

Balles, Patrick; Matter, Ulrich; Stutzer, Alois

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## The political economy of attention and electoral accountability

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Universität Basel  
Peter Merian-Weg 6  
4052 Basel, Switzerland  
[wwz.unibas.ch](http://wwz.unibas.ch)

**Corresponding Author:**  
Prof. Dr. Alois Stutzer  
Tel. +41 61 207 33 61  
Mail : [alois.stutzer@unibas.ch](mailto:alois.stutzer@unibas.ch)

# The Political Economy of Attention and Electoral Accountability

Patrick Balles\*

Ulrich Matter†

Alois Stutzer‡

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## Abstract

In this survey, we investigate the general mechanisms underlying the political economy of attention and review their empirical relevance, in particular for electoral accountability. The focus is on exogenous or stimulus-driven attention that political actors try to win or divert when pursuing their private interests. The corresponding evidence refers to representatives' reactions to general shifts in media attention and persuasive content as well as to short-term fluctuations in attention when exploiting anticipated attention shifts or attention shocks. In the context of digitization and the Internet, we consider the substitution effects between alternative media sources, the role of algorithmic content selection in informational segregation (or echo chambers), and the new opportunities of individual-level targeting strategies to steer attention.

**Keywords:** accountability, attention, media, representative democracy, re-election

**JEL classifications:** D72, D83, L82, L86

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\*University of Basel, Faculty of Business and Economics, email: [patrick.balles@unibas.ch](mailto:patrick.balles@unibas.ch)

†Bern University of Applied Sciences, Business School, email: [ulrich.matter@bfh.ch](mailto:ulrich.matter@bfh.ch)

‡University of Basel, Faculty of Business and Economics, Peter Merian-Weg 6, 4002 Basel, Switzerland, phone: +41 61 207 33 61, <https://orcid.org/0000-0002-7410-5513>, [alois.stutzer@unibas.ch](mailto:alois.stutzer@unibas.ch). (corresponding author)

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# 1 Introduction

*“In an information-rich world, the wealth of information means a dearth of something else: a scarcity of whatever it is that information consumes. What information consumes is rather obvious: it consumes the attention of its recipients. Hence a wealth of information creates a poverty of attention and a need to allocate that attention efficiently among the overabundance of information sources that might consume it”* [Simon \(1971\)](#), p. 40-41.

From a political economy perspective, a well-informed citizenry is key to holding elected politicians accountable. With information about the actions and decisions of those in power, citizens can either sanction them for wrongdoing or reward them for good political work. Moreover, an attentive electorate can contribute to better political representation by selecting “good” politicians who take into account the preferences of their constituents competently and honestly.

However, in today’s flood of information, facts that are actually known and important for the political process are at risk of getting lost in the general media noise. At the same time there is a risk of filter bubbles when personalized searches and recommendations leave people in isolated information domains ([Pariser, 2011](#)). And, there are cascades of “viral” political news, leading events and political items being covered and triggering political reactions that far exceed the news’ political substance. In short, in such an environment it is a matter of attention whether certain facts become relevant to voters’ evaluations of particular policies or politicians and therefore become relevant to politician behavior.

Accordingly, we want to address the question of what is determining which information receives the attention of citizens and which does not. This question is related to a series of mechanisms that people use when they select information for costly processing over competing information. As attention spans are limited, not all available information is considered when people make decisions. Moreover, unlike when private decisions are involved, few people actively search for information about politics, for example, to learn about their local representative. Rather, people take up political information as a by-product of consuming political news or of processing it for important private (investment) decisions. This argument is consistent with the concept of rational ignorance put forward by [Downs \(1957\)](#) a long time ago.

Consequently, media coverage of political information plays an important role in whether a news item will get the attention of citizens. This view is underlying the idea of the media as the fourth power. However, to what extent can we still expect the news media to fulfill that role in today’s digital world? With modern information technology, traditional news media (TV, print, and radio) are far from the only sources through which citizens can receive their information, creating entirely new dynamics. In the U.S., among the new digital sources, news websites and apps are the most preferred, followed by search engines, social media, and podcasts (with 25%, 15%, 12%, and 6% respectively preferring each source for getting

news among the available digital technologies) (Pew Research Center, 2023).<sup>1</sup> This partially disintermediated provision of information is virtually unlimited and nominally close to free. More recently, the prospects of Generative Artificial Intelligence (GenAI) for news production, which is likely to increase the noise-to-signal ratio in political news supply, have further raised concerns regarding trust in and quality of news outlets.<sup>2</sup>

Given this abundance of information about politics, specific public policies, or individual politicians from a myriad of platforms, it is obvious that the selection of information which attracts people’s attention plays an important role. Catchy and sensational headlines designed by attention merchants (Wu, 2017) (and their GenAI tools) might crowd out valuable political information. And this has far-reaching consequences. On the one hand, it provides governments and the public administration with more leeway to make unpopular decisions that go against the interests of constituents. On the other hand, it gives other interests, such as well-funded lobby groups, the opportunity to influence politics in their favor (especially on issues that conflict with voter interests).

It is therefore important to ask about the incentives that media providers face when it comes to editorial decisions regarding political coverage. What structural factors drive news coverage of the political process? What happens to political coverage in the short term when other newsworthy material is available? How does increased competition from the new digital media affect political reporting in traditional media? And importantly, is there evidence of an attention-driven response in the behavior of politicians? This article aims to review and discuss various aspects of this – what we might call – political economy of attention. The main focus is on summarizing and discussing related empirical research and placing it in a general context, which in turn can serve as a starting point for further research and scholarly debate.<sup>3</sup>

The remainder of this review is organized as follows. In Section 2, we introduce attention in economic decision-making separating between endogenous or goal-directed attention and exogenous or stimulus-driven attention. Section 3 describes where attention is an important moderating factor in the political process and what role the accessibility to information and incentives in the media play in this. In Section 4, we discuss the evidence on the effects of attention in politics. Separately, in Section 5, we take up issues related to attention in the context of digitization and the Internet emphasizing algorithmic content selection and new

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<sup>1</sup>Figures for the U.S. show that digital news sources are already ahead of traditional sources: 58% of adults surveyed in 2023 say they prefer digital devices for getting news – followed by TV (27%), radio (6%) and print (5%) (Pew Research Center, 2023). In Europe, according to a 2023 survey, 79% of respondents cite online news or social media as one of their most used sources for accessing news, followed by TV at 71% (European Parliament, 2023).

<sup>2</sup>While these developments are recent, there are good arguments that the intermediate to long-term impact of GenAI on news production will be substantial. For example, Nishal and Diakopoulos (2024) provide a discussion of which aspects of news production could be affected by GenAI. Some of those potential applications, such as the automated processing of news reports to find “newsworthy angles” (p. 3) might well affect the competition for consumers’ attention.

<sup>3</sup>Many related issues are not covered; this refers in particular to political actors’ strategies related to the spread of misinformation and conspiracy theories, the tapping into identities, or the surveillance and micro-targeting of voters (for a popular account, see Zuboff, 2019, and for an overview, see Hendricks and Vestergaard, 2019).

targeting strategies. Section 6 lists the various empirical strategies that have been used to identify attention effects. Section 7 offers concluding remarks and an outlook to open questions.

## 2 Attention in Economic Decision-Making

Attention refers to a set of mechanisms that individuals use to select and (efficiently) process (relevant) information. The selection process involves costs, and selection is made among a variety of competing items of information that are potentially relevant to the individual (for general overviews in economics, see [Loewenstein and Wojtowicz, 2023](#), [Bordalo et al., 2022](#), [Caplin, 2016](#), [Fest   and Garrouste, 2015](#), or [Hefti and Heinke, 2015](#)).<sup>4</sup> As a consequence, people are only partially informed not because of a lack of information, but because the information is not processed. In consequence, not all available information becomes behaviorally relevant. In general, there is always a gulf between potentially accessible information and the information based on which an individual makes decisions.

The selective processing of information may be more or less under the control of the individual. In models of goal-directed attention, individuals control and optimally allocate their limited resources for information processing. In models of stimulus-driven attention, this control is limited. Accordingly, senders of stimuli have a larger set of strategies to influence receivers.

### 2.1 Endogenous or Goal-Directed Attention

Individuals consider their limitations in the processing capacity of information and optimally allocate their cognitive effort to selecting information. Thereby, their optimization strategy depends on their prior knowledge about the world:

1. If they know ex ante how valuable different information sources are they can efficiently allocate their limited mental or processing capacities to learn about their choice context. They can apply the optimization tools as modeled in traditional economics. This is the perspective in the literature on rational inattention (for a review, see [Ma  kowiak et al., 2023](#)).
2. If they do not have a lot of prior knowledge about what they might miss if they are not considering some information sources, they have to engage in alternative strategies when processing information and adopt some decision process involving the way search is organized and terminated. This reasoning in the tradition of Herbert Simon’s bounded rationality is modeled in research at the intersection between economics and psychology on behavioral inattention (for a review, see [Gabaix, 2019](#)). In this perspective, people

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<sup>4</sup>Basic models in neuroscience separate between two processes in the control of attention ([Corbetta and Shulman, 2002](#)): In one system closer to reasoning, attention is a top-down process involved in the selection of stimuli, whereby the selection is oriented towards the pursuit of particular goals. In the other system related to automatic thinking, attention is a bottom-up process of detecting stimuli that are potentially relevant for behavior. Salient and unexpected stimuli receive particular attention.

develop strategies to deal with the information flow and adopt a boundedly rational allocation of their processing capacity. They follow heuristics that may or may not be productive (or functional) to pursue private goals. Moreover, actors with divergent interests may try to exploit individuals' limitations with particular attention strategies.

## 2.2 Exogenous or Stimulus-Driven Attention

The behavioral perspective assumes that people have limited control over how they react to stimuli and therefore the information they process. It is largely the salience of information that drives attention. In an extreme form, people are externally controlled recipients of information and have no sovereignty over what they process from the stimuli arriving in their environment. This view is sometimes taken up in the context of state propaganda in authoritarian regimes.<sup>5</sup>

With limited control, incentives arise not only to react to what people pay attention to but also to actively affect it. Actors who try to win attention or divert attention to pursue private interests adopt communication strategies to increase the salience of particular pieces of information. For example, they produce targeted stimuli that deviate from the stimuli people are used to. They 'disturb' people to win attention. The available technical means (including bots) are used to successfully create a disturbance. The emphasis on the 'deviation from the usual' indicates its dynamic nature. Thereby, the receivers of the stimuli are not passive. People learn about persuaders' strategies, they partly see through and react.<sup>6</sup> They adopt strategies that protect them from unwanted attempts to influence them. Accordingly, the dynamic process fuels an arms race between senders and receivers of stimuli. Senders invest in creativity to develop new strategies so that receivers process and take up information and can be persuaded. This is one explanation for why there are so many professionals working in advertising and public relations. On behalf of their customers, these specialists develop provocative slogans, headlines, tweets, and pictures to be louder and shriller than their competitors.

In the competition for attention, new strategies are constantly being developed to exploit individuals' limited control over their perception and their use of processing capacity. In this process, the senders of stimuli collaborate with intermediaries that make use of technological features that help them grab attention. For example, these so-called persuasive designs have been prominently featured in recent controversies about manipulation on social media platforms (see, e.g., [Zuboff, 2019](#)). GenAI applied in such a setting will likely further promote the use of such persuasive designs, particularly as it will make the personalized/targeted provision of such designs much cheaper.

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<sup>5</sup>[Bernays \(1928\)](#) prominently wrote about propaganda as manufactured attention through mass psychology. An economic and intellectual elite would be able to influence and control the opinions of the masses.

<sup>6</sup>The aspect of learning in the context of attention is particularly emphasized in [Caplin \(2016\)](#).

## 2.3 General Consequences of Limited Attention

Due to the selective processing of information about alternatives, attention affects the valuation of options in the choice set and thus behavior and ultimately individual welfare. Given its potential fallibility, limited attention may therefore be a reason for lower individual well-being.<sup>7</sup>

However, the consequences are not confined to the individual. Attention scarcity can be seen as a common pool resource that can be overused by information providers or senders of stimuli, creating negative externalities not only with the individual receiver/user but also with the collective that aims to solve collective problems and obtain beneficial collective decisions. From the perspective of the senders, the issue has recently been termed information pollution or spamming (see, e.g., [Malin and Lubienski, 2022](#); [Meel and Vishwakarma, 2020](#)).<sup>8</sup>

## 3 Attention in Politics

In various frameworks and theories within political economy and political science, attention to politics is a key factor affecting the functioning of representative democracy. This section aims to review related conceptual works and perspectives that integrate the dimension of attention into the functioning of politics. In [Section 3.1](#), we discuss conceptual frameworks allowing the study of the moderating role of attention on political behavior and political outcomes. [Section 3.2](#) addresses the crucial role of news media in directing attention towards political matters. Finally, [Section 3.3](#) examines the related concepts of transparency and press freedom as prerequisites for information to capture attention. It also discusses the crucial role of economic incentives in guiding media producers’ decisions on reporting political matters.

### 3.1 Theoretical Frameworks

Attention to politics becomes particularly relevant in the context of voters’ electoral choices. The median voter theorem predicts that vote-maximizing candidates choose their policy platform in order to appeal to the preferences of the median voter (see [Congleton, 2004](#) for a review of the literature on the median voter model). However, for this theorem to hold, voters must be informed about the positions of the candidates. Informed voters are better able to assess which candidate aligns most closely with their own preferences and are therefore more likely to select candidates that represent them well.

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<sup>7</sup>“The dark side of information proliferation” is, for example, discussed in the correspondingly entitled article by [Hills \(2019\)](#). Related work includes [Bawden and Robinson \(2009\)](#) or [Eppler \(2015\)](#).

<sup>8</sup>The economic problem is old, though. [Hotelling \(1938\)](#) described it a long time ago and proposed taxation as a remedy: “Another thing of limited quantity for which the demand exceeds the supply is the attention of people. Attention is desired for a variety of commercial, political, and other purposes and is obtained with the help of billboards, newspapers, radio, and other advertising. Expropriation of the attention of the general public and its commercial sale and exploitation constitute a lucrative business. From some aspects this business appears to be of a similar character to that of the medieval robber barons and therefore to be an appropriate subject for prohibition by a state democratically controlled by those from whom their attention is stolen. But attention-seeking of some kinds and in some degree is bound to persist, and where it does, it may appropriately be taxed as a utilization of a limited resource. The taxation of advertising on this basis would be in addition to any taxation imposed for the purpose of diminishing its quantity with a view to restoring the property of attention to its rightful owners” (p. 257).



In a similar vein, paying attention is crucial for monitoring government activity and empowering voters to hold their elected officials accountable. The central concept behind the accountability mechanism is that politicians who behave well are rewarded with re-election, while those who perform poorly in the eyes of voters face sanctions at the polls. In the underlying political agency framework, politicians act as delegates of constituents who have entrusted them to act in their interests. Since voters do not have access to all information about their politicians' behavior, the latter cannot be bound to a specific political program and possess substantial discretionary power while in office. Information about a politician's behavior enables voters to hold them accountable for their actions or unfavorable decisions. Not acting on behalf of voters might involve pursuing private interests that conflict with voters' preferences, such as interests influenced by party leaders or special interest donors. Well-informed citizens mitigate this principal-agent problem and create incentives for re-election-oriented politicians to prioritize the interests of the electorate (see, e.g., [Persson and Tabellini, 2002](#) for related theoretical considerations).

Theories on political business cycles assume myopic voters who are particularly concerned and pay attention to the state of the economy just before elections. The prerequisite for that is, again, that voters consume information about the performance of the incumbent government to reward governments with good performance or vote out less effective ones (see [Frey and Lau, 1968](#) and [Nordhaus, 1975](#) for seminal theoretical work and [Nannestad and Paldam, 1994](#) for a review of the development of popularity functions predicting voter satisfaction with government performance).

Given the importance of political information for the functioning of elections and the accountability mechanism, understanding the conditions under which voters pay attention to relevant political information is key. Simply holding regular elections and providing information is not enough. Information becomes only relevant when it receives attention and is processed by voters in their decision-making processes.<sup>9</sup>

Instrumental and expressive motives (like the fulfillment of civic duty) may spur information processing, especially when someone holds extreme political preferences and accordingly stakes are perceived as high. [Matějka and Tabellini \(2021\)](#) integrate this aspect of selective attention into a probabilistic voting model. In response, candidates cater to the more attentive voters when defining their policy platform. As a consequence, proponents of divisive issues gain influence relative to more moderate voters.

Particularly in the run-up to elections, political candidates employ a whole range of strategies to capture voters' attention and make themselves known (see, e.g., [Gerstlé and Nai, 2019](#)). They consider that voters can only partly control their attention and that they react to

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<sup>9</sup>In his economic theory of democracy, [Downs \(1957\)](#) emphasizes the incentives of voters to process political information. He predicted that voters would remain rationally ignorant because the likelihood of casting the decisive vote is very small for each individual. Therefore, it is not attractive to invest resources in learning about the world and choosing the best candidate offering the best political platform if the outcome is largely driven by other voters' decisions. It is rational to stay largely inattentive to signals or news about politics. Instead, the scarce capacities for selecting and processing information are primarily devoted to decision-making in the private realm, with political information potentially taken up as a by-product when processing it for important private (investment) decisions or when consuming the news.

stimuli that either affect their support of a particular candidate/issue or the propensity to participate at all. Conceptually, these aspects are framed within the mobilizing and persuasive character of campaign communications. Much of the empirical literature in this context (reviewed below) focuses on the impact on voters exposed to varying levels of TV campaign advertising.

Agents in the political process are not only expected to *react* to attention by adhering to procedural rules and putting effort into the fulfillment of official tasks and ultimately satisfying voters' wishes. They are also expected to *affect* attention when their private interests conflict with those of their constituency. In such instances, they may try to avoid publicity or obfuscate a potentially interested audience, or even deliberately divert attention away from pertinent issues (see, e.g., [Belguise, 2024](#) for a theoretical framework exploring politicians' incentives to divert public attention from scandals).

Conflicts between constituent interests and a politician's interests can arise from links to special interest groups that provide the politician with campaign funds (or other benefits), or from party interests that are opposed to those of the electorate. Together with the politician's ideological and private economic interests, these are the three main driving forces used in political agency models to study politician behavior.<sup>10</sup> [Kau et al. \(1982\)](#) emphasize the conflict between the preferences of constituents and special interest donors (see also [Grossman and Helpman, 2001](#)). In this theoretical framework, there are two ways for the politician to increase his or her re-election chances: he or she can either support policies in favor of voters' preferences and thereby gain direct electoral support. However, he or she can also cater to special interests that contribute to the electoral campaign and thus try to secure electoral support indirectly. The trade-off is not easy to strike when special interest donors as well as the voters pay attention to representatives' political decisions. However, it is comparatively simple when voters are not watching (but agents of special interest groups keep tracking representatives' behavior).<sup>11</sup> In the context of U.S. federal politics, a representative explained: "If nobody else cares about it very much, the special interest will get its way. [...] If the company or interest group is (a) supportive of you, (b) vitally concerned about an issue that, (c) nobody else in your district knows about or ever will know about, then the political calculus is quite simple" – U.S. Representative Vin Weber (R-MN, 1995) in [Schram \(1995\)](#). As a general hypothesis for the behavior of politicians, rent-seeking activities are thus predicted to be more pronounced if (i) politicians face little (media) attention in what they are doing or (ii) manage to move exchanges with special interest groups to fora with less attention (see, e.g., [Culpepper, 2010](#) on 'quiet politics').

Beyond electoral accountability, the quality of bureaucracy – particularly in delivering public services and goods – as well as taxation can also be studied with a focus on citizens' limited attention. Theoretical models of bureaucracy predict that the amount of citizen attention

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<sup>10</sup>An example for an empirical application is offered in [Levitt \(1996\)](#) considering constituency, party, and ideological self-interest in determining a politician's calculus.

<sup>11</sup>The consideration is similar to the trade-off between serving informed and uninformed voters as modeled in [Baron \(1994\)](#).

impacts bureaucratic output and the effort expended by employees in public administration (Prendergast, 2003; Prendergast, 2016). Shanks and Stratmann (2023) develop a model to examine the collective action problem in citizens’ monitoring of bureaucracies. The model shows that as the number of beneficiaries increases, individual incentives to monitor decrease due to reduced personal economic gains and a free-riding problem, where individuals rely on others to carry out the monitoring. This results in an overall under-provision of monitoring activities, leading to sub-optimal bureaucratic performance. Regarding taxation, the issue of attention has recently been highlighted in considerations about tax illusion (see, e.g., Mueller, 2003 for a brief overview) and fiscal obfuscation (Sanandaji and Wallace, 2011). In this branch of literature, recent experimental evidence highlights the importance of tax salience for consumer choice (Chetty et al., 2009; Morrison and Taubinsky, 2023).

### 3.2 The Role of News Media

Given that people often exert minimal effort to actively inform themselves, the role of the news media becomes critically important. The news media largely determine whether voters pay attention to politicians, their positions, certain political matters, debates, or scandals, depending on the coverage these topics receive (see, e.g., Besley and Burgess, 2002; Besley et al., 2002). This perspective aligns with the concept of stimuli-driven attention, where press coverage acts as a key external stimulus affecting which information is processed by citizens (for a review, see Strömberg, 2015). By selecting information from the broad universe of all available information, the media act as the primary filter, thus determining which issues achieve a minimum level of salience.

Complementary, endogenous or goal-directed attention concepts can also play a role. Individuals may use heuristics based on their prior valuation of certain information sources, for example, the ideological orientation of the news outlets they consume. This results in selective exposure to certain sources over others (see, e.g., Iyengar and Hahn, 2009 for evidence on ideological selectivity in media use, or Winter et al., 2016 for information selection on social media).

As key disseminators of political information, the media significantly influence the political process through various channels. Firstly, they provide voters with crucial information and cues about the political positions and policy platforms of politicians, thereby shaping voting decisions (Zaller, 1992). Once governments are elected, attentive media establish the foundation for monitoring government activity, enabling voters to hold their elected officials accountable. This incentivizes politicians to be more responsive to their constituents’ interests. In this context, the ability of citizens to hold their elected officials accountable aligns with the media’s role as the fourth power (see, e.g., Prat and Strömberg, 2013 for a review on the political economy of mass media). Numerous studies have empirically documented that the level of media attention devoted to politics significantly influences politicians’ behavior, both in terms of overall exposure and short-term fluctuations in coverage. The evidence section will review this literature.

Moreover, the news media play a critical role in determining which topics are placed on the political agenda and are addressed by policymakers in the first place. This occurs as the issues and topics covered by the media and the attention they receive influence public discourse and perceptions of importance (see [McCombs and Shaw, 1972](#) for seminal work on the agenda-setting function of the media). It follows that the economic considerations of media producers, specifically editorial decisions about which political issues and topics to cover, and to what extent, are of crucial importance. Attractiveness to advertisers is one of the main driving forces behind these decisions regarding what is covered and what is not (see [Anderson and Jullien, 2015](#) for related works and the next section for evidence regarding media producers’ economic incentives on covering politics). Additionally, a range of work addresses the systematic biases of media toward certain ideological directions (for an overview of the media bias literature, see [Gentzkow et al., 2015](#) and [Puglisi and Snyder, 2015](#)).

### 3.3 Institutional Determinants of Attention Stimuli

Under many conditions, the prerequisites for the availability of political information and the incentives for media to cover politics are either not present or insufficient. On the one hand, in many countries, there is limited press freedom.<sup>12</sup> On the other hand, media providers themselves may have little incentive to provide the necessary amount of political information for politicians to be held accountable to voters’ interests. This issue is most prominently integrated into the discussion on media providers offering hard vs. soft news (as in [Gentzkow and Shapiro, 2008](#)). This section reviews important aspects related to these conditions affecting the attention stimuli toward politics.

#### Transparency and Press Freedom

While the availability of political information is not sufficient on its own to ensure responsible behavior by representatives, it is an important precondition. In many countries, citizens and journalists still lack access to official documents that would increase transparency about government behavior without compromising its proper functioning.<sup>13</sup> Transparency may also refer to the disclosure of financial interests and other potential conflicts of interests by legislative members.<sup>14</sup> Currently, various movements engage towards greater transparency of government. These are, in particular, organizations around civic tech, open government, and e-government (see, e.g., [Gilman, 2017](#); [Yoshida and Thammetar, 2021](#)).<sup>15</sup>

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<sup>12</sup>Various international non-profit organizations are documenting the state of press freedom like, e.g., Reporters Without Borders (RWB, <https://rsf.org/en>)

<sup>13</sup>One approach to increase transparency about government work is to legally require public agencies to provide information upon request, which is what so-called Freedom of Information Act (FOIA) laws aim to achieve. [Cordis and Warren \(2014\)](#) study the effect of FOIA regulations on public corruption of U.S. state and local officials. By exploiting policy changes over time within states, the authors document that strengthening FOIA laws is associated with lower corruption rates, as officials respond by reducing their corrupt practices.

<sup>14</sup>Regarding the effect of general transparency regulations on financial disclosure of politicians, a study by [Djankov et al. \(2010\)](#) provides meaningful insights through a cross-country analysis. They examine the legal situation in 175 countries and document that public disclosure is related to lower levels of corruption.

<sup>15</sup>In the U.S. context, notable organizations include, for example, OpenSecrets ([opensecrets.org](https://www.opensecrets.org)) – prominent for its comprehensive information on the transparency of campaign financing by U.S. politicians – GovTrack

Restrictions on the freedom of the press are another reason that prevents important facts about government and administrative actions from receiving the necessary attention (see, e.g., [Leeson, 2008](#)). In many countries, TV and other media are captured by the state inhibiting them to function as a fourth power and a further democratic check (see, for example, [Djankov et al., 2003](#), [Besley and Prat, 2006](#), [Brunetti and Weder, 2003](#), and [Szeidl and Szucs, 2021](#)). Yet, new digital media offer an opportunity for political movements in countries with severely limited press freedom (see Section 5).

## Economic Incentives

Besides the simple lack of political news providers (see, for example, [Abernathy, 2018](#) on the decline of local newspapers in the U.S.), media providers may have little economic incentive to cover politics. This aspect is particularly critical for the coverage of local politics. In many places, there is a shift from local to national news recently. For example, [George and Waldfogel \(2006\)](#) examine the effect of increased circulation of the national edition of the New York Times and find a decline in local newspaper sales among the more educated. In the U.S. context, the change in media ownership towards more conglomerate ownership seems to be a further important driver of this development (see [Martin and McCrain, 2019](#), [Levendusky, 2022](#) or [Miho, 2023](#)). The related nationalization of politics (and in the U.S. a tying of lower-level election results to presidential election results) is seen as a major risk to democracy in a multi-level political system (see, e.g., [Abramowitz and Webster, 2016](#), [Hopkins, 2018](#), [Moskowitz, 2021](#), or [Trussler, 2022](#)).

As advertising revenues are the main revenue source for media outlets besides the fees for subscriptions, they try to attract as many viewers and readers as possible with their news stories. For example, if a particular politician represents only a small fraction of readers in a newspaper’s sales area, this newspaper understandably has little incentive to report extensively on that politician. Studies by [Schaffner and Sellers \(2003\)](#), [Snyder and Strömberg \(2010\)](#), and [Balles et al. \(2023\)](#) indeed find evidence for this, showing that local newspapers and TV stations report more about a U.S. Congress member the more congruent their media market area is with the politician’s district.

In recent decades, declining advertising revenues in the traditional media industry have been observed (see, e.g., [Abernathy, 2018](#) for the U.S.), with the increasing popularity of digital media being a key factor. This growing competition forces traditional media to focus more on attention-grabbing (soft) news rather than political content ([Gentzkow and Shapiro, 2008](#)). This is especially true when soft news can easily be made to fit with emotional content and sensational headlines. In summary, intensified competition between traditional newspapers and digital media has adverse side effects associated with cutbacks in reporting and editorial quality. Examining the U.S. media landscape, [Djourelouva et al. \(2024\)](#), e.g., show that the introduction of the online platform Craigslist led local newspapers to lay off news editors, disproportionately

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([govtrack.us](#)) – known for tracking legislation and individual voting decisions in the U.S. Congress, and MapLight ([maplight.org](#)) – maintaining a database coding the positions of special interest groups on individual legislative proposals.

those responsible for political news stories. This has resulted in a corresponding reduction in political coverage.<sup>16</sup>

Consistent with these observations and predictions, publicly funded media (which face less competition and are less dependent on advertising revenues) have been found to provide more political information content than private providers (see, e.g., the study by [Esser et al., 2012](#)). Similarly, [Zaller \(1992\)](#) argues that the British publicly funded BBC offers higher news quality than American private TV news.

## 4 Evidence on the Effects of Attention in Politics

This section reviews important empirical work on the impact of attention on electoral accountability. This includes research that investigates general shifts in political coverage, as well as studies that focus on the consequences of short-term fluctuations in attention to politics. We also review prominent literature on the persuasive nature of political communications and its effects on voter behavior and accountability.

### 4.1 Reaction to General Shifts in Attention

[Besley and Burgess \(2002\)](#) empirically examine the fundamental relationship between political coverage and government behavior in the context of disaster relief in India. They show that in states with higher newspaper circulation governments are more responsive to shocks in food production and offer financial support and food aid. Similarly, [Strömberg \(2004\)](#) documents that U.S. counties with better radio coverage received more aid money under the federal government’s New Deal program in the 1930s. For the U.S. as well, [Snyder and Strömberg \(2010\)](#) examine whether local press coverage in a constituency influences politicians’ behavior. They find that representatives who receive more coverage are more likely to take roll call votes against the party position, are more likely to witness before congressional hearings, and direct more federal funds to their districts. In complementary work, [Balles et al. \(2023\)](#) examine whether local TV coverage is related to politicians’ responsiveness to the preferences of their politically active constituents. U.S. representatives exposed to smaller TV markets (covering fewer districts) are found to receive more coverage in local stations’ news shows. However, TV coverage only increases alignment with constituency preferences if representatives are exposed to some minimal level of electoral competition. The evidence found thus suggests that TV coverage and political competition complement each other (and are no substitutes) when it comes to improving the representation of voter interests.

The first crucial link in the chain of effects from attention to representation is that voters absorb information from the media, becoming better informed about their politicians. Indeed,

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<sup>16</sup>In a theoretical model, [Chen and Suen \(2023\)](#) study the effect of intensified competition in the news industry with a focus on consumers’ limited attention. They find that the entry of a new news outlet reduces the quality of news produced by existing outlets. This happens due to two effects: first, the incentive for individual outlets to produce high-quality news diminishes (strategic substitution). Second, the attention of existing outlets is diverted to outlets offering news stories with a better fit, reducing the incentives of the former to enhance news quality.



this appears to be the case, as studies by [Snyder and Strömberg \(2010\)](#), [Hayes and Lawless \(2015\)](#), and [Balles et al. \(2023\)](#) demonstrate. They provide evidence that voters exposed to more coverage of their local representatives in newspapers and on TV are also more knowledgeable about them.

Are these better-informed citizens also more likely to turn out to vote, rewarding or punishing incumbent politicians' behavior through their voting decisions? Several studies document a relationship between higher levels of attention to politics and voter turnout. [Snyder and Strömberg \(2010\)](#) and [Hayes and Lawless \(2015\)](#) find that voters who receive more newspaper coverage of their local representatives are more likely to turn out to vote in the respective elections. Conversely, studying the introduction of TV in the U.S., [Gentzkow \(2006\)](#) finds that voters are less likely to turn out to vote once exposed to the new TV media. This is consistent with the observation that TV replaced other media with more political content; the entry of TV in a market coincided with a drop in the consumption of newspapers and radio and a reduction in political knowledge as measured in surveys. Similarly, [Gentzkow et al. \(2011\)](#) show that the market entry of U.S. daily newspapers is associated with increasing voter turnout levels.

A last important mechanism concerns whether voters use the information on specific politicians' actions when forming their voting decisions. In this context, [Ferraz and Finan \(2008\)](#) and [Larreguy et al. \(2020\)](#) provide evidence that this seems to be the case. In the Brazilian and Mexican contexts, they show that in municipalities where audits revealed some mayoral misconduct behavior, voters are more likely to vote them out of office. However, this punishment effect is only observed when local media are also present, disseminating information about mayoral wrongdoing.

Overall, the reviewed evidence is consistent with the premise that citizens use facts from the media about the performance of their elected officials to hold them accountable. Moreover, these results also highlight that available information on government behavior is not very useful without appropriate media providers disseminating that political information. In other words, published information about politicians' behavior seems to have no impact on their re-election probability if the media (and thus voters) do not pay attention to it. Interestingly, this role of the media in information dissemination does not seem to be easily substituted by other means of political information provision. A meta study of several randomized controlled trials in the field where subjects were exposed to voter information campaigns finds no evidence for such campaigns affecting voter behavior ([Dunning et al., 2019](#)).

## 4.2 Reaction to Short-Term Fluctuations in Attention

In addition to the general attention that politics and particular politicians receive in a specific media environment, there are short-term fluctuations in attention to policy-making that create incentives and provoke reactions from political decision-makers.

**Exploitation of anticipated attention shifts and creation of attention shifts** — Rational agents pursue their goals forward looking, and accordingly politicians and government

officials are expected to respond to likely shifts in attention in the short term. Knowing that today’s decisions will receive little attention in the future, it becomes more attractive for politicians to make controversial decisions that would likely generate negative publicity. For instance, [Durante and Zhuravskaya \(2018\)](#) show that the Israeli Defense Forces plan attacks in the Israeli-Palestinian conflict depending on major sporting or political events occurring in the U.S. Their findings are therefore consistent with the view that Israeli military leaders want to avoid unfavorable coverage in the U.S. news. In a similar vein, [Djourelouva and Durante \(2022\)](#) document that controversial executive orders signed by the U.S. president (which are likely to face opposition in Congress) are more likely to be signed in advance of predictable events that may crowd out news on executive orders.

If unfavorable coverage is already in the pipeline, one attractive way for politicians to avoid it is by intentionally provoking some form of agitation, with a focus on other unrelated issues. This is especially tempting in the age of social media, since “news” can be produced and disseminated relatively cheaply by anyone. Related to then-President Trump’s heavy use of Twitter, the work of [Lewandowsky et al. \(2020\)](#) documents that increased media coverage of the Mueller investigation (on potential Russian interference in the 2016 presidential elections in coordination with Trump) in critical media outlets is immediately followed by an increased frequency of Twitter posts by Trump on unrelated topics, after which a decline in critical coverage is observed.

An extreme example of seeking attention, not to distract from unfavorable coverage, but precisely with the intent of obtaining coverage, is in the context of international terrorist attacks. Analyzing coverage of international terror in the New York Times, [Jetter \(2017\)](#) finds that more coverage of a particular event significantly increases the likelihood of further attacks. Using U.S. natural disasters as an exogenous source of variation in terror coverage, the study identifies that one more newspaper article about an attack translates into three more casualties from terror in the following week (see also [Rohner and Frey, 2007](#) for related work).

**Ex-post response to attention shocks** — In the case of unpredicted shock events that draw attention away from politics, there is scope for political actors to make different decisions than usual. As their behavior will likely receive less attention in the news media, they are also less likely to be punished due to unfavorable coverage. In their study of U.S. government’s disaster relief payments to countries affected by natural disasters, [Eisensee and Strömberg \(2007\)](#) examine whether the granting of funds depends on whether the disaster is covered in the national TV evening news. For identification, the authors exploit the fact that other newsworthy material sometimes happens to be available at the time of natural disasters, which is why some disasters go unreported purely by chance. They find evidence that the provision of aid money is positively related to the coverage of the disaster on TV.

[Balles et al. \(2024\)](#) show that at times of high news pressure generated by exogenous shocks such as natural disasters or school shootings, politicians of the U.S. Congress are less likely to vote in line with the preferences of their active constituents when these conflict with the preferences of special interest groups contributing to the politicians’ campaigns. Their finding is thus consistent with the view that, during phases of low media attention to politics,



politicians behave opportunistically and well-organized and financially strong interest groups have an advantage in having their (contra-constituency) preferences taken into account in the political process. In a similar vein and using a case study design, [Matter and Stutzer \(2019\)](#) demonstrate that politicians' positions on two bills debated by the U.S. Congress regarding Internet copyright issues can be predicted by the campaign contributions from affected industries. However, this is only the case as long as these bills remained secondary policy issues with low public attention. Once an unexpected, orchestrated online protest by various actors elevated the bills to highly salient primary policy issues, the authors document that many politicians changed their stance. Specifically, after the issue gained national prominence through the protest movement – culminating in the temporary shutdown of the English Wikipedia – the previously observed correlation between the positions of the affected industries that contributed to the politicians' campaigns and the politicians' stances is no longer observable. The evidence found is thus consistent with the notion that public attention to the issue reduced the influence of interest groups' donations on politicians' stances on the issue. [Garz and Sörensen \(2017\)](#) use a corresponding measure of exogenous news pressure in the German context to show that politicians involved in a scandal are more likely to resign after their immunity is lifted, the more media attention their case receives.

Studying trade policy within the U.S. context, [Ponzetto et al. \(2020\)](#) find that industries experience reduced protectionist trade policies following periods of heightened public attention. Identification of attention effects is based on the occurrence of industrial accidents (which drive the salience of that industry in news media) and simultaneously happening other newsworthy events (which lead to crowding out of industrial accident news). This finding corresponds to the pattern that trade policy tends to align with efficiency criteria when an industry is in the focus of the general public (who benefits from free trade). As long as the attention is low, the interests of producers (who favor protectionist measures) are represented.

Regarding the attention devoted to macroeconomic conditions just before elections, the study by [Garz and Martin \(2021\)](#) provides meaningful insights. By examining unemployment rates across U.S. states, they document that it is not only the actual unemployment conditions for which the incumbent governor is held responsible, but also the more newsworthy ones. When the state-level rate of unemployment increases *and* crosses a round number, unemployment features disproportionately more in the news than when no milestone is crossed. Keeping the actual economic conditions statistically constant, a bad milestone thereby systematically reduces the electoral support of the incumbent governor (see also [Garz, 2023](#) for a review on the economics of attention in the context of macroeconomic news).

### 4.3 Shifts in Persuasive Content

A related strain of literature documents how shifts in media content, particularly, shifts in ideologically slanted news coverage, has significant effects on political outcomes. This literature can be seen in the light of voters being exposed to stimuli driving attention to certain ideological views or specific political candidates.

Many studies in this context focus on reactions to exposure to the conservative Fox News Channel in the U.S. For instance, [DellaVigna and Kaplan \(2007\)](#) investigate the introduction of Fox News Channel into the U.S. cable TV market and observe a positive effect on voters' likelihood to support the Republican presidential candidate, consistent with the persuasive character of ideologically biased TV news programs. [Martin and Yurukoglu \(2017\)](#) provide evidence in line with this using the Fox News Channel's position in viewers' TV programming for identification. Following the strategy of [Martin and Yurukoglu \(2017\)](#), additional studies have shown that conservative TV news not only increases the likelihood of voting for Republican candidates per se, but it also affects the political stances of representatives already in office, leading them to behave more conservatively ([Arceneaux et al., 2016](#); [Clinton and Enamorado, 2014](#)). Furthermore, conservative TV news leads to a reduced provision of public services, consistent with the conservative thought of small government ([Ash and Galletta, 2023](#)). Finally, higher viewership of Fox News Channel in a jurisdiction is estimated to have effects on the judicial system regarding criminal sentencing ([Ash and Poyker, 2023](#)). Specifically, it increases incarceration lengths, with this effect being stronger for black defendants and for drug-related crimes.

Regarding persuasive content in campaign advertising, [Spenkuch and Toniatti \(2018\)](#) and [Sides et al. \(2022\)](#) document for U.S. federal and state-level elections that more TV ads supporting particular candidates increase their respective vote shares. Identification in these studies is particularly convincing, comparing neighboring counties within the same constituency but situated in two distinct TV markets, thus exposed to differential TV advertising and thus stimuli driving attention. Regarding the effect of increased ad exposure on total voter mobilization, several studies suggest that it does not have a significant impact ([Ashworth, Clinton, et al., 2007](#); [Krasno and Green, 2008](#); [Spenkuch and Toniatti, 2018](#)). Consistently, [Huber and Arceneaux \(2007\)](#) find evidence that campaign advertising in U.S. presidential elections is effective in persuading voters but hardly so in mobilizing them.

Using an experimental design, [Galasso et al. \(2024\)](#) examine how voters react to video ads advocating against a populist referendum proposal. They compare two types of videos: one providing purely informational content aimed at debunking the populist narrative, and the other a blame video focused on undermining the credibility of populists. Their findings indicate that the latter video was more effective at capturing viewers' attention. While both videos were reducing populist votes through demobilization, the effect of the blame video was of a larger magnitude.

To sum up, evidence points to the general effectiveness of persuasive messaging in news programs and pre-election campaigning.<sup>17</sup> If a candidate gets relatively more attention in the paid content of media, he or she is more likely to win voters' support (see also [DellaVigna](#)

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<sup>17</sup>The literature further examines the conditions under which certain persuasive content ads work better or worse. In this context, recent studies have found that attack ads are often prioritized because they are more effective at capturing the attention of the news media compared to ads that merely promote the election of candidates ([Geer, 2012](#)). However, they are simultaneously accompanied by the risk of a backlash, resulting in a decline in the evaluation of the attacking candidate ([Lau et al., 2007](#)). This effect is less pronounced when an outside group finances the advertisement ([Brooks and Murov, 2012](#); [Dowling and Wichowsky, 2015](#)).

and Gentzkow, 2010 for a review of the literature on persuasion). Not surprisingly then, what specific campaigning strategies attract more attention per US-\$ or Euro spent, is the daily business of an entire industry.

Finally, campaign finance regulations might affect the balance of power that certain groups have in financing political advertising and thus might shift the attention devoted to the issues deemed important by those groups. In this context, the changing U.S. campaign finance landscape following the landmark U.S. Supreme Court decision in *Citizens United v. FEC* allowed corporations to use general treasury funds for making independent expenditures (previously forbidden at the U.S. federal level and in many U.S. states) – that is, money spent on election advertising calling for or against the election of candidates, officially uncoordinated with the involved politicians. Klumpp et al. (2016) and Abdul-Razzak et al. (2020) study the electoral consequences of this change in the rules of the competition for attention. In both analyses, they find that people are more likely to vote for Republican candidates. Furthermore, Balles (2024) documents that, as a result of the ruling, people are exposed to more TV campaign ads supporting Republican candidates and more negative campaigning, ultimately reducing voter turnout.

## 5 Attention in the Context of Digitization and the Internet

Advancements in information technology have changed the ways politically relevant information can be and is disseminated to consumers. This section discusses aspects on the political economics of attention within the realm of such technologies (see Zhuravskaya et al., 2020 and Campante et al., 2023 for related reviews on the political effects of digital media). Specifically, we first examine evidence regarding the general effects on voter turnout, mobilization, and accountability, which all can be seen in light of attention and information access. Next, we discuss the literature on algorithmic content selection and the associated concerns regarding ideological segregation and polarization. Finally, we explore the increasing role of targeting strategies in political communications in the new digital media age.

### 5.1 General Effects on Voter Behavior

In line with the idea that the Internet substitutes other media sources with more political information content, evidence suggests that the introduction of broadband Internet has resulted in reduced turnout levels in several countries (Falck et al., 2014 for Germany, Campante et al., 2018 for Italy, Gavazza et al., 2019 for the UK). However, while online news outlets generally appear to provide less political information than traditional sources like print newspapers, the Internet can serve as an essential medium for delivering political information independent of government control. This is particularly relevant in countries where traditional media are heavily censored. Guriev et al. (2021) document that the rise of 3G mobile Internet networks led to reduced government approval ratings, primarily in countries with censored traditional media. This evidence is consistent with the idea that in these countries, access to 3G mobile Internet exposes people to cases of corruption, like those revealed by the Panama Papers,

helping them hold politicians accountable. In Europe, the authors document that increased mobile Internet availability has primarily benefited populist politicians.

New digital media provide previously underrepresented political actors with opportunities to engage with voters through online ads, websites, and social media platforms. This democratization of access potentially allows for more inclusive participation in the political process. For voters and interest groups, social media enable efficient mobilization, such as grassroots lobbying campaigns, which have recently gained importance in areas such as environmental activism. Used in this way, information technology can thus bring rather specific political topics to the attention of rather specific groups in society. Moreover, studies have shown the importance of social media for organizing and succeeding in protest movements, particularly in less democratic countries with restricted press freedom (Enikolopov et al., 2020; Qin et al., 2021; Steinert-Threlkeld et al., 2015).

A significant concern regarding digital media is the potential for informational segregation, social divisions, and political polarization – often discussed in the context of ‘filter bubbles’ or ‘echo chambers’ (Sunstein, 2001, DiMaggio et al., 2001, Pariser, 2011). A central aspect of these concerns is how information technology, particularly the Web and information intermediaries such as search engines and social media platforms can steer people’s attention to specific content.

One set of studies investigates the question of whether Internet usage is generally linked to segregation and political polarization. Interestingly, early work did not find much evidence for such a link. Gentzkow and Shapiro (2011) document that segregation in online news consumption is low in absolute terms (while still higher than in most offline news consumption). And Boxell et al. (2017) show that age groups who are the least likely to use the Internet and social media had the largest increase in political polarization since the dawn of the Internet. In addition, they document that many measures for political polarization in the U.S. have shown the same speed of growth for the decade before and the decade after Internet access became broadly available. Yet, later results, particularly focusing on widespread broadband access draw a different picture. Indeed, Lelkes et al. (2017) document that access to broadband Internet (identified through changes in access due to U.S. state-level regulations) increases the consumption of partisan media and, importantly, affects partisan hostility. These results suggest that shifts in attention to partisan media induced by broadband accessibility might indeed fuel polarization. Consistently, based on web browsing data and survey experiments following the 2016 U.S. presidential elections, Peterson et al. (2021) observations suggest a partisan divide in online information search, with partisans preferring news sources primarily read by their like-minded peers.

## 5.2 Algorithmic Content Selection

A central aspect of information dissemination and the competition for people’s attention online are machine learning algorithms employed by large web platforms such as social media platforms, e-commerce sites, and search engines to personalize exposure and determine which content is prominently displayed, thereby influencing user attention.

Most contributions in this literature focus specifically on social media platforms. [Levy \(2021\)](#) demonstrate that Facebook’s algorithm tends to reduce exposure to counter-attitudinal content, potentially contributing to increased polarization. Consistently, [González-Bailón et al. \(2023\)](#) and [Barberá et al. \(2023\)](#) find that Facebook’s algorithm is associated with decreased exposure to moderate and ideologically mixed content, reinforcing ideological segregation. Additionally, supporting the idea that social media use increases polarization, [Allcott et al. \(2020\)](#) conducted a randomized experiment showing that deactivating Facebook for four weeks before the 2018 U.S. midterm elections reduced political polarization among users. [Di Tella et al. \(2021\)](#) conducted a field experiment on Twitter (now X) during the 2019 Argentine presidential debate, involving two treatments for individuals who were both inside and outside echo chambers before the experiment. In the first treatment, participants were exposed to counter-attitudinal tweets. In the second treatment, users were asked to voluntarily stop their Twitter activity. The main finding indicates that individuals who initially engaged within echo chambers tended to become more polarized when exposed to counter-attitudinal tweets or when ceasing their social media activity. In contrast, the authors document no significant effects (or even polarization-reducing effects) for the two treatments among individuals who were outside the echo chambers before the treatments.

Related contributions focus on the role of personalization on large search engines, particularly, Google. [Epstein and Robertson \(2015\)](#) demonstrate in an experimental study that biased search rankings can influence the voting preferences of undecided voters. Conceptually, personalization of search results in the political domain might thus lead to filter bubbles. However, there is so far no conclusive evidence that search engines bend search results towards the (estimated) political preferences of their users (as part of the general personalization of search results). Based on 150 synthetic web users (“bots”) configured with either Republican, Democratic, or non-partisan preferences, and active before, during, and in the aftermath of the U.S. 2020 election, [Matter and Hodler \(2024\)](#) find no evidence for systematic ideological leaning of search results in line with the users’ revealed partisan preferences. However, they document systematically more liberal search results being shown to users located in more liberal cities and vice versa for users located in more conservative cities. Similarly, [Robertson et al. \(2023\)](#) find that, based on users’ exposure to search results, strong partisans encounter similar rates of partisan news as less partisan individuals. This suggests that Google’s search engine and thus the unavoidable direction of attention does not significantly contribute to ideological segregation. Instead, engagement with partisan news appears to be rather driven by users’ own choices than by Google’s algorithmic selection.

### 5.3 Targeting Strategies

In addition to algorithms steering consumers’ attention to specific news/pieces of information, political actors utilize new digital technologies to disseminate messages within political campaigns. A significant advantage of digital media is its highly effective use of targeting strategies, directing specific content or advertisements to particular demographic groups based on their interests, behaviors, and other criteria. This is further leveraged with GenAI ([Sim-](#)

chon et al., 2024). While these strategies enable cost-effective political communications, the collection of potentially sensitive personal data remains a serious concern – illustrated, for example, by the Cambridge Analytica scandal, where involvement in the 2016 U.S. presidential election allegedly helped Donald Trump deliver personalized political messages to specific voter segments. Another issue involves the presence of bots on social media platforms, that is, automated software programs that perform tasks such as posting content, liking and sharing posts, following users, and engaging in conversations. Investigating social media manipulation in the 2020 U.S. presidential election, Ferrara et al. (2020) document the significant role of bots and coordinated disinformation campaigns in distorting political narratives and intensifying echo chambers.

Overall, the individual targeting of stimuli to attract or steer attention is currently being raised to a much more sophisticated level.

## 6 Identification of Attention Effects

This section outlines the diverse empirical methodologies employed in recent literature (or the studies cited above) to identify the effects of attention on political outcomes.

**Distraction by concurrent events** — A prominent empirical measure of the availability of newsworthy material in the U.S., capturing potential crowding out effects, is the *daily news pressure* measure developed by Eisensee and Strömberg (2007). It captures the length of the first three segments of the evening news across the top U.S. TV networks ABC, CBS, CNN and NBC. If more time is spent on these segments, less time is available for other stories, for example, political news. This measure has been employed, for example, in studies by Durante and Zhuravskaya (2018) and Djourelova and Durante (2022).<sup>18</sup> Other studies directly leverage competing events that crowd out political news coverage to estimate the effects of varying levels of attention on political outcomes. For instance, Balles et al. (2024) utilize natural disasters, mass shootings, and terror attacks to gauge how reduced short-term attention to politics affects politicians’ responsiveness to voter preferences.

**Geographical match between political and media markets** — Another approach exploits variations in attention to politics across regions by leveraging the geographical overlap between media markets and electoral districts, often referred to as *congruence*. Pioneered by Snyder and Strömberg (2010), this approach suggests that some districts receive increased media coverage because local media outlets primarily serve residents within those districts. That is, news about local representatives or political issues relevant to the district becomes highly pertinent to all readers within the media outlet’s coverage area, creating strong incentives for comprehensive coverage. Building on this concept, Balles et al. (2023) examine the effects of higher congruence between U.S. congressional districts and local TV markets on political

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<sup>18</sup>The news pressure measure covering the years 1968-2022 is accessible through David Strömberg’s GitHub repository (<https://davidstro.github.io/DataArchive>).



accountability, while [Lim et al., 2015](#) apply similar methods to investigate how attention to judicial cases influences sentencing decisions by U.S. judges.<sup>19</sup>

**Technological developments and conditions** — Several studies utilize technological advancements or conditions to identify effects of varying attention to politics and exposure to ideologically biased news. Examples include the expansion of radio across U.S. counties ([Strömberg, 2004](#)), the introduction of broadcast TV across the U.S. ([Gentzkow, 2006](#)), the availability of Spanish-language local TV ([Oberholzer-Gee and Waldfogel, 2009](#)), exposure to the conservative Fox News Channel (explored in [DellaVigna and Kaplan, 2007](#) and [Martin and Yurukoglu, 2017](#) through cable TV roll-out, and in [Ash and Galletta, 2023](#) and [Ash and Poyker, 2023](#) by exploiting changes in Fox News Channel positioning), the roll-out of broadband Internet ([Falck et al., 2014](#); [Gavazza et al., 2019](#); [Campante et al., 2018](#)), and the expansion of 3G mobile internet ([Guriev et al., 2021](#)).

**Media market regulations** — Since assignment of counties to local TV markets in the U.S. (so-called ‘Designated Market Areas’) and thus exposure to content are governed by regulatory frameworks set by the Federal Communications Commission (FCC), researchers can analyze effects on stimuli steering attention of voters residing in different TV markets but who are otherwise comparable. The approach involves comparing neighboring counties within the same state or congressional district but located in two distinct TV markets, thereby experiencing differential TV advertising. This experimental design is, for example, utilized by [Spenkuch and Toniatti \(2018\)](#) to estimate the impact of campaign ad exposure (see also [Sides et al., 2022](#)).

**Survey and field experiments** — Experimental designs offer another avenue to identify effects in the political economy of attention. By randomizing the exposure of subjects to specific information and/or by modifying in what format politically relevant information is presented to users, this branch of studies most directly extends our understanding of causal links between attention to information and people’s decisions. For example, [Brooks and Murov \(2012\)](#) and [Dowling and Wichowsky \(2015\)](#) manipulate ad characteristics to evaluate how people’s attention to different financial sponsors of ads affects ad effectiveness. Similarly, [Ansolabehere et al. \(1994\)](#) exposes people to negative ads and evaluates their impact on turnout decisions.

Examples for field experiments include [Gerber et al. \(2009\)](#) who evaluate the effect of increased attention to newspaper exposure before the 2005 Virginia gubernatorial election on voter behavior, or [Galasso et al. \(2024\)](#) who expose people to anti-populist negative ads before a referendum initiated by a populist party. Regarding differential attention exposure in the context of social media, [Levy \(2021\)](#) and [Allcott et al. \(2020\)](#), for example, conducted field experiments with users on Facebook, offering subscriptions to news outlets of particular ideologies and deactivating users’ accounts before elections. The study conducted by [Di Tella](#)

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<sup>19</sup>They find that attention through newspaper coverage increases sentence length for violent crimes but only for non-partisan elected judges and not for partisan elected and appointed judges.

et al. (2021) implemented a field experiment involving Twitter users in Argentina, exposing individuals who were already inside or outside echo chambers to counter-attitudinal tweets.

## 7 Concluding Remarks and Outlook

A key prerequisite for the functioning of representative democracy is the availability of information about politics. However, for such information to become relevant for politicians' behavior and accountability, voters must pay attention to it. In this review, we summarized the economics of attention in the context of politics, highlighting the economic problems that arise when people do not have full control over how they allocate their attention. Additionally, we examined the conditions media providers face when deciding which information to highlight or ignore. This, in turn, outlines a range of strategies and behaviors political actors can use to pursue their private interests, providing them with leeway to make decisions that do not represent their voters' interests, with voters unable to hold them accountable.

Overall, our review offers several key aspects suitable for further reflection on the political economy of attention. First, since the availability of information is a necessary but not sufficient condition for a well-informed electorate, it is crucial to consider how the institutional setting of media markets influences both the dissemination of information and the attention given to it. Specifically, we need to rethink the idea that increasing competition between more and more media outlets is always beneficial. This long-held belief does not seem applicable in contexts where the media decide about taking up political information and investing in news quality. When in competition to attract news consumers, an additional competitor makes it less attractive to invest in quality as fewer additional customers can be won at the margin. While overall there might be more information provided, the individual consumer might get lost in the information overload, in favor of sensational or entertaining news. An interesting direction for future research is to study the conditions under which important political information is diluted or gets lost across distinct news platforms and segments of the market.

Second, the competition for attention has significantly changed in the era of digital and social media technology and their use in various aspects of life. The research reviewed suggests that social media may contribute to the political polarization of the electorate with the attention on information reinforcing beliefs. However, what are the consequences of a polarized voter environment on accountability? On the one hand, polarized individuals might be more likely to engage in politics and hold their elected representatives accountable for their actions. On the other hand, in a highly polarized environment, voters may not punish incumbents for misbehavior because high out-group dislike prevents them from doing so.

Third, in the realm of digital media campaigns, the lack of robust disclosure rules often allows for the influx of dark money (i.e., money from hidden donors) into politics. This opacity in digital media campaigns hampers the ability of voters to fully understand the origins and intentions behind the messages they encounter and poses a significant risk to the democratic process itself. When donors and creators can remain hidden, it becomes challenging



to hold them accountable for their actions or discern potential conflicts of interest. Such an environment allows for the spread of information with obscured motivations, undermining public trust in political communication and decision-making. In short, attracting attention with provocative media content is much more attractive for sponsors if they can remain unknown.

Fourth, it is not well understood how the public administration plays the attention game. Does public administration communication compete with other information for attention, or is communication limited in order to be heard when something important needs to be disseminated? To what extent is bad news about public administration performance drowned in a flood of announcements?

Fifth, what are the options for citizens and voters to react to the attention strategies of politicians or the media? So far, the scientific literature attributes them a comparatively passive role. How aware are citizens of biases due to the competition for attention? How do their reactions affect media reporting in equilibrium?

Finally, difficult positivist and normative questions concern the role of state media and news media under public law in an attention economy. Is agenda choice the means to coordinate attention in a polity so that attention is not diverted to side issues? But who decides what side issues are? What is an appropriate level of attention? The attention devoted to single issues helps to address them. However, there might also be too much focus on a subject and an overreaction in the political process (as sometimes observed after a scandal). The challenge for institutional design is to organize state media so that they inform in a way that counteracts the hyper-salience of single issues, contributing instead to a well-functioning democracy that continuously works on challenges and societal problems to improve people's lives.

## References

- Abdul-Razzak, N., Prato, C., & Wolton, S. (2020). After Citizens United: How outside spending shapes American democracy. *Electoral Studies*, 67, 102190.
- Abernathy, P. M. (2018). *The Expanding News Desert*. University of North Carolina Press.
- Abramowitz, A. I., & Webster, S. (2016). The rise of negative partisanship and the nationalization of U.S. elections in the 21st century. *Electoral Studies*, 41, 12–22.
- Allcott, H., Braghieri, L., Eichmeyer, S., & Gentzkow, M. (2020). The welfare effects of social media. *American Economic Review*, 110(3), 629–676.
- Anderson, S. P., & Jullien, B. (2015). The advertising-financed business model in two-sided media markets. In S. P. Anderson, J. Waldfogel, & D. Strömberg (Eds.), *Handbook of Media Economics* (pp. 41–90, Vol. 1). North-Holland.
- Ansolabehere, S. D., Iyengar, S., Simon, A., & Valentino, N. (1994). Does attack advertising demobilize the electorate? *American Political Science Review*, 88(4), 829–838.
- Arceneaux, K., Johnson, M., Lindstädt, R., & Vander Wielen, R. J. (2016). The influence of news media on political elites: Investigating strategic responsiveness in Congress. *American Journal of Political Science*, 60(1), 5–29.

- Ash, E., & Galletta, S. (2023). How cable news reshaped local government. *American Economic Journal: Applied Economics*, 15(4), 292–320.
- Ash, E., & Poyker, M. (2023). Conservative news media and criminal justice: Evidence from exposure to the Fox News Channel. *Economic Journal*, 134(660), 1331–1355.
- Ashworth, S., Clinton, J. D., et al. (2007). Does advertising exposure affect turnout? *Quarterly Journal of Political Science*, 2(1), 27–41.
- Balles, P. (2024). The impact of Citizens United: How the removal of independent expenditure bans shaped U.S. gubernatorial elections. WWZ Working Paper 2024/08, University of Basel, Basel.
- Balles, P., Matter, U., & Stutzer, A. (2023). Television market size and political accountability in the US House of Representatives. *European Journal of Political Economy*, 80, 102459.
- Balles, P., Matter, U., & Stutzer, A. (2024). Special interest groups versus voters and the political economics of attention. *The Economic Journal*, 134(662), 2290–2320.
- Barberá, P., Chen, A., Allcott, H., Brown, T., Crespo-Tenorio, A., Dimmery, D., Freelon, D., Gentzkow, M., González-Bailón, S., Guess, A., et al. (2023). Like-minded sources on Facebook are prevalent but not polarizing. *Nature*, 620(7972).
- Baron, D. P. (1994). Electoral competition with informed and uninformed voters. *American Political Science Review*, 88(1), 33–47.
- Bawden, D., & Robinson, L. (2009). The dark side of information: Overload, anxiety and other paradoxes and pathologies. *Journal of Information Science*, 35(2), 180–191.
- Belguise, M. (2024). Red herrings: A model of attention-hijacking by politicians. CRETA Discussion Paper Series No. 86, Warwick.
- Bernays, E. L. (1928). *Propaganda*. H. Liveright.
- Besley, T., & Burgess, R. (2002). The political economy of government responsiveness: Theory and evidence from India. *Quarterly Journal of Economics*, 117(4), 1415–1451.
- Besley, T., Burgess, R., & Prat, A. (2002). Mass media and political accountability. In R. Islam, S. Djankov, & C. McLeish (Eds.), *The Right to Tell: The Role of Mass Media in Economic Development*. World Bank.
- Besley, T., & Prat, A. (2006). Handcuffs for the grabbing hand? Media capture and government accountability. *American Economic Review*, 96(3), 720–736.
- Bordalo, P., Gennaioli, N., & Shleifer, A. (2022). Salience. *Annual Review of Economics*, 14, 521–544.
- Boxell, L., Gentzkow, M., & Shapiro, J. M. (2017). Greater internet use is not associated with faster growth in political polarization among US demographic groups. *Proceedings of the National Academy of Sciences*, 114(40), 10612–10617.
- Brooks, D. J., & Murov, M. (2012). Assessing accountability in a post-Citizens United era: The effects of attack ad sponsorship by unknown independent groups. *American Politics Research*, 40(3), 383–418.
- Brunetti, A., & Weder, B. (2003). A free press is bad news for corruption. *Journal of Public Economics*, 87(7-8), 1801–1824.

- Campante, F., Durante, R., & Sobbrío, F. (2018). Politics 2.0: The multifaceted effect of broadband Internet on political participation. *Journal of the European Economic Association*, 16(4), 1094–1136.
- Campante, F., Durante, R., & Tesei, A. (Eds.). (2023). *The Political Economy of Social Media*. CEPR Press.
- Caplin, A. (2016). Measuring and modeling attention. *Annual Review of Economics*, 8, 379–403.
- Chen, H., & Suen, W. (2023). Competition for attention and news quality. *American Economic Journal: Microeconomics*, 15(3), 1–32.
- Chetty, R., Looney, A., & Kroft, K. (2009). Salience and taxation: Theory and evidence. *American Economic Review*, 99(4), 1145–1177.
- Clinton, J. D., & Enamorado, T. (2014). The national news media’s effect on Congress: How Fox News affected elites in Congress. *Journal of Politics*, 76(4), 928–943.
- Congleton, R. D. (2004). The median voter model. In C. K. Rowley & F. Schneider (Eds.), *The Encyclopedia of Public Choice* (pp. 702–712). Kluwer Academic.
- Corbetta, M., & Shulman, G. L. (2002). Control of goal-directed and stimulus-driven attention in the brain. *Nature Reviews Neuroscience*, 3(3), 201–215.
- Cordis, A. S., & Warren, P. L. (2014). Sunshine as disinfectant: The effect of state Freedom of Information Act laws on public corruption. *Journal of Public Economics*, 115, 18–36.
- Culpepper, P. D. (2010). *Quiet Politics and Business Power: Corporate Control in Europe and Japan*. Cambridge University Press.
- DellaVigna, S., & Gentzkow, M. (2010). Persuasion: Empirical evidence. *Annual Review of Economics*, 2(1), 643–669.
- DellaVigna, S., & Kaplan, E. (2007). The Fox News effect: Media bias and voting. *Quarterly Journal of Economics*, 122(3), 1187–1234.
- Di Tella, R., Gálvez, R. H., & Schargrodsky, E. (2021). Does social media cause polarization? Evidence from access to Twitter echo chambers during the 2019 Argentine presidential debate. National Bureau of Economic Research Working Paper 29458.
- DiMaggio, P., Hargittai, E., Neuman, W. R., & Robinson, J. P. (2001). Social implications of the Internet. *Annual Review of Sociology*, 27, 307–336.
- Djankov, S., La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2010). Disclosure by politicians. *American Economic Journal: Applied Economics*, 2(2), 179–209.
- Djankov, S., McLiesh, C., Nenova, T., & Shleifer, A. (2003). Who owns the media? *Journal of Law and Economics*, 46(2), 341–382.
- Djourelouva, M., & Durante, R. (2022). Media attention and strategic timing in politics: Evidence from US presidential executive orders. *American Journal of Political Science*, 66(4), 813–834.
- Djourelouva, M., Durante, R., & Martin, G. J. (2024). The impact of online competition on local newspapers: Evidence from the introduction of Craigslist. *Review of Economic Studies*, rdae049.

- Dowling, C. M., & Wichowsky, A. (2015). Attacks without consequence? Candidates, parties, groups, and the changing face of negative advertising. *American Journal of Political Science*, 59(1), 19–36.
- Downs, A. (1957). *An Economic Theory of Democracy*. Harper & Row.
- Dunning, T., Grossman, G., Humphreys, M., Hyde, S. D., McIntosh, C., Nellis, G., Adida, C. L., Arias, E., Bicalho, C., Boas, T. C., Buntaine, M. T., Chauchard, S., Chowdhury, A., Gottlieb, J., Hidalgo, F. D., Holmlund, M., Jablonski, R., Kramon, E., Larreguy, H., ... Sircar, N. (2019). Voter information campaigns and political accountability: Cumulative findings from a preregistered meta-analysis of coordinated trials. *Science Advances*, 5(7), eaaw2612.
- Durante, R., & Zhuravskaya, E. (2018). Attack when the world is not watching? US news and the Israeli-Palestinian conflict. *Journal of Political Economy*, 126(3), 1085–1133.
- Eisensee, T., & Strömberg, D. (2007). News droughts, news floods, and US disaster relief. *Quarterly Journal of Economics*, 122(2), 693–728.
- Enikolopov, R., Makarin, A., & Petrova, M. (2020). Social media and protest participation: Evidence from Russia. *Econometrica*, 88(4), 1479–1514.
- Eppler, M. J. (2015). Information quality and information overload: The promises and perils of the information age. In L. Cantoni & J. A. Danowski (Eds.), *Communication and Technology* (pp. 215–232). De Gruyter.
- Epstein, R., & Robertson, R. E. (2015). The search engine manipulation effect (SEME) and its possible impact on the outcomes of elections. *Proceedings of the National Academy of Sciences*, 112(33), E4512–E4521.
- Esser, F., de Vreese, C. H., Strömbäck, J., van Aelst, P., Aalberg, T., Staney, J., Lengauer, G., Berganza, R., Legnante, G., Papathanassopoulos, S., et al. (2012). Political information opportunities in Europe: A longitudinal and comparative study of thirteen television systems. *International Journal of Press/Politics*, 17(3), 247–274.
- European Parliament. (2023). Eurobarometer Media & News Survey 2023. Online available at <https://europa.eu/eurobarometer/surveys/detail/3153> (accessed July 11, 2024).
- Falck, O., Gold, R., & Heblich, S. (2014). E-lelections: Voting behavior and the Internet. *American Economic Review*, 104(7), 2238–2265.
- Ferrara, E., Chang, H., Chen, E., Muric, G., & Patel, J. (2020). Characterizing social media manipulation in the 2020 US presidential election. *First Monday*, 25(11).
- Ferraz, C., & Finan, F. (2008). Exposing corrupt politicians: The effects of Brazil’s publicly released audits on electoral outcomes. *Quarterly Journal of Economics*, 123(2), 703–745.
- Festré, A., & Garrouste, P. (2015). The ‘economics of attention’: A history of economic thought perspective. *Economia. History, Methodology, Philosophy*, 5(1), 3–36.
- Frey, B., & Lau, L. J. (1968). Towards a mathematical model of government behaviour. *Zeitschrift für Nationalökonomie*, 28(3/4), 355–380.

- Gabaix, X. (2019). Behavioral inattention. In B. D. Bernheim, S. DellaVigna, & D. Laibson (Eds.), *Handbook of Behavioral Economics - Foundations and Applications 2* (pp. 261–343, Vol. 2). North-Holland.
- Galasso, V., Morelli, M., Nannicini, T., & Stanig, P. (2024). The populist dynamic: Experimental evidence on the effects of countering populism: CESifo Working Paper No. 10949. Munich.
- Garz, M. (2023). Macroeconomic news: A literature survey and methodological guidelines. Available at SSRN 4643970.
- Garz, M., & Martin, G. J. (2021). Media influence on vote choices: Unemployment news and incumbents' electoral prospects. *American Journal of Political Science*, 65(2), 278–293.
- Garz, M., & Sørensen, J. (2017). Politicians under investigation: The news media's effect on the likelihood of resignation. *Journal of Public Economics*, 153, 82–91.
- Gavazza, A., Nardotto, M., & Valletti, T. (2019). Internet and politics: Evidence from U.K. local elections and local government policies. *Review of Economic Studies*, 86(5), 2092–2135.
- Geer, J. G. (2012). The news media and the rise of negativity in presidential campaigns. *PS: Political Science & Politics*, 45(3), 422–427.
- Gentzkow, M. (2006). Television and voter turnout. *Quarterly Journal of Economics*, 121(3), 931–972.
- Gentzkow, M., & Shapiro, J. M. (2008). Competition and truth in the market for news. *Journal of Economic Perspectives*, 22(2), 133–154.
- Gentzkow, M., & Shapiro, J. M. (2011). Ideological segregation online and offline. *Quarterly Journal of Economics*, 126(4), 1799–1839.
- Gentzkow, M., Shapiro, J. M., & Sinkinson, M. (2011). The effect of newspaper entry and exit on electoral politics. *American Economic Review*, 101(7), 2980–3018.
- Gentzkow, M., Shapiro, J. M., & Stone, D. F. (2015). Media bias in the marketplace: Theory. In S. P. Anderson, J. Waldfogel, & D. Strömberg (Eds.), *Handbook of Media Economics* (pp. 623–645, Vol. 1). North-Holland.
- George, L. M., & Waldfogel, J. (2006). The New York Times and the market for local newspapers. *American Economic Review*, 96(1), 435–447.
- Gerber, A. S., Karlan, D., & Bergan, D. (2009). Does the media matter? A field experiment measuring the effect of newspapers on voting behavior and political opinions. *American Economic Journal: Applied Economics*, 1(2), 35–52.
- Gerstlé, J., & Nai, A. (2019). Negativity, emotionality and populist rhetoric in election campaigns worldwide, and their effects on media attention and electoral success. *European Journal of Communication*, 34(4), 410–444.
- Gilman, H. R. (2017). Civic Tech for urban collaborative governance. *PS: Political Science & Politics*, 50(3), 744–750.
- González-Bailón, S., Lazer, D., Barberá, P., Zhang, M., Allcott, H., Brown, T., Crespo-Tenorio, A., Freelon, D., Gentzkow, M., Guess, A. M., et al. (2023). Asymmetric ideological segregation in exposure to political news on Facebook. *Science*, 381(6656), 392–398.

- Grossman, G. M., & Helpman, E. (2001). *Special Interest Politics*. MIT Press.
- Guriev, S., Melnikov, N., & Zhuravskaya, E. (2021). 3G Internet and confidence in government. *Quarterly Journal of Economics*, 136(4), 2533–2613.
- Hayes, D., & Lawless, J. L. (2015). As local news goes, so goes citizen engagement: Media, knowledge, and participation in US House elections. *Journal of Politics*, 77(2), 447–462.
- Hefti, A., & Heinke, S. (2015). On the economics of superabundant information and scarce attention. *Economia. History, Methodology, Philosophy*, (5-1), 37–76.
- Hendricks, V. F., & Vestergaard, M. (2019). *Reality Lost: Markets of Attention, Misinformation and Manipulation*. Springer Nature.
- Hills, T. T. (2019). The dark side of information proliferation. *Perspectives on Psychological Science*, 14(3), 323–330.
- Hopkins, D. J. (2018). *The Increasingly United States: How and Why American Political Behavior Nationalized*. University of Chicago Press.
- Hotelling, H. (1938). The general welfare in relation to problems of taxation and of railway and utility rates. *Econometrica*, 6(3), 242–269.
- Huber, G. A., & Arceneaux, K. (2007). Identifying the persuasive effects of presidential advertising. *American Journal of Political Science*, 51(4), 957–977.
- Iyengar, S., & Hahn, K. S. (2009). Red media, blue media: Evidence of ideological selectivity in media use. *Journal of Communication*, 59(1), 19–39.
- Jetter, M. (2017). The effect of media attention on terrorism. *Journal of Public Economics*, 153, 32–48.
- Kau, J. B., Keenan, D., & Rubin, P. H. (1982). A general equilibrium model of congressional voting. *Quarterly Journal of Economics*, 97(2), 271–293.
- Klump, T., Mialon, H. M., & Williams, M. A. (2016). The business of American democracy: Citizens United, independent spending, and elections. *Journal of Law and Economics*, 59(1), 1–43.
- Krasno, J. S., & Green, D. P. (2008). Do televised presidential ads increase voter turnout? Evidence from a natural experiment. *Journal of Politics*, 70(1), 245–261.
- Larreguy, H., Marshall, J., & Snyder Jr, J. M. (2020). Publicising malfeasance: When the local media structure facilitates electoral accountability in Mexico. *Economic Journal*, 130(631), 2291–2327.
- Lau, R. R., Sigelman, L., & Rovner, I. B. (2007). The effects of negative political campaigns: A meta-analytic reassessment. *Journal of Politics*, 69(4), 1176–1209.
- Leeson, P. T. (2008). Media freedom, political knowledge, and participation. *Journal of Economic Perspectives*, 22(2), 155–169.
- Lelkes, Y., Sood, G., & Iyengar, S. (2017). The hostile audience: The effect of access to broadband internet on partisan affect. *American Journal of Political Science*, 61(1), 5–20.
- Levendusky, M. S. (2022). How does local TV news change viewers’ attitudes? The case of Sinclair Broadcasting. *Political Communication*, 39(1), 23–38.

- Levitt, S. D. (1996). How do senators vote? Disentangling the role of voter preferences, party affiliation, and senator ideology. *American Economic Review*, 86(3), 425–441.
- Levy, R. (2021). Social media, news consumption, and polarization: Evidence from a field experiment. *American Economic Review*, 111(3), 831–870.
- Lewandowsky, S., Jetter, M., & Ecker, U. K. H. (2020). Using the president’s tweets to understand political diversion in the age of social media. *Nature Communications*, 11(1), 5764.
- Lim, C. S. H., Snyder, James M., Jr., & Strömberg, D. (2015). The judge, the politician, and the press: Newspaper coverage and criminal sentencing across electoral systems. *American Economic Journal: Applied Economics*, 7(4), 103–135.
- Loewenstein, G., & Wojtowicz, Z. (2023). The economics of attention. CESifo Working Paper No. 10712. Munich.
- Maćkowiak, B., Matějka, F., & Wiederholt, M. (2023). Rational inattention: A review. *Journal of Economic Literature*, 61(1), 226–273.
- Malin, J., & Lubienski, C. (2022). Information pollution in an age of populist politics. *Education Policy Analysis Archives*, 30, 94.
- Martin, G. J., & McCrain, J. (2019). Local news and national politics. *American Political Science Review*, 113(2), 372–384.
- Martin, G. J., & Yurukoglu, A. (2017). Bias in cable news: Persuasion and polarization. *American Economic Review*, 107(9), 2565–2599.
- Matějka, F., & Tabellini, G. (2021). Electoral competition with rationally inattentive voters. *Journal of the European Economic Association*, 19(3), 1899–1935.
- Matter, U., & Hodler, R. (2024). Web search personalization during the US 2020 election. CEPR Discussion Paper No. 18908.
- Matter, U., & Stutzer, A. (2019). Does public attention reduce the influence of moneyed interests? Policy positions on SOPA/PIPA before and after the Internet blackout. *Economic Inquiry*, 57(4), 1879–1895.
- McCombs, M. E., & Shaw, D. L. (1972). The agenda-setting function of mass media. *Public Opinion Quarterly*, 36(2), 176–187.
- Meel, P., & Vishwakarma, D. K. (2020). Fake news, rumor, information pollution in social media and web: A contemporary survey of state-of-the-arts, challenges and opportunities. *Expert Systems with Applications*, 153, 112986.
- Miho, A. (2023). Small screen, big echo? Political persuasion of local TV news: evidence from Sinclair. Mimeo, Paris School of Economics.
- Morrison, W., & Taubinsky, D. (2023). Rules of thumb and attention elasticities: Evidence from under- and overreaction to taxes. *Review of Economics and Statistics*, 105(5), 1110–1127.
- Moskowitz, D. J. (2021). Local news, information, and the nationalization of U.S. elections. *American Political Science Review*, 115(1), 114–129.
- Mueller, D. C. (2003). *Public Choice III*. Cambridge University Press.

- Nannestad, P., & Paldam, M. (1994). The VP-function: A survey of the literature on vote and popularity functions after 25 years. *Public Choice*, 79(3), 213–245.
- Nishal, S., & Diakopoulos, N. (2024). Envisioning the applications and implications of generative AI for news media. *CoRR*, abs/2402.18835.
- Nordhaus, W. D. (1975). The political business cycle. *Review of Economic Studies*, 42(2), 169–190.
- Oberholzer-Gee, F., & Waldfogel, J. (2009). Media markets and localism: Does local news en Espanol boost Hispanic voter turnout? *American Economic Review*, 99(5), 2120–2128.
- Pariser, E. (2011). *The Filter Bubble: What the Internet Is Hiding from You*. Penguin UK.
- Persson, T., & Tabellini, G. (2002). *Political Economics: Explaining Economic Policy*. MIT Press.
- Peterson, E., Goel, S., & Iyengar, S. (2021). Partisan selective exposure in online news consumption: Evidence from the 2016 presidential campaign. *Political Science Research and Methods*, 9(2), 242–258.
- Pew Research Center. (2023). News platform fact sheet. Online available at <https://www.pewresearch.org/journalism/fact-sheet/news-platform-fact-sheet> (accessed July 11, 2024).
- Ponzetto, G. A. M., Petrova, M., & Enikolopov, R. (2020). The Dracula effect: Voter information and trade policy. Mimeo, Department of Economics and Business, Universitat Pompeu Fabra.
- Prat, A., & Strömberg, D. (2013). The political economy of mass media. In D. Acemoglu, M. Arellano, & E. Dekel (Eds.), *Advances in Economics and Econometrics*. Cambridge University Press.
- Prendergast, C. (2003). The limits of bureaucratic efficiency. *Journal of Political Economy*, 111(5), 929–958.
- Prendergast, C. (2016). Bureaucratic responses. *Journal of Labor Economics*, 34(S2), S183–S215.
- Puglisi, R., & Snyder, J. M. (2015). Empirical studies of media bias. In S. P. Anderson, J. Waldfogel, & D. Strömberg (Eds.), *Handbook of Media Economics* (pp. 647–667, Vol. 1). North-Holland.
- Qin, B., Strömberg, D., & Wu, Y. (2021). Social media and collective action in China. CEPR Discussion Paper No. 16731.
- Robertson, R. E., Green, J., Ruck, D. J., Ognyanova, K., Wilson, C., & Lazer, D. (2023). Users choose to engage with more partisan news than they are exposed to on Google Search. *Nature*, 618(7964), 342–348.
- Rohner, D., & Frey, B. S. (2007). Blood and ink! The common-interest-game between terrorists and the media. *Public Choice*, 133(1), 129–145.
- Sanandaji, T., & Wallace, B. (2011). Fiscal illusion and fiscal obfuscation: Tax perception in Sweden. *Independent Review*, 16(2), 237–246.
- Schaffner, B. F., & Sellers, P. J. (2003). The structural determinants of local congressional news coverage. *Political Communication*, 20(1), 41–57.



- Schram, M. (1995). *Speaking Freely: Former Members of Congress Talk About Money in Politics*. Center for Responsive Politics.
- Shanks, O., & Stratmann, T. (2023). Monitoring of bureaucracy as a public good. Mimeo, George Mason University.
- Sides, J., Vavreck, L., & Warshaw, C. (2022). The effect of television advertising in United States elections. *American Political Science Review*, 116(2), 702–718.
- Simchon, A., Edwards, M., & Lewandowsky, S. (2024). The persuasive effects of political microtargeting in the age of generative artificial intelligence. *PNAS Nexus*, 3(2), pgae035.
- Simon, H. A. (1971). Designing organizations for an information-rich world. *Computers, Communications, and the Public Interest*, 72, 37.
- Snyder, J. M., & Strömberg, D. (2010). Press coverage and political accountability. *Journal of Political Economy*, 118(2), 355–408.
- Spenkuch, J. L., & Toniatti, D. (2018). Political advertising and election results. *Quarterly Journal of Economics*, 133(4), 1981–2036.
- Steinert-Threlkeld, Z. C., Mocanu, D., Vespignani, A., & Fowler, J. (2015). Online social networks and offline protest. *EPJ Data Science*, 4(1), 1–9.
- Strömberg, D. (2004). Radio’s impact on public spending. *Quarterly Journal of Economics*, 119(1), 189–221.
- Strömberg, D. (2015). Media and politics. *Annual Review of Economics*, 7(1), 173–205.
- Sunstein, C. (2001). *Republic.com*. Princeton University Press.
- Szeidl, A., & Szucs, F. (2021). Media capture through favor exchange. *Econometrica*, 89(1), 281–310.
- Trussler, M. (2022). The effects of high-information environments on legislative behavior in the US House of Representatives. *Legislative Studies Quarterly*, 47(1), 95–126.
- Winter, S., Metzger, M. J., & Flanagin, A. J. (2016). Selective use of news cues: A multiple-motive perspective on information selection in social media environments. *Journal of Communication*, 66(4), 669–693.
- Wu, T. (2017). *The Attention Merchants: The Epic Scramble to Get Inside Our Heads*. Vintage.
- Yoshida, M., & Thammetar, T. (2021). Education between GovTech and Civic Tech. *International Journal of Emerging Technologies in Learning*, 16(4), 52–68.
- Zaller, J. (1992). *The Nature and Origins of Mass Opinion*. Cambridge University Press.
- Zhuravskaya, E., Petrova, M., & Enikolopov, R. (2020). Political effects of the Internet and social media. *Annual Review of Economics*, 12(1), 415–438.
- Zuboff, S. (2019). *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. Profile Books.