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Arbaoui, B.

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Chapter 5

How the media context matters

Television systems and trust in politicians

Abstract⁴²

In this chapter, we estimate the impact of two media context factors on trust in politicians: (1) The television system level advertising dependency and (2) audience fragmentation across television channels. We measure these two variables in 17 European television systems, link these to individual survey data from the European Social Survey, and test their effects by means of multilevel analysis. The findings contradict elements of the common media malaise theory. We find that advertising dependency and audience fragmentation exert significant *positive* macro-level effects on trust in politicians, but that these effects vary across different groups of citizens. The positive effect of advertising dependency at system-level is particularly strong and significant among the most politically sophisticated citizens, whereas audience fragmentation only exerts a significant effect among the least politically sophisticated citizens. The results highlight the relevance of contextual media characteristics and point to mobilising forces within television systems but also exemplify the segmented nature of audiences.

Keywords: media malaise, political trust, audience fragmentation, commercialisation, competition, media systems

⁴² This chapter is a revision of a paper co-authored with Wouter van der Brug and Philip van Praag.

5.1. Introduction

Over the past two decades, television markets in most West-European countries have transformed from supply markets, largely dominated by public television, to demand markets, with increasing competition for audiences between commercial as well as public stations. When commercial television was introduced, scholars expressed concern about how this would affect the content audiences would be exposed to, and, indirectly, how this would affect public opinion (Blumler & Gurevitch, 1995; Brants, 1998; Djupsund & Carlson, 1998; Mazzoleni et al., 2003; Norris, 2000).

These contributions were to some extent inspired by American scholars who introduced the 'media-malaise' thesis by arguing that, as a result of increased competition for market shares and the profit orientation of commercial television, the content of political information on television has become increasingly superficial, entertainment-oriented and cynical about politics. As a consequence of these changes in content, political engagement and support for politicians had declined, particularly among those who rely on television as a source of political information rather than on newspapers (Cappella & Jamieson, 1997; Patterson, 1993, 2000).

Patterson (2000, p. 244), for instance, declares the "commercial based news system" responsible for the rise of adversarial journalism both in the press and television. The focus of such journalism is "reporting politics not as an issue but as a (dramatic/strategic) game in which individual politicians vie for power" (p. 254). Such a strategic coverage confuses citizens about the substantive significance of issues and heightens their mistrust of political leaders (e.g. Cappella and Jamieson, 1997). Commercial and competitive pressure stimulates an aggressive interpretive approach in which journalists raise cynical questions about politicians' motivations

(e.g., West, 2001). Such a cynical approach might contribute to 'media-malaise' (Bennett, Rhine, Flickinger, & Bennett, 1999; Robinson, 1976) and declining trust in government (Cappella and Jamieson, 1997). European scholars feared that the introduction of commercial television would have similar consequences in Europe. Scholars have shown that exposure to *public* television is positively related to political trust (Aarts & Semetko, 2003; Holtz-Bacha & Norris, 2001; Hooghe, 2002). So, commercialisation processes in the media are often believed to lead to decreasing levels of trust, particularly among those who frequently watch *commercial* television (see Brants, 1998; Hendriks Vettehen et al., 2005).

However, these claims are not uncontested because no empirical study has systematically investigated the link between characteristics of the television or media systems on the one hand, and political attitudes on the other. Most studies ignore such contextual factors and focus on individual-level media content exposure or content of individual media to derive inferences about the media system environment such as competition intensity or a commercial orientation of media.⁴³

Recently, scholars have begun to study the relationship between media system characteristics, political information and political knowledge (Aalberg & Curran, 2012; Aalberg et al., 2013; Curran et al., 2009; Esser et al., 2012; Iyengar et al., 2010). These studies inform us that the quality of information in public service systems is generally higher compared to commercially oriented media systems and that citizens' level of political knowledge is therefore higher in countries with public service television systems. Notwithstanding their merits, these studies do not tell

⁴³ Researchers might be in risk of committing the fallacy of composition or atomistic fallacy because they might wrongly infer a relationship at a higher (media system) level based on the observed relationships at the lower (channel) level (Hox, 2002).

us anything about the differences between media systems in competition intensity and as well as differences within dual (mixed) systems.

Instead of using a typology of media systems, our study employs two indicators that indicate competitive and commercial pressures at the system level of television environments. This chapter analyses the link between media environment characteristics and political trust. Apart from a study by Schmitt-Beck and Wolsing (2010), to our knowledge this is the first time the relevance of the television system environment to (political) trust is empirically investigated. Schmitt-Beck and Wolsing (2010) applied cross-national multilevel analysis and concluded that the (aggregate level) market share of public television is positively correlated with social trust but that 'total television time' has a negative effect on social trust. This study builds upon this contextual approach. We focus on two key variables that indicate the presence of commercial and competitive pressures at the television system level: (1) The dependency of the television system on advertising revenues as a source of income; and (2) Audience fragmentation across television channels indicating the intensity of competition. We distinguish these two aspects from each other and test their effects on trust in politicians.

We focus on trust in politicians because the media might tend to report about politicians (as persons) rather than about institutions. In addition, while citizens come in contact with various political institutions in their daily life, most of them never get to know a politician so that their perceptions about politicians mostly stem from media coverage. Trust or distrust in politicians may spill over to other levels of the political system (Dalton, 2004; Easton, 1975).

The relationship between competition intensity and the advertising dependency at system level on the one hand, and trust in politicians on the other, has not been tested in prior research. We argue that a lack of appropriate macro-

level data and (until recently) insufficient methodological tools prevented scholars from properly testing the effects of media system variables (e.g. Slater et al., 2006). By testing these relationships, and by demonstrating that the level of advertising dependency at system level, and competition intensity have differential effects for different groups of citizens, we contribute to the knowledge on the effects of television systems on trust in politicians.

Even though much research has supported elements of the ‘media malaise’ hypothesis, it has also been criticised. Several scholars have for instance argued that the mass media, including television, still mobilise and inform citizens (Dalton, 2002; Norris, 2000). On the basis of a Swedish panel study, Prat and Strömberg (2005) concluded that the introduction of commercial television resulted in engaging the less informed people who were previously not exposed to television news, a finding that runs counter to the expectations of scholars cited above. In contrast to the ‘media malaise’ literature, the ‘media mobilisation’ literature states that there is easy access to ample political information nowadays, which makes people more aware of their political world and more politically educated. As a consequence, exposure to political information, including news on television, is related to higher levels of trust in politicians and lower levels of cynicism (Dalton, 2002; Norris, 2000).

We realise that the link between the media context and political trust is indirect, and that a number of intermediate effects are missing from our model. Various other elements of the media malaise theory therefore remain a ‘black box’ in this chapter, such as the possible link between the nature of political information and television system characteristics and the possible causal relationship between media content and trust in politicians. We also limit our study to television, even

though we are aware that some have argued that superficiality, negativity and infotainment are not related to the television medium *per se*, but should mainly be explained by increased commercialisation of the media field *in general* (for an extensive review see: Newton, 1999).

5.2. Characterising the television system

5.2.1. Advertising dependency

In many West-European countries, public television has an official duty to inform the public. There are two ways in which governments have tried to guarantee that public television fulfils this role, that is, through regulation and through funding. It has been argued that the nature of revenues is more important than official regulation in determining the programme output of broadcasters (Kops, 2001; 2007). While public funding might ensure that programmes serve the goals of a democratic public sphere at least to a certain extent, commercial funding tends to divert attention away from such public interests. The priority becomes the financial considerations of commercial agents, such as advertisers, sponsors and shareholders (Minasian, 1964; Steemers, 2001, p. 73). Programming then becomes dependent on audience shares and upon advertisers' assessments of whether a particular audience will purchase the advertised products (McChesney, 2004). Hence, advertising dependent television stations would give priority to 'mass' audiences or *significant* segments of audiences that are attractive to advertisers.⁴⁴ In an advertising dependent television system, high-spending audiences tend to receive more attention, and low-income groups might be, in some cases, deliberately shunned (Baker, 1994; Curran et al., 2009; Curran & Seaton, 2003).

⁴⁴ This suggests that when serious political news is a lucrative business, commercial media might provide this kind of content. We focus here on aggregate-level effects.

Various studies have indeed shown that in order to shape an advertisement-friendly environment, advertising-dependent media tend to depoliticise news content and therefore do not mobilise citizens (Baker, 1994; Lemert, 1984). Advertising dependent media tend to use a more 'neutral', professional style of reporting (Chalaby, 1996; Curran, 1991).

Until the 1980s, advertising in European broadcasting used to be either banned or regulated and restricted in amount, content and placement (McQuail, 1998, p. 110). The stagnation or reduction of public funding has also made public television more dependent on commercial revenues, increasing the dependence of broadcasting systems *as a whole* on commercial income mainly consisting of advertising revenues.

To summarise, a higher dependence on advertising as the main source of revenue generally leads to more entertainment programming and tends to depoliticise media content targeting a mass audience. A focus on entertainment, including political scandals, and de-politicisation of media content is supposed to lead to alienation from and mistrust of the political system and politicians (Putnam, 1995). We formulate our first macro level hypothesis as follows:

- **H1:** *At the macro level, the system level advertising dependency is negatively correlated with trust in politicians.*

5.2.2. Audience fragmentation across television channels

It is often argued that in order to attract the largest possible audience, media political coverage would be driven towards 'tabloidisation', entertainment and superficiality and that one of the most important consequences of commercial and

competitive pressure is the framing of politics as a (strategic/dramatic) game, making news less issue-oriented and more focused on politicians (e.g. Patterson, 2000).

However, the effects of competition on news coverage are disputed. While many economists believe that competition enhances the quality of media products in terms of accuracy, reduces bias and increases diversity, other researchers have argued that the relationship between competition and product quality and hence with news coverage quality is non-linear. Nicholson (1979) for instance, argues that with increasing competition, media organisations will produce goods that are different from those of other suppliers. Although producing soft news is also a strategy that is used by media companies to differentiate their products (Atwater, 1984), the strategy of differentiation would mean that at the aggregate level there is more variety in supplied content.

Van der Wurff and van Cuilenburg (2001) show that while differentiation occurs in the case of moderate competition, when competition is fierce television companies are pushed to fight for survival and produce cheap content targeting the 'median' viewer. Fierce competition would occur when there are many players in the market that are equally powerful with very small audiences, reflecting high levels of audience fragmentation. Thus, audience fragmentation might pose a structural limit on the capacity of television markets to produce high quality programmes and diverse content.

As more media companies enter the market, the average audience becomes smaller, generating less income, which would urge television companies to produce less expensive content (Picard, 2000). Audience fragmentation would therefore encourage television stations to focus on melodramatic, sensational and bad news (e.g., crime, sex and scandals and political wrongdoings) in order to attract a bigger

audience. Since the focus on scandal is expected to undermine trust in politicians, we would expect trust in politicians to be relatively low when audiences are the most fragmented. We can now formulate our second macro-level hypothesis:

- **H2:** *At the macro level, audience fragmentation is negatively correlated with trust in politicians.*

5.3. Individual factors conditioning media effects

We do not expect all citizens to be affected in the same way by media context characteristics such as audience fragmentation and advertising dependency. The effects of media context variables may be stronger for some groups than for others (McQuail, 1987; Miller, 1991). In this chapter we focus on two individual-level characteristics that may moderate the effects of contextual variables: political interest and attention to news on television. Unfortunately, the available European Social Survey (ESS) survey data does not contain information about which television station people are most exposed to, so that we cannot distinguish exposure to public television from exposure to commercial television. However, we can and will investigate how effects of television system characteristics are moderated by political interest and attention to news.

The literature suggests that the least politically interested and the politically least attentive citizens are most affected by media messages because they are more open to mobilising influences (Cappella, Price & Nir, 2002; Van Kempen, 2007). The smaller the repertoire and the more limited the information and arguments people have, the greater their readiness to accept and to be influenced by new information. ‘Those who fall into the news’ will suffer more from a hypothetical ‘media malaise’,

since they do not have sufficient political knowledge to be able to critically follow the news (Robinson, 1976). The ability to select media content suited to one's needs becomes crucial as the media system and in particular television becomes more fragmented.

In addition, there are also other mechanisms at play that are more closely related to the way television markets developed. The changes in structure from a supply to a demand market may well diminish the extent to which less interested and attentive citizens are actually exposed to 'hard news'. Research in the United States shows that a higher choice media environment leads to more selective exposure: "People who like news take advantage of abundant political information" (Prior, 2005, p. 577). The opposite may also be true: Less interested citizens can easily switch to other types of programmes, such as entertainment or infotainment.

However, there is no *a priori* reason to assume that watching other programmes will not lead to some kind of learning about politics and politicians (as a celebrity for instance), even though this might be another kind of political knowledge than 'facts'-based knowledge. While some argue that there is not much good in soft news (Prior, 2003), others argue that soft news, while not influencing recall knowledge about political information, does influence attitudes towards political issues and the way people make sense of their political world (Baum, 2003; Hollander, 1995, 2005; Norris, 2000).

If fierce competition and advertising dependency indeed lead to the predicted kind of programming and content, we expect the most politically sophisticated individuals to be the least affected. People who do not possess the ability and motivation to search for 'hard news', on the other hand, will be influenced the most by competition and the system level advertising dependency. This leads to the following hypothesis:

- **H3:** *The negative effects of advertising dependency at system level and audience fragmentation on political trust are stronger for the politically less interested and the politically less attentive.*⁴⁵

5.4. Control variables to be included in the model

Previous studies have indicated a number of individual-level variables that we need to control for in addition to the key variables political interest and media exposure. We will include them in the models without further discussion. Yet there are some aggregate-level variables that need discussing. Other researchers have shown that the effect of competition on media content partly depends on audience's beliefs (Mullainathan & Shleifer, 2005). The profit motive of television organisation implies that the selection of stories by journalists depends to a large extent on audiences' shared preferences and tastes (Hamilton, 2004). The more these preferences are heterogeneous, the more the stories are likely to be diverse.

When the audience holds rather homogeneous beliefs about an issue, the media will slant their stories towards these beliefs. This may be the case in particular in a media context where competition is fierce. This means that we potentially face an endogeneity problem. A media bias could originate because of audiences' homogenous beliefs about an issue and this bias could in turn strengthen

⁴⁵ Zaller (1992) demonstrated convincingly that there is a nonlinear relationship between political sophistication and the extent to which people are influenced by media messages. We also investigated whether the effects of system-level advertising dependency and competition were strongest for citizens with intermediate levels of sophistication. However, no evidence was found for such nonlinear relationships. We distinguished four levels of sophistication by creating three dummy variables. The interactions with levels of audience fragmentation increase linearly in strength with levels of political sophistication. In the sample, the effect of system-level advertising dependency is slightly weaker for the highest level of sophistication than for the second highest, but this difference is not statistically significant. We do not interpret this as a falsification of Zaller's theory, because we have no direct information about the content that different groups of citizens are exposed to.

these beliefs. In order to validly attribute effects to the media context, which may be caused by the distribution of beliefs in society, we will control for the heterogeneity in possible sources of individual beliefs.

The various political and demographic individual-level control variables (see model $m_{1.1}$) already account for individual-level sources of beliefs about politicians that precede our media variables. However, also at the aggregate level societies differ in their level of social trust. These differences in collective trust may be partly reflected in the attitude of media in general towards politicians. Echoing a general 'suspicious mind' of societies, media may also adopt a suspicious attitude towards politicians. If most people think that others in general are not trustworthy this should result in a media coverage showing more often the negative side of a story than its positive side. However, if there is no consensus about the trustworthiness of others, media coverage is likely to be more segmented and diverse, and the aggregate effect is likely to be minimal to even absent. At the aggregate level we therefore control for the homogeneity of beliefs about the trustworthiness of people in general⁴⁶.

Secondly, there are some characteristics of political and media systems that may be related to our macro-level media variables as well as to political trust, which we also need to control for. On the basis of the historical relationship between media and political systems, Hallin and Mancini distinguished three types of media systems: the *democratic corporatist media system* (Netherlands, Belgium, Germany, Austria, Switzerland and the Scandinavian countries), the *liberal media system* (Britain and Ireland), and the *polarised pluralist media system* (France, Italy and

⁴⁶ Even if media do not have this information and cannot deliberately differentiate its content along these lines, differences in social trust might reflect general differences in social predispositions between individuals and groups. Controlling for these differences ensures that the effects of our media variables can be ascribed to the media context and not to population characteristics.

Spain) (Hallin & Mancini, 2004a). We will check to what extent our contextual variables are correlated with the typology of Hallin and Mancini and control for it. Moreover, we will control for a typology of political systems developed by Lijphart (1999). Previous research indicated that political trust tends to be higher in countries with proportional systems of representation than in a first-past-the-post system. We use an updated index for the Lijphart's executive-parties dimension developed by (Vatter, 2009). Vatter's measure covers the period 1997-2006 and includes five variables: (1) the effective number of legislative parties, (2) the electoral disproportionality, (3) the executive-legislative relationship, (4) interest group corporatism, and (5) central bank independence.⁴⁷

5.5. Data and measures

The individual-level data for our dependent variable and individual control variables comes from round 2 of the European Social Survey (ESS), collected in the period 2004 through 2006⁴⁸. Our dependent variable is trust in politicians and is measured by the question: "Using this card, please tell me on a score of 0-10 how much you personally trust politicians? A 0 means that you do not trust politicians at all, and a 10 means that you have complete trust".

To measure advertising dependency and audience fragmentation, we drew on the yearbook (2007) of the European Audiovisual Observatory for measuring the income of public broadcasting, and the audience share of national and international channels. We used the average public income and audience share over the years 2004-2005 and 2006 (for the operationalisation of television system

⁴⁷ Higher scores of this index indicate more consensus-oriented democracies (Vatter, 2009, p. 153).

⁴⁸ The data can be obtained through www.europeansocialsurvey.org. We use round 2 of the ESS because we also collected data on media systems for these years.

variables, see chapter 2 of this thesis). We did so because the individual data are gathered over the period 2004-2006. We could have chosen to take the values for each year separately but we believe that taking an average of 3 years gives our aggregate measures more stability.

The values of advertising dependency of television systems range between 0.57 and 0.84. Greece and Spain score highest on system-level advertising dependency, followed by the Benelux countries. For Greece this is due to the non-popularity of its public television, for Spain this is due to the high dependency of its national public television stations on commercial revenues. Finland and Sweden are the only countries where public television organisations have no commercial income. Audience fragmentation scores range between 0.74 and 0.92 on a scale between 0 and 1. Norway scores the lowest on audience fragmentation and the Netherlands the highest⁴⁹.

With regard to the heterogeneity measure of individuals' interpersonal trust, we use the Herfindahl-Hirschman Index (HHI).⁵⁰

$$\text{Heterogeneity} = 1 - \sum_i p_i^2 \quad (3)$$

In formula 3, P is the proportion of people that have scored 'i' of the 10-point scale used to measure interpersonal trust. This index has previously been used to measure heterogeneity (Kaniovski & Mueller, 2006). The index runs between 0 and 1 with a value of 0 corresponding to maximum homogeneity and the value of 1 corresponding to maximum heterogeneity (see appendix for country scores).

⁴⁹ See appendix D for variable scores.

⁵⁰ See: www.europeansocialsurvey.org for the exact variable wording.

Table 5.1. Bivariate correlation between macro-level variables (N=17).

	Polarised Pluralist model	Democratic Corporatist model	Liberal model	Consensualism	Advertising dependency	Audience Fragmentation	Heterogeneity
Polarised Pluralist model	1						
Democratic Corporatist model	-0.78**	1					
Liberal model	-0.27	-0.39	1				
Consensualism	-0.19	0.56*	-0.59*	1			
Advertising Dependency	0.74**	-0.73**	0.03	-0.3	1		
Audience fragmentation	-0.08	-0.09	0.27	-0.02	0.21	1	
Heterogeneity	0.42	-0.56*	0.24	-0.27	0.40	0.47	1

5.6. Analyses and results

Before estimating our model, we examined correlations between the macro-level variables. System-level advertising dependency and audience fragmentation are positively, but not significantly correlated (Pearson correlation 0.21). The variable indicating the degree of ‘consensualism’ is negatively but not significantly correlated with the system level advertising dependency and audience fragmentation. The system level advertising dependency is strongly correlated with Hallin and Mancini’s typology. The correlation between the system level advertising dependency and the polarised pluralist model is 0.74, and with the democratic

corporatist model category it is -0.73. Both of these correlations are significant at the highest level. Because of this high correlation we do not include this typology and system-level advertising dependency in the same model. Heterogeneity correlates positively though not significantly with both advertising dependency and audience fragmentation (0.40 and 0.47 respectively). Democratic corporatist countries are the most homogeneous in terms of interpersonal trust (see table 5.1. for the correlations between the macro variables and table A.5.1. in the appendix for the country scores on the macro-level variables).

We start our analysis by testing whether average trust in politicians varies significantly between countries. In other words: Is the country level a meaningful level of analysis? To answer this question, we compare the empty usual regression model and an (empty) random intercept (U_{0j}) model with trust in Politicians (TP) as a dependent variable⁵¹. The results (not reported here) show that the average trust in politicians varies significantly from country to country. The model with a random intercept clearly fits the data much better than the model with a fixed intercept ($X^2(1) = 2162.96, p = 0.00$). The country level accounts for 13 per cent of the total variance in trust in politicians. The significance of the country level variation indicates the presence of contextual effects that are the interest of this study and justify the use of hierarchical multilevel modelling (Snijders and Bosker, 1999).⁵²

⁵¹ We compare $m_{00} : TP_{ij} = \alpha_0 + R_{ij}$ and $m_{10} : TP_{ij} = \alpha_{00} + U_{0j} + R_{ij}$ m_{00} is the fixed empty model compared with the basic multilevel empty model. The outcome variable Y (trust in politicians (TP)) for individual i nested in country j is equal to the average outcome for the population α_{00} and a country specific effect U_{0j} plus an individual-level error R_{ij} (Snijders & Bosker, 1999).

⁵² The contrary is not true: if the inter-correlation is low this does not imply the absence of contextual effects. When the data are multilevel and/or the interest questions of the study are multilevel one should always use a multilevel model to analyse the data.

5.6.1. Across-the-board effects of television systems

Table 5.2 displays the results of the various models analysed. Model m_{11} analyses the effects of our individual-level control variables. For this analysis, the most relevant individual-level variables are political interest and media exposure: the amount of time spent watching the news, the total time spent watching television and the amount of time spent reading newspapers. The results show that political interest has a positive effect on trust in politicians. People who are more politically interested are also significantly more trusting. The effect of watching the news on political trust depends on the total time spent watching TV. The more time spent watching TV in general, the more negative the effect of watching the news.⁵³

⁵³ Without controlling for the effect of political interest, all media exposure variables are significant and the mean effect of time spent watching the news is positive. The finding that the effect of watching news becomes negative for people watching a lot of television seems to support the well-known Putnam position about television effects. We do not discuss this further as this is not the focus of this study (however, see Schmitt-Beck and Wolsing, 2010).

Table 5.2. Individual, television-system and cross-level effects on trust in politicians⁵⁴

	Model <i>m</i> _{1.1}	Model <i>m</i> _{1.2}	Model <i>m</i> _{1.3}	Model <i>m</i> _{1.4}
Intercept	4.08*** (0.15)	4.01*** (0.1)	4.02*** (0.1)	4*** (0.1)
<i>Contextual variables</i>				
Advertising dependency		0.20* (0.1)	0.18* (0.1)	0.20* (0.1)
Audience fragmentation		0.23* (0.11)	0.25* (0.1)	0.23* (0.13)
Heterogeneity of beliefs about others trustworthiness		-0.50*** (0.12)	-0.49*** (0.11)	-0.51*** (0.12)
Consensualism		0.10 (0.14)	0.1 (0.13)	0.1 (0.13)
<i>Individual-level variables and cross-level interactions</i>				
Political interest	0.40*** (0.02)	0.40*** (0.02)	0.41*** (0.02)	0.40*** (0.02)
Political interest*Advertising dependency	-	-	0.07*** (0.02)	
Political interest*Fragmentation	-	-	-0.09*** (0.01)	
Hours watching news (News)	-0.03 (0.03)	-0.04 (0.03)	-0.03 (0.03)	-0.02 (0.02)
News * Advertising dependency	-	-	-	0.1*** (0.02)
News * Fragmentation	-	-	-	-0.04* (0.02)
Newspapers news *News	0.007 (0.04)	0.007 (0.04)	0.002 (0.04)	0.01 (0.04)
Total TV watching*News	-0.08*** (0.00)	-0.08*** (0.02)	-0.08*** (0.02)	-0.1*** (0.02)

⁵⁴ The probabilities we use in the deviance test are based on a comparison between the model in question and the model with only the individual variables. For the model with individual-level variables only the reference is the empty multilevel model. The number of countries in these models is 17 and the number of the individual level units is about 16800. All individual-level variables, except age, gender and party partisanship are centred around the grand mean and the country level variables are standardised. Age is centred so that the value zero corresponds to the age of 30 years. The dependent variable is trust in politicians measured on a 10-point scale (mean=3.87; SD=2.28): How much do you personally trust politicians? 0 means you do not trust politicians at all and 10 means you have complete trust in politicians. Political interest is measured on a 4 point scale (SD=0.9). Time spent watching news is recorded so that it is measured in hours (SD=0.61). The macro-level variables are standardised (see index for the scores).

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	Model m _{1.1}	Model m _{1.2}	Model m _{1.3}	Model m _{1.4}
Newspapers news	0.02 (0.04)	0.02 (0.46)	0.02 (0.04)	0.02 (0.04)
Total TV watching	0.004 (0.02)	0.005 (0.02)	0.0005 (0.02)	0.006 (0.04)
Party Partisanship (0 is Partisan)	-0.27*** (0.03)	-0.27*** (0.031)	-0.28*** (0.03)	-0.27*** (0.03)
Left-Right scale (0 is left - 10 is right)	0.06*** (0.00)	0.06*** (0.00)	0.06*** (0.00)	0.06*** (0.00)
Interpersonal trust	0.21*** (0.00)	0.21*** (0.00)	0.21*** (0.00)	0.20*** (0.04)
Times experienced corruption public officials	-0.2*** (0.04)	-0.20*** (0.04)	-0.20*** (0.04)	-0.19*** (0.2)
Subjective income	-0.19*** (0.02)	-0.19*** (0.02)	-0.19*** (0.02)	-0.19*** (0.02)
Education	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)
Gender (1 is woman)	0.05 (0.03)	0.05 (0.03)	0.04 (0.03)	0.05 (0.03)
Age	-0.01*** (0.00)	-0.01*** (0.00)	-0.01*** (0.00)	-0.01*** (0.00)
Age2(*100)	0.04*** (0.00)	0.04*** (0.00)	0.04*** (0.00)	0.04*** (0.00)
Country-level variance	0.34	0.12	0.12	0.13
Individual-level variance	3.77	3.77	3.76	3.76
Deviance	72345***	72330.74* *	72295.86* **	72316.16* **
Explained country-level variance (reference empty model)	35.72%	74.33%	76.20%	74.65%
Explained country-level variance (in comparison m _{1.2})	-	60%	63 %	60.56%
Total explained variance (in comparison m _{1.2})	-	5.22%	5.65%	5.34%

Other individual characteristics, however, seem to be more important than self-reported media exposure. People who have experiences with corrupt public officials have significantly less trust in politicians. People who trust other people in general, also have more trust in politicians. Partisanship is also significantly correlated with trust in politicians: partisans have more trust in politicians than non-partisans. The ideological placement of the respondent also seems to be of significant importance for trust in politicians, with right-wing people trusting politicians slightly more than left-wing people. When controlling for subjective income (feelings about own economic situation), education level is no longer relevant. People who report their economic situation to be satisfactory have higher levels of trust in politicians. Finally, gender does not seem to be relevant and age has a non-linear (first negative, then positive) effect. This model with individual-level variables explains 15.66 per cent of the total variance and 35 per cent of the country-level variance in trust in politicians.

Model m_{12} explores whether advertising dependency at system level, and audience fragmentation can explain part of the cross-country variance in political trust. In this model we also control for the type of democracy, and for the homogeneity in people's beliefs about the trustworthiness of other people.⁵⁵ Three of our contextual variables are significantly related to trust in politicians.⁵⁶ Contrary to our expectations, audience fragmentation and the system level advertising dependency are *positively* correlated with trust in politicians and most heterogeneous countries are significantly less trusting in their politicians. We also tested for non-linear effects of competition, but found no significant effect of a squared term (results not shown). This could be explained by the fact that our

⁵⁵ In another model that we do not report here we looked at the effect of competition while controlling for the media system typology and excluding the type of democracy and the system-level advertising dependency. The media system typology was not significantly related to trust in politicians and the effect of competition remained positive and significant.

⁵⁶ We test the system-level advertising dependency and competition; $p < 0.05$ one sided.

selection of countries contains no cases with very low levels of competition. So, H1 and H2 find no support in our analyses. This model explains 60 per cent more country level variance than the previous model with individual level variables only.⁵⁷

5.6.2. Interactions between media context variables and political interest

To investigate H3 we tested two models with cross-level interactions between television system variables and relevant individual-level variables (see Table 5.2. model m₁₃ and m₁₄). Due to the relatively small number of our group level units (17), it is impossible to test all hypotheses simultaneously. We therefore estimate various models and test our hypotheses separately. Model m₁₃ presents the results of the cross-level interactions for political interest. This model analyses whether the contextual-level effects depend on the level of political interest. The results show that the effect of audience fragmentation weakens at higher levels of political interest (positive main effect with a negative interaction), while the effect of the advertising dependency at system level becomes stronger and significant (positive interaction with a positive main effect) at high levels of political interest. Thus for a

⁵⁷ Researchers can never conclusively reject the existence of omitted variable bias in their research. This issue of omitted variable bias is often erroneously addressed by controlling for too many variables. One should however only control for explanatory variables that are 'antecedents' of the causal factor of interest and are both correlated with the dependent and the independent variable. One should not control for variables that are in part a consequence of the key explanatory variable (King, Keohane, & Verba, 1994). To ascertain that our results are not a result of omitted variables that affect both the dependent and the independent variables, we controlled for the percentage of people who experienced corruption by a public official at least once in the last five years and for the GDP per capita (while taking consensualism out of the analysis). Corruption might affect political trust as well as media coverage (results not shown) and the GDP per capita indicates difference in welfare that might be relevant for media system difference and trust in politicians. The aggregate effect of corruption was significant and negative as expected, but it did not affect the results of our media system variables and it became non significant after controlling for the individual level variables. The GDP variable had also no significant effects in the full model. We therefore do not include these variables in the final model.

politically interested person, advertising dependency has a positive effect, whereas audience fragmentation has a positive effect on the least politically interested (see the plots of these interactions in figure A.5.1. -A.5.4. in the Appendix).

The observation that the media context has different effects on groups of citizens with different levels of political interest raises the question how strong and significant the effect is for the different groups. To address this question, we calculated the regions of significance; and the simple slopes of audience fragmentation and the system level advertising dependency in order to assess at which levels of political interest this effect is significantly different from zero (Preacher, Curran, & Bauer, 2006).

Figure 5.1. shows that the effect of audience fragmentation is positive and significant for political interest levels that are approximately equal to or lower than average. This effect becomes stronger as political interest decreases. Audience fragmentation has no significant effect on the attitudes towards politicians of those who are most politically interested. Figure 5.2. shows that the effects of the advertising dependency are significant for levels of political interest above 0.6. This corresponds to 49 per cent of the respondents who are moderately to highly interested in politics.

The results thus highlight considerable qualitative differences in how those who are politically interested and those who aren't, are affected by the media system. Audience fragmentation mostly affects those who are least politically interested, while advertising dependency exerts a stronger effect on those who are most politically interested. This suggests that, contrary to conventional views, advertising dependency and competition relate to different processes of political communication, which further justifies the need to distinguish the two concepts.

Figure 5.1. Confidence bands slope of audience fragmentation for observed values of political interest⁵⁸

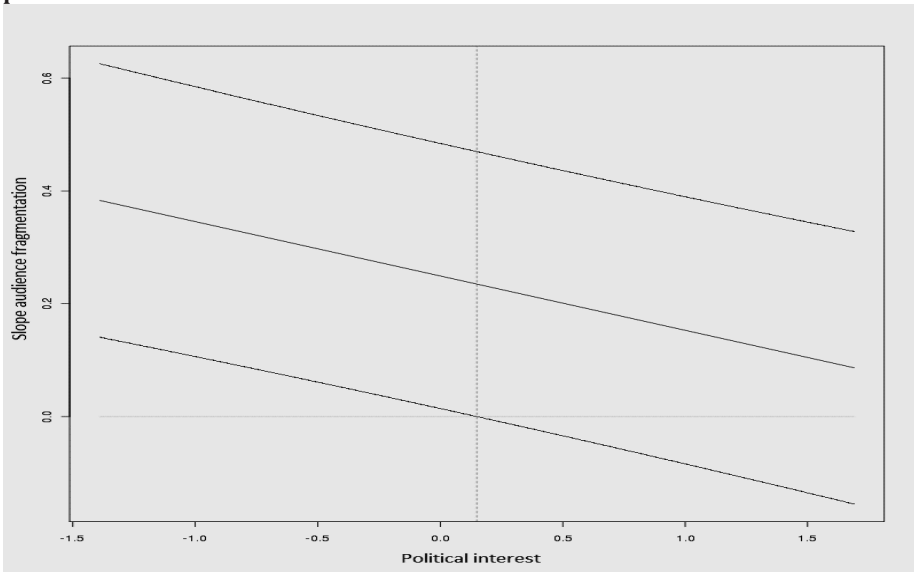
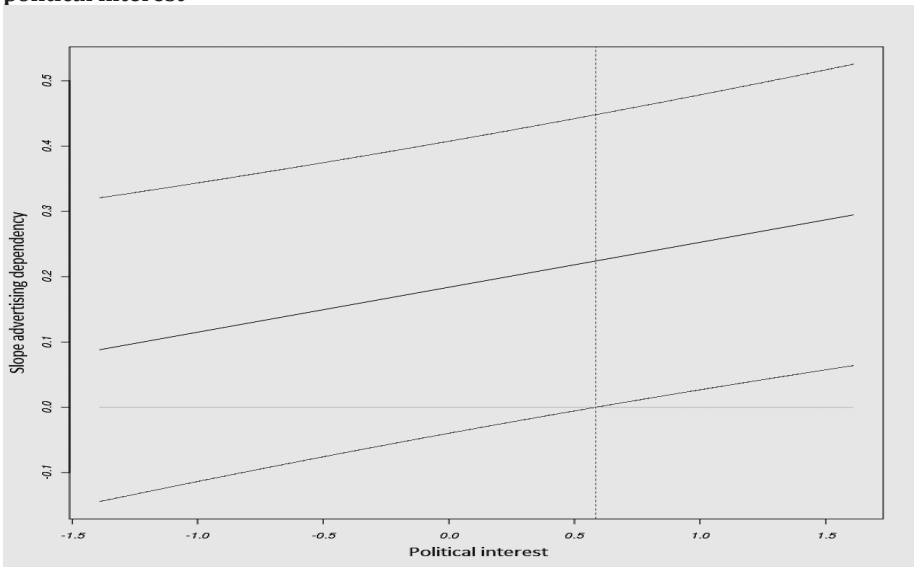


Figure 5.2. Confidence bands slope advertising dependency at observed values of political interest



⁵⁸ The figures in this paper are produced using Preacher, Curran and Bauer (2006).

5.6.3. Interactions between media context variables and time spent watching news

Model $m_{1.4}$ analyses the differential effects of audience fragmentation and advertising dependency at system level on respondents with different levels of attentiveness to the news. The results largely mirror the previous findings. Audience fragmentation has the strongest positive effect on the politically least attentive citizens, while advertising dependency mainly affects the politically most attentive citizens. To assess if these effects are significant for various levels of political attentiveness we plotted the confidence bands of the regression coefficient of competition in figure 5.3. The results show that audience fragmentation has a significant positive effect on people who spend just less than average daily time on watching the news. This applies to 38 per cent of the respondents.

The effect of advertising dependency also depends on the amount of time spent watching the news (see figure 5.4). The effect of advertising dependency is significant when the time spent watching the news is above the average, which is equivalent to watching more than one hour of news per day. People who satisfy this condition represent about 33 per cent of the sample (see table A.5.2. and A.5.3. in the appendix for the distribution of political interest and time spent watching the news).

Figure 5.3. Confidence bands slope of audience fragmentation by time spent on news watching

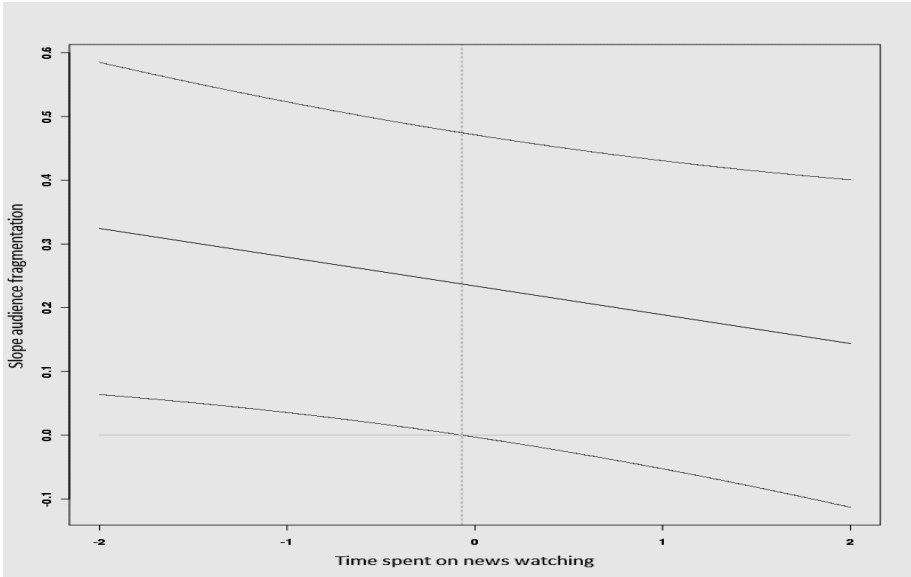
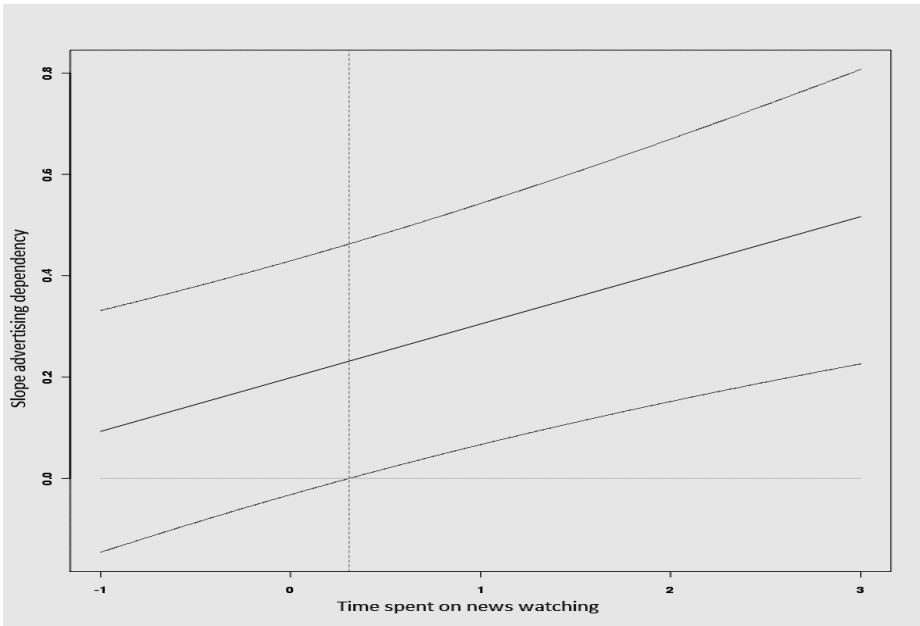


Figure 5.4. Confidence bands slope of advertising dependency by time spent on news watching



Robustness

We tested the robustness of the cross-level interactions first by investigating the existence of outliers at the macro level (see Table A.5.1. in the appendix). The Z-scores presented in this table show that no real outliers exist in our data. Second, for each of the models we followed a jack-knife procedure, where the models were estimated 17 times, each time excluding one of the 17 countries from the analyses. The results (not reported) show that in model m_{12} the aggregate effect of advertising dependency at system level varied between 0.15 and 0.26 and the aggregate effect of audience fragmentation varied between 0.05 and 0.45. Even though the direction of the effects is always positive, the main effects do not reach statistical significance in each of these analyses. In terms of statistical significance and explanatory power, cross-level interactions are more important than the main effect.

In model m_{13} the cross-level interaction of audience fragmentation and political interest varies between -0.9 and -0.1 and is always significant (at $p < 0.000$). The cross-level interaction between the system level advertising dependency and political interest varied between 0.04 and 0.1 and is also always significant at ($p < 0.05$). In model m_{14} the cross-level interactions between advertising dependency at system-level and time spent watching the news varied between 0.08 and 0.13 (always significant at $p < 0.000$). The cross-level interaction between audience fragmentation and time spent watching the news varied between -0.02 and -0.05. The significance of the latter cross-level interaction varied between $p < 0.000$ and $p < 0.1$ but when excluding the Netherlands or Germany from the analysis, this interaction becomes insignificant. So, of the four interaction effects, only this one is not robust.

5.7. Discussion

Over the past three decades, television markets in most West-European countries have transformed from supply markets that were largely dominated by public television, to demand markets characterised by increasing competition for audiences between commercial and public broadcasting stations. This is the first time a study estimates how the structure of different television markets affects trust in politicians. This question is important, because many scholars believe that a non-commercial media system would contribute to support for democratic governance through informing citizens about politics and by increasing political trust. Very competitive and commercial media systems would, in the words of Fallows (1997), “undermine democracy”. Even though much of the literature on this ‘media malaise’ originates in the American context, European scholars have also expressed concern about the introduction of commercial television and increasing competition.

Our study focused on two key structural aspects of television systems: advertising dependency at the system level, and audience fragmentation across television channels, which we see as a proxy for competition intensity. Contrary to hypotheses derived from the media malaise literature, we found that advertising dependency and audience fragmentation have *positive* macro-level effects. However, the effect of audience fragmentation and advertising dependency varies among different groups. While audience fragmentation is most relevant for those who are less politically interested and less attentive, advertising dependency is most relevant for the most politically interested and attentive citizens. With regards to trust in politicians, this study has shown that the general tendency in the

literature to identify advertising dependency, media competition and, more generally, increasing 'commercialisation' of media systems as factors contributing to political mistrust are misplaced. This study found no evidence of negative structural effects of advertising dependency and audience fragmentation on trust in politicians.

We have shown that both advertising dependency and audience fragmentation have positive effects on trust in politicians, albeit on different groups of citizens. How do we explain these unexpected findings? Obviously, we have to be cautious in our interpretation of these findings, because we have not directly studied the contents of the messages our respondents were exposed to. However, a plausible interpretation could be that changes in the television market resulting from an increase in advertising dependency and cross-channel competition have altered patterns of political communication. As a result of the introduction of commercial television resulting in increased competition, audiences have obtained a wider choice of programmes to watch, with an increased differentiation between 'hard news' for the politically most attentive and interested and infotainment for the politically least interested.

The media systems' increased dependency on commercial income seems to serve the politically most interested and attentive citizens in providing a larger number of more varied news programmes. However, we did not find evidence that high levels of advertising dependency are 'harmful' for those who are not politically interested. According to much research, more competition leads to a wider availability of infotainment. Chapter 3 offered some evidence supporting these claims. This wider availability of infotainment could explain the positive effect of audience fragmentation on the trust levels of citizens with lower levels of political interest. These are people who normally do not watch 'hard news' regularly, but

gain more trust in politicians from seeing them appear in infotainment shows and other programs as a celebrity.

With the fragmentation of audiences, politicians appear on various channels and in less serious programmes that are less critical and which may in fact be more likely to portray them as likeable persons (Brants and Siune, 1998, p. 138; see also Baum, 2003). Other research has shown that watching entertainment programmes and talk shows in particular, is negatively associated with mistrust in politicians (Guggenheim, Kwak, & Campbell, 2011; Tsfati, Tukachinsky, & Peri, 2009). These programmes tend to picture politicians as likeable people (Baum, 2003); do not depict politics in divisive or strategic frames; and usually avoid incivility; which are all associated with cynicism (Cappella & Jamieson, 1997; Mutz & Reeves, 2005). This interpretation of our findings suggests that political information processes are qualitatively different for both groups of citizens.

The most politically interested are not affected by audience fragmentation. Following our earlier interpretation, this implies that infotainment and entertainment dominance in a television system does not significantly affect people with high levels of political interest. The finding that this group is only affected by the degree of advertising dependency suggests that those who are the most politically interested benefit from an abundance of news, which in turn originates from their being a profitable segment in the media market interesting for advertisers.

This interpretation supports earlier research by Prior (2005) on the US. People who like news take advantage of abundant 'traditional' political information, which is partly offered by (thematic) commercial channels, some of which are entirely devoted to news. Contrary to Prior's beliefs, also those who are less

politically interested take advantage of the 'non-traditional' political information including infotainment and entertainment. Politically less interested citizens build their trust in politicians using infotainment . This finding supports research by Baum (2003), who argued that although infotainment might not increase the levels of (fact based) political knowledge, it does influence people's perceptions of politics. He even argues that some people are better served by infotainment than by regular news programmes.

Our study challenges the common assumption that the commercialisation of media systems has negative effects on trust in politicians. The study also points to structural differences in political trust between the politically interested and news-attentive citizens on the one hand, and the non-news attentive, non-politically interested citizens on the other hand. The results suggest that political trust might be built on different types of political information by these distinctive groups of citizens.