Measuring Partisan Media Bias Cross-Nationally *

Laia Castro

Research note accepted for publication in the Swiss Political Science Review (February 2021)

Abstract

Partisan media bias has been difficult to operationalize, and it rarely has been cross-nationally analyzed. This study presents new measures of media bias and applies them in 24 EU countries. To build the measures, we employ two benchmarks of political balance—objectivity and neutrality. We rely on cross-national content data on parties' visibility from 13,893 mentions in news stories, 530 expert evaluations on party favorability of media outlets, and survey data on media audiences' partisan preferences from 24,068 individuals. Scores are used to assess partisan media bias at country, outlet, and party levels.

Keywords: Political Communication; Cross-National Analysis; Media; Objectivity; Neutrality

^{*}Acknowledgments: I thank the editors and anonymous reviewers for their helpful comments. I am also grateful to Florin Büchel, Manuel Puppis, Frank Esser, Caroline Dalmus, Birte Gundelach, Dietlind Stolle and Dominique Wirz for their valuable contributions and comments to a previous version of this paper. I also thank all the participants of the research colloquium of the division of International and Comparative Media Research in IKMZ at University of Zurich, of the research colloquium at the Centre for Journalism and the Department of Political Science at the University of Southern Denmark, the session "Kommunikationsinhalte im Vergleich" from SGKM 2015 conference, and the session "Truth, Bias and Values in Journalism" of the conference "Re-Inventing Journalism" held in Winterthur in February 2015, where previous versions of this paper were presented. All errors are my only responsibility.

Six Measures of Partisan Media Bias

The measures are constructed at the media outlet, party, and media-system levels as shown in Figure 1.

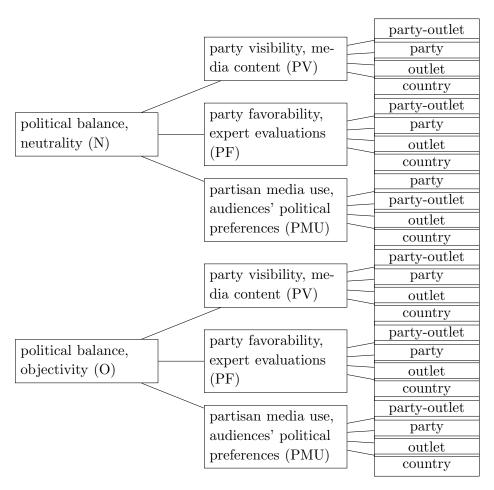


Figure 1: Diagram of measures of partisan media bias

Advantages and Applicability of the Measures

This study presented a novel operationalization of partisan media bias and applied it systematically in several countries (in casu 24 EU countries). Thereby we overcome theoretical and methodological challenges highlighted by previous literature in a single approach, and heed the call for more transparent and handy measures able to describe media bias in different countries (Lelkes). In particular, the measures presented address the need to conceptualize and operationalize the absence of partisan media bias straigthforwardly, as well as the challenge to take advantage of the strengths of different modes of data collection to measure bias at different levels of analysis.

Our measures integrate two benchmarks of political balance that consider the strength of each party in the political system (neutrality) and the party newsworthiness across outlets in each country (objectivity). This methodological framework makes it possible to consistently operationalize and compare three different measures of partisan media bias: parties' visibility in media, the extent to which parties are favorably treated by media according to experts, and the partisan affiliations of media users. This is in contrast to previous studies, where data from media coverage or different sources was collected and examined using different analytical strategies.¹ Finally, scores are calculated using four different units of analysis, namely party-outlet, party, media outlet, and country levels.

Our approach offers further advantages. First, by relying on two variants of political balance, we make it possible to "discount" contextual factors that may lead to spurious assessments of partisan media bias. On the one hand, the first political balance variant—neutrality—discriminates intentional party bias (partisan media bias) from impartial approaches to news coverage based on each party's political power at any given point in time. On the other hand, the second variant—objectivity—differentiates partisan bias from news-judgment-driven bias (Hofstetter 1976; Schiffer 2006) stemming from news values and routines by "discounting" across-the-board news coverage benefitting a particular party. Secondly, comparing media outlets' relative slant, as we do in this study, also helps in controlling for selection bias (Groeling 2013). Many media organizations avoid publishing certain news pieces, even though they are available. Although these skewed samples and missing news stories are difficult to trace, checking for variations across media outlets and coupling content data with the analysis of

¹See Semetko (1996) for an example of how quantitative analyses of news content and journalists qualitative interviews are combined to assess political balance in TV campaign coverage. See also (Eberl et al. 2017) for the use of several analytical constructs using content data to analyse the effects of partisan media bias on individuals' party preferences.

further sources (experts' evaluations and partisan preferences of media users), as this study does, can attenuate what Groeling (2013) calls the *unobserved population problem* (p. 15) and help in detecting selective omission of news stories.² Third, the measures can be used to explore media bias in both two-party and multi-party systems.³ Gauging partisan media bias in most of Europe is especially challenging because of its multi-party systems. Unlike in the U.S., where there are only two major political parties competing for media attention, analyzing partisan media bias in almost all European countries using any measure of favorable media coverage to a party relative to the others entails some sort of subjective assessment. In a multi-party system, if a certain party is (un)favored by the media, the remaining parties may not all be equally affected. Our approach avoids any arbitrary cut-off point between leftist and rightist parties and does not use binary variables more suited to systems where "winners" and "losers" are clearly delineated ⁴ We also count on additional robustness checks that help shed light on the scope of media imbalances (e.g., audiences' partisan preferences) and avoid idiosyncratic definitions and measurements more suited for the U.S. case.

Our approach is not without its shortcomings. Analysing journalists' political affiliations in each media outlet could have also provided robustness to the results, as it is a means of assessing the origin and rationale behind slanted news media coverage (Kepplinger et al. 1991; Patterson and Donsbagh 1996). Such affiliations may account for the extent to which journalists' political views affect the way they cover and select news (or what Entman 2007 called decision-making bias). However, due to a lack of cross national surveys and interviews inquiring about the direction of journalists' partisan preferences, this empirical approach was disregarded in the present study.

Also, our approach offers ways to measuring partisan media bias cross-nationally, that are less operationally demanding and also less resource-intensive than sophisticated coding (tone, left-right slant) of media content in different languages Helbling and Tresch (2011); Lelkes. While we cannot discriminate traditional units of analysis in the media bias literature such as topic ownership Eberl et al. (2017), the use of different frames Entman (2007); Hänggli (2020) or words Groseclose and Milyo (2005), tonality toward political parties Boomgaarden and Semetko

²Flowers et al. 2003; Grimmer 2013; Haselmayer et al. 2017 also addressed the unobserved population problem by relying on correlational approaches comparing slant in news coverage with parties' press releases and texts from legislators.

³Both on conceptual (see definitions of bias and balance on pp. 1, 3, and 4) and methodological (see detailed operationalization on pp. 5 to 8) levels, our approach assumes party competition. In other words, it is silent about media bias in one-party political systems and in the case of monopoly.

⁴(see, for example, Brandenburg 2006; Hopmann et al. 2017, where the Duncan index of dissimilarity that splits parties into two groups is used to calculate deviations in party visibility in media content from an impartiality benchmark based on parties voting share).

(2012); Hopmann et al. (2010) or credibility attributed to different sources (Gentzkow and Shapiro 2006), that only more fine-grained manual or semi-automated large-scale content analyses could uncover; we put forth a straightforward analytical strategy that can help uncover media bias across different polities by using a straightforward content-analytical construct (party visibility) and examining data from other sources in a systematic and consistent manner. Our approach do not analyze intricate features of the media content to identify media bias, nor it uses rather volatile or complex benchmarks of political balance such as the presence of media regulation or the extent to which media coverage is in line with parties' standing in the polls (Hopmann et al., 2017). Instead, our measures can be easily used by researchers interested in measuring bias with own and also publicly available cross-national data sources, since they are based on analytical units broadly covered in voter survey questions -such as the probability to vote for a party-, content analyses of political news coverage -such as the visibility of parties or political actors- and expert and journalists' surveys -such as the perceived objectivity and diversity of news coverage.

In this vein, the use of data retrieved through methods other than content analysis present some advantages. Experts' evaluations can couple analyses of actor visibility in media coverage by identifying broadly perceived and more explicit editorial slants, while the use of outlets' audiences' political alliances from a great number of individuals surveyed by crossnational teams such as EES 2009 can provide more stable and less-sensitive to-outliers estimates than content analyses with fewer data points. Finally, mixed method approaches can also mitigate additional problems inherent in content analyses, such as the underestimation of between-outlet variance as a result of random slant misclassifications in manual content analyses (Scharkow and Bachl 2017); or the still limited scope and the lack of a gold standard in automated approaches to infer (latent) political positions, including media bias, from texts (see e.g. Flaxman et al. 2016, Lowe 2008 for a more comprehensive discussion).

We acknowledge that the degree of subjectivity inherent in analyses of experts' evaluations adds a limitation to this study, however (Helbling and Tresch 2011). The fact that the EMSS 2010 reports high reliability scores and that we can compare such experts evaluations with other data sources adds robustness to our analyses, though.

Our validity and reliability tests hold also some limitations. Although construct-validity checks confirm the pertinence of adopting two benchmarks of political balance and show that the different measures presented tend to perform as expected when applied to specific sub-samples of media outlets, other validity checks yielded inconclusive results, such as comparisons with

other measures based on same sources but different operationalizations. In this vein, running correlations between our scores and values from other cross-national studies relying on larger-N datasets and using closer analytical strategies could have contributed to assessing the reliability of the different measures in a more accurate manner, had that been a possibility. Also, we note that despite close proximity in time of data collection, the data used was collected during different time points (June 2009 EU elections for the EES content and survey studies, between six and eleven months later, for the EMSS experts' survey). However, time differences in fieldwork do not compromise the validity of future studies using such measures to analyse other data, nor they are expected to have biased the estimates employed in this study in a non-systematic manner.⁵

Most importantly, the indicators built in this study are valuable to the extent that can be analysed separately and also compared to each other. As argued by Lelkes, examining different components of so-called political parallelism, which has been operationalized through similar indicators in the past (see discussion in Section 2 of this research note), could enrich analyses of media bias at the country level based only on content analysis, and shed light on the nature and differentiated effects of different manifestations of political media bias. Further longitudinal studies may capture variations across time in our measures and assess their differentiated impact on changes in news media exposure and political attitudes, contributing to the measures' predictive validity (Andersen et al. 2016; Dilliplane et al. 2013).

Indeed, the methodological approach presented in this study has several possible applications. It can be easily applied to the analysis of different datasets (we used publicly available sources), since political actors and parties visibility, or political preferences of media users are frequently included in content analyses and surveys in many democratic countries. Furthermore, aside from being used to analyze media bias toward certain parties, it can also be replicated to assess media bias benefiting or harming political actors, candidates, minorities, and political issues or broader political agendas. More tailored measures can also account for a larger amount of media outlets and platforms beyond the limited set of mainstream newspapers and TV channels considered in our study.

The measures of partian media bias also serve to analyze selective (Mutz 2006; Stroud 2011)

⁵Relying on EU voting preferences to proxy ideological leanings of media outlets does not seem to pose additional problems of equivalence with EMSS data to the extent that people tend to report EU voting preferences on the basis of their national political preferences Marsh (1998); Reif and Schmitt (1980). Similarly, media content analyses carried out during campaigns or elections are expected to contain more political news than in other time periods, but this increase in campaign news may be constant across media outlets and therefore should not affect the ability of the measures to capture relative differences in media outlets' attention towards specific parties.

and cross-cutting news media exposure (Goldman and Mutz 2011). Previous analyses to the degree at which citizens encounter slanted information in the media mostly relied on binary scales, in which either one is exposed to like-minded or conflicting news or he or she is not (Dilliplane 2011), or either one is exposed to counter- or pro-attitudinal news compared with balanced news information (Wojcieszak et al. 2016), or else the ideological distance between one's views and their media diet is placed on a continuum (Author 2017). An adaptation of the measures presented in this study can further account for the intensity with which partisan views are being spread and encountered in the media. For example, a combination of PMB at the outlet-party level, which accounts for party preference of media outlets, with PMB at the outlet level, which stands for the degree to which an outlet is favoring parties, can grasp both the direction and the intensity of media bias. In combination with measurements of media outlets' individual use, such operationalizations can account for the direction and the intensity of partisan media exposure.

The comparison at different levels of analysis (party-outlet, outlet, party and country levels) can help harmonize strands of literature with substantively different outcomes and assumptions on the underlying mechanisms behind media bias. As Lelkes argues, scholars working on media bias at the outlet level (many of whom from the political economy literature) have posited that increased commercialization trends in media ownership have yielded decreases in media bias (e.g. Petrova). Another research strand investigating media bias and selective exposure trends at the country level, however, have come to different conclusions, highlighting the role of increased competition and product differentiation trends in favoring media fragmentation and partisanship (Goldman and Mutz 2011; Knobloch-Westerwick et al. 2019). Another tension worth resolving with a combination of measures at the party and country levels is whether multiparty or two-party systems are more or less favorable opportunity structures for media bias to unfold. So far, the arguments and evidence are mixed (Author 2020; Wessler and Rinke 2014; but see Lelkes.) Overall, having measures at different levels of analyses (also at party and party-outlet levels) can be useful to gauge potential and crucial antecedents and consequences of slanted information. Measures at the media-system level can help identify the political, societal, and media factors shaping news media bias in different countries. One could investigate whether in countries where journalists are less professionalized media outlets news reporting departs from across-the-board structural bias more often, for instance; or whether changes in media ownership or new technological affordances and proliferation of media outlets and platforms affects partisan media bias over time. Measures at the party level could allow for assessing the role of the media on the salience and rise of particular parties to power, and scores at the media outlet-party level can further contribute to assess how media slant reflects organizational and financial linkages between media groups and parties. Finally, the extent to which media outlets are more or less partisan, in combination with measures of individual news exposure, can also shed light on media's chilling effects (e.g. impact on political polarization) and the need for future regulations.

To summarize, the measurement approach presented in this research note enables to account for contextual nuances in the study of media bias with a less computationally demanding strategy than previous approaches. It is also less time consuming, and more stable and less sensitive to changes over time, since the assessment of bias through media content of one point in time (or short periods of time, see Helbling and Tresch 2011) can be complemented with media outlets biases as captured by more stable party IDs of their audiences (partisan media use) or expert knowledge. The use of our measures at different levels of analysis may enable future studies to answer new research questions related to parties ability to communicate, trade-offs between media and political logics, plain levels of partisanship across media outlets in each country, and the ability of more or less explicit biases (as captured by experts evaluations v. visibility in media content) to polarize the political landscape and the publics. Finally, the detailed operationalization outlined in the appendix allows for its replicability, which is also an important contribution of this piece in contrast to previous studies.

References

Andersen, K., C. H. de Vreese and E. Albæk (2016). Measuring media diet in a high-choice environment-testing the list-frequency technique. *Communication Methods and Measures* 10(2-3): 81–98.

Author (2017).

Author (2020).

Boomgaarden, H. G. and H. A. Semetko (2012). News Bias: Media Content, Public Perceptions and Voting Behavior at the 2009 German Federal Election. *POLITISCHE VIERTEL-JAHRESSCHRIFT*: 442–+.

Brandenburg, H. (2006). Party strategy and media bias: A quantitative analysis of the 2005 UK election campaign. *Journal of elections, public opinion and parties* 16(2): 157–178.

- Dilliplane, S. (2011). All the news you want to hear: The impact of partisan news exposure on political participation. *Public Opinion Quarterly* 75(2): 287–316.
- Dilliplane, S., S. K. Goldman and D. C. Mutz (2013). Televised exposure to politics: New measures for a fragmented media environment. *American Journal of Political Science* 57(1): 236–248.
- Eberl, J.-M., H. G. Boomgaarden and M. Wagner (2017). One bias fits all? Three types of media bias and their effects on party preferences. *Communication Research* 44(8): 1125–1148.
- Entman, R. M. (2007). Framing bias: Media in the distribution of power. *Journal of communication* 57(1): 163–173.
- Flaxman, S., S. Goel and J. M. Rao (2016). Filter bubbles, echo chambers, and online news consumption. *Public opinion quarterly* 80(S1): 298–320.
- Flowers, J. F., A. A. Haynes and M. H. Crespin (2003). The media, the campaign, and the message. *American Journal of Political Science* 47(2): 259–273.
- Gentzkow, M. and J. M. Shapiro (2006). Media bias and reputation. *Journal of political Economy* 114(2): 280–316.
- Goldman, S. K. and D. C. Mutz (2011). The friendly media phenomenon: A cross-national analysis of cross-cutting exposure. *Political Communication* 28(1): 42–66.
- Grimmer, J. (2013). Representational style in Congress: What legislators say and why it matters. Cambridge University Press.
- Groeling, T. (2013). Media bias by the numbers: Challenges and opportunities in the empirical study of partisan news. *Annual Review of Political Science* 16: 129–151.
- Groseclose, T. and J. Milyo (2005). A measure of media bias. The Quarterly Journal of Economics 120(4): 1191–1237.
- Hänggli, R. (2020). The Origin of Dialogue in the News Media. Springer.
- Haselmayer, M., M. Wagner and T. M. Meyer (2017). Partisan bias in message selection: Media gatekeeping of party press releases. *Political communication* 34(3): 367–384.
- Helbling, M. and A. Tresch (2011). Measuring party positions and issue salience from media coverage: Discussing and cross-validating new indicators. *Electoral Studies* 30(1): 174–183.

- Hofstetter, C. R. (1976). Bias in the news: Network television coverage of the 1972 election campaign. The Ohio State University Press.
- Hopmann, D. N., P. Van Aelst and S. Salgado (2017). Political balance. Comparing Political Journalism. Neww York: Routledge: 92–111.
- Hopmann, D. N., R. Vliegenthart, C. De Vreese and E. Albæk (2010). Effects of election news coverage: How visibility and tone influence party choice. *Political communication* 27(4): 389–405.
- Kepplinger, H. M., H.-B. Brosius and J. F. Staab (1991). Instrumental actualization: A theory of mediated conflicts. *European Journal of Communication* 6(3): 263–290.
- Knobloch-Westerwick, S., L. Liu, A. Hino, A. Westerwick and B. K. Johnson (2019). Context impacts on confirmation bias: Evidence from the 2017 Japanese snap election compared with American and German findings. *Human Communication Research* 45(4): 427–449.
- Lelkes, Y. (????). National and Cross-National Perspectives on Political Media Bias. In *The Oxford Handbook of Electoral Persuasion*.
- Lowe, W. (2008). Understanding wordscores. *Political Analysis*: 356–371.
- Marsh, M. (1998). Testing the second-order election model after four European elections. British journal of political science 28(4): 591–607.
- Mutz, D. C. (2006). Hearing the other side: Deliberative versus participatory democracy. Cambridge University Press.
- Patterson, T. E. and W. Donsbagh (1996). News decisions: Journalists as partisan actors. Political communication 13(4): 455–468.
- Petrova, M. (2011). Newspapers and parties: How advertising revenues created an independent press. *American Political Science Review*: 790–808.
- Reif, K. and H. Schmitt (1980). Nine second-order national elections—a conceptual framework for the analysis of European Election results. *European journal of political research* 8(1): 3–44.
- Scharkow, M. and M. Bachl (2017). How measurement error in content analysis and self-reported media use leads to minimal media effect findings in linkage analyses: A simulation study. *Political Communication* 34(3): 323–343.

- Schiffer, A. J. (2006). Assessing partisan bias in political news: The case (s) of local senate election coverage. *Political Communication* 23(1): 23–39.
- Semetko, H. A. (1996). Political balance on television: Campaigns in the United States, Britain, and Germany. *Harvard International Journal of Press/Politics* 1(1): 51–71.
- Stroud, N. J. (2011). *Niche news: The politics of news choice*. Oxford University Press on Demand.
- Wessler, H. and E. M. Rinke (2014). Deliberative performance of television news in three types of democracy: Insights from the United States, Germany, and Russia. *Journal of communication* 64(5): 827–851.
- Wojcieszak, M., B. Bimber, L. Feldman and N. J. Stroud (2016). Partisan news and political participation: Exploring mediated relationships. *Political Communication* 33(2): 241–260.