migration of all the soccer teams within its programming are extremely telling stories.

If a single operator were able to obtain most of these contents on an exclusive basis, a real possibility of market foreclosure would emerge. The mixture of competition for the more attractive contents and the vertical links between producers and distributors creates a market position that is very hard for new entrants to contest.

A second ground of foreclosure can arise downstream, in the distribution of the signals. Both the case of cable and of satellite distribution entail proprietary issues and a problem of access. Cable TV operators usually own (or have a long term concession over) the broadband wires used for distributing the signals. If the cable TV operators are integrated in the distribution segment, standard problems of access can arise for competitors. Satellite distribution requires the customers to use a set-top box to decode the signal, whose standard

can be proprietary. Compatibility among satellite TV operators can avoid the doubling of the investment, but compatibility might be strategically denied by an incumbent operator to foreclose new rivals.

Consideration of vertical integration and foreclosure therefore suggests even more reasons to be skeptical of a market solution to EP.

We now turn to the complementary question of whether there are adequate private incentives for internal pluralism.

4 Are private incentives sufficient to provide Internal Pluralism?

When the number of independent media companies is not sufficient to provide a full range of varieties and policy positions, or when we observe strong concentration in audience or readership among a few channels or newspapers, the objective of IP becomes fundamental, as it may be the only way to ensure pluralism in access to information. Internal pluralism requires that each media company chooses a bundle or mixture of political views to satisfy the demand of a wide range of citizens. We have argued in the previous section that models of the media industry consistent with the Hotelling approach are rather flexible in describing the editorial choices of the media companies, which usually select a particular mixture of the main types of contents. Hence, the analysis of market equilibria summarized in the previous section is compatible with even a few media companies offering contents that, in different proportions, cover the main types appreciated by the public.

In fact, we observe in most media markets a key role for such operators: commercial TV channels offer a program schedule that includes (several types of) movies, news, entertainment, sport, cultural events, etc.; the same holds true for general public newspapers and magazines; even thematic pay-TV channels are usually offered in bundles, giving access through subscription to a full range of varieties.

Content differentiation is therefore mostly realized by mixing in different proportions the main types of contents, rather than through specializing in a single variety. This is probably due to the fact that viewers/readers are very often interested in more than one variety, and appreciate a mixture of them. The more obvious exceptions to this stylized fact - sporting newspapers - are in a sense an indirect confirmation of this claim, as sport fans are probably one of the very few single-variety constituencies for media content²¹.

So far we have treated the choice of contents in general and of political views in particular as equivalent, considering the latter as one additional variety in information and entertainment supply. And we have discussed how far the tendency to differentiation extends from contents to political views. At this

²¹Not surprisingly, in fact, pay-TV channels have always used sport and movie channels as the tool to open and create new markets for pay-TV services.

point it is important to look more carefully at the specific choice of the political position of a media firm on the part of its owners. Two points are fundamental, one on the demand side and one on the supply side.

First, while we stressed that most of the viewing or reading public tends to have a taste for a variety of content, the same does not seem to be true for political information. While those members of the public who are not strongly interested in politics simply do not care for political discussion, those who actively participate and require political information seem to prefer to patronize media outlets close to their own views rather than to range over a variety of political opinions. In other words, the demand for political information seems to be naturally partisan and not to exhibit any comparable taste for variety. Hence, media companies are much less likely to mix over different political opinions than when mixing their programming among different varieties or types of movies, sports, etc. While some sports fans like to watch soccer and basketball matches, and motorbike and Formula 1 races, there are few politics fans who derive the same satisfaction when listening to both left-wing and right-wing politicians.²²

On the supply side, if a single channel or newspaper tends to patronize one political position, we might still have a range of views represented if there are multi-channel or multi-media companies active in the market. If the objective of the media company is simply to maximize its profits in the market, it would be optimal to differentiate its political positions (and more generally its mix of varieties) among the channels or newspapers of the group. Thus even in a situation with a limited number of operators, we might observe significant variety in political views if there were multi-product rather than single product operators, provided they aimed at maximizing (media market) profits.

However, before drawing this conclusion we have to look in more detail at the motivations of the media companies. So far we have considered the choices of media companies as driven by the profits that can be obtained in the media market through advertising, sales, subscriptions, etc. However, there are considerations that may cast doubt on this assumption.

The first is that some companies have a partisan identification, due to the opinions of their owners. In such case, sponsoring the owners'preferred political views is the natural choice, even if this leads to a sacrifice of profits. Should we expect, in this case, a bias in favour of a particular segment of the political spectrum?²³ In other words, will the selection mechanism among partisan media companies determine in equilibrium the survival of operators over the entire range of political views, or will entry benefit only a part of the range (such as the right wing positions)? This is a hard question that cannot be addressed in general terms without observation of real markets. It is important to remember, however, that in those segments where concentration is more likely, due to high costs of content, a media company has to raise a large amount of capital to operate, and therefore entry requires considerable access to financial markets.

 $^{^{22}}$ This attitude of the voters reminds the "self-serving" beliefs analized in Benabou and Tirole (2002). Their approach may represent a foundation based on intrapersonal behaviour of such attitude in politics.

²³See Beasley and Coate (1997).

The second consideration is that firms often have a wider interest in communication than simply the maximization of profit in the relevant market. Media markets are often heavily regulated, and the hertzian spectrum is considered a public good that is licensed by the State to private companies. Hence media companies have a strong interest in public policies governing their markets. But they also control something in which political parties and the government have a strong interest, namely the supply of political information. Hence the decision to support one political party or another not only has an impact on the choices of viewers and readers, and on advertising revenues, but it implies also a (much less transparent) basis for negotiation with public institutions over policies for media markets and for the companies involved. These effects are even more important when the media companies belong to diversified conglomerate groups active (and influenced by public policies) in many markets. In these cases, the choice of political positioning depends heavily on such factors. And a bias in favour of the government and of the major political parties can be expected.

Notice that when a media company determines its political views according to these latter (partisan or lobbying) motivations, having multichannel broadcasters or press groups makes the problem of pluralism even worse, since we should expect homogenous political positioning of all the media of the group and not, as imagined above for a profit maximizing conglomerate, a differentiation of views within the group.

Our general conclusions about private incentives for the provision of pluralism in the media market are rather negative. Looking at market equilibria (EP) we have stressed that although differentiation in contents can be expected, with a diversified supply of the main types of content, this effect can be severely limited by the persistent concentration of many media markets, driven by competition for the more attractive contents. If the number of key players remains limited, we have to rely on a sufficient differentiation of content on the part of each individual company (IP). We argued that although there are private incentives for differentiation with respect to many types of content and entertainment, the representation of political views and opinions tends to be more partisan, both with respect to the (ideological) demand of viewers and readers and with respect to the pro-government bias that tends to characterize media companies. IP is therefore poorly provided by private incentives. It is now time, therefore, to consider regulation for pluralism.

5 Regulation for pluralism

In this section we first review the main regulatory tools used in advanced economies to preserve pluralism, with a main focus on the EU^{24} . We offer an

²⁴We focus on the European countries since the market dimensions, the important role of public TV channels and the vertical articulation of the industries are relatively similar. The US offers important insights on the future development of the European markets, but the problems involved, in particular for what concerns External Pluralism, are rather different (see Alexander and Brown in this volume). On the European and US broadcasting markets

evalutation of their merits and limits in the light of the analysis of private incentives developed above.

5.1 The main regulatory tools

We can distinguish the main tools used in actual regulation by type of instrument: as it will be clear in the discussion, similar instruments find a justification with a reference to different pieces of the picture or, put another way, they are designed mostly with an objective of IP or EP in mind. Although we do not present a complete review of the actual policies of the European countries, we shall offer several examples of the different regulatory regimes. We can distinguish:

- 1. Constraints on ownership: in several countries regulation sets limits on the ownership of media companies. We can further distinguish among:
 - 1.1 Ownership of single media companies: these limits are usually set for TV broadcasting operators and define an upper bound to the share of a single owner in the company, in order to induced a more fragmented ownership structure. For instance in France and in Spain no single investor can own more than 49% of the shares and of the voting rights of a TV broadcasting company²⁵
 - 1.2 Ownership of different media: the regulation limits the participation of a single investor in companies belonging to different media segments. Since operating in TV and radio broadcasting markets implies holding public licenses while operating in the press segment can be defined in terms of ownership of newspapers, inter-industry limits are usually designed as limits to cumulating ownership in the press and licenses in radio or TV broadcasting. For instance, in France²⁶ and the UK²⁷ participations in TV and radio broadcast-

see Motta and Polo (1997).

²⁵The limits are further refined in France by setting a constraint of 15% of shares if a single investor has participations in 2 TV companies and a ceiling of 5% in case of shares in 3 TV companies. An upper bound of 50% of the shares is set also to individual participations in satellite TV's.

²⁶ The rules are particularly articulated in France. For *national broadcasting*: no company can have a TV or radio licence if 2 conditions in the list below are met: it has already a radio license reaching a basin of at least 30 millions people; it has already TV or radio licenses for cable broadcasting reaching a population of at least 6 millions people; it offers TV services reaching more than 4 millions people; it owns newspapers covering at least 20% of the total readers. For *local broadcasting*: no company can operate in local broadcasting markets if it already has licenses for national over the air or cable TV broadcasting, and if it owns national or local newspapers.

²⁷In the UK there are limits both to multiple licenses at the national and local level. At the *national* level, no company can have a license for national TV broadcasting (Cannel 3 or Cannel 5) and a national radio broadcasting license or ownership of national newspapers with a share of at least 20% of the national readership. At the *local* level, no double licenses are permitted between regional Channel 3 TV broadcasting and regional radio or digital TV broadcasting; a Channel 3 regional TV broadcasting license cannot be hold if the company owns a local newspaper with more than 20% of the local readership.

ing, or broadcasting and the press are severly limited. Ownership constraints between media and telecommunication companies, which were frequent both in Europe and in the US before the liberalization of telecoms, have now been mostly lifted.

- 1.3 Foreign ownership: foreign investors not belonging to the European economic area are usually restricted from ownership of broadcasting companies: the limits, as before, are expressed in terms of prohibition of holding broadcasting licenses. These constraints are set in Italy, France (maximum of 20% of shares), Germany and the UK. Foreign investors, however, can hold licenses if their country of residence or establishment applies rules of reciprocity with European countries.
- 1.4 Absolute prohibitions: in Germany and the UK an absolute ban is set on the ownership of TV broadcasting companies (holding of TV broadcasting licences) for public (central or local) institutions, for central or local governments and for political parties.
- 2. Limits on the number of licenses: in this group we include constraints that try to influence, by setting a maximum number of licenses, the concentration of single media segments, namely TV broadcasting. In France a single national or regional license can be held in TV (terrestrial or satellite) broadcasting. In the UK no company can hold more than one national (Channel 3 or Channel 5) license, or more than 2 Channel 3 regional licenses in the same area; moreover, Channel 4 and the BBC cannot hold Channel 3 or Channel 5 national or regional licenses. In Spain only one national or local license can be held by private companies.
- 3. Limits on market shares: in some countries, as Germany and Italy, limits to concentration are set not in terms of the number of licenses that a single company can hold, but in terms of market shares, that can be computed in terms of audience or in terms of turnover. In Germany an upper bound of 30% of the audience for television services is set: in case a group, considering all its channels, breaks this limit, no further license can be assigned nor any acquisition of TV channels allowed. In Italy a recent new regulation sets a limit of 20% of total resources, defined over a very wide and diversified market (the so called "Integrated communication system") that includes TV and radio broadcasting, the press, advertising and commercial promotions, movies, journals and books publishing.
- 4. Limits on advertising: In most countries some limits on advertising messages on TV and Radio broadcasting are set, on a hourly and daily basis, and distinguishing between private and public channels. Although this regulation is not usually explained directly with reference to pluralism, indirectly these rules constrain market equilibria in the TV broadcasting markets and the allocation of advertising expenditures between broadcasting and the press. Hence, their indirect impact on the resources of the different media segments (and, in this way, on pluralism) is very strong.

- 5. Limits on content: specific rules are applied in many countries during electoral campaigns, constraining information programs and news in TV and radio broadcasting. The rules require balancing the presence of parties and candidates in the programs and in the news, regulating the free and paid direct access of political parties, and offering a timely right of reply. These rules are monitored during electoral campains not only quantitatively (for total time) but also qualitatively (for tone and completeness), although this latter crucial feature is very hard to implement²⁸
- 6. Public media (TV channels): the presence of the State in media markets is today almost everywhere limited to TV and radio broadcasting. In Europe public TV channels still play a crucial role. During the Fifties public channels allowed TV broadcasting to develop in continental Europe, and until the Eighties they represented the only broadcasting supply. Public channels have to follow a set of public obligations that rely on the notion of public TV service and include information and culture, granting access to a variety of cultural, social, political and religious interest groups within a country. Hence, ensuring (IP) pluralism is certainly among the goals of public TV channels, which in this sense can be considered as a further tool for public policies on this issue.

This short review allows us to appreciate some general regularities in the norms that regulate media markets, and some country specificities as well. First, it is immediately evident that TV (and radio) broadcasting are much more heavily regulated than the press. This is due in part to the fact that in these markets a public license is needed to operate, since a scarce public good, the hertzian spectrum, must be allocated: hence, the licensing policy offers a powerful and general instrument to regulate the structure of the market. The other, complementary reason derives from the presumption that TV and radio broadcasting are much more widely diffused, and therefore more powerful in influencing public opinion than are newspapers.

Secondly, looking at the specific tools, some of them, such as the limits to the number of licenses in a single market, or the market share ceilings in terms of audience or turnover, are clearly inspired by the goal of external pluralism, aimed at preserving a deconcentrated market. Constraints to ownership, referring to a single company's ownership structure or to its participation in several segments of the media market, can instead be rationalized in terms of an IP objective. In particular, they are justified if it is very likely that the owner in control of the company will condition the political positioning of its media according to partisan or lobbying motivations. To balance this effect, dispersed ownership and limited intermarket links are pursued.

Thirdly, it is not always clear whether regulation has shaped the features of the media market, or instead the existing and powerful interests of media companies have been able to impose regulation corresponding to their own interests.

 $^{^{28}}$ On media monitoring and the associated methodological and practical implementation issues, see the report Osservatorio di Pavia (2003).

In Germany, for instance, no limits are set on the ownership of broadcasting companies nor on the number of licenses, with a single constraint on the overall audience of the group: multichannel TV broadcasting has been one of the distinctive features of the German market from the Eighties on. Is it the result of a gap in regulation, or did regulation adapted to multichannel operators that from the beginning characterized the market?

The answer is easier when we look at the Italian case. The opening of private broadcasting markets occurred in the mid Eighties within a sort of regulatory vacuum, while the consolidation of the Mediaset group was allowed by the norms approved by the Parliament, which set limits in terms of licenses that always fitted the actual market positions of the strong private group. The recent reform approved by the Italian Parliament sets market shares limits defined over so large and composite an aggregate that no real constraint binds. Unfortunately, Italy offers a new and dramatic swing to the old theme of regulatory capture, with the Prime Minister owning the first private communication group and controlling the public TV channels, giving what amounts to around 90% of the audience and 85% of total advertising revenues.

5.2 Regulation for pluralism: open issues

We try in this section to evaluate the regulatory tools most frequently used, and to propose a possible set of interventions. We start from some general issues and then move to a discussion of the EP and IP objectives.

5.2.1 General issues

Our first point refers to **measuring pluralism**, a hard but necessary step when public policies must be designed. In the discussion on the objectives of public policy for pluralism we have proposed a double definition, External and Internal pluralism, pointing out that the EP objective can be implemented looking at the mere availability of different views, or alternatively by considering the actual choices of the public.

In the case of EP, for instance, availability can be evaluated by considering the number of media in a market (the number of channels, of newspapers, of radio stations), toghether with a check of the effective differentiation of contents and political views. In the case of IP, availability would require guaranteed access to all political views on an equal basis, for instance with equal exposure and time given to each position.

If actual choices are the concern, EP should be ascertained through some measure of concentration of the audience or the readership. What really matters, in this case, is whether the actual choices reflect the policy preferences of the public, or instead are driven by some lock-in effect. In a country with very concentrated political views of the electorate, for instance, we should not be surprised to observe a polarized distribution of the public's viewing or reading

choices across the media. Hence, what really matters should be the difference in concentration between the audience and the votes for political parties or coalitions, where a higher concentration of the former measure with respect to the latter might signal problems with EP²⁹. This approach is not immune from serious implementation problems, but seems close to how the problem of EP is perceived. The main difficulty is to evaluate the political positioning of the different media; a second relevant issue is how to treat a media outlet that presents several political views and not a single one (should we treat NBC news differently from Fox news?).³⁰

We think that when media markets are more concentrated than the distribution of political views (votes), EP should be evaluated according to the actual choices of the public (concentration), and not simply looking at the number of media in a market.

The second general point is the **relation between regulation for pluralism and competition policies**. Although regulatory limits on market shares in the media market are often labelled as antitrust restrictions, it is important to stress that competition policy is inspired by public goals (welfare and efficiency) and applied in practice in ways that are not necessarily consistent with regulation for pluralism. Hence, competition policy cannot be considered as a complete substitute for the public policies for pluralism, although in some areas pluralism benefits from antitrust interventions.³¹

The clearest example of the difference in approaches is given by the relevance of efficiency arguments for multiproduct firms. It is hard to deny that a media group can benefit from relevant synergies: some inputs and contents can be used on different media, and their contents can be better differentiated, covering several market niches; compatibility in standards, as for instance in the use of the same set-top box to receive satellite transmissions, benefits viewers and calls for agreements among firms or the concentration of many channels in the supply of a pay-TV broadcaster. Hence, efficiency arguments should play a relevant role when discussing, for instance, a concentration project and the creation of

²⁹For instance, in Italy the center-right coalition obtained around 50% of votes in the 2001 elections and controls directly (through ownership) three commercial TV channels and indirectly (through the appointment of the management) at least two of the three public channels, with a cumulative audience around 80%.

³⁰In a recent paper S. Mullainathan and A.Shleifer have used the classification of the Americans for Democratic Action, based on votes in Committees and at the Senate of the US, on how close are 100 senators to the positions of the Democratic party. Then, given this ranking they have studied the frequency of citations of different think tanks and policy organizations (Brookings Institution, Rand Corporation, Amnesty International etc.) by the senators, identifying a pair (policy positioning, frequency of citations). Finally, they have studied the frequency of citations of the same organizations in the news of the leading newspapers. By comparing the frequency of citations of a newspaper and of a senator, they are able to identify indirectly the policy positioning of the newspaper as well. Apart from Fox News and the Washington Times, all the other national newspaper obtain a ADA ranking above 60, that can be interpreted as being close to Democratic positions.

³¹We think that antitrust policies should become the main policy tool for the development of the media markets, substituting in many cases for industry-specific regulations. The defense of pluralism, however, should maintain an independent status, specific tools and institutions. On public policies for broadcasting markets, see Motta and Polo (1997)

a communication group. Antitrust policies should take these synergies into account

Regulation for pluralism, on the other hand, having as an objective the preservation of indipendent operators and access for political views, has no reason to consider these efficiencies in its evaluation: from the point of view of pluralism, the only relevant effect of such concentration would be that of extending the control of a company over more media, something dangerous if partisan or lobbying motivations condition the editorial choices of the company in political information.

Once we have acknowledged the differences, it must be recognized that competition policy can be of great help for pluralism, by monitoring and preventing practices that would further reduce competition in media markets. Consider for instance the foreclosure issues that we have discussed in the previous sections, and that seem particularly serious in the pay-TV segment. If exclusive contracts or vertical integration upstream and the use of proprietary distribution infrastructures and technologies downstream are used by a TV operator to consolidate its position, standard antitrust analysis and intervention are required. Opening the market to new comers, on the other hand, creates a more favourable environment not only for competition but also for external pluralism.

5.2.2 External Pluralism

As we argued above, EP should be assessed first of all by looking at concentration in media markets. **Market definition** should be very strict in this context, distinguishing different media (free to air TV, pay TV, newspapers, radio stations), because we want to assess market by market whether EP is provided, establishing whether the additional objective of Internal pluralism should come into the picture. Geographic markets should be carefully addressed as well, in order to assess the set of media that the public effectively receives in different regions. From this point of view, the press market is particularly important, because the key role of local news makes local newspapers an important actor in small geographical markets, although we may overlook this effect if we consider only national circulation figures: in many countries, local newspapers (or even national newspaper with a traditional entrenchment in a given town or region) reach a very high share of the readers in a given area, although their individual position in the national market is negligible.

Once the relevant markets have been defined, a comparison should be made between a **concentration index** (say, the Herfindhal Index) of the audience/readership and an analogous measure applied to the votes for political parties. When we observe the former measure to be significantly higher than the latter, EP becomes problematic, and remedies should be considered.

Our general approach is to design public policies in order to prevent the creation of companies that are very strong in a specific market, while allowing the creation of a diversified communication group active (but not dominant) in many media markets. Hence, a media market dominated by a multichannel TV operator or by a publishing groups with many newspapers is not desirable, while

a set of media markets with communication groups active (but not dominant) in TV, the press or the radio would be welcome.

We can distinguish regulatory limits to concentration and remedies that come into play when a merger project is scrutinized. The former include a limitation in the number of licenses for broadcasting or radio transmission, limits to ownership of media companies, or divestiture of specific activities. For instance, when market concentration becomes very high, the largest companies might be forced to sell a licence; or, alternatively, a ceiling to the number of individual licences might be set when the overall audience of the group exceeds a certain threshold. Analogous measures on the number of licences might be triggered by an expansion of a media group in other segments such as the press market, once a given market share is reached. These measures can be easily introduced when the broadcasting and radio segments, where a licence is needed to operate, are involved. We are in a weaker position when market concentration is truly internal to other segments, such as the press market, where creating a new media outlet does not require public authorization. Still, requiring a publishing group to divest a newspaper is not very different from other deconcentration measures that can be applied to lines of business of a dominant firm in non media markets.

The second basis for dealing with concentration refers to **merger control**. A merger project should be reviewed not only by the antitrust authority, but also by the institution in charge of the regulation of pluralism. And the project should obtain the double approval of the two institutions, or be revised according to the remedies required. Among potential remedies, the divestiture of specific media outlets (single TV channels, or newspapers or magazines, or radio stations) should be the preferred commitment³², since it is immediately effective and does not require a long lasting monitoring activity on the part of the regulator.

How then should mergers be evaluated? Borrowing from antitrust jargon, we may say that we should prohibit mergers that "substantially lessen pluralism". While we can establish a direct link between pluralism and market fragmentation, the economic analysis of free entry equilibria has suggested (under the NO approach) that in some cases concentration cannot be avoided, being the outcome of competition on the merits; in other cases (under the MC approach), small local press markets cannot sustain more than very few operators. In the move towards a (concentrated) free entry equilibrium, the emergence of a few winners can take the form of mergers and acquisitions of the losers, or their bankruptcy. Merger control, in this case, has to seriously consider the **failing firm defence argument**: if in a long run equilibrium some operators have to exit, merger with the failing competitors should be acceptable not only from a

³²These divestitures are in line with the approach followed by the European Commission for merger remedies under competition policy. The aim of the divestiture is to create a new and viable competitor in the market. Hence, divesting entire lines of business (single media) is preferred to selling a miscellaneous set of assets. On the logic of merger remedies see Motta, Polo and Vasconcelos (2003).

competition policy perspective but also under regulation for pluralism³³

While the tendency to a reduction in the number of media operators in a market can be driven by competitive forces and in some cases cannot be avoided by merger regulation, the **creation of a multimedia operator in the same market** (a communication group with many TV channels, or many newspapers, etc.) should be constrained not only through ex-ante regulatory limits, as discussed above, but also at the stage of merger control. Here the analysis under competition policy and that under regulation for pluralism diverge, and the efficiency defence arguments can be used in an antitrust case but should not be considered when pluralism is involved.

Advertising limits can indirectly influence market concentration if they reduce advertising revenues of the broadcasters³⁴, softening the rise in the fixed costs of programming (according to the NO approach). From the point of view of pluralism, however, these measures are usually justified mainly for their effect of shifting advertising investments from the TV to the press segments. The point here is that adverting messages are considered to be more effective on video than on the press, and this creates a bias of advertisers in favour of TV. From the point of view of pluralism, however, such a bias has no justification since news are equally important on the video and on the press. Regulation for pluralism should therefore correct this distortion. Further research is needed to evaluate if it is preferable to intervene through advertising limits or using transfers to newspapers drawn from the licenses revenues collected from the TV's.

5.2.3 Internal Pluralism

In our view as set out above, the main danger to IP comes from the partisan and lobbying motivations of the media owners, while in the absence of these distortions some degree of internal differentiation would be provided. Regulation should therefore intervene primarely on these grounds.

Restrictions on company ownership are not particularly effective: a 49% ceiling on individual shares does not really limit in practice the control of a single owner. Creating a more fragmented ownership structure in order to prevent the interference of shareholders in the editorial choices of the media seems a rather naive approach. If the control group has partisan or lobbying motivations, it is not this kind of measure that can solve the problem, as it would seem rather easy to find other investors with similar interests or political views, while formally respecting the constraints. What should be considered

 $^{^{33}}$ The recent merger Stream/Tele+ in the Italian pay-TV market approved under commitments by the European Commission can be interpreted in this way.

³⁴We may expect that in a non cooperative equilibrium with no advertising limits, media companies sell too little advertising space with respect to a monopolist. A company, by increasing its advertising space, in fact, exerts a positive externality on the rivals, that observe an increase in their customers. Since in a non cooperative equilibrium this externality is not taken into account, the companies sell less space than a monopolist. Then, if the advertising limits are binding they induce even less space sold, with a fall in advertising revenues.

is setting limits to ownership by investors who have strong interests in other heavily regulated activities, and who for this reason might try to use the media as a lobbying device.³⁵ Moreover, the constraints would be upon horizontal cross participations by the same investors in different media companies: interlocking directorates have a well established treatment in antitrust interventions against collusion; an additional effect, relevant for pluralism, of these links might be that of homogenizing the political positioning of different media companies.

With the future development of digital transmission, which will allow broadcasting of a very large number of TV channels, the absolute ban on broadcasting licenses for political parties or religious movements has no motivation and should be lifted.

Internal pluralism should be reinforced during **electoral campaigns** through stricter **rules on news, policy debates and programming in TV broadcasting**: the rules to be followed should require balance and fair access to all parties, candidates and policy positions. Moreover, a quick **right of reply** should be granted not only on TV programs but also in the press. Such rules are however often difficult to implement because it is easier to define them in terms of quantity (space/time) rather than in terms of the quality and fairness of political information. Moreover, enforcement of such rules during the short deadlines of electoral campaigns is problematic, since often the fines, if any, are set after the elections.

For this reason we think that, while private operators should follow such regulations, a **public TV channel** might be a complementary tool for ensuring internal pluralism. In a sense, the public service obligation of fair political information is realized in different ways according to the nature of the TV companies: for private operators regulation is imposed by setting rules to be followed; in addition to them, a public TV channel can also be controlled more directly by a Parlamentary committee or an independent authority that monitors its programs, and requires changes and amendments if political information is unfair: the distortions that are more difficult to avoid through direct regulation³⁶ can still be controlled under the direct intervention of the committee/authority. This role of a public TV channel does not call for maintaining the extremely large role that public TV's still have in Europe, often offering programming that hardly differs from that of commercial rivals. Hence, when we recognize the important role of public TV's for internal pluralism we can also support at the same time proposals to reduce the number of public channels and strongly

³⁵For instance, banning participation in media markets by operators in the energy or transport industries can be a straightforward application of this approach. More problematic is the extension of this ban to telecoms, which have genuine industrial reasons due to technological convergence for entering media markets.

³⁶ There is a full range of examples of how formal rules can be circumvented if a TV broadcaster has strong political biases: the opinions of the rival party can be described using a critical or skeptical tone, or reviewed in such a way that the viewer hardly understands the relevant points. When different coalitions compete in an electoral campaign, only the more extremist politicians of the rival coalition are invited into the debate, producing a distorted representation of the coalition as a whole, etc.

limit the dimensions of public TV, which should not be competing for resources from the advertising market.

All our examples refer to broadcasting marketa, where there is very high concentration in all countries. However, there is a parallel concentration process in many segments of the written press, where local markets are often dominated by a single newspaper. Hence, an issue of IP is potentially relevant also for press markets. This is a very delicate point, as traditionally newspapers have not been regulated; nevertheless the issue is worth debating.

Finally, with all these measures forming the framework of regulation for pluralism, an **independent authority** should be in charge of its enforcement. Supervising the licensing policy of free-to-air broadcasting and cross participation in different media segments, controlling the ownership structure of media companies and authorizing new shareholders, running merger control, implementing the rules for fair and balanced information during electoral campaigns would be among the main tasks of such an institution. Its appointment and governance structure should avoid direct influence by government and political parties.

6 Conclusions

In this paper we have analyzed whether and how the market mechanism and private incentives can provide pluralism in media markets, both from the point of view of a diversified supply of different political positions in each market (external pluralism) and of a fair and complete representation of the political spectrum within each media outlet (internal pluralism). We can summarize our findings around three issues.

First, what are the mains insights that the economic analysis of the media market offer today? We argue that recent research, and, more broadly, the literature on modern Industrial Organization, offer several contributions to an understanding of media markets and the private provision of pluralism. Relying on this body of literature, we argue that the market mechanism tends to create differentiation in the contents of the media companies, but this heterogeneity does not necessarily extend to the representation of political opinions and points of view. Moreover, in many segments of media markets, competition for the more attractive content tends to push up the fixed costs of the operators, creating and preserving concentrated structures. For these reasons, we expect that the market will not adequately satisfy the need for external pluralism.

Moving to internal pluralism, while media companies usually offer a mixture of different contents that matches the taste for variety on the part of the public, as far as political information is concerned, viewers and readers tend to have much more partisan tastes and do not demand a diversified presentation of many political views. Moreover, partisan or lobbying motivations of the media company owners can create a strong bias in favour of the government and the major political parties. For these reasons we do not expect that the general tendency to offer differentiated contents would extend to the political

views expressed by each media company. Private incentives to provide internal pluralism seem quite poor.

Second, what we still need to know? Although recent research offers important contributions to our understanding of media markets and pluralism, we find many open issues that make the research agenda quite rich in this area. A full application of the insights of two-sided markets to the choices of quality and variety differentiation of media contents, the choice of contents within a single media outlet, the political economy analysis of media positioning when political lobbying is relevant, and the links between media markets and political processes are among the most facinating open issues that research in the field should address.

Third, from a normative point of view, which are the priorities for policy in this area? Having argued that market processes will not provide adequate incentives for pluralism, we considered regulation, describing the main tools used in the European countries and proposing a possible list of interventions, reflecting our view of the priorities for policy in this area. We think that External Pluralism should be assessed by looking at market concentration (compared to concentration of votes in elections) and not simply by checking the availability of different contents. Competition policy can be of great help for pluralism, for instance in avoiding the foreclosure that may arise from vertical integration, but it cannot be considered a complete substitute for proper regulation, since in some areas the two approaches diverge. Regarding the implementation of EP, public policies should try to prevent through regulatory limits and merger control the creation of multimedia groups dominant on a single market, although allowing for cross market activities. IP should be implemented by limiting the role of investors active in heavily regulated industries, by regulating content during electoral campaigns and by maintaining a public TV channel. Finally, all these interventions will require an independent authority that enforces regulation for pluralism out of the control of the government and of the political parties.

References

- [1] Amstrong M. (2004), Subscription versus Advertising-Funded Television: the Case of Programme Quality, *mimeo*.
- [2] Anderson S., Coate S. (2000), Market Provision of Public Goods: the Case of Broadcasting, NBER wp n. 7513
- [3] Beasley T., Coate S. (1997), An Economic Mode of Representative Democracy, Quarterly Journal of Economics, 108, 85-114.
- [4] Benabou R., Tirole J. (2002), Self-Confidence and Personal Motivation, Quarterly Journal of Economics, 117: 871-915.
- [5] Dixit A., Stiglitz J. (1977), Monopolistic Competition and Optimum Product Diversity, *American Economic Review*, 67, 297-308.

- [6] D'Aspremont C., Gabszewicz J., Thisse J.F. (1979), On Hotelling's "Stability in Competition", Econometrica, 47, 1145-1150.
- [7] Gabszewicz J., Laussel D., Sonnac N. (1999), TV-Broadcasting Competition and Advertising, *mimeo*
- [8] Gabszewicz J., Laussel D., Sonnac N. (2001), Press Advertising and the Political Differentiation of Newspapers, *mimeo*
- [9] Gal-Or E., Dukes A. (2003), Minimum Differentiation in Commercial Media Markets, Journal of Economics and Management Strategy, 12, 291-325.
- [10] Gustafsson K. (1978), The Circulation Spiral and the Principle pf Household Coverage, Scandinavian Economic History Review, 1-14.
- [11] Hotelling H. (1929), Stability in Competition, Economic Journal, 39, 41-57.
- [12] Ireland N. (1987), Product Differentiation and Non Price Competition, Oxford, Basil Blackwell.
- [13] Irmen A., Thisse J.F. (1998), Competition in Multi-Characteristics Spaces: Hotelling Was Almost Right, *Journal of Economic Theory*, 78, 76-102.
- [14] Motta M., Polo M. (1997), Concentration and Public Policies in the Broadcasting Industry: the Future of Television, *Economic Policy*, 25, 294-334
- [15] Motta M., Polo M. (2001), Beyond the Spectrum Constraint: Concentration and Entry in the Broadcastng Industry, Rivista di Politica Economica.
- [16] Motta M., Polo M., Vasconcelos H. (2003) Merger Remedies in the EU: an Overview, in Leveque F., Shelanski H. (eds.) Merger Remedies in American and European Competition Law, Edward Elgar.
- [17] Mullainathan S. and Shleifer A., The Market for News, 2004, available at http://post.economics.harvard.edu/faculty/shleifer/papers/
- [18] Neven D., Thisse J.F. (1988), On Quality and Variety Competition, mimeo
- [19] Nilssen T., Sørgard L. (2001), The TV Industry: Advertising and Programming, mimeo
- [20] Osservatorio di Pavia (2003), Guidelines for Media Monitoring of Elections.
- [21] Polo M. (1991), Hotelling Duopoly with Uninformed Consumers, Journal of Industrial Economics, 39, 701-716.
- [22] Rochet J.C., Tirole J. (2003), Competition in Two-Sided Markets, *Journal* of the European Economic Association, 1, 990-1029.
- [23] Rochet J.C., Tirole J. (2004), Two-Sided Markets: an Overview, mimeo.

- [24] Salop S. (1979), Monopolistic Competition with Outside Goods, *Bell Journal of Economics*, 10, 141-56.
- [25] Shaked A., Sutton J. (1990), Multiproduct Firms and Market Structure, Rand Journal of Economics.
- [26] Sonnac N. (2000), Readers' Attitudes Towards Press Advertising: Are Thy Ad-Lovers and Ad-Averse?, Journal of Media Economics, 13, 249-259.
- [27] Spence M., Owen B. (1977), Television Programming, Monopolistic Competition and Welfare, *Quarterly Journal of Economics*, 91, 103-26.
- [28] Steiner P. (1952), Program Patterns and Preferences, and the Workability of Competition in Radio Broadcasting, *Quarterly Journal of Economics*, 66, 194-223.
- [29] Sutton J. (1991), Sunk Costs and Market Structure, MIT Press
- [30] Sutton J. (1998), Technology and Market Structure, MIT Press
- [31] Ward D. (2004), A Mapping Study of Media Concentration and Ownership in Ten European Countries, Commissariaat voor de Media, The Netherlands