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Abstract

We analyze minute-by-minute, individual level data on viewership for Italian TV news broadcasts, matched with detailed data on content. We study viewer behavior, especially the decision of viewers to switch away from a news program as a function of the type of story being broadcast. Somewhat surprisingly, we find that viewers are systematically more likely to switch away from “soft” news compared to “hard” news. On the other hand, sensational stories about crime, accidents and disasters are associated with less switching. We also find significant differences in this switching behavior according to gender, age, and TV channel. For example, young people are relatively more likely to switch away from hard news than soft news, compared to older people. Finally, we find that viewers are relatively more likely to seek another news program if they are switching away from a soft news story. Overall, the results are inconsistent with a commonly held view that television viewers always prefer soft news to hard news.

JEL-Codes: L820.

Keywords: television news, media content, infotainment, consumer.

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*“If you don't eat yer meat, you can't have
any pudding. How can you have any
pudding if you don't eat yer meat?”—
The Teacher, Another Brick in the Wall
(Part 2), Pink Floyd*

1 Introduction

Political scientists and communication scholars have documented a trend in news production and consumption away from “hard” news—e.g., stories about public policies, the economy, the general functioning of government, and foreign affairs—towards “soft” news about sports, fashion, food, travel, celebrity gossip, and the like (Zaller 1999a and 1999b, Patterson 2000, Curran *et al.* 2009).¹ This has led scholars to different conclusions about the consequences of soft news for democratic politics. Some worry the proliferation of soft news harms civil discourse, public opinion, and voter knowledge (Zaller 1999, Patterson 2000, Prior 2003) and might induce higher political apathy (Nguyen 2012) and cynicism (Boukes and Boomgaarden 2015). Others suggest that soft news is beneficial—for example, by capturing the interest of citizens who otherwise would be inattentive to news, and thus helping political knowledge “trickle down” to a larger set of citizens (Baum 2002 and 2003, Baum and Jamison 2006, Prat and Strömberg 2005, Taniguchi 2011, Andersen 2019).

Discussions about the merits and drawbacks of soft news often start with the (often implicit) assumption, dating back to Schumpeter (1942) and Downs (1957a), that citizens have little incentive to be knowledgeable about public affairs and tend to watch news programs for their entertainment content rather than to learn about details of politics and policy.² This leads to claims that most viewers prefer soft news to hard news, and that more competition in the media market leads to more consumption of soft news (Zaller 1999a and 1999b, Prat and Stromberg 2005, Cagé 2020). In a non-competitive media market viewers might be “forced” to consume more hard news than what would be individually optimal due to restrictions on the supply side (an extreme example would be a state monopoly). Competition for viewers, on the other hand, should lead news outlets to increase their total supply of soft news in equilibrium, while also

¹In their comprehensive review and discussion of how communication scholars have operationalized the distinction between hard and soft news, Reinemann *et al.* (2012) note that “[...] *in spite of the fact that most scholars seem to have an intuitive understanding of the concept and despite its ubiquity in the literature, scholars are far from reaching a consensus about how hard and soft news is to be defined.*” Otto *et al.* (2017) provide a general theoretical framework about the “softening” of political journalism.

²Kernell *et al.* (2018) use aggregate audience shares for the ABC, CBS, and NBC evening news programs to show that lower levels of civic affairs content (the definition of which is very similar to our definition of hard news) are associated with greater audience share.

allowing viewers to better choose their preferred combination of soft and hard news (Hamilton 2004).³

Empirical studies seeking to document patterns of viewership, or seeking to estimate the impact of soft news consumption on political knowledge and behavior, are typically based either on aggregate measures or on survey data. Due to the presence of strong social norms towards “civic-mindedness,” self-reported behavior might not be an accurate indicator of actual news viewership. Social-desirability bias might lead respondents to systematically overstate their consumption of hard news and understate how much they watch soft news. Moreover, the amount of over- and under-reporting could be correlated with both observed and unobserved characteristics of respondents.⁴

In this paper we study the actual behavior of individual news consumers, rather than self-reports. More precisely, we use the minute-by-minute, individual-level ratings data for all major Italian television news broadcasts during the two-year period, January 1, 2009 through December 31, 2010. These ratings are provided by the AUDITEL™ consortium, which uses meter-based data from Nielsen. In addition to the obvious advantages stemming from the use of “revealed preferences,” these data allow us to investigate the details of TV viewership with no need to infer individual behavior from aggregate information.⁵

We match the TV ratings data with equally granular data on the issues covered by Italian national evening news broadcasts, minute by minute. These data are provided by the *Osservatorio di Pavia*.⁶ Merging the two databases tells us which news story each individual in the

³Hamilton (2004) argues that news content is driven by the interactions of suppliers with market demand. In her study of French local newspapers, using county level data, Cagé (2020) finds that increased competition leads to a lower share of articles on hard news and lower turnout in local elections. This evidence supports John Zaller’s claim that “few would dispute that the overall ‘quality’ of mass journalism has declined since the 1950s [...] Market competition is the main cause.” (Zaller 1999a, p. 1).

⁴For example, Prior (2009) estimates that American respondents in the National Annenberg Election Study over-reported their total news consumption threefold, on average. He also finds that the degree of over-reporting varies significantly across demographic groups.

⁵Previous studies using meter data have typically considered short samples and addressed different questions. Webster (2005), for example, studies television news viewing in the U.S. during the first week of February 2003. Wonneberger et al. (2012) studies the evolution of the Dutch television news audience from 1988 to 2010 using a sample consisting of one week of data in March of every second year. Wonneberger et al. (2011) uses one week of data on Dutch viewers in fall 2007.

⁶The *Osservatorio di Pavia* (www.osservatorio.it/en) is an independent research institute that specializes in media analysis, with a specific focus on monitoring media freedom and pluralism.

sample is watching—or not watching—for each minute of the major evening news programs.

Our analysis proceeds as follows. First, we use these data to describe the overall patterns of news viewership in the Italian TV audience. Our descriptive analysis reveals heterogeneity in viewing habits and a relatively clear typology. A substantial share of Italian adults never or rarely watch TV news. A second type watches the news regularly, and these people often watch the entire program. A third type watches news more irregularly and often watches only part of the broadcast. Second, the best predictor of TV news watching is total TV watching. This means that demographic variables that predict overall TV consumption, such as age, gender, and education, also tend to predict TV news consumption. As a consequence, older and less educated people, as well as women, tend to watch more TV news. In a preliminary multivariate analysis, we also find that the percentage of TV news being watched is strongly increasing with the share of hard and sensational news being aired, while the positive correlation with the share of soft news stories is much smaller.

We then conduct regression analyses to study the minute-by-minute switching behavior of all TV news viewers. In these regressions, the dependent variable indicates whether or not a given viewer changed channels (or turned off the television) during each minute in which he or she was watching the news. The key independent variables indicate the type of news story that was being aired during or just prior to the switch, distinguishing between hard and soft news, as well as “sensational” news (e.g, stories about natural disasters and serious accidents).

Our focus is on the difference in the propensity to switch away during a hard news story than during a soft news story. When we do not include channel-specific fixed effects, i.e., when looking at the overall variation in switching behavior between and within TV news stories, we find that the propensity to switch away during a soft news story is systematically higher than during a hard news story, except during the first few minutes of the show. Moreover, this difference in the propensity to switch away increases steadily as the news program proceeds. We find an even stronger difference in the propensity to switch away during a soft news story than during a sensational story.

When including channel-specific fixed effects, and therefore exploiting only within-program

variation, the differences in switching behavior when watching hard versus soft news are smaller than those estimated without channel fixed effects, but they are still significant and sizable during the last 10-15 minutes of each show. We also find significant differences in the propensity to switch away during hard versus soft news according to the viewer’s gender and age, as well as the specific TV news show the viewer watches.

Finally, for a shorter time interval for which we have the full TV schedule, we are also able to investigate directly where viewers “land” when they decide to switch away from a TV news program. We find that viewers who leave during a hard news story are more likely to switch off the TV, compared to when they leave during a soft news story. On the other hand, when viewers leave during a soft news story, they are relatively more likely to switch to *another* TV news show. One interpretation of these patterns is that the first type of viewers are “satisfied” with the amount of hard news they have watched, while the latter are not, and hence they search for another TV news show.

Overall, these findings are inconsistent with the simple hypothesis that TV consumers always seek entertaining news rather than politically relevant information. Instead, there is considerable heterogeneity across viewers—and many do *not* appear to avoid hard news.

The paper is organized as follows: in the next section we provide some background information on the Italian television system and introduce the ratings data and the TV content data. We also provide basic descriptive statistics and discuss some of the advantages of using data based on actual behavior rather than self-reported information from surveys. In section 3 we present our descriptive analysis of viewership by type of news, while in section 4 we discuss our regression results on individual switching behavior. In Section 5 we discuss our results in the context of the existing theoretical literature. Section 6 concludes by summarizing our findings and proposing possible next steps.

2 Background and Data

2.1 A Brief Introduction to Italian TV News

During the two-year period we study, virtually all Italian households watched television via a signal broadcast over the air. Cable TV is practically absent in Italy, and pay TV—mainly via satellite distribution—accounts for a small audience share.⁷ There are seven national channels. Three channels are part of the national broadcasting corporation (RAI), which is state-owned. A tacit agreement between the main political forces is that RAI 1 is typically controlled by the government, RAI 2 by the right and RAI 3 by the left.⁸ Three channels—Rete 4, Canale 5, and Italia 1—are part of the Mediaset network and are controlled by Silvio Berlusconi, who was the leader of the right-wing coalition for two decades and prime minister three times.⁹ During the period studied in this paper, 2009-2010, Silvio Berlusconi was Italy’s prime minister and therefore, in addition to the Mediaset Channels, he had substantial influence over the RAI 1 and RAI 2 channels.

Prime time (8:30-10:30 PM) audience shares for RAI and Mediaset in 2010 were 44 percent and 37 percent, respectively. The main RAI channel (RAI 1) had a share of about 22.5 percent, while the main Mediaset channel (Canale 5) had 18.5 percent. Shares for other times of the day are only slightly different. The last national channel, La 7, had a small audience share, only about 3 percent, and is not part of our baseline sample.¹⁰ In addition to these channels,

⁷Cable TV never developed in Italy, largely because of a 1974 law which permitted cable networks to operate only if they were exclusively single-channel, thus defeating the economic rationale of multi-channel cable television. The main pay TV operator, Sky, reached 5 million subscribing households in 2010, with a penetration of just over 20 percent of total households. However, the pay-TV audience share has always been below 10 percent, especially during prime time. The only channel focused on news, Sky TG24, had an audience share well below 1 percent.

⁸The board of directors of RAI is composed of nine members. Seven members are chosen by a Parliamentary committee and therefore reflect the composition of Parliament—typically four members are appointed by the majority and three by opposition parties. The remaining two members, including the director, are nominated by the Minister of the Economy. The board of directors is therefore clearly composed of personnel which is close to the main political parties and skewed in favor of the parties in government. Formally, the board of directors then appoints the directors of the channels and of the news shows. Not surprisingly such appointments are subject to intense political pressure. Leaving one channel to the opposition is an informal convention.

⁹In 2009-2010 Silvio Berlusconi owned by far the largest share of the company, and owned more than 50 percent until 2005. No other single shareholders owned more than 4 percent. Berlusconi’s son Pier Silvio was vice-president of Mediaset, and his daughter Marina sat on the administration board.

¹⁰From 2001 to 2013, La 7 was owned by Telecom Italia, the former state-owned telecom monopoly. It was

which are available everywhere, there are many local channels and, after the introduction of the digital signal, many specialized digital channels. These other channels, however, accounted for a small share of the audience in 2009-2010.¹¹ The transition to digital terrestrial television took place between the end of 2010 and 2012, but the significant increase in the number of available channels occurred mainly at the end of this period. Thus, for the time period of our analysis, viewership is heavily concentrated on the six main channels we study.

Each of the seven national channels broadcasts several TV news shows during the day. As in other countries, the most highly watched news shows are in the evening, between 6:30 PM and 9:00 PM.¹² Those news shows are a traditional appointment for about half the Italian population. The political leaning of each RAI news show tends to reflect the general orientation of its respective channel (see above). There is also some interesting variation inside the group of Berlusconi-owned news broadcasts. The main news broadcast aired on Mediaset 5, TG5, was (and still is) more politically moderate in coverage than the TG4 broadcast of Rete 4. It was also more moderate than Studio Aperto, the main news program aired on Italia 1, which appeals to a younger audience. These ideological leanings correspond to the ones estimated by Durante and Knight (2012).

In what follows we will refer to the RAI channels as, respectively, RAI 1, RAI 2, and RAI 3. We will refer to the Mediaset channels Rete 4, Canale 5, and Italia 1 as Mediaset 4, Mediaset 5, and Mediaset 6, respectively. Table 2 shows that the most popular TV news shows are RAI 1 and Mediaset 5. Despite its relatively early time slot, the third most popular show is RAI 3. Because of its political leaning and focus, the conventional wisdom is that it has an especially loyal audience.

sold to its current owner Cairo Editore in March 2013. La 7's audience share increased considerably in the last months of 2010.

¹¹There were about 350 private local broadcasters in 2010, of which only 109 had revenues over one million Euros. To note, they have shrunk to about 180 in the last 12 years. Despite the fact that many of those TV channels feature local news programs, the limited availability of financial and journalistic resources make them relatively unattractive products; this is different from the role that local TV news plays in the U.S.

¹²During the 2009-2010 period the evening national news programs began at 6:30 PM on Italia 1 (lasting about 25-30 minutes, on average), at 7:00 PM on both RAI 3 and Rete 4 (lasting about 30 minutes on both), at 8:00 PM on both RAI 1 and Canale 5 (lasting about 30-35 minutes on both channels), at 8:30 PM on RAI 2 (where it lasted until about 9:00 PM). These times are the same today, with only a slight change for Channel 4 and are typically more flexible than in many other countries, for example the U.S.

2.2 The AUDITEL Data

We use individual-level, minute-by-minute ratings data for Italian TV, provided by AUDITEL. We focus on the 24 months from January 2009 to December 2010 and restrict our analysis to evening TV news broadcasts.

During this period, AUDITEL collected data from a panel of about 10,000 Set Top Box devices connected to the televisions of about 5,000 families that includes about 15,000 individuals. Each Set Top Box records second by second if a television is switched on and to what channel it is tuned, collecting information automatically, continuously, and passively. Each participating family has a special remote control with buttons for each family member to press when they are watching TV. The participating families receive no monetary compensation, but they receive an in-kind gift. The turnover in the panel is about 8-10 percent per year. New participants are selected from a sample of 100,000 individuals who are interviewed each year to assess the technological equipment and devices of Italian families, the technologies employed to receive television signals, and the use of services such as pay TV. The sample is stratified by age, gender, education, and region.

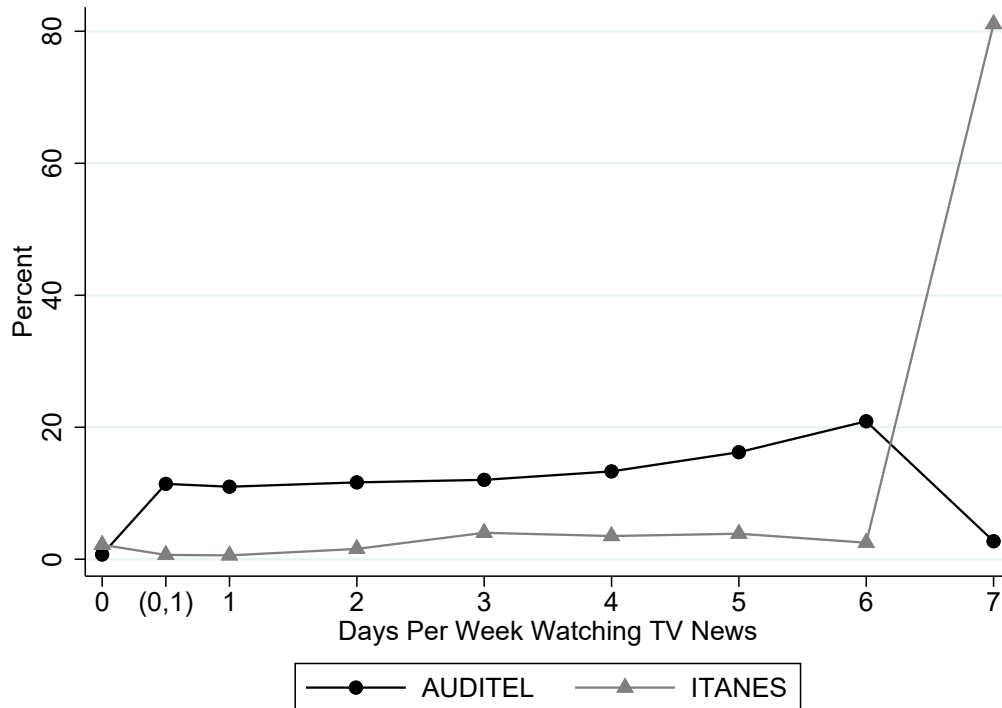
One important advantage of the AUDITEL data is that they track actual behavior. Much previous work relies on self-reported data from surveys, which can be highly inaccurate. For example, Prior (2009) shows that American citizens display a strong, systematic tendency to overstate the frequency with which they watch TV news broadcasts. He does this by comparing the self-reported frequency of viewership with partially aggregated viewership data from Nielsen ratings. It is likely that the propensity to overstate news consumption is due at least in part to social-desirability bias.

It appears that Italians also substantially overstate how much TV news they watch when they are surveyed. Consider, for example, the widely used Italian National Election Study (ITANES).¹³ ITANES asks respondents how many days per week they watch television news, from zero to seven. We compare these responses with the AUDITEL data in Figure 1.¹⁴

¹³See <http://www.itanes.org/en/questionnaires/>

¹⁴Since the AUDITEL data cover 2009 and 2010, we use the closest available ITANES study, which was conducted in 2008.

**Figure 1: Frequency of TV News Watching
AUDITEL Ratings vs. ITANES Self-Reports**

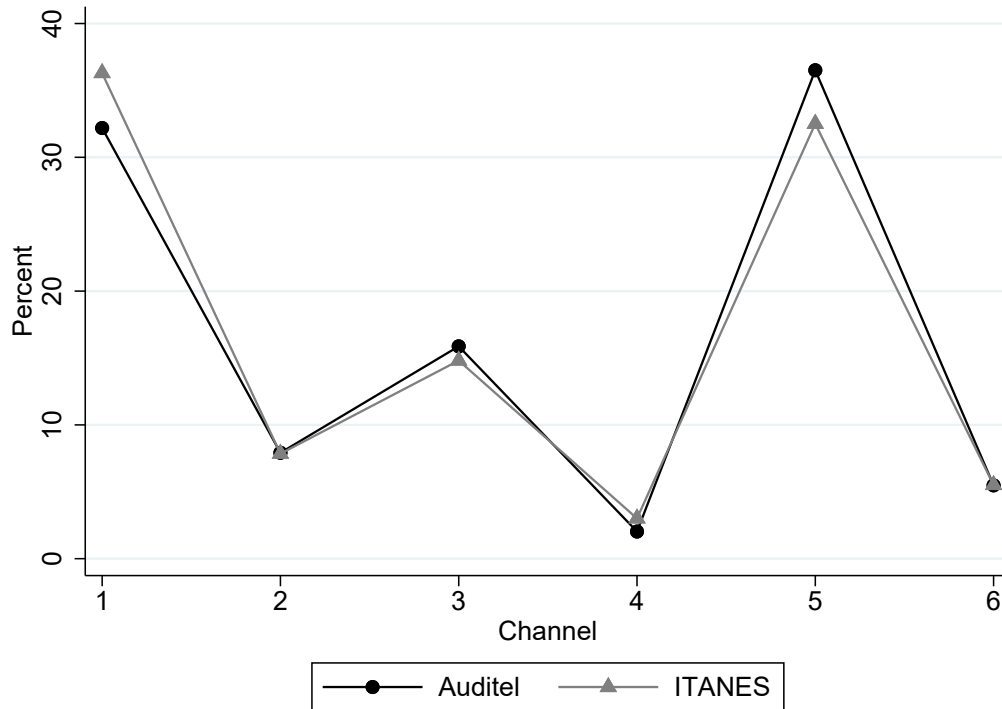


Clearly, there are large differences between actual viewership from AUDITEL and self-reports from ITANES. While 80 percent of ITANES respondents say they watch the news every day, according to the AUDITEL data only slightly more than 20 percent of viewers watch TV news six or seven days per week. And the percentage actually watching news every day is less than 3 percent.^{15,16}

¹⁵The AUDITEL numbers are calculated as follows. For each individual i and each day t we compute the total number of minutes the individual watched any TV news show (this includes daytime and late-night news programs as well as the evening news). If individual i watched at least five minutes of TV news on day t , then we count that individual as having “watched the news” on day t , and we set $w_{it} = 1$. Otherwise, we set $w_{it} = 0$. We think that a five-minute minimum is a generous lower bound for defining what people mean when they say they “watch” a program. We then average w_{it} over all days that individual i is in the AUDITEL sample and multiply by seven to obtain the average number of days of TV news watching per week.

¹⁶When answering the question about TV news viewership, ITANES respondents might have in mind all days during the year, or they might focus on those days when they actually watched some TV. For example, they might not watch TV while on holiday, and might also disregard those days when answering the question. So, as a robustness check, we computed the AUDITEL analogue by limiting attention to those days when each individual watched at least some TV. Computed this way, about 36 percent of individuals watch at least 5

**Figure 2: TV News Watching, Favorite Channel
AUDITEL Ratings vs. ITANES Self-Reports**



It is also interesting to check the differences between self-reported data and ratings data along other dimensions. For example, ITANES asks each respondent what is their favorite TV news program. Assuming each respondent watches only that program, we can construct a survey-based estimate of the distribution of viewership shares across TV news programs. Figure 2 compares the ITANES-based estimates against the AUDITEL-based audience shares. This figure shows virtually no difference between self-reported and actual news choices across the six main channels.¹⁷

On the other hand, if we consider the *total* time spent watching television, self-reports in surveys are systematically lower than actual viewing behavior. According to AUDITEL data, viewers watched on average 204 minutes of television per day in 2009, and 207 in 2010. In most minutes of TV news 6 days a week, and about 6 percent watch every day. So, the difference with ITANES data is slightly less pronounced than what is shown in Figure 1, but still large.

¹⁷Respondents slightly overstate their preference for RAI1 and understate their preference for Mediaset 5. These gaps might partially reflect individuals watching a second news show in addition to their favorite.

of the available surveys, Italian respondents report that they watch an average of 2.5 and 3.5 hours of television per day. For example, in the Italian National Institute of Statistics (ISTAT) survey of 2010 on time-use, respondents report watching television 181 minutes per day, on average. The AUDITEL average for that year is 14.4 percent higher than the self-reports. As in the case of news consumption, these differences are likely due in part to social-desirability bias.

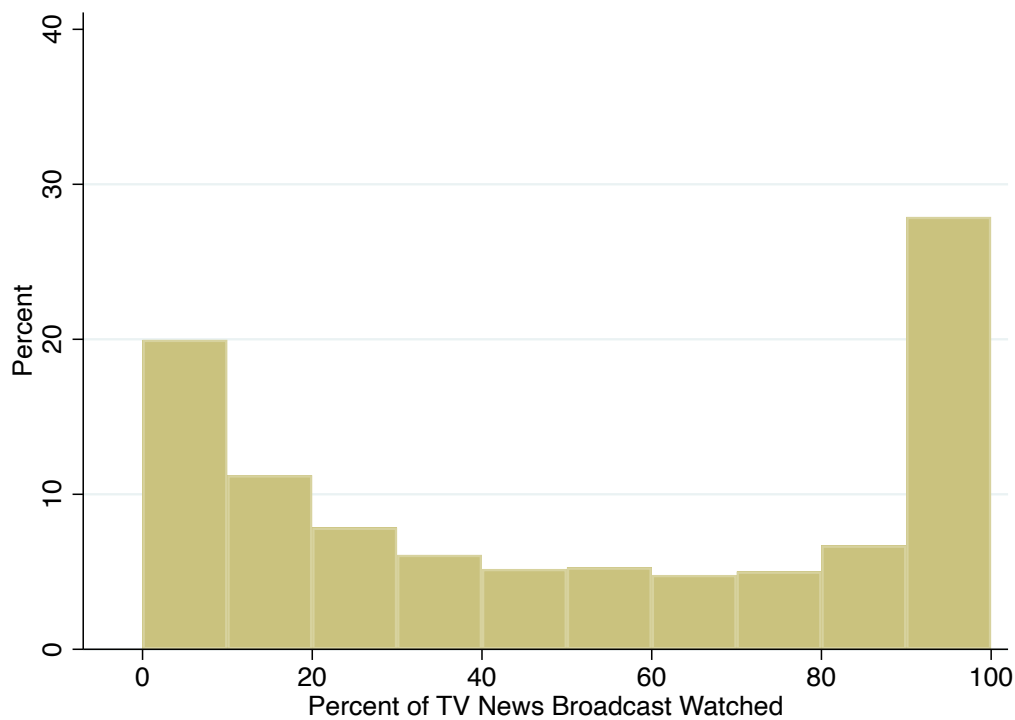
Table 1: Average Viewing Patterns

| Group | Total Minutes | News Minutes | News Share | 1-6 Evening News Minutes | Share Hard | Share Soft | Share Sensational | Obs. |
|---------------------|---------------|--------------|------------|--------------------------|------------|------------|-------------------|-------|
| Education | | | | | | | | |
| Elementary or Less | 289 | 34 | 0.12 | 16 | 0.38 | 0.24 | 0.14 | 2737 |
| Middle School | 239 | 25 | 0.10 | 11 | 0.36 | 0.25 | 0.13 | 3552 |
| High School (Tech.) | 174 | 18 | 0.10 | 8 | 0.37 | 0.25 | 0.13 | 2270 |
| High School (Acad.) | 181 | 19 | 0.10 | 8 | 0.36 | 0.25 | 0.13 | 4642 |
| University | 149 | 16 | 0.11 | 7 | 0.37 | 0.26 | 0.12 | 2415 |
| Income Group | | | | | | | | |
| Low | 206 | 20 | 0.10 | 9 | 0.36 | 0.25 | 0.13 | 1481 |
| Middle | 215 | 23 | 0.11 | 10 | 0.36 | 0.25 | 0.13 | 9885 |
| High | 189 | 21 | 0.11 | 10 | 0.38 | 0.24 | 0.13 | 4250 |
| Social Class | | | | | | | | |
| Low | 241 | 25 | 0.10 | 12 | 0.36 | 0.25 | 0.13 | 5149 |
| High | 190 | 21 | 0.11 | 9 | 0.37 | 0.25 | 0.13 | 10467 |
| Gender | | | | | | | | |
| Male | 185 | 20 | 0.11 | 9 | 0.37 | 0.25 | 0.13 | 7280 |
| Female | 227 | 24 | 0.11 | 11 | 0.37 | 0.25 | 0.13 | 8336 |
| Age Group | | | | | | | | |
| 18-29 | 106 | 8 | 0.09 | 4 | 0.34 | 0.27 | 0.12 | 2299 |
| 30-39 | 149 | 12 | 0.09 | 5 | 0.34 | 0.27 | 0.12 | 2627 |
| 40-49 | 179 | 16 | 0.09 | 8 | 0.35 | 0.26 | 0.13 | 3309 |
| 50-59 | 232 | 25 | 0.11 | 12 | 0.38 | 0.24 | 0.13 | 2357 |
| 60-69 | 283 | 35 | 0.13 | 15 | 0.40 | 0.23 | 0.14 | 2517 |
| 70-79 | 307 | 39 | 0.13 | 18 | 0.40 | 0.23 | 0.14 | 1730 |
| 80-99 | 276 | 36 | 0.14 | 18 | 0.40 | 0.22 | 0.14 | 777 |

The AUDITEL data also show that the total time spent watching television is correlated with variables such as education, age, and gender. Table 1 reports a few summary statistics—here we focus on columns 1-3. Individuals with more education spend less time watching television while older people and women watch more (column 1). These patterns are similar when we focus instead on time spent watching television news (column 2). Individuals with less

education watch *more* TV news on average than individuals with more education, and women watch slightly more TV news than men. In general, the people who watch more television overall also tend to watch more TV news. The time spent watching news as a share of the total time spent watching television (column 3) is broadly constant across subgroups, except for age. Elderly individuals not only watch more television than younger individuals, but they watch more minutes of TV news as a share of the total time spent watching.

Figure 3: Percentage of News Broadcast Watched, All Channels



Using the AUDITEL data we can also compute—for every evening TV news program each day—the percentage of the show watched by each individual. The distribution of these percentages is shown in Figure 3. The histogram is U-shaped, and highest for the right-most bin, i.e., for those cases where an individual watches over 90 percent of the program. We report the same graph separately for each individual channel in Figure A.1, in Appendix A.2. There is some variation across channels, in particular the spikes at the right-hand side of the distribution are higher for the programs that have more total viewers, i.e., RAI 1, Mediaset 5, and RAI 3.

Table 2: Classification of Viewing Minutes

| Channel | % of Minutes Where Viewer Is: | | | | Total Minutes |
|---------|-------------------------------|---------|---------|---------|------------------|
| | Joining | Staying | Leaving | Surfing | |
| 1 | 4.6 | 93.0 | 2.0 | 0.4 | 26,861,099 |
| 2 | 7.2 | 87.4 | 4.4 | 1.0 | 9,270,108 |
| 3 | 5.6 | 91.8 | 2.2 | 0.5 | 9,325,704 |
| 4 | 5.9 | 89.0 | 3.8 | 1.3 | 4,185,714 |
| 5 | 4.7 | 92.7 | 2.2 | 0.4 | 23,399,786 |
| 6 | 7.6 | 87.7 | 3.9 | 0.9 | 3,867,746 |
| All | 5.3 | 91.6 | 2.5 | 0.6 | 76,910,157 |

Finally, the AUDITEL data also allow us to classify—for each TV news program—the minutes that each individual spends “joining,” “staying” on, or “leaving” the program. We can also detect “surfing,” i.e., when an individual leaves a program in minute t and rejoins in minute $t + 1$. Summary statistics of these behaviors are displayed in Table 2. By far the most common behavior is “staying,” which accounts for about 92 percent of all minutes. Thus, evidently there is a large amount of inertia in viewing. About 5 percent of total minutes involve “joining” and only 2.5 percent involve “leaving.” Note that we define “leaving” as leaving before the show ends. So, although every viewer that watches a show must “join” it at some point, viewers who watch until the very end are not classified as “leaving” it. The percentage of “staying” minutes is somewhat larger for the TV news programs with the highest ratings, i.e., RAI 1, Mediaset 5, and RAI 3. Conversely, the percentages of “leaving” minutes is smaller for these programs.¹⁸

¹⁸The AUDITEL data also allow us to track the dynamics of the audience for each TV news program. Figures A.2 and A.3 in Appendix A.2 show the raw number of individuals watching each broadcast—a minute-by-minute stock variable—together with the minute-by-minute flow of individuals leaving or joining that broadcast. For RAI 1 and Mediaset 5 the stock of viewers increases at a decreasing rate for the first 30 minutes and then decreases rapidly. For RAI 3 the stock of viewers increases continually throughout the show. The patterns for the other news programs are more mixed. Importantly, there are no spikes in “joining” behavior at any time during any of the shows (except at the start), suggesting that there is little or no anticipatory behavior. For example, it is not the case that a large number of individuals joins a show when the sports or weather segments typically begin.

2.3 The Osservatorio Data

Recall that we want to study the real-time behavior of TV news viewers as a function of the type of content that is being shown. Are they more likely to switch away during a hard news story than a soft news story? To do this, we match AUDITEL data with a database of content provided by the *Osservatorio di Pavia*.

For each of the main evening news programs, the *Osservatorio* database contains the starting minute and ending minute of each news story in the program, a short summary of the story, and a classification of the main issue or issues covered in that story. The summaries and issue codes allow us to classify each story as “hard,” “soft,” or “sensational,” or unclassified and left to a residual category. As pointed out in Williams and Delli Carpini (2011), any distinction between news and entertainment contains some arbitrariness. Here we follow a common classification scheme, used by Hamilton (2004) and many others. Broadly speaking, this distinction reflects the usefulness of news for viewers if and when they want to act as citizens, for example, by voting or expressing their opinions about specific policies.¹⁹ Hence, we define hard news stories as those covering international affairs, domestic politics, public policy issues, the economy, business, and so on.²⁰ Soft news stories are those about sports, entertainment, celebrities, fashion, food, and so on. Other stories appear for other reasons: as Kerbel (2000) states, “*blood or the promise of blood is a must.*” Hence, we also distinguish a third type of news, sensational news stories defined as those about natural disasters, large accidents (e.g., deadly accidents in the workplace, not simple traffic accidents), and crime (e.g., grisly murders, not crime as a policy issue). Appendix A.1 gives the details of the procedure we use to classify each news story.

During the two-year period under study, there were a total of 46,469 hard news stories, 29,126 soft news stories, and 32,063 sensational news stories. Some stories are in more than one category. For example, a story about a deadly workplace accident that also discusses lax

¹⁹As we discuss extensively in Section 5, this distinction has a clear theoretical purpose which can be traced back to Anthony Downs’ rational ignorance hypothesis.

²⁰Zaller uses the term “high quality” news to refer to “hard” news—i.e., news about “matters of general political or social significance.” (Zaller 1999a, page 34).

government enforcement of safety regulations would be classified as both hard and sensational. A story about a prominent Italian politician declaring that he would not root for the national team during the World Cup would be classified as both hard and soft. During 2009-2010, 2,413 stories were classified as both hard and soft news, 5,814 stories were classified as both hard and sensational news, and 1,643 stories were classified as both sensational and soft news.²¹

Figure 4 shows the average relative share of hard, soft, and sensational news appearing during each minute of each news show. The pattern is clear: news programs start predominantly with hard news, and then progressively shift towards softer news. There is a peak in the share of soft news around the 30th minute of a show, which is at or near the end of most programs. On the other hand, sensational stories are distributed relatively uniformly over time. They are a bit more common than soft stories during the first half of the typical program, and then slowly decline during the second half.²²

These patterns imply that it is important to know the exact time at which a viewer joins and leaves a show. Consider, for example, an individual who joins during the first 5 minutes, then he or she will be exposed to substantially more hard news than a person who joins in minute 15. Therefore in the analysis below we are careful to investigate the heterogeneity of viewing behavior across different time segments of each show.

3 Viewership By Type of News

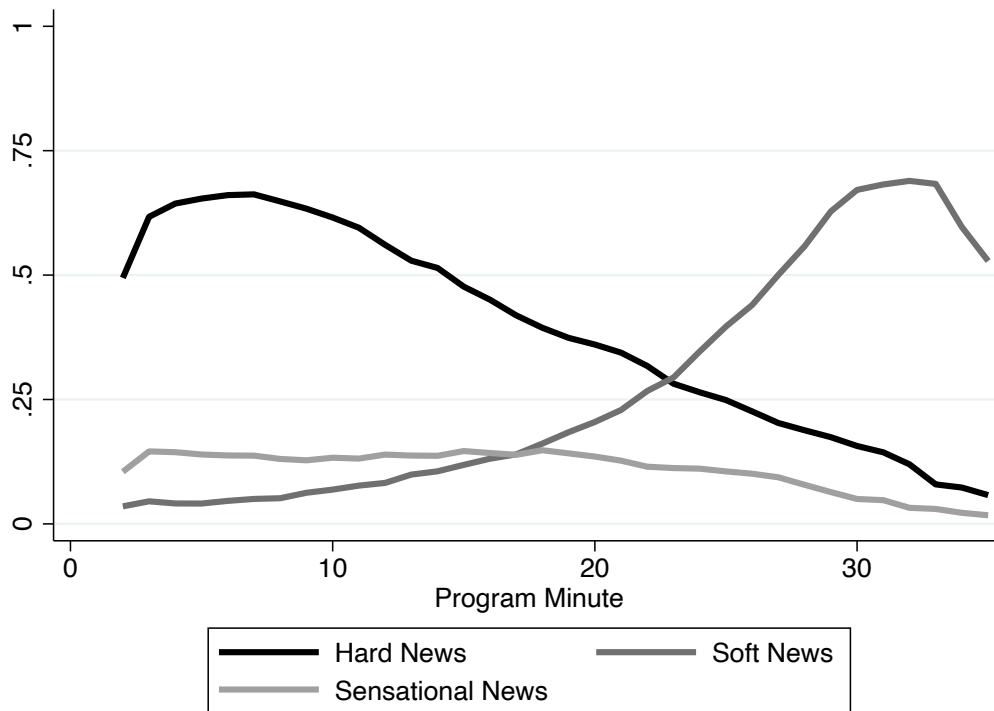
Here we present some basic facts about the relative amounts of hard, soft, and sensational news consumed, i.e., the “diet” of TV news viewers.²³ Table 1 above shows the news diet as a function of individual socioeconomic characteristics. Column 4 reports the total number

²¹Only 26 stories were classified as hard and sensational and soft news.

²²Appendix Figure A.4 show how the patterns vary channel by channel. Overall, the shows tend to follow the same broad pattern, although with some differences, especially for RAI3 and Mediaset 6.

²³It is tempting to compare TV news programs to dinners. As the host, you must serve vegetables—the hard news—to make a healthy meal, but you need a good dessert—the soft news—to keep some people at the table, and possibly to attract more diners in the first place. This could explain the increasing percentage of soft news (desserts) and decreasing percentage of hard news (vegetables) during each TV news broadcasts, as well as variation between different channels—e.g., lots of dessert on Mediaset 6 for young viewers. Following this metaphor, sensational news is analogous to not-so-healthy but delicious courses that can be served anytime during the dinner.

Figure 4: What's on the News?



of evening news minutes watched by different subgroups, while columns 5-7 report the share of minutes spent watching hard, soft, and sensational news, respectively. Interestingly, there are almost no significant differences in the fraction of minutes spent watching hard, soft, and sensational news across subgroups, except for age. Hard news accounts for about 35-37 percent of total news watched, and soft news accounts for about 25 percent, irrespective of education, social class, income, or gender. The one exception is that hard news consumption increases and soft news consumption decreases with age. Older individuals watch more news, and a larger share of the news they watch is hard news.

These patterns shed light on the role television news plays, or does not play, in helping to produce an informed citizenry. A stylized fact in the political science literature is that more educated and richer citizens are on average more informed about political matters than less educated and poorer ones. Also, men appear to be more informed about politics than women. There is less agreement about why this knowledge gap exists (Converse and Dupeux 1962,

Tichenor *et al.* 1970, Delli Carpini and Keeter 1996). As noted in section 2.2, individuals with less education watch more minutes of television news than individuals with more education, women watch more than men, and the differences between low- and high-income individuals is negligible (column 3). Moreover, given the “proportionality” result discussed immediately above, there is no noticeable difference in the share of hard and soft news respondents watch as a function of education, income, social class, or gender. As a result, individuals with less education are also exposed to more minutes of hard TV news than those with more education, on average. Similarly, on average women are exposed to more hard TV news than men, and the differences between high-income and low-income individuals are small.

This suggests that television news consumption cannot account for the knowledge gap between richer and poorer individuals, more- and less-educated citizens, and men and women. Instead, researchers should look elsewhere, such as other news sources (newspapers, magazines, books, the internet), differences in attention to and interest in politics, or differences in the ability to process information or recall facts.

On the other hand, the percentage of time spent watching TV news over the total time spent watching TV overall is an increasing function of age as it goes from 9 percent to 14 percent (bottom panel of Table 1). This finding is consistent with the idea that the elderly not only spend more time at home than young and middle-aged people; also, they might be significantly more interested in knowing “what happens in the world” thanks to TV news.

Although Table 1 reveals little systematic variation in the average shares of hard vs. soft news consumption across key socioeconomic dimensions, with the exception of age, there is substantial variation across individuals. Figure 5 shows one type of variation: individuals who watch only a few minutes of a news program tend to watch more soft news than individuals who watch most of the show when they watch.

The x-axis in the figure shows the percentage of a TV news broadcast’s total minutes each viewer watches, on average—for the shows they watch—binned by deciles (similar to Figure 3). The y-axis plots the “relative diet” consumed by the individuals in each decile. For hard news, for example, the values on the y-axis are calculated as follows. For each channel, we

compute the total number of hard news minutes each individual watches on that channel over the entire sample period, divided by the total number of hard news minutes broadcast on that channel during the sample period. We then average these ratios across all 6 channels for each individual, and then average again over all individuals in the same decile along the x-axis. The values for soft and sensational news are calculated in the same way. Of course, for individuals who entirely or almost entirely watch the news show, the hard, soft, and sensational news consumptions bundle must correspond to the bundle aired by that TV news broadcast— i.e., they must all be approximately 1. Figure 5 shows that individuals who tend to watch only short segments of news programs, e.g., only 20 percent or 30 percent of the entire show, tend to watch disproportionate amounts of soft news, and relatively less hard (and sensational) news.^{24,25}

3.1 Percentage of TV News Watched and the News “Diet”: a Regression Approach

To investigate the average behavior of viewers as a function of the news diet on the chosen TV news show, we can also use a relatively straightforward regression approach. More precisely, we run regressions where the dependent variable is the percentage of TV news watched by individual i on day j , as a function of the percentage of hard, soft, and sensational stories that were aired that day.²⁶ The outcome of this exercise is shown in Table 3, where the first column pools all TV channels (including channel fixed effects), while the other six columns show channel-specific results. To facilitate the reading of the estimated coefficients, the explanatory variables are measured on a $[0, 1]$ scale. All standard errors are clustered at the viewer level.

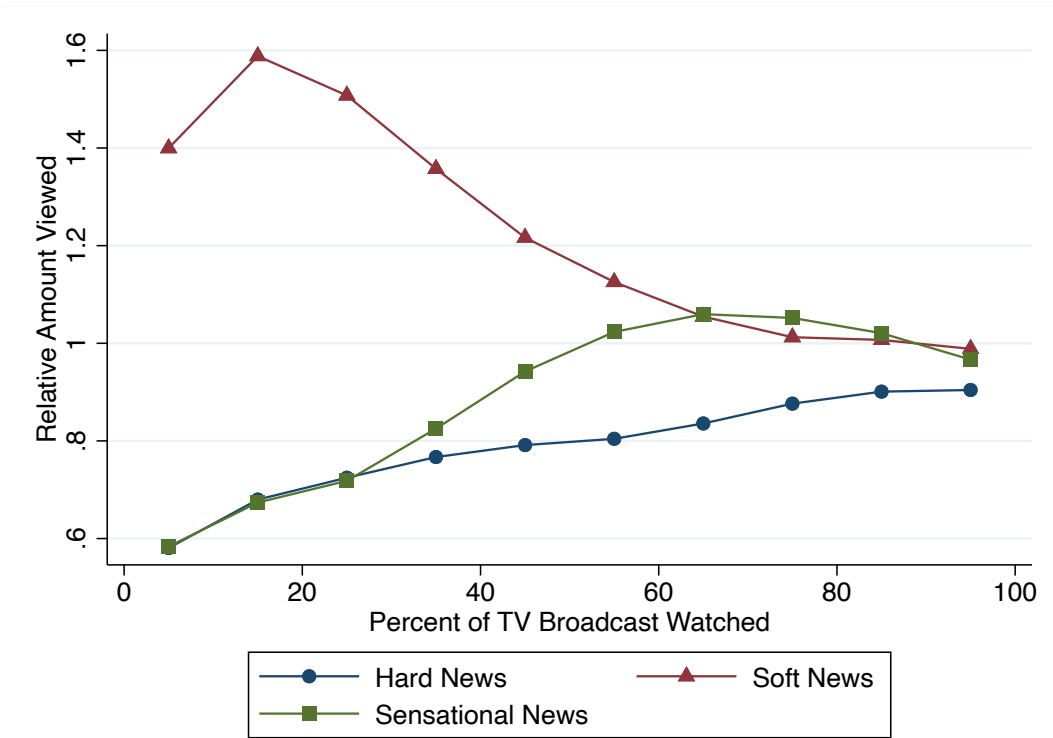
The overall message from this analysis is clear: The percentage of TV news shows being

²⁴Returning to “TV news as dinner” metaphor, this figure hints at an observable difference between consumers that properly eat their meat and vegetables—the hard news—and those who do not: the latter typically have shorter dinners than the former.

²⁵Another implication is the following. While the initial quote by “the Teacher” from Pink Floyd’s *Another Brick in the Wall (Part 2)* is about coercion (“If you don’t eat yer meat, you can’t have any pudding”), the data shown in Figure 5 refer instead to free individual choices. So, while the soft-news pudding might induce some marginal viewers to consume some hard-news meat (and vegetables), but not *all* of the available meat, as many viewers appear to choose short dinners with plenty of pudding.

²⁶The scale of the dependent variable is $[0, 100]$. Note that in these regressions the excluded category of stories is the residual one, which includes stories that we do not include in any of our three news categories (hard, soft, and sensational).

Figure 5: Hard vs. Soft vs. Sensational News “Diet” as a Function of Average Percentage of Broadcast Watched



watched is strongly and positively associated with the percentage of hard news and sensational news stories. By contrast, although news watching is positively associated with the percentage of soft news on average, the relationship is much smaller. Since the standard deviation of the share of *Hard News* stories in the full sample is 0.3, a one-standard-deviation increase in the share of hard news is correlated with an 8.5 percentage point increase in the amount of TV news show being watched.²⁷ In the case of *Sensational News* stories, a standard deviation increase (which equals 0.25) is associated on average with a 7.8 percent increase in the share of TV news being watched. On the other hand, a standard deviation increase in the share of *Soft News* (which equals 0.3) would imply a tiny increase of 0.17 in the share of the TV news being watched, i.e., about half of a percentage point of the standard deviation of the dependent

²⁷In turn, since the standard deviation of the dependent variable is 36.5, a one-standard-deviation increase in the percentage of hard news corresponds to a sizeable 23 percent.

Table 3: Average Watching Behavior as a Function of the News Mix (DV = Percent of TV news being watched)

| Variable | <i>All Channels</i> | <i>RAI 1</i> | <i>RAI 2</i> | <i>RAI 3</i> | <i>Mediaset 4</i> | <i>Mediaset 5</i> | <i>Mediaset 6</i> |
|------------------|---------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Soft News | 0.587 (0.204) | -3.618 (0.426) | 9.492 (0.289) | -4.803 (0.494) | 0.458 (0.308) | 0.816 (0.392) | 4.854 (0.623) |
| Hard News | 28.409 (0.257) | 39.538 (0.385) | 11.977 (0.260) | 35.119 (0.589) | 13.365 (0.496) | 34.961 (0.472) | 17.919 (0.589) |
| Sensational News | 31.371 (0.294) | 43.521 (0.481) | 17.982 (0.290) | 22.534 (0.544) | 6.257 (0.401) | 44.414 (0.546) | 21.222 (0.612) |
| Observations | 4,394,449 | 1,300,793 | 762,908 | 562,428 | 287,566 | 1,149,609 | 331,145 |

The dependent variable in each column is the percentage of TV news being watched by viewer i in day t . In the first column we consider TV news shows on all channels (controlling for channels fixed effects), while the other columns refer to each TV news show on each channel separately. The explanatory variables are the percentages of each news type for each TV news show and each day. Standard errors, clustered by individual, are in parentheses.

variable.

The channel-specific regressions show some interesting differences across TV news shows, which might be explained by their heterogenous target audiences and time schedules. First, RAI 1 and RAI 3 are the only TV news programs for which an increase in the share of *Soft News* stories is correlated with a significant *decrease* in the percentage being watched, with a larger estimated magnitude for the latter. Perhaps not coincidentally, these news shows have a long term focus on “serious” hard news. For example, in the case of RAI 3 a standard deviation (s.d. = 0.16) increase in the share of *Soft News* is associated with a 0.77 percent reduction in the percentage of the news program being watched. Second, RAI 2 and to a lesser degree Mediaset 6 are the TV news programs with the largest—and positive—estimated coefficient on the percentage of *Soft News* stories: this might be due to the late starting time of the former (at 8:30 PM, when prime time actually starts) and the younger audience of the latter. Third, in a parallel fashion with respect to the previous finding, the TV news shows with the smallest estimated coefficient on the share of *Soft News* are again RAI 2 and Mediaset 6, together with Mediaset 4.²⁸

²⁸In fact, Mediaset 4 is the only TV news show with an estimated coefficient on *Soft News* stories that is not significantly different than zero at ordinary confidence levels.

4 Switching Behavior By Type of News

In this section we study the switching behavior of news viewers. More specifically, we estimate the degree to which viewers appear to avoid hard news, switching to another channel (or turning off their TV) more when exposed to such stories; and whether they appear to be more attracted to, and therefore keep watching, soft news stories. We also explore the degree to which viewers appear to be attracted by sensational stories.

Note that the first choice viewers make is which channel to watch, and the data indicate that those who watch news do not choose to maximize the amount of soft news relative to hard news—otherwise, they could all watch Mediaset 6, which on average airs 11.1 minutes of soft news per show and just 4.8 minutes of hard news. This is true even within each time-slot. The news programs on RAI 3 and Mediaset 4 begin at 7:00 PM. RAI 3 airs 18.0 minutes of hard news and 3.9 minutes of soft news, on average, while for Mediaset 4 the corresponding figures are 13.7 and 10.2 minutes. If viewers simply sought less hard news, then they could all watch Mediaset 4. But they do not, and in fact RAI 3’s news program has more than double the audience of Mediaset 4’s.²⁹ Similarly, RAI 1 and Mediaset 5 both begin at 8:00 PM. RAI 1 airs 14.8 minutes of hard news and 8.2 minutes of soft news per show, on average, while Mediaset 5 airs 11.0 minutes of hard news and 8.4 minutes of soft news. If viewers simply sought less hard news, then they could all watch Mediaset 5. However, they do not—in fact, RAI 1’s news program has a slightly higher audience than Mediaset 5.³⁰

Simple means of switching behavior are also suggestive. Averaging over all viewers, channels, and news minutes, 1.97 percent of the audience switches away during hard news stories, while 4.20 percent switch away during soft news stories. Only 1.70 percent of viewers switch away during sensational news stories.

As shown by Figure 4 (and Figure A.4 in Appendix A.2), the balance of hard and soft

²⁹Other factors could of course play some role in this choice, e.g., the marked difference in political leaning between RAI 3 and Mediaset 4. Still, this revealed preference argument rules out a simple lexicographic model of choice, according to which only the hard versus soft balance of news matters in decisions about TV news watching.

³⁰In the choice between RAI 1 and Mediaset 5, the difference in the ideological leaning is narrower than in the previous case of RAI 3 versus Mediaset 4.

news varies over the course of each news program. Therefore, in our empirical specifications we treat each 5-minute block within each TV news show separately. For each 5-minute block we therefore estimate the following model:

$$Switch_{it} = \gamma_j + \theta_t + \beta_1 Hard\ News_{it} + \beta_2 Soft\ News_{it} + \beta_3 Sensational\ News_{it} + \epsilon_{it} \quad (1)$$

where i is an index for the individual viewer, j is an index for the news program (channel), and t is an index for the minute within each block. Each observation is for a given viewer i at minute t , watching a given news program j (since each viewer can only watch one channel at a time, we include only the i and t subscripts in describing the observations). The independent variables are indicators: $Hard\ News_{it} = 1$ if the news story i is watching at time t is a hard news story and zero otherwise; $Soft\ News_{it} = 1$ if the news story i is watching at time t is a soft news story and zero otherwise; $Sensational\ News_{it} = 1$ if the news story i is watching at time t is a sensational news story and zero otherwise. The omitted category is a collection of miscellaneous stories which are not easily classified as hard, soft, or sensational.³¹ The term γ_j denotes a channel-specific fixed effect, while θ_t denotes an elapsed-time fixed effect, i.e., we allow the average propensity to switch off to vary for each minute within each separate block. Standard errors are clustered by individual viewer in all regressions.

Recall from Table 2 that only about 2.5 percent of all minutes of TV news viewing involve switching. Therefore, to avoid regression coefficients with many zeroes, we define the dependent variable as follows: $Switch_{it} = 100$ if viewer i switches away from the channel he or she is watching sometime during minute t , and zero otherwise. This implies that we can interpret an estimated coefficient $\hat{\beta}_1$ of 1.0 as a one percentage point increase in the probability of switching during a hard news story relative to the omitted category of unclassified stories.

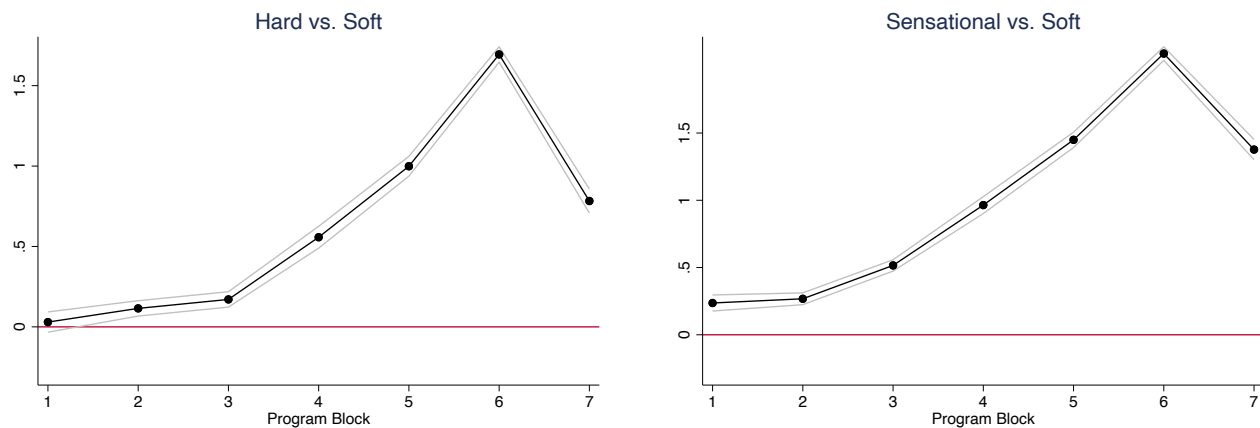
The first choice TV news viewers make is which program to watch. Hence, we first estimate models that *do not* include the channel-specific fixed effects (γ_j). This provides us with estimates of the overall propensity to switch away from hard versus soft news block-by-block, including the decision to watch the news on one channel rather than another.

³¹As noted above, the “standard” length of a news broadcast varies across stations. The overall median is 33 minutes, and the mean is about 34 minutes. In the regressions we drop observations that occur after the first 35 minutes of a broadcast.

If viewers are more likely to switch off from the TV news they are watching when *Hard News* = 1 compared to when *Soft News* = 1, then $\beta_1 > \beta_2$. If the opposite is true, then $\beta_2 > \beta_1$. Thus, for each block we compute the difference in the point estimates, $\hat{\beta}_2 - \hat{\beta}_1$, as well the 95 percent confidence interval around the estimated difference.

The results are presented in the left panel of Figure 6. The black curve shows the point estimate of the difference, $\hat{\beta}_2 - \hat{\beta}_1$, block by block. The light gray lines show the 95 percent confidence interval around each point estimate.

Figure 6: Propensity to Switch from Soft News Relative to Hard or Sensational News, By Block, Without Channel-Specific Fixed Effects



For all 5-minute blocks except the first, $\hat{\beta}_2 - \hat{\beta}_1$ is *positive* and statistically significant. That is, viewers are significantly more likely to switch during a *Soft News* story than during a *Hard News* story. Moreover, this difference is steadily increasing as time goes by, reaching a peak in block 6.³² This is inconsistent with the simple hypothesis that TV consumers always seek entertainment rather than politically relevant information.³³

We can also compare the propensity to switch away from soft news with the propensity to switch away from sensational news, by studying the block-by-block estimates of $\hat{\beta}_2 - \hat{\beta}_3$. These are shown in the right-hand side panel of Figure 6. Again, the black curve shows the point

³²Recall that only the news shows on RAI1, Mediaset4 and Mediaset5 are long enough to regularly have block 7.

³³It is likely that the switching behavior of viewers depends both on what they are currently watching and on their expectations about what can be found on other channels (as well as non-TV options).

estimate of $\hat{\beta}_2 - \hat{\beta}_3$, while the light gray lines show the 95 percent confidence intervals. In this case, for all 5-minute blocks, $\hat{\beta}_2 - \hat{\beta}_3$ is positive and statistically significant. That is, viewers are significantly more likely to switch during a *Soft News* story than during a *Sensational News* story. Similar to the case of soft vs. hard news, the difference increases over time, and reaches a peak in block 6.

Comparing the two panels of Figure 6, we see that $\hat{\beta}_2 - \hat{\beta}_3 > \hat{\beta}_2 - \hat{\beta}_1$ for all blocks, which implies that $\hat{\beta}_1 - \hat{\beta}_3 > 0$. That is, the propensity to switch off during *Sensational News* stories is systematically lower than during *Hard News* stories.

Table 4 presents the full regression results underlying Figure 6. Each column shows a different 5-minute block, and the rows at the bottom show the p-values of the F-tests for the null hypotheses $\hat{\beta}_2 - \hat{\beta}_1 = 0$, $\hat{\beta}_2 - \hat{\beta}_3 = 0$, and $\hat{\beta}_1 - \hat{\beta}_3 = 0$.

Table 4: Viewer Switching Behavior, All Channels Pooled, No Channel-Specific Fixed Effects (DV = Percent of Time Viewer Switched Away From Channel)

| Variable | Block | | | | | | |
|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Soft News | -0.008 (0.030) | 0.102 (0.021) | 0.243 (0.021) | 0.602 (0.029) | 1.003 (0.025) | 1.506 (0.020) | 1.257 (0.027) |
| Hard News | -0.038 (0.018) | -0.013 (0.013) | 0.072 (0.012) | 0.044 (0.014) | 0.004 (0.014) | -0.188 (0.015) | 0.474 (0.036) |
| Sensational News | -0.245 (0.015) | -0.166 (0.013) | -0.273 (0.012) | -0.362 (0.012) | -0.446 (0.011) | -0.585 (0.015) | -0.120 (0.036) |
| Observations | 7,701,954 | 10,695,172 | 11,230,997 | 11,778,734 | 12,122,955 | 11,622,801 | 6,765,630 |
| p-value 1 | 0.354 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| p-value 2 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| p-value 3 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

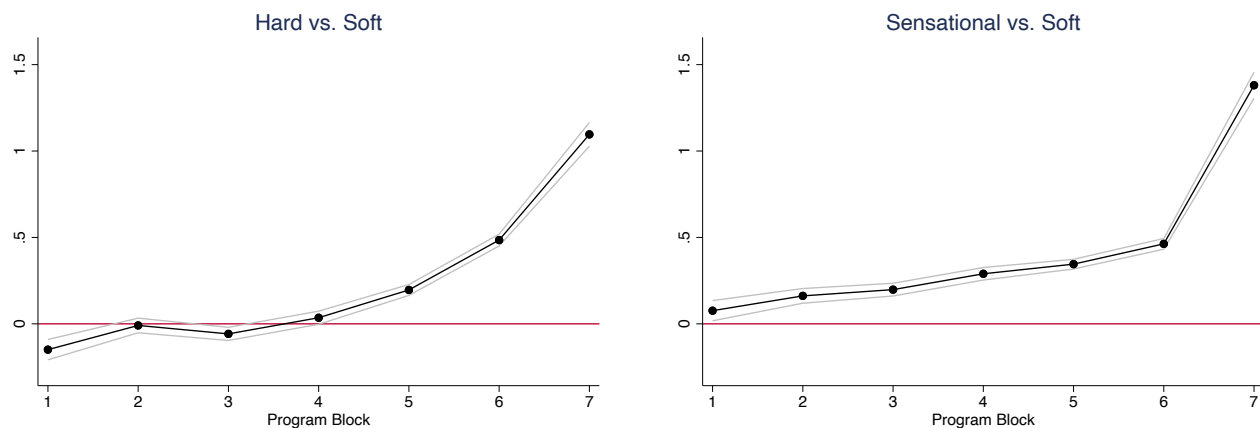
Fixed effects for each program minute included in all specifications. Standard errors, clustered by individual, are in parentheses. p-value 1 is for F-test of H0: Soft News = Hard News ($\beta_2 = \beta_1$). p-value 2 is for F-test of H0: Soft News = Sensational News ($\beta_2 = \beta_3$). p-value 3 is for F-test of H0: Hard News = Sensational News ($\beta_1 = \beta_3$).

In relative terms, the differences in average switching behavior across the different types of news stories are substantively large. Consider for example the difference in switching from a hard news story versus a soft news story in block 4. In block 4, on average 1.90 percent of viewers switched away while watching the news—1.99 percent switched away while watching

a hard news story, while 2.56 percent did so during a soft news story. Not surprisingly, the difference, $2.56 - 1.99 = 0.57$, is almost the same as the point estimate of $\hat{\beta}_2 - \hat{\beta}_1$ for block 4, which is 0.56. The point estimate of the difference from the regression implies that, on average, during block 4 a viewer is about 28 percent more likely to switch away from a soft news story than a hard news story. The estimated differences are even larger in blocks 5, 6, and 7.

We now include channel-specific fixed effects (γ_j). This yields estimates of the within-channel behavior, i.e., viewers' decisions to switch conditional on having chosen to watch a given news program. The results are shown in Figure 7, and the full regression results underlying the figure are presented in Table 5. Analogously to Figure 6, the differences between hard and soft news are presented on the left, while those comparing sensational and soft are shown on the right.

Figure 7: Propensity to Switch from Soft News Relative to Hard or Sensational News, By Block, With Channel-Specific Fixed Effects



With the channel fixed effects included, the differences in switching behavior when watching hard versus soft news are generally smaller than those estimated without channel fixed effects. In block 1, $\hat{\beta}_2 - \hat{\beta}_1$ is slightly negative and statistically significant. That is, viewers are significantly more likely to switch during a *Hard News* story than during a *Soft News* story. In blocks 2, 3, and 4, $\hat{\beta}_2 - \hat{\beta}_1$ is approximately zero, so viewers are equally likely to switch away during hard and soft news stories. In blocks, 5, 6, and 7, $\hat{\beta}_2 - \hat{\beta}_1$ is positive and statistically significant,

implying that viewers are significantly more likely to switch during a *Soft News* story than during a *Hard News* story. The difference between $\hat{\beta}_2$ and $\hat{\beta}_1$ is large in blocks 6 and 7. The pattern is again inconsistent with the simple hard news avoidance hypothesis.

We can also compare the propensity to switch away from soft news with the propensity to switch away from sensational news, by studying the block-by-block estimates of $\hat{\beta}_2 - \hat{\beta}_3$. In this case, for all 5-minute blocks, $\hat{\beta}_2 - \hat{\beta}_3$ is positive and statistically significant. That is, viewers are significantly more likely to switch during a *Soft News* story than during a *Sensational News* story, and the difference increases steadily over time.

Comparing the two panels of Figure 7, we see again that $\hat{\beta}_2 - \hat{\beta}_3 > \hat{\beta}_2 - \hat{\beta}_1$ for most blocks, so $\hat{\beta}_1 - \hat{\beta}_3 > 0$. That is, the propensity to switch off during *Sensational News* stories is systematically *smaller* than during *Hard News* stories. This suggests that television news directors and producers would prefer to air more sensational news stories, if they could. News directors, however, do not control the supply of sensational news. Moreover, if the stories in this category became commonplace—natural disasters or large industrial accidents every day—they would no longer be “sensational.”³⁴ This way, viewers never know when a sensational story might be coming, and some viewers might keep watching just in case one will appear soon.

In relative terms, the differences in average switching behavior across the different types of news stories are substantively large in the last two blocks. Consider, for example, the difference in switching from a hard news story versus a soft news story in block 6. In this block, on average 2.55 percent of viewers switched away while watching a hard news story. The estimated difference $\hat{\beta}_2 - \hat{\beta}_1$ from the regression, 0.49, implies that on average, during block 6 a viewer is about 19 percent more likely to switch away from a soft news story than a hard news story.

Appendix Table A.1 reports results analogous to those in Table 5 separately for each channel. There we observe some interesting heterogeneity across channels. Mediaset 6, which is geared toward a younger audience, stands as an outlier vis-a-vis the other channels. Its viewers are more likely to switch away during hard news stories than during soft news stories in every block

³⁴Thus, the best the news director can do is place them strategically during the show. Perhaps this why they are spread relatively uniformly, as shown in Figure 4.

Table 5: Viewer Switching Behavior, All Channels Pooled, With Channel-Specific Fixed Effects (DV = Percent of Time Viewer Switched Away From Channel)

| Variable | Block | | | | | | |
|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Soft News | -0.106 (0.031) | 0.101 (0.021) | 0.058 (0.018) | 0.138 (0.017) | 0.219 (0.014) | 0.342 (0.013) | 1.112 (0.025) |
| Hard News | 0.043 (0.014) | 0.110 (0.012) | 0.116 (0.011) | 0.102 (0.011) | 0.023 (0.011) | -0.143 (0.013) | 0.016 (0.030) |
| Sensational News | -0.183 (0.015) | -0.061 (0.012) | -0.140 (0.011) | -0.152 (0.010) | -0.126 (0.010) | -0.121 (0.013) | -0.268 (0.035) |
| Observations | 7,701,954 | 10,695,172 | 11,230,997 | 11,778,734 | 12,122,955 | 11,622,801 | 6,765,630 |
| p-value 1 | 0.000 | 0.670 | 0.003 | 0.068 | 0.000 | 0.000 | 0.000 |
| p-value 2 | 0.011 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| p-value 3 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.168 | 0.000 |

Fixed effects for channel and program minute included in all specifications. Standard errors, clustered by individual, are in parentheses. p-value 1 is for F-test of H_0 : Soft News = Hard News ($\beta_2 = \beta_1$). p-value 2 is for F-test of H_0 : Soft News = Sensational News ($\beta_2 = \beta_3$). p-value 3 is for F-test of H_0 : Hard News = Sensational News ($\beta_1 = \beta_3$).

except block 2 (where the difference is small and statistically insignificant).³⁵

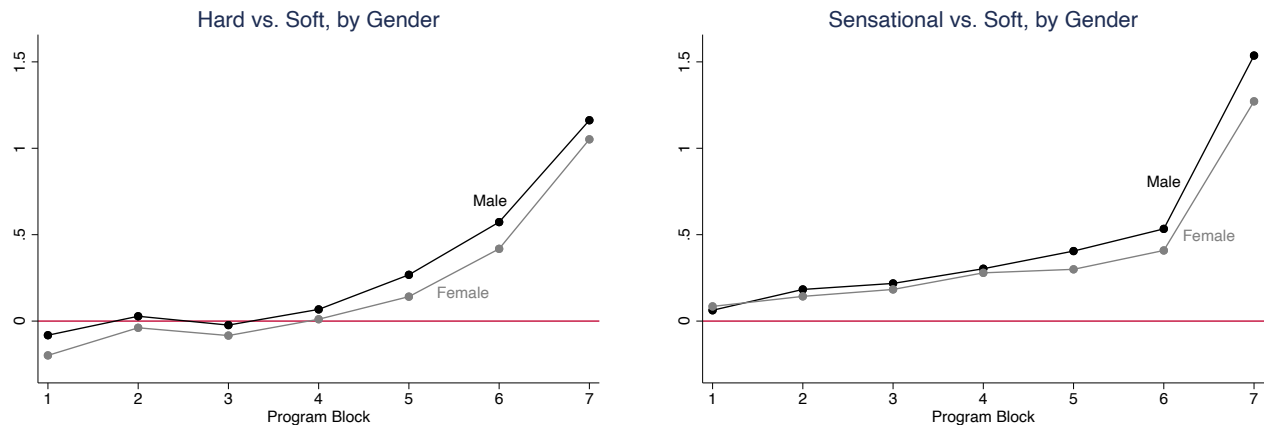
Since we have individual-level data we can also study whether different types of viewers respond differently to hard and soft news. Figure 8 compares men and women, while Figures 9, 10, and 11 show the differences by age, education, and income, respectively. As in the previous figures, the block-by-block differences in the propensity to switch away from soft versus hard news are shown on the left, and the analogous differences for soft versus sensational news are presented on the right. The full regression results are shown in Tables A.2, A.3, A.4, and A.5 in Appendix A.2.

The patterns across blocks are basically the same for men and women. However, for all blocks, the point estimate of $\hat{\beta}_2 - \hat{\beta}_1$ is larger for men than for women, meaning that men are relatively more likely to switch away from a *Soft News* story than a *Hard News* story, compared to women. In 4 of the 7 blocks the difference is statistically significant at the 0.05 level. When comparing *Soft News* with *Sensational News*, there are essentially no differences between men

³⁵Interestingly, the largest difference in switching behavior when watching a soft news story versus when watching a hard news story (about 1.75) occurs in the last block of RAI2. Since the RAI2 news show is the latest to start (at 8:30 PM), viewers might simply switch away with such a high propensity as they want to watch—say—a movie on another channel, and there is only non-relevant soft news on the TV program itself (and it is almost 9pm).

and women in blocks 1-4. The difference in $\hat{\beta}_2 - \hat{\beta}_3$ between men and women is positive and statistically significant at the 0.05 level in blocks 5-7. Thus, during these blocks, men are somewhat more likely to switch away from a *Sensational News* story than a *Hard News* story, compared to women. At the bottom of Table A.2 we show that women are significantly *less* likely to switch off from TV news broadcasts than men, except during the first block, with an estimated fixed effect that becomes larger and more significant across blocks. Since we allow for gender-specific coefficients on *Hard News*, *Soft News*, and *Sensational News*, the estimated fixed effects capture the differential switching behavior during the residual set of unclassified news items.³⁶

Figure 8: Propensity to Switch from Soft News Relative to Hard or Sensational News, By Gender and Block

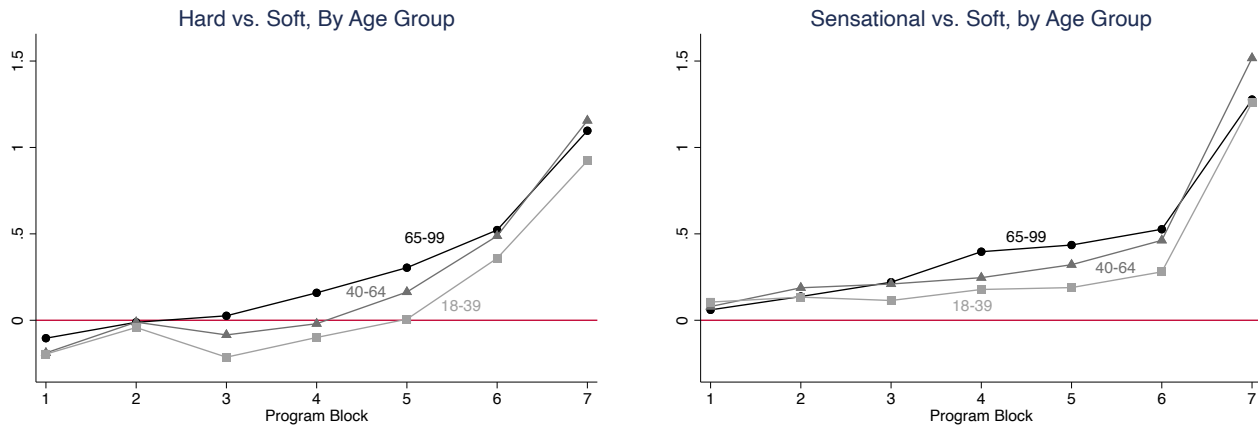


The patterns across age groups are also interesting, as shown in Figure 9. We divide viewers in three age groups: “young” (15-39), “middle-aged” (40-64), and “old” (65-99). Looking first at the panel on the left, we see almost no differences by age in blocks 1 and 2. Beginning in block 3, we see systematic differences in switching behavior between the old and young. Older viewers are more likely to switch off during *Soft News* than during *Hard News*, compared to younger viewers. This pattern is confirmed by the p-values on the difference-in-differences tests between age groups for *Soft News* against *Hard News* and *Sensational News* respectively, as

³⁶This is a still sizeable subsample, as it includes about 10 million observations, vis a vis a total of about 73 million observations.

shown on the bottom of Table A.3. In that table we also show that the young are significantly more likely to switch off than middle-aged and old individuals, and that this difference is much larger at the start of the news broadcasts, and especially during blocks 1 and 2.

Figure 9: Propensity to Switch from Soft News Relative to Hard or Sensational News, By Age and Block



Similarly, we divide viewers in three education groups: those with a middle school degree or less, high school graduates, and university graduates. Again, as shown in Figure 10, the patterns across program blocks are very similar, but the differences across education groups within the same block are less pronounced than in the comparison of age groups. During the central program blocks (3, 4, and 5) the intermediate group of High School graduates displays a stronger propensity to switch off during *Soft News* than during *Hard News*, as compared to University graduates and those with a Middle School degree or less. As shown by the estimated fixed effects at the bottom of Table A.4, more educated individuals are significantly more likely to switch off during unclassified stories, less so during the central program blocks (3 and 4).

Finally, we exploit the household-level variable “social class” in the AUDITEL dataset—which incorporates both economic and social characteristics of the household—to create a three-way income variable. Figure 11 shows very similar block-by-block patterns among the three income categories. High-income individuals are systematically more likely to switch off during

Soft News than during *Hard News*, vis-a-vis low-income individuals.³⁷

Figure 10: Propensity to Switch from Soft News Relative to Hard or Sensational News, By Education and Block

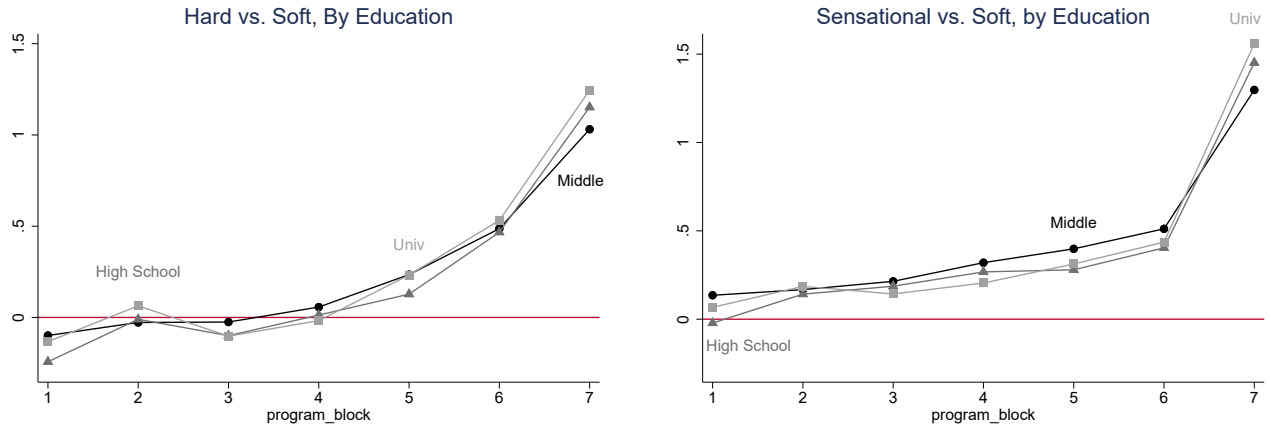
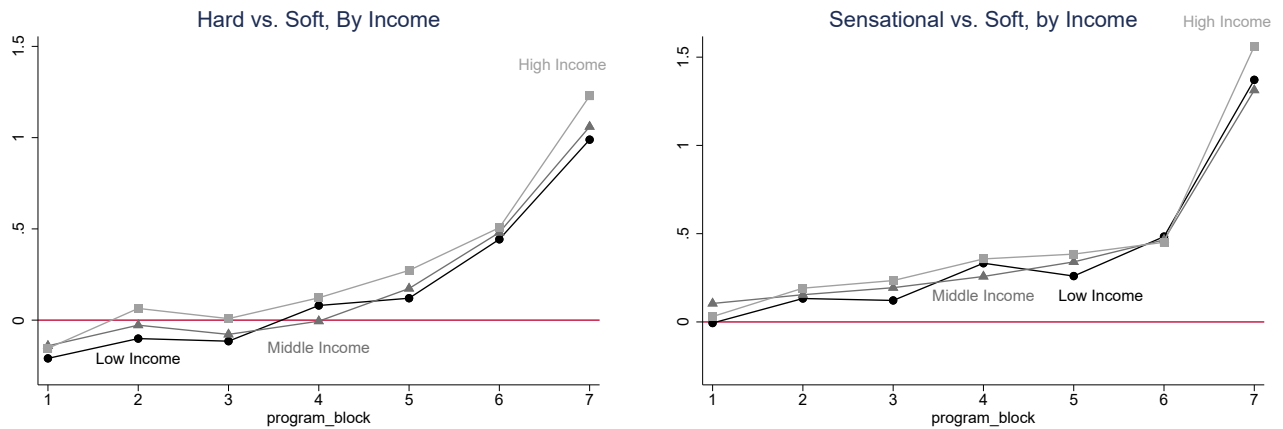


Figure 11: Propensity to Switch from Soft News Relative to Hard or Sensational News, By Income and Block



As pointed out in Section 2.3, the same news story can be simultaneously coded as belonging to two different categories, e.g., a story may be classified as both hard and sensational. Thus, in our baseline regressions our dummy variables for *Hard News*, *Soft News* and *Sensational News*

³⁷The estimated group-specific fixed effects—shown at the bottom of Table A.5—show no significant differences in the average propensity to switch off during unclassified news stories.

stories are not mutually exclusive. However, we can instead partition news stories into mutually exclusive categories—hard, soft, sensational, hard-and-soft, hard-and-sensational, and soft-and-sensational—and re-run regressions on switching behavior with these six categories as the explanatory variables. This allows us to check whether hard-and-soft stories (which we call *Hard & Soft News*) display patterns that are intermediate between those for *Hard News* and *Soft News* stories.³⁸

The outcome of this exercise is shown in Appendix Table A.6. The table follows the format of Table 5, i.e., we focus on all channels and include channel fixed effects. We find the following. First, the differences in switching behavior when watching hard versus soft news largely correspond to the ones we find with our baseline specification. Second, in five blocks out of seven the estimated coefficient on *Hard & Soft News* lies between the *Hard News* and *Soft News* coefficients, which is consistent with the hypothesis that this is an intermediate category.³⁹

4.1 Where do viewers land when they switch away from TV news?

To better understand the individual decision to switch away from the TV news show being watched, we want to check the viewers’ “destinations.” While the decision to switch off the TV set is directly observable from the AUDITEL data, we need to have information about the subsequent TV schedule to investigate whether the viewer—when continuing to watch some TV—landed on another TV news program or on an entertainment program. Also, viewers might not be satisfied with the first TV channel they switch to, and therefore decide to “surf” across different TV channels. This is relevant, since from the landing decision we can infer whether viewers on average have an appetite for more information or more entertainment. Thanks to Metro Media System, we obtained information on the entire TV schedule for the last four months of our period of analysis, i.e. from September to December 2010.

³⁸We thank an anonymous reviewer for suggesting this further empirical investigation.

³⁹This partition of TV news stories into six categories –with the addition of “hybrid” ones– also helps to better understand the typical timing of these categories. On average *Hard News* and *Soft News* stories are aired in minutes 12.59 and 25.16, respectively, while *Hard & Soft News* stories are aired in minute 22.02, i.e., pretty close to the average timing of *Soft News* ones. *Sensational News* stories are aired on average in minute 15.78, while the average broadcasting minutes for *Hard & Sensational News* and *Soft & Sensational News* stories are 13.93 and 20.43 respectively, i.e., quite close to the average timing of the plain *Hard News* category in case of the former.

We distinguish four different outcomes when leaving the TV news broadcast: (1) switching off the television, (2) “surfing” through two or more TV channels, (3) landing and staying on a non-news program, and (4) landing and staying on another TV news show. We also explore a broader definition of an “information” program, which includes political talk shows and weather forecasts as well. We are not only interested in the average choices of viewers, but specifically and additionally on whether those choices on where to land in turn depend on the type of news that is on when the viewer switches away from the TV news show, i.e., we exploit our three categories of *Hard*, *Soft*, and *Sensational News* stories.⁴⁰ This descriptive analysis is shown in Table 6.

Some interesting patterns emerge. When viewers leave the TV news show during a *Hard News* story, they are more likely to switch off the TV (about 8 percent of the time) than when they leave during a *Soft News* (about 4 percent of the time). Also, the propensity to switch off during a *Sensational News* story is similar to the propensity to switch off during a *Hard News* story. These patterns suggest that the viewers are satisfied with the overall amount of hard (and sensational) news they have consumed.

On the other hand, when viewers switch off during a *Soft News* story, they are more likely to switch to another TV news program, relative to when they switch off from a *Hard News* or *Sensational News* story (about 14, 10, and 9.4 percent of the time, respectively). They thus behave as if they are not yet satisfied with the overall amount of hard news they have consumed, and hence search for other some other TV news.

One potential concern is that we are considering different times of day which are characterised by heterogenous choice sets for viewers, i.e., different numbers of alternative TV news programs for the viewer deciding to switch away from the news show he/she is watching. To deal with this concern, Table A.7 in Appendix A.2 replicates the format of Table 6, but it displays summary statistics on landing behavior for the most “news-intensive” time-slot, which

⁴⁰We also include the TV news show on La7 as a potential landing destination. We could not include it in the main analysis because the *Osservatorio* did not code its news stories by topic. As discussed in footnote 10, although La7’s audience grew considerably during the last months of 2010, it was still much smaller than for the other TV news show. The La7 news show is aired from 8:00 PM to 8:30 PM, so it is a direct competitor of Rai 1 and Mediaset 5.

Table 6: Where Do Viewers Land, When Switching Away from a News Show?

| Where do they land? | Switch off | Surf | Non-news Show | News Show | Total |
|---------------------|-------------------|---------------------|---------------------|--------------------|----------------------|
| Hard News | 13,337 (7.71%) | 61,156 (35.34%) | 81,148 (46.89%) | 17,430 (10.07%) | 173,071 (100.00%) |
| Soft News | 6,703 (4.38%) | 53,392 (34.87%) | 71,523 (46.71%) | 21,501 (14.04%) | 153,119 (100.00%) |
| Sensational News | 5,778 (8.02%) | 26,173 (36.34%) | 33,318 (46.26%) | 6,757 (9.38%) | 72,026 (100.00%) |
| All News | 25,818 (6.48%) | 140,721 (35.34%) | 185,989 (46.71%) | 45,688 (11.47%) | 398,216 (100.00%) |

In each row, we show the total number of times that viewers landed on different program types (news and non-news shows), surfed or switched off the TV when leaving the TV news. We separately consider in each row different news types that were aired when viewers switched away from the show. Below each number, we also show the percentage of landing destinations for each news type. The time period under consideration is from September to December 2010.

runs from 8:00 PM to 8:45 PM. During this time interval, the viewer can choose between RAI 1 and Mediaset 5 from 8 PM onwards, with the addition of RAI 2 from 8:30 PM. The landing choices during this news-intensive sub-period are very similar to the ones displayed in Table 6: if anything, there is a much wider difference in the percentage of cases where viewers land on another news program when switching away during a *Soft News* story (about 21 percent of cases) than during a *Hard News* (about 13 percent of cases), i.e., an 8 percent difference, to be compared with a 4 percent difference in Table 6.

These patterns—where landing behavior appears to depend on the type of news story being watched when the viewer leaves—are confirmed by straightforward regression analyses. We separately consider the following options: (i) switch off the TV rather than continuing to watch (i.e., to surf, watch an entertainment program or another TV news show); and (ii) switch to another TV news show rather than to an entertainment program.

We run linear probability models with viewer fixed effects, as shown in Table 7. The dependent variable in the first two columns is a dummy variable that takes on the value of 100 if the viewer switches the TV off when leaving the news show, and zero otherwise. In the last two columns, the dependent variable equals 100 if the viewer switches to another news

show, and zero if he or she switches to an entertainment show.⁴¹ The explanatory variables of interest are dummy variables for the types of news being aired when the viewer leaves the TV news show, i.e., whether the viewer leaves the show after a *Soft News*, a *Hard News*, or a *Sensational News* story. In columns (2) and (4) we also control for the time of the day when the viewer leaves the TV news show and the number of contemporaneous news shows that are available in that minute. Standard errors, clustered by individual, are in parentheses.

Compared to the residual category of stories that we cannot classify in our three categories, viewers are about one percent more likely to switch off the TV after a *Hard News* or a *Sensational News* story, while they are about 2.4 percent *less* likely to switch off the TV after a *Soft News* story: this of course implies that viewers are much more likely to switch off during a hard news (or a sensational news) story than during a soft news story.⁴²

The opposite pattern holds when considering the decision to switch to another news program or to an entertainment program: in column (3) viewers are 4.6 percent more likely to land on another news show when leaving the initial TV news show after a *Soft News* story than after an undefined story, while the coefficients on *Hard News* and *Sensational News* are not statistically significant. When controlling for the time of the day and the number of available TV news shows, however, the coefficient on *Soft News* stories shrinks to 2.3 percent (see column 4).⁴³

It is not clear what amount and mix of prior news consumption induces a viewer to switch off the TV (because they are satisfied with what they have consumed), or to switch to another TV news program (because they are not). The results above assume that the type of story that is aired in the minute before the decision to switch away is an adequate statistic. A better

⁴¹As in our baseline regressions, we do this to avoid regression coefficients with many zeroes. For example, we can interpret an estimated coefficient of 1.0 on *Soft News* stories as a one percentage point increase in the probability of switching off the TV (landing on another TV news show) during a soft news story relative to the omitted category of unclassified stories.

⁴²Column (2) shows that, as time goes by during the evening, viewers are significantly more likely to switch off the TV. On the other hand, they are *less* likely to switch off if in that minute there are more TV news shows that are contemporaneously available.

⁴³Column (4) correspondingly displays an opposite pattern regarding our two additional control variables vis-a-vis column (2): as time goes by, viewers are systematically less likely to land on another news program than on an entertainment show, while the availability of a larger number of contemporaneous news shows is (obviously) associated with a higher probability to land on another news show, which of course explains why the coefficient on *Soft News* shrinks to about half from column (3) to column (4).

Table 7: Where Do Viewers Land? Switching Off and Landing on Another News Show, as Function of the News Type Watched during the Last Minute

| Dependent Variable | Switch Off | Switch Off | To Other News | To Other News |
|-------------------------|-------------------|-------------------|-------------------|-------------------|
| Soft News | -2.350 (0.154) | -2.394 (0.155) | 4.643 (0.329) | 2.315 (0.304) |
| Hard News | 1.035 (0.132) | 1.086 (0.132) | -0.038 (0.273) | -0.852 (0.256) |
| Sensational News | 1.077 (0.138) | 1.393 (0.138) | 0.305 (0.274) | -1.038 (0.264) |
| Time of the Day | | 3.120 (0.140) | | -0.994 (0.272) |
| Available TV News Shows | | -2.215 (0.081) | | 14.384 (0.187) |
| Observations | 398,216 | 398,216 | 231,677 | 231,677 |

The dependent variable in the first two columns is a dummy variable that takes on the value of one if the viewer –when leaving the news show– does switch off the TV, and zero otherwise. In the last two columns the dependent variable equals one if the viewer –when leaving the news show– lands on another news show, and zero otherwise. The explanatory variables of interest are the types of news being aired when the viewer leaves the TV news show. In columns (3) and (4) we also control for the time of the day when the viewer leaves the TV show and the number of contemporaneous news shows that are available in that minute. Viewer fixed effects are included in all regressions. Standard errors, clustered by individual, are in parentheses.

measure might be the percentage of *Soft News*, *Hard News*, or *Sensational News* stories a viewer has watched during the t minutes before the act of switching away. In Tables A.8 and A.9 of the Appendix we re-run the linear probability models shown in Table 7 for the cases $t = 5$ and $t = 10$, respectively, and we find very similar results.

Overall, the findings above appear to be consistent with the arguments by Bennett (1996) and Patterson (2000) that not all viewers avoid hard news, and some actively seek it.

5 Discussion

Since at least Antony Downs' *An Economic Theory of Democracy* (Downs 1957a) political scientists have questioned the motivation of ordinary citizens to be informed about political matters and public affairs. According to Downs (1957b, p. 147), "since the odds are that no election will be close enough to render decisive the vote of any one person, or the votes of all those he can persuade to agree with him, the rational course of action for most citizens is to remain politically uninformed."

Decades of empirical research surveying American voters have often reached pessimistic conclusions regarding voters' interest in politics (see for example Delli Carpini & Keeter 1996). The implication of this argument is that entertainment is preferred to news, not because citizens lack civic virtue but because they have little incentive to be knowledgeable about public affairs. According to Zaller (1999b, p. 25), for example, "the question that now arises is the attitude of rationally ignorant citizens toward political news. The answer, in broad outline, is obvious: They will mostly disdain it." Hamilton (2007, p. 9) notes that rational ignorance can explain "the often-noted divergence between providing individuals with the information they want versus the information they need as citizens." In her study of news consumption habits, Graber (1984) found that citizens tend to complain about oversimplified news but are nonetheless reluctant to engage in more extensive and detailed accounts of policy and political issues.⁴⁴ By contrast, a normative—and perhaps paternalistic—perspective posits that media organizations

⁴⁴Similarly, Neuman (1991, p. 95, 103) writes: "Those who call for public-affairs programming on television do not tend to watch it when it is made available [...] For knowledge acquisition in general, and for public affairs knowledge in particular, people are not inclined to give such matters a great deal of effort."

should provide information that helps citizens participate actively in a democratic society, even if this is not the information they demand.⁴⁵

Standard economic models imply that media outlets seeking to maximize market share or profits must provide viewers with what they want.⁴⁶ Bennett (1996, p. 22-23), for example, writes that “many editors and marketers think that the few noble experiments to improve election issue coverage and offer more in-depth political reporting are up against a basic obstacle: People really do not want more serious news, even when they say they do.” According to this view, market competition is the main force driving the decline of hard (high-quality) news while favoring the diffusion of news with a higher entertainment value. Hence, if media are providing soft news it is because viewers demand it.⁴⁷

On the other hand “the little attention voters do pay may be very important to politicians and journalists, since their livelihoods depend on the response of the mass audience to political news.” (Zaller 1999b, p. 25). If professional norms lead journalists to resist demands to reduce the informational content of news, then they will be better able to produce “high-quality” news in excess of voters’ demand when they are more insulated from market competition. We should therefore expect the amount of high-quality news to fall when media market competition increases (Hamilton 2004). New technologies—with lower fixed costs, more user-generated content, and the ability to bypass gatekeepers—also increase competitive pressures, and may result in a further shift toward soft news (Williams and Delli Carpini 2011).

By using observed rather than self-reported TV news exposure, our contribution helps to shed light on the central premise of this argument, namely that viewers mostly “*disdain*” high quality news and favor soft news with higher entertainment value. We find that on average

⁴⁵This position is well articulated by the Lord Beveridge during a 1962 debate at the House of Lords about the Pilkington Report on the reform of TV and radio broadcasting. Citing an article on *The Economist* that defined television as the “University in the Air,” he argued: “I do not believe that the business of a university, whether on the air or elsewhere, is essentially to bring more and more students to its business by telling them what will make them happy or amused. Its business is to tell them what will make them better citizens, and happier citizens in the process of being better citizens.”

⁴⁶For an overview of economic theories of news see chapter 1 in Hamilton (2004). Economic theories can reach different conclusions about the consequences of more competition, depending on what viewers and editors want. See also Gentzkow *et al.* (2014).

⁴⁷For a critique of the classical liberal view of media markets see Grossberg et al. (1998), particularly chapter 14.

news programs broadcast many more hard news stories than soft news stories, and in fact the programs begin with mainly hard news.⁴⁸ Also, those who watch the news do not all gravitate towards shows that broadcast the most amount of soft news. Most tellingly, we find no evidence that viewers are more likely to switch away during hard news stories than during soft news stories; in fact, if anything the opposite is true. Thus, the evidence is inconsistent with the simple hypothesis that there is a general tendency by all viewers to seek entertainment even while watching the news.

One of the problems with the rational ignorance argument is that it downplays the importance of voter heterogeneity, and the utility some voters may derive from high-quality news independently of any instrumental value.⁴⁹ Although some of this heterogeneity can be due to unobservable individual characteristics (which can be captured in regressions by individual fixed effects), we use observable covariates to shed further light on the heterogeneity in the decision to switch off across different types of viewers. We find significant differences according to the gender and age of the viewer, and the specific TV news show the viewer watches. We find that young viewers are relatively more likely to switch away from hard news compared to older viewers, and in one of the five-minute blocks the young are significantly more likely to switch away from hard news than soft news stories. Our results on “landing behavior” are also consistent with the idea that there is important heterogeneity among viewers, and a sizable percentage of them actually seek hard news.

Our findings show that a personal taste for news matters, and therefore a general theory of viewers’ behavior that assumes the audience is homogenous might ultimately prove of limited

⁴⁸The argument in Kerbel (2000) helps understand this pattern and offers avenues for further exploration: “network news folk thrive on conflict. [...] Much of what happens in politics and policy-making involves conflict, it’s true. But it’s the wrong kind of conflict. It involves things like speeches and votes, things that are too slow or take more than 4 seconds to say. [...] Compounding the problem is a long tradition that says the national newsies have to cover things like politics and policy-making. Overlooking things like national elections and major congressional debates could make a network news operation seem almost as if it were not serious about reporting the news, possibly bringing into doubt the credibility of your trusted anchor. [...] It is a serious problem, which lends itself to only one solution. These stories have to be transformed into the right kind of conflict by skilled television professionals.”

⁴⁹We could regard this taste for political news as being part of an “ideology,” defined by Grossberg *et al.* (1998, p. 393) as a system of “meaning by which people live”. Ideologies “define how we experience the world, what we take for granted.”

use to understand media markets and media content. A substantial proportion of viewers who watch television news probably expects high-quality news, while strategies based on more supply of soft news do not necessarily achieve the aim of capturing a larger share of audience. Ultimately, some people will never watch the news and will not be attracted anyway by “softer” content.

Survey-based research suggests that people who claim to watch more hard news are also more likely to be more knowledgeable of public affairs. Soroka *et al.* (2012), for example, show that, *ceteris paribus*, watching news programs on public service channels (like the BBC), where hard news tends to be prevalent, is related to better political knowledge than is watching news on commercial broadcasts. The decline in news quality therefore might have positive effects on political knowledge and engagement on the extensive margin (Baum 2002), but it comes with a cost on the intensive margin since citizens who expect high-quality information from the mass media may have a harder time finding it.

6 Concluding Remarks

Political observers in virtually all democratic countries complain about the electorate’s lack of knowledge and information. Some blame the news media environment for this situation, arguing that there is too much soft news and not enough informative news, especially on television news broadcasts. Others point out that this might be largely driven by the media catering to viewers’ taste for soft news.

In this paper we investigate television news-watching behavior in Italy, exploiting two rich and fine-grained datasets. These data allow us to analyze the type of news story each viewer is watching, minute by minute, for the two-year period from 2009 to 2010. Our analysis of switching behavior suggests that citizens are not a homogenous mass that avoids hard news and seeks soft news. Thus, our findings cast doubt on the simplest versions of the rational ignorance argument.

Other aspects of news viewing behavior deserve further study. One is to distinguish different types of citizens on the basis of their viewing habits. Do habitual versus casual viewers of TV

news programs differ significantly in their propensity to switch away during hard versus soft versus sensational news? Another is to explore the formation of viewing habits, by exploiting quasi-random cases of casual viewers who happen to be watching a news broadcast when a very salient event occurs, or during a “breaking news” program. Does this systematically affect their propensity to seek more news in the short term, or possibly in the medium- or long-run?

We would also like to know more about the decision to switch on a given news broadcast. From an informational viewpoint, the “joining” behavior is trickier than the “leaving” behavior, since viewers do not know with certainty what they will find on the channel to which they switch to, while they know for sure what they decide not to watch anymore when leaving the channel.

Finally, going beyond the simple and partial-equilibrium analyses done here, it would be interesting to employ structural empirical models to distinguish “marginal” vs. “average” viewers. For example, borrowing from Hamilton (2004), viewers who are more likely to leave the TV news show can be treated as marginal consumers, while those who habitually watch the entire show can be thought as average consumers.⁵⁰ The ultimate goal would be to estimate the objective functions of TV news directors implied by the interactions between their programming choices and viewers’ behavior, and help answer the question: Would a channel’s total viewership increase or decrease if it offered more soft news?

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⁵⁰We thank an anonymous reviewer for these suggestions.

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