When conflict fuels negativity. A large-scale comparative investigation of the contextual drivers of negative campaigning in elections worldwide

Maier, Jürgen; Nai, A.

Full length article

When conflict fuels negativity. A large-scale comparative investigation of the contextual drivers of negative campaigning in elections worldwide

Jürgen Maier [a],[*], Alessandro Nai [b]

[a] University of Koblenz-Landau Department of Political Science, Kaufhausgasse 9, 76829 Landau, Germany
[b] University of Amsterdam Amsterdam School of Communication Research (ASCoR), The Netherlands

ABSTRACT

We investigate the contextual conditions under which campaigns in elections worldwide are fought "negatively", that is, rely on attacks against political opponents. We test the overarching intuition that societal, political, and cultural conflicts in the country are associated with greater negativity in election campaigns; conflicts, we argue, sow political discord. We test this intuition via a large-scale comparative dataset that covers 136 national elections across more than 100 countries worldwide that happened between June 2016 and March 2020, based on the expert judgments of more than 2000 scholars - to the best of our knowledge, the single largest comparative dataset about the content of elections worldwide. Our results show that countries in which elections are fought under a majoritarian or plurality rule tend to witness higher campaign negativity, and so are countries characterized by higher income inequality, deeper ethnic fragmentation, and higher individualism. Similarly, election competitiveness and ideological diversity of competing actors both tend to be associated with a greater use of negative campaigning, and so is news media preference for sensationalism.

Introduction

The purpose of election campaigns for political leaders is to try to convince voters to cast their vote for them – or convince them *not* to cast it for their opponents. In contemporary democracies, an endless stream of (more or less coherent) persuasive messages tries to clarify the political offer and increase the net favorability of the sponsor of the messages in the eyes of the voters. Among the multitude of rhetorical tricks and framing devices in the playbook of spin doctors, a particularly widespread technique to achieve such goals is to "go negative" against political opponents, stressing their "undesirable attributes or policy missteps" (Benoit 2007: 36). Negativity in contemporary elections is ubiquitous (Fridkin & Kenney 2004, 2008; Geer 2006; West 2018), even if its increase in recent times is more contested (e.g., Buell & Sigelman 2009; Lau & Pomper 2004; van Heerde-Hudson 2011; Walter 2014a). Negativity, importantly, *matters*. On the short term, negative messages are more memorable than comparable positive messages ("negativity bias;" Rozin & Royzman, 2001), can convey relevant information, cue voters that the election is salient, and ultimately foster the interest of the public (e.g., Finkel & Geer, 1998;

Martin, 2004; Geer, 2006). Whether negative messages work as intended, that is, to reduce support for the target and ultimately promote the electoral fortunes of the sponsor, is less clear (Pinkleton 1997). Meta-analyses (Lau et al. 1999, 2007) report only minimal effects of negative messages in general, even if some evidence exists that negative campaigning "can be effective, under certain circumstances" (Fridkin & Kenney 2012: 181) and can help shape the image of political leaders (Grabe & Bucy 2009). More worryingly, several studies report detrimental *systemic* effects: Negative campaigns can increase the gap between citizens and the elites, reduce political mobilization, depress political efficacy and trust, and generally foster political polarization and a "gloomier" public mood (Ansolabehere and Iyengar, 1995; Thorson et al., 2000; Yoon et al., 2005; Cappella & Jamieson 1997).

Because of its relevance for the political game - for good or for bad - much attention has been paid to factors incentivizing candidates to "go negative" on their rivals. Perhaps unsurprisingly, most research on this matter focuses on micro-level determinants, usually assuming that the decision to go negative stems from cost-benefit calculations (Garramone 1984; Roese & Sande 1993; Lau & Pomper 2002): If

---

political attacks can work as intended to depress support for the target, the fact that voters tend to dislike excessively negative campaigns (e.g., Lipsitz et al. 2005) creates a substantial risk of backlash against the sponsor of the attack. The literature has indeed shown that several strategic considerations come into play; for instance, challengers tend to attack more often than incumbents (e.g., Benoit 2017; Maier & Jansen 2017; Walter, van der Brug & van Praag 2014; Nai 2020), most likely because they have a more favorable risk–benefit balance, not having an office to lose. Similarly, candidates lagging behind in the polls are often considerably more likely to go negative than frontrunners (e.g., Haynes & Rhine 1998; Maier & Jansen 2017).

But it is highly unlikely that only strategic considerations come into play; the context in which the election takes place is likely to set the stage for greater or smaller incentives to go negative. Yet, due to major hurdles plaguing comparative research in political communication, literature on the impact of *macro-level factors* (or contextual variables) on the use of negativity is scarce. Exceptions are studies suggesting differences in attack behavior between campaigns held at the national, state, or local level (e.g., Benoit 2007; Maier & Jansen 2017; Sullivan & Sapir 2012) or assessing the effects of party polarization on negative campaigning (e.g., Curini & Martelli 2010; Dolezal et al. 2015; Elmelund-Præstekær 2008; Papp & Patkós 2019; Walter 2014b). More recently, several studies have introduced a large-scale comparative approach to the study of campaign negativity using expert assessments (e.g., Nai, 2020; Maier & Nai, 2020), but these studies have only marginally addressed the issue of the deeply rooted, contextual drivers of negativity. This is what this article intends to do. We claim that the nature and intensity of conflicts inherent in the context in which political actors compete - at the societal, cultural, and political levels – can lead to discursive conflict in election campaigns. We focus most notably on four broad categories of contextual determinants: (i) the political system, (ii) economic, ethnic, religious, and cultural cleavages, (iii) the electoral race, and (iv) the media. To what extent are instances of conflict at these four levels associated with greater negativity in election campaigns across the world? We answer this overarching question via a large-scale comparative dataset (Nai 2020; Maier & Nai 2020) covering 136 national elections held in 102 countries worldwide between June 2016 and March 2020 - to the best of our knowledge, the single largest existing comparative dataset on elections worldwide. Most available studies either compare only a handful of countries (e.g. Benoit 2007; Walter 2014a; Walter, van der Brug & van Praag 2014; but see Papp & Patkós 2019) or compare different contexts within a given country (e.g., Hale, Fox & Farmer 1996; Kahn & Kenney 2004; Lau & Pomper 2004). The comparative nature of the dataset allows us to investigate, for the first time on such a large scale, the impact of various macro-level factors on the tone of election campaigns.

Conflict breeds conflict

Research on agenda setting and conflict expansion (e.g., Baumgartner & Jones 1993; Schattschneider 1960) has consistently shown that the context has a structuring function in social and political dynamics. Following the same logic, we argue that the presence, type, and intensity of conflicts in society influence the strategic calculus used by competing candidates – the assessment of potential costs and benefits – by encouraging the use of negative rhetoric. For instance, in consensual societies where cooperation, compromise, and agreement are the norm, political confrontations based on vicious personal attacks are undoubtedly at odds with public expectations and social rules. Conversely, positive and optimistic campaigns in times of great conflict and upheaval might seem excessively tame, inappropriate. Broadly speaking, the overall assumption that guides our investigation is that the presence of deeply-rooted conflict lines – or, rather, the presence of elements in the political system, culture and society,

electoral race, and media coverage that are indicative of these conflict lines – provides incentives for election campaigns to be particularly confrontational and negative.[1] Conflict breeds conflict. In the following we describe our expectations in more detail.

Political system

According to Lijphart (2012), parliamentary ("consensual") democracies are "kinder, gentler" than majoritarian political systems. In contrast to the latter, consensual democracies share power at the executive level, allow effective minority representation, accept minority veto, and generally set up a system where the ruling majority has to consider the interests of the minority at least in part (Lijphart 1984). More importantly for our argument, consensus democracies tend to be characterized by more harmonious and consensual decision making. Political actors have incentives to "go along", as they otherwise face the risk of harder coalition bargaining (Walter 2014a) or, more generally, system paralysis. In this sense, cooperation rather than confrontation is an integral component of the institutional dynamics of parliamentarism; as a result, negativity should be lower (H1). A similar argument can be advanced for a specific institutional setting, the electoral and party system. In a multiparty system the cost-benefit structure of attacking the opponents is more complex (Walter 2014a). Whereas in a two-party system a zero-sum game exists in which any strategy that reduces support for the rival should directly or indirectly increase support for the sponsor, this mechanism does not necessarily work in multiparty systems. An attack from party A against party B could effectively reduce support for the latter, but only for party C to benefit from it - what Galasso et al. (2020) call "positive spillovers." Of course, the risks inherent in attack politics (backlash due to dislike of negativity by the public at large) still exist in multiparty systems. As a result, multiparty competition leads to a different cost-benefit balance, in such a way that it is more likely for costs to outweigh potential benefits. Campaigns fought in multiparty systems based on proportional representation should thus be *less* likely to be negative (H2). Furthermore, the increase of personalization (Swanson & Mancini 1996; Van Elst et al. 2017; Van Zoonen & Holtz-Bacha 2000) forces campaigns to increasingly emphasize their critique of political leaders rather than parties ("negative personalization"; see Pruysers & Cross 2016; Garzia & da Silva 2021). Since personalization is at its maximum when leaders (instead of parties) are elected, we expect negativity to be higher in presidential elections (H3).

Cleavages and culture

Modern societies are characterized by cleavages - fundamental disagreements between large societal groups regarding how society in general should be structured in terms of economic, ethnic, regional, or religious matters (Lipset and Rokkan 1967). If politicized and embraced by the partisan supply in the country, cleavages can become stable large-scale conflicts that will shape the political life of the country on the long term (e.g., Sartori 1968; Klandermans & de Weerd 2000). With this in mind, we advance the rather simple set of expectations that in societies characterized by economic inequalities, ethnic heterogeneity, or religious diversity, conflicting interests of competing social groups are mirrored by political disagreements within the political elite. The resulting issue polarization will, in turn, increase the chances of discursive conflicts during elections (Geer, 2012). Hence, societies with deep economic, religious, or ethnic cleavages should be characterized by more negative campaigns (respectively, H4, H5,

---

[1] Of course, it is not only the presence of conflicts that fuels negativity campaigning; negativity also depends on the type, amount, and intensity of a given conflict, as well as the institutional structures that influence if/how it is addressed. Unfortunately, however, our data is not granular enough to address these additional matters.

Table 1
Expectations at a glance.

Level	Variable	Hypothesis	
Political system	Parliamentarism	Negativity lower in parliamentary democracies	H1 (-)
	Proportional representation	Negativity lower in countries with proportional representation	H2 (-)
	Presidential election	Negativity higher during presidential elections	H3 (+)
Cultural & societal cleavages	Income inequalities	Negativity higher in countries with higher inequality	H4 (+)
	Religious diversity	Negativity higher in countries with higher diversity	H5 (+)
	Ethnic diversity	Negativity higher in countries with higher diversity	H6 (+)
	Individualism	Negativity higher in countries with stronger individualism	H7 (+)
The electoral race	Number of competing actors	Negativity lower when many actors compete	H8 (-)
	Ideological diversity of actors	Negativity higher when actors are more ideologically diverse	H9 (+)
	Competitiveness of the race	Negativity higher in more competitive races	*H*10 (+)
Media coverage	Infotainment	Negativity higher when high media preference for sensationalism	*H*11 (+)

H6). Differences create conflict lines in which disagreements - together with the accompanying confrontational and aggressive rhetoric – fester.[2]

Beyond these cleavages, we also argue that patterns of cultural differences across countries are likely to be associated with diverging incidences of attack politics. Research in intercultural psychology shows that there are large intra-individual differences in personality and values (e.g., Schoen & Schumann 2007) and that specific patterns exist for different regions of the globe (e.g., Schmitt et al. 2007; Rudnev et al. 2018). According to Hofstede, Hofstede, and Minkov (2010), one of the most important and structuring dimensions of cross-cultural differences is the individualism vs. collectivism dimension. Whereas in collective cultures social cohesion is high and group interests are more important than individual preferences, individualistic cultures are characterized by the primacy of personal benefit, self-fulfillment, and selfishness. As a result, cooperation is the norm in collective cultures whereas in individualist cultures conflict is widely accepted. In terms of leadership, some evidence exists that in collectivistic cultures organization leaders show stronger affective attachments to the larger group they belong to, whereas leaders in individualistic cultures prefer transactional styles of leadership and tend to focus on personal goals and short-term achievements (Dickson, Den Hartog and Mitchelson 2003). With this in mind, we should expect higher levels of confrontation and antagonism in individualistic cultures, reflected by higher negativity in election campaigns (H7).

The electoral race

Conflict should also drive negativity when it comes to electoral competition. First, targeted attacks could lead to zero direct gains for the attacker in contexts where a large number of actors compete, while still remaining quite risky in terms of potential backlash effects (Walter 2014a; see also Elmelund-Præstekær 2008; Ridout & Walter 2015; but see Elmelund-Præstekær & Svensson 2014; Peterson & Djupe 2005). We therefore expect that the level of negativity decreases with the number of actors competing against each other in the election (H8) – a simple extension of the more general effect expected for differences in party systems (see H2 above). Second, elections fought among candidates with very different ideological stances should be particularly negative. Empirical evidence for this effect is mixed (Dolezal et al. 2015; Elmelund-Præstekær 2008; Curini & Martelli 2010; Papp & Patkós 2019; Walter 2014b), but we believe that a case can be made that ideological distance between candidates provides incentives to attack for the same reason that political polarization fos-

ters negativity (e.g., Geer 2006, 2012): Distance between competing actors escalates disagreements on key issues, which opens the window of opportunity for ideologically-based attacks (H9).

Lastly, the competitiveness of the race – that is, how close or undecided the expected outcome of an election is – likely alters the strategic considerations of candidates. Indeed, evidence exists that more competitive or "close" races are associated with higher negativity (e.g., Druckman, Kifer & Parkin 2009; Elmelund-Præstekær 2008; Lau & Pomper 2004). When the going gets tough, the tough get going. More competitive races are a cue that the stakes are high, which should normally create incentives for more confrontational rhetoric (*H*10).

Media logic

The last set of factors concerns the nature of the media system covering the elections. Following theories of mediatization of politics (e.g., Mazzoleni & Schulz 1999), the political system and its outcomes are increasingly co-dependent on the coverage of political events provided by news media. The news media in modern democracies (and beyond) tend to pay special attention to the conflicts and disagreements between political actors (Geer 2006, 2012; Patterson, 1993. The news media are characterized by a "negativity" frame (Esser et al. 2017; Lengauer, Esser & Berganza 2011; Ridout & Smith 2008), that is, the tendency to promote "conflict-centeredness" and disputes between candidates. This is mainly because negativity is an important news value (e.g., Lengauer, Esser & Berganza 2011). Due to the underlying structuring role of negativity bias for citizens (e.g., Soroka, Fournier and Nir 2019), but also for journalists, negativity sells (Geer 2012). Increased market pressure in recent decades has incentivized a shift towards "soft news" (de Vreese et al. 2017; Prior 2003; Reinemann et al. 2011) and "infotainment journalism" (Albæk et al., 2014; Brants 1998), where the news "is nowadays more buffeted by rumors, controversies, and trivialities" (Plasser 2005: 55).

All in all, news media today tend to pay particular attention to the negative and sensational aspects of the political game (see also Haselmayer, Meyer & Wagner 2019). Candidates vying for media attention, in order to increase their electoral chances, face strong incentives to create conflict by going negative on their opponents: Media personalization pays more attention to the candidates themselves, negativity of news coverage provides special attention to attack politics, and a media culture promoting infotainment over hard news encourages political actors to focus on the dirty business of their rivals. Thus, it seems reasonable to expect that negative campaigns are likely to thrive in a context characterized by a marked proclivity for news "infotainment" (*H*11).

In addition to this direct effect, we explore the moderating role of media coverage for the effects of the other determinants of negativity at the political system, culture, and electoral race levels, starting from the assumption that structural lines of conflict become relevant if the

---

[2] The degree of conflict carried by cleavages depends on whether cleavages overlap or crosscut. In the first case, cleavages reinforce each other, further exacerbating the level of conflict. In the second case, cleavages mutually attenuate each other and thus keep conflicts at bay (Dahl 1982: 57).

"media picks them up" and makes them visible to the public ("agenda setting"; e.g., McCombs & Shaw 1972), thus altering their relative weight when it comes to individual decision-making ("priming"; e.g., Iyengar & Kinder 1987).

Table 1 summarizes all expectations for direct effects, including the direction of the expected association (positive, negative).

Data and methods

The dataset

Analysis in this article is based on a large-scale comparative dataset (The Negative Campaigning Comparative Expert Survey; NEGex) that uses expert ratings to map the campaigning strategies of parties and candidates competing in elections worldwide (Nai 2020; Maier & Nai, 2020).[3] Starting in June 2016 and subsequent to all national elections worldwide, a sample of domestic and international scholars with expertise[4] on electoral politics, political communication (including political journalism), electoral behavior, or related disciplines in the country was contacted. Experts were asked to provide their opinion on several aspects of the election, including the campaigning strategies of competing candidates (e.g., the tone of their campaign or the issues on which they attacked their rivals the most). The current version of the dataset (NEGex 2.0) includes detailed information for almost 700 candidates having competed in 136 national elections held in 102 countries worldwide between June 2016 and March 2020, based on aggregated ratings provided by more than 2,000 national and international experts. In this article, we rely on the data at the election level – that is, we use information in the dataset that concerns differences across elections on the whole (e.g., the overall level of negativity of the campaign) and not information about the campaign of competing parties and candidates specifically. The list of 136 elections on which we run our models can be found in Appendix A. The list only includes elections for which at least 3 experts provided ratings. The number of expert answers varies across elections; on average, 15.4 experts (min 3, max 75) evaluated each election; this average is substantially higher than in other comparable studies, for instance, on US presidents (see, e.g., Lilienfeld et al. 2012). On average, experts in the overall sample lean to the left on a 1–10 left–right scale (M = 4.37, SD = 1.81), 75% of them work in the country for which they were asked to evaluate the election, and 31% of them are female. Experts declared themselves very familiar with the elections (M = 8.05/0–10, SD = 1.72), and rated the questions in the survey as relatively easy to answer (M = 6.56/0–10, SD = 2.35).

Using expert ratings to measure campaign tone might seem unusual. Typically, the discipline relies on content analysis of communication events and discursive material, such as televised leadership debates (e.g., Maier & Jansen 2017; Walter & Vliegenthart 2010) and campaign ads (e.g., Benoit 2007). The advantage of measures obtained through content analysis is that the discursive universe is known, and the coding can be monitored and verified (for instance, through intercoder reliability assessments); on the other hand, this classical approach suffers from several severe shortcomings that hinder comparative research. First, it is an excessively expensive and time-consuming method, with the direct consequence of reducing the magnitude of the compared cases to keep the costs at bay. Second, the relative importance of specific communication channels is likely to vary across countries. For instance, attack ads in newspapers might be an important component of elections in Switzerland, but they are all but irrelevant in the US; televised ads are an extremely important campaign message in the US but of very limited importance in Sweden

(Strömbäck 2008). This – and even more profoundly – the level of negativity itself have been shown to be a function of the medium in which it is measured (Elmelund-Præstekær, 2010; Walter & Vliegenthart 2010); in this sense, scholars comparing the use of negativity across countries by looking only at specific communication channels could face the risk of obtaining a skewed image of the overall campaign. Relying on expert judgments – and, more specifically, on systematic surveys where experts are asked to provide ratings about the campaign on the whole, and not in a specific channel (see below) – allows us to address all these shortcomings simultaneously (Gélineau & Blais 2015).

Measuring negativity

Experts were first provided with a definition of negative and positive campaigning[5] and then asked to evaluate whether "the campaign taken as a whole before the most recent election in [country] was exclusively negative, exclusively positive, or somewhere in between" (from −10 "exclusively negative" to +10 "exclusively positive"). Given the large comparative scope of the dataset, a potential issue that might arise is the fact that "negativity" could not have the same meaning everywhere – for instance, in countries where negativity is endemic to the political game (e.g., US) a certain type of attack could be seen as relatively normal and harmless, whereas in other countries that *same* attack could be perceived as extremely harsh and thus drive the impression that the campaign is more negative in this second case. To correct for this potential cross-cultural bias in the understanding of the main concept at stake, the questionnaire included a series of "anchoring vignettes" (Bakker et al. 2014; King et al. 2004). Vignettes, in this case six statements that take the form of campaign messages[6] that experts had to evaluate in terms of their "negativity", can be used to set up "benchmarks" for comparisons across respondents and to make sure that all experts have the same understanding of what a "negative" message is – or, in case their understanding diverges, to "correct" such discrepancies. Based on how experts evaluated the six vignettes, we estimated an "adjusted" measure of campaign negativity via a series of parametric adjustments (Hopkins & King 2010; King et al. 2004) through ordered probit models implemented using the GLLAMM package (Stata/MP 14.2 for Mac). These models estimated, for each expert, a new "adjusted" value on the main dependent variable (negativity) based on their "raw" estimation, the scores they provided on the six vignettes, and five set parameters: an unique election identifier (to control the fact that experts are clustered within different elections), gender, domestic/international, self-reported familiarity with the election, and left–right positioning. By including the expert profile directly within the measurement, this "adjusted" variable reduces the risk that differences in experts (e.g., in terms of their ideology; Curini 2010) drive their aggregated ratings. The obtained variable is a continuous measure of campaign negativity and ranges between 1 ("very positive") and 7 ("very negative"). We will use this "adjusted" measure as main dependent variable in our models; the original variable will be used in robustness checks. Table A1 in the appendix reports the negativity level for each county in our dataset. The table also reports the country-level standard deviations calculated for

---

[4] Expertise is established by existing relevant academic publications (including conference papers), professional engagements, and biographical statement (e.g., on the scholar's academic website).

[5] The lead-in to the question reads as follows: "During election campaigns, parties and candidates sometimes rely on negative campaigning, defined as talking about the opponents in the race by criticizing their programs, attacking their ideas and accomplishments, questioning their qualifications, and so on. Positive campaigning is the opposite: talking about one's own accomplishments, qualifications, programs and ideas by praising them."

[6] The six vignettes read as follows: "I care about people"; "Inflation dropped during my term in office", "Unemployment dropped during my term in office, whereas under my opponent it increased", "Under my opponent's administration the economy has stagnated", "You cannot trust my opponent", and "My opponent is dishonest and corrupt". Experts had to evaluate these six vignettes using the same scale used for the general question about campaign negativity, ranging from −10 ("very negative") to +10 ("very positive").

the original variable (original tone scale ranging between −10 and +10), which can provide an indication of the extent of inter-expert agreement. The ratio between the standard deviation and the country average (SD / M), usually referred to as "coefficient of variation" (CV) or "relative standard deviation" and reflecting the overall dispersion of the observations around the mean, is on average well below 1.0 across all elections (CV = 0.52),[7] signaling a rather low variance in the expert answers. In plainer words, experts seem, on average, to agree rather consistently on their ratings of campaign tone.

Due to the logistic difficulties in measuring the content of election campaigns worldwide, no comparable evidence exists that we can use to validate our measurement of campaign negativity. Nonetheless, as we report elsewhere (Maier & Nai 2020), we were able to set up a tri-angulation check that compares data in a parallel expert survey (for the 2018 US Senate midterm election) using an identical protocol with two independent data sources: the tone of the candidates' campaign on Twitter, and the percentage of negative TV ads of competing candidates in the midterms elections. Even when controlling for covariates at the candidate and US state levels (gender, party affiliation, age, state turnout, state leaning, and so forth), the measure of campaign negativity in our expert data significantly and positively correlates with negativity in Twitter and TV ads. In other words, the triangulation check strongly suggests that experts are able to effectively capture the tone of election campaigns. Appendix D describes this triangulation in detail.

Independent variables

Concerning the *political system*, we first use a binary variable that sorts between countries with a presidential political system (0) and countries with a parliamentary political system (1). Information is based on the Central Intelligence Agency (CIA) World Factbook.[8] Second, we use a dummy variable separating countries with a plurality/majority system, including Mixed Member Majoritarian (0) from countries with proportional representation electoral systems ("PR"), including Mixed Member Proportional (1), as classified by Gallagher (2014). Third, we set up a dichotomous variable measuring whether the election is a parliamentary election (0) or a presidential election (1).

At the *societal and cultural* level, to measure the extent of religious and ethnic diversity in the country we rely on the "fractionalization" scores discussed in Alesina et al. (2003). The fractionalization measures are standardized 0–1 scores that, broadly speaking, reflect "the probability that two individuals selected at random from a country will be from different ethnic, linguistic or religious groups" (Martinez i Coma & Nai, 2017, p. 78).[9] We measure the presence of economic inequalities via the Gini index for each country, retrieved from the CIA World Factbook;[10] The Gini index is a standardized composite index

ranging from 0 ("complete equality of income") to 100 ("complete inequality of income"). The Individualism Index (see, e.g., Hofstede, Hofstede & Minkov 2010),[11] ranging from 0 ("strong collectivistic society") to 100 ("strong individualistic society"), is a straightforward measure of individualism.

Concerning *electoral competition*, we first use the formula proposed by Laakso and Taagepera (1979) for the effective number of parties (ENPP) to measure the total (effective) number of competing candidates; this measure takes the differences in candidates support into account and yields a value to be interpreted as the number of competing candidates with a similar strength (Gallagher & Mitchell 2005). Second, to measure "competitiveness" of the election we rely on a question in the expert survey that asked experts to evaluate how much they agree that "the race was not competitive, the winner was clearly known beforehand"; we recoded the aggregated scores into a variable that varies between 0 ("very low competitiveness") and 4 ("very high competitiveness"). Third, to measure ideological distance among competing parties and candidates we simply use the standard deviation, for each election, of the ideological placement of the most important parties and candidates running for the election (as included in the dataset); ideology of political actors itself is measured on a 13-point scale from 1 ("far-left") to 13 ("far-right") (for more details, see Nai, 2020). Smaller standard deviation scores indicate more uniform ideological profiles of competing actors in the election, whereas greater standard deviations reflect greater diversity (average distance).

Finally, to measure the presence of sensationalism in political media coverage ("infotainment") we use a question asked to our experts; for each election, they had to evaluate how much attention the media as a whole provided to "the sensational aspects of events and stories". The resulting measure, aggregated at the election level from all expert ratings, ranges from 0 ("no attention") to 4 ("a great deal of attention"). Models that include the "infotainment" variable are also controlled by the country score on the "freedom of the press index."[12] The index, broadly speaking, reflects the extent to which the press in the country is restricted, and varies between 0 and 100, with 0 being unrestricted and 100 the most restricted (see also Farah et al., 2019). Descriptive statistics for all variables are presented in Table B1, Appendix B.

Analysis strategy

Below we present three sets of results. First, we describe the level and distribution of negativity across the elections under investigation. Second, we test for the direct effect of factors at the political system, culture, electoral race, and media coverage levels on the use of negative campaigning during elections. Due to the limited number of elections included in the analyses we run separate models for each of these four levels to ensure statistical robustness. As we discuss below, none of the models suffer from multicollinearity. We are wary of the too-many-variables-too-few-cases problem, which prevents us from testing the impact of *all* variables in a joint model. However, by following the described procedure we are still able to test whether a larger category of factors – the political system, social conflicts and culture, the electoral race, the media – has an impact on the use of negative campaigning and we can test the influence of different indicators representing each category against each other. If this approach is not entirely satisfactory, it represents a reasonable tradeoff between the imperative of multivariate checks and the risk of overspecification of the models. Furthermore, what we present is still - to the best of our knowledge - the most comprehensive comparative test of contextual drivers of negative campaigning worldwide. Third, we test whether there are significant interactions between the media's campaign coverage and the

---

[7] Because the original variable includes both negative and positive values (range between −10 and +10), which affects the computation of the CV, we have forced the variable on a 0–20 scale (simply adding 10 to the original scores), allowing for a correct interpretation of the CV. Shifting the range of the original variable in such a way has no implications for the standard deviation.

[8] Data was retrieved from https://www.cia.gov/library/publications/the-world-factbook/, last access 25 October 2020.

[9] Missing values were substituted as follows: For ethnic fractionalization, we used values coming from the Historical Index of Ethnic Fractionalization Dataset (HIEF; Drazanova, 2019) for Bosnia & Herzegovina, Serbia, and Timor-Leste; the scores for China from the HIEF are used for Hong Kong; for Montenegro and Kosovo we use the fractionalization score reported in Hysa (2020); the values for Ireland are used for Northern Ireland as well, and the scores of linguistic fractionalization are used for São Tomé and Príncipe. For religious fractionalization, we used the scores from the DELFR (distance adjusted ethno-linguistic fractionalization index for religion) described in Kolo (2012) for Kosovo, Montenegro, North Macedonia, and Serbia.

[10] Data was retrieved from https://www.cia.gov/library/publications/the-world-factbook/, last access 25 October 2020. Missing values were substituted as follows: for Afghanistan we used the 2013 estimate from the HDR; Cape Verde and Fiji we used the estimates from the World Bank (for respectively 2015 and 2013); for The Bahamas we used the 2011 IMF estimate, and for Northern Ireland we used the most recent values from the Northern Ireland Council for Voluntary Action (NICVA).

[11] Data was retrieved from https://www.hofstede-insights.com/product/compare-countries/, last access 25 October 2020.

[12] https://rsf.org/en/ranking, last access 25 October 2020.

determinants of negativity at the political system, culture, and electoral race levels. This analysis follows the idea that the latter factors can have a particularly strong impact if the media picks up these conflict lines and put them on the agenda of politicians and voters.

The data used for this article as well as all syntaxes used to produce the analyses discussed below (including all robustness checks) are available for replication and further analyses at the following Open Science Foundation (OSF) repository: https://osf.io/t9a8h/.

Results

Negativity in elections worldwide

The general public opinion about election campaigns is that they are excessively negative[13] – a sentiment often echoed by the literature at large. Our data confirm this general impression. In a vast majority (i.e. 110 out of 136, or 81%) of the elections in our dataset the campaign tends to be more negative than positive. The average level of negativity across all 136 elections in our database is 4.85 (see Table B1, Appendix B), clearly above the midpoint of the scale for the adjusted variable, ranging from 1 ("very positive") to 7 ("very negative"). The lowest level of negativity was observed for the presidential elections in Rwanda (2017), Algeria (2019), and Uzbekistan (2016), with a score of 2.0 in all three cases; the highest level of negativity is reported for the presidential elections in Mongolia (2017) and the general elections in DR Congo (2018), with a score of 7.00 in both cases; see Table A1 in Appendix A. Fig. 1 illustrates the level of negativity across all 102 countries under investigation and shows substantial variations across countries and regions.[14] At first glance, campaigns seem somewhat less negative in Western and Northern Europe and the southern third of the African continent, and more negative on the American continent and Eastern Europe.

The drivers of election negativity

What factors account for the reported variation in negativity between elections? The argument we advance in this article is that conflict inherent in the political system, cultural and societal cleavages, the character of the electoral competition, and the way the media covers election campaigns can explain differences in the use of negativity (for a correlation matrix see Table B2 in the Appendix B). To test this assumption, we set up four linear regressions – one for each of the four sets of determinants (see Table 2). The table presents standardized regression coefficients, allowing us to directly compare the effects across different variables. All models are controlled by the geographical region of the country and have robust standard errors. The second column summarizes the hypothesis that is tested and the direction of the expected association (positive, negative).

Results in Table 2, broadly speaking, provide a strong confirmation for our overarching assumption that deep-seated conflicts are associated with more aggressive election campaigns. Model M1 tests the structuring effects of diverging political systems. As expected (H2), countries with a proportional electoral system, when compared to countries in which elections (at the national level) are fought under a majoritarian or plurality rule, tend to be characterized by less negative campaigns - suggesting that indeed systems in which parties face incentives to "go along", for instance when there is the possibility of post-election bargaining to form coalition governments, tend to promote a more "positive" approach to election campaigning. We do however find no confirmation that campaigns are more aggressive during presidential elections or that parliamentarism promotes more positive campaigns; we thus reject H1 and H3.

Model M2 confirms that cultural and social conflict lines tend to translate into more aggressive election campaigns. More specifically, countries characterized by higher income inequality (Gini coefficient), deeper ethnic fragmentation, and higher individualism are all characterized, ceteris paribus, by more negative campaigns - confirming H4, H6 and H7. Even if we fail to find a similar effect of religious fractionalization (H5), the overall trend is in line with the general idea that fracture lines at the cultural and societal level tend to translate into more exacerbated party competition, leading in our case to higher disagreements and political attacks.

Model M3 shows that conjunctural dynamics at the level of the electoral competition are also associated with negativity. As expected, higher election competitiveness (H10) and ideological diversity (H9) both tend to be associated with a greater use of negative campaigning - suggesting that political disagreements and uncertain electoral results provide incentives for a more aggressive rhetoric, perhaps to boost the (party or candidate) profile and salience of the platform in the eye of the voter. We do not find any association between campaign negativity and (effective) number of competing actors.

Finally, as expected (H11), and in line with theories of political mediatization, countries whose media favor a more sensationalistic coverage of political events - what we have called a propensity towards "infotainment" - tend to be associated with greater campaign negativity. We find here perhaps the clearest confirmation of Geer's theory (2006, 2012), according to which the media provides strong incentives to use negative campaigning techniques because "negativity sells".

The moderating role of media coverage

Beyond its direct effect, we expect sensationalistic media coverage to reinforce the effect of other contextual determinants. This rationale follows the general assumption that conflicts existing at the other levels (e.g., the existence of economic, ethnic, or religious cleavages in a society) become electorally meaningful only if the media provides a fertile ground for the framing of elections in terms of conflicts and the more sensational aspects of the race. By highlighting conflicts, they explicitly put differences in society on the public agenda and prompt politicians to emphasize these cleavages in their election campaigns. To test this assumption, we interacted media infotainment with determinants at the other levels; as before, we ran separate models for each level and dimension, due to the overall number of observations.

Results are presented in Table 3. Overall, we find only two significant effects in this direction, but suggestive of broader dynamics. However, due to the relatively small N overall, these results should be treated with caution. Table 3 reports only the coefficients for single interaction terms added to the baseline models presented in Table 2. Full results are described in Tables B3 to B5 (Appendix B).

First, the association between campaign negativity and media infotainment is especially strong in countries with a proportional electoral system (model M2), even if the marginal difference between the two systems is not particularly strong, and the effect is only significant at $p < .1$. More substantial is the interaction between media news coverage and the competitiveness of the race (model M10). Fig. 2 substantiates the interaction with marginal effects. As shown, the positive effect of infotainment on negativity exists especially for campaigns with low competitiveness, whereas it is weaker in highly competitive elections. This effect might suggest that candidates in non-competitive elections have additional incentives to go negative and capture the attention of the media when the media itself is known to prioritize more sensationalistic angles of political news. Conversely, in highly competitive races candidates have enough incentives to go negative, regardless of the incentives provided by the media market. In other

---

[13] For instance, in a PEW report released in early August 2020 about half of US respondents surveyed declare that the campaign so far has been "too negative." https://www.pewresearch.org/politics/2020/08/13/views-of-the-2020-campaign-and-voting-in-november/

[14] For countries where multiple elections took place in the period under investigation, the map reports the average score across these elections.

J. Maier, A. Nai

Fig. 1. Negativity across the world. Note. Only countries in which elections took place in the period under investigation are included in the map (N = 102). Darker shades reflect greater negativity.

Table 2
Determinants of negativity.

	Hypotheses	M1 β	Se	p	M2 β	Se	p	M3 β	Se	p	M4 β	Se	p
Parliamentarism	H1 (-)	0.26	(0.23)	*									
Proportional repr.	H2 (-)	-0.30	(0.24)	**									
Presidential election	H3 (+)	-0.02	(0.22)										
Gini index	H4 (+)				0.24	(0.01)	†						
Religion index	H5 (+)				0.14	(0.49)							
Ethnic index	H6 (+)				0.23	(0.47)	*						
Individual. index	H7 (+)				0.28	(0.01)	*						
Effective N actors	H8 (-)							−0.03	(0.04)				
Ideological diversity	H9 (+)							0.14	(0.08)	†			
Competitiveness	*H*10 (+)							0.37	(0.09)	***			
Infotainment	*H*11 (+)										0.58	(0.16)	***
Restricted press											0.06	(0.01)	
MENA [a]		0.32	(0.35)	**	0.32	(0.38)	**	0.33	(0.35)	**	0.17	(0.32)	†
Sub-Sah Africa		0.14	(0.35)		-0.11	(0.49)		0.19	(0.34)		0.09	(0.30)	
Lat Am & Car		0.45	(0.34)	***	0.31	(0.40)	**	0.30	(0.23)	***	0.20	(0.21)	***
Ctr & S Asia		0.06	(0.49)		0.14	(0.64)		0.24	(0.48)	*	0.10	(0.33)	
E & SE Asia		0.09	(0.33)		0.18	(0.45)		0.22	(0.31)	*	0.09	(0.33)	
Eastern Europe		0.30	(0.27)	***	0.39	(0.33)	***	0.38	(0.28)	***	0.22	(0.24)	**
Southern Europe		0.27	(0.27)	**	0.36	(0.27)	***	0.30	(0.27)	**	0.14	(0.23)	†
N(elections)		135			131			134			133		
R-squared		0.18			0.26			0.23			0.44		

Note: the dependent variable ranges between 1 "very positive" and 7 "very negative". Displayed are standardized coefficients of an OLS regression (in parenthesis: robust standard errors). N might vary due to missing data. Minimum 3 experts per election.
[a] Reference category for regions is "Western and Northern Europe" (includes the USA, Australia and New Zealand). E & SE Asia includes Melanesia, Micronesia and Polynesia.
*** p < .001, ** p < .01, * p < .05, † p < .1

words, the marginal utility to go negative seems to be much higher in a moderate environment than in a superheated surrounding.

The robustness of the interaction effect was verified following the procedure described in Hainmueller et al. (2019), using the interflex package for Stata.[15] Figure B1 (Appendix B) shows that it is especially at low levels of competitiveness that a (positive) linear association seems to exist between infotainment and negativity (top-left panel); Figure B2 shows that the linear marginal effect of infotainment on negativity is significantly different from zero (and positive) for low (and medium) levels

of competitiveness, whereas it is not significantly different from zero - that is, the model does not pick up any association between infotainment and negativity - at high levels of competitiveness, confirming the simplified depiction in Fig. 2. Figure B2 also shows no particular issues in terms of common support, even if caution should be exercised when interpreting the interaction at lower levels of infotainment (as shown also in Fig. 2 by the excessively wide confidence intervals).

Robustness checks

The results of several robustness checks are presented in Appendix C. All robustness checks can be run with the materials stored in the OSF repository. First, we replicated our models by also controlling

---
[15] The procedure to perform the test is described in the following document (for Stata): https://goo.gl/0uYvLb. Replication materials in the OSF repository include all syntaxes used to perform the test with our data on this interaction.

Table 3
Determinants of negativity, moderated by media coverage (interaction effects only, separate models).

Model	Interaction term	β	Se	p
M1	Infotainment * Parliamentarism	−0.32	(0.36)	
M2	Infotainment * Proportional representation	0.94	(0.35)	†
M3	Infotainment * Pres. election	0.72	(0.28)	
M4	Infotainment * Gini index	−1.01	(0.02)	
M5	Infotainment * Religion index	−0.48	(0.81)	
M6	Infotainment * Ethnic index	−0.43	(0.86)	
M7	Infotainment * Individual. index	−0.63	(0.01)	
M8	Infotainment * Effective N actors	−0.38	(0.06)	
M9	Infotainment * Ideological diversity	0.40	(0.19)	
M10	Infotainment * Competitiveness	−1.31	(0.14)	**

Note: The table reports only the value of the interaction coefficients (one interaction coefficient per model only). The dependent variable in all 10 models ranges between 1 "very positive" and 7 "very negative". Displayed are standardized coefficients of an OLS regression (in parenthesis: robust standard errors). Minimum 3 experts per election. All models are controlled by geographical region, infotainment, restricted press. Furthermore, models M1-M3 are controlled by parliamentarism, PR, presidential election; models M4-M6 are controlled by Gini index, religion index, ethnic index, individualism index, models M8-M10 are controlled by effective N actors, ideological diversity, competitiveness.
Full results in Appendix B, Tables B3-B6.
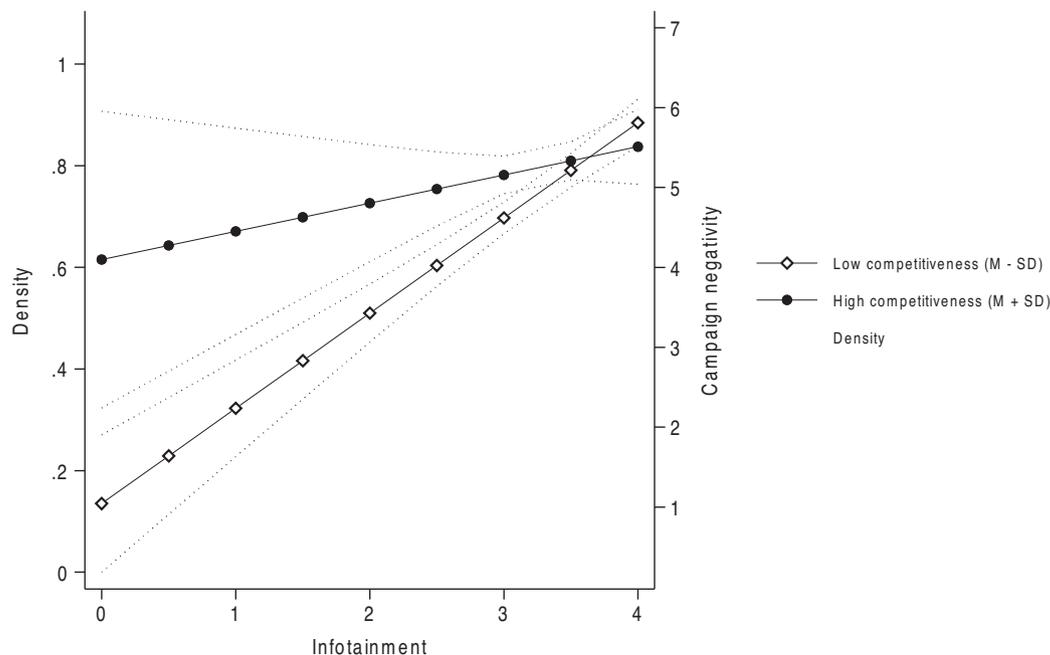*** p < .001, ** p < .01, * p < .05, † p < .1.

Fig. 2. Negativity by infotainment * competitiveness. Marginal effects with 95% CIs, based on coefficients in Table 3 (Model M10). All other variables fixed at their mean. Full results in Table B5 (Appendix B). The two groups in the graph represent two critical values competitiveness, respectively at one standard deviation below the mean value (low competitiveness), and one standard deviation above the mean value (high competitiveness).

by the level of democracy in each country, as measured by the Polity2 score[16] (Tables C1 and C2); results are robust and, in some cases, even stronger. Second, we replicated the models using an alternative dependent variable - the unadjusted one, that comes directly from the aggregated expert assessments of campaign negativity (Tables C3 and C4); results using this alternative dependent variable are very similar to the main ones.

Third, since one of the most common critiques arguing for caution when relying on expert surveys is that the ideological profile of experts is likely to influence their judgments (e.g., Curini 2010), we replicated the models using an alternative adjusted dependent variable that "filters out" the effect of the ideological leaning of the expert sample. Inspired by the procedure described in Walter & van der Eijk, 2019,

we regressed the election negativity score (unadjusted original variable coming from the aggregation of expert answers) on the average expert left–right position (sample ideological leaning); we stored the regression residuals - that is, the part of the dependent variable (campaign tone) that is *not* explained by the average ideology of the experts - into a new variable. In other words, by doing this we have computed a measure of campaign tone that is independent of the ideological profile of each expert sample. Tables C5 and C6 replicate the main models but use this adjusted dependent variable instead. Results are again robust, suggesting that the (average) ideological profile of experts is not a source of biases in this case.

Fourth, and to err on the side of caution, Tables C7 and C8 present an additional series of models that control for several characteristics of the expert samples: average expert self-assessed familiarity with elections in the country, average assessed survey simplicity, average left–right position of the experts, percentage female experts, and

percentage domestic experts (that is, the percentage of experts that work in the country they were asked to rate); furthermore, those additional models also control for the standard deviation on the dependent variable at the level of the expert samples (as reported in Table A1), which can be seen as an indication of the inter-expert agreement on the dependent variable. All results discussed in the main text withstand the test with these additional controls and are thus robust.

Fifth, we replicated the models using Niedenthal's measure of "cultural heterogeneity" (Niedenthal, Rychlowska, Wood, & Zhao, 2018), which broadly reflects how many other countries have contributed to the current population of any given country, as alternative measure of ethnic cleavages (Tables C9 and C10); results are somewhat weaker, but relatively in line with the main results.

Sixth, to exclude potential estimation biases due to the fact that several countries had more than one election in the time period under investigation, we ran separate models where only the first election in these countries was included (Tables C11 and C13); results are generally in line with the main ones. The same can be said for models where only the second election in these countries was included (Tables C12 and C14).[17] Finally, Table C15 presents the checks for multicollinearity for the four models in Table 1; results in Table C15 show very low scores for the variance inflation factor (VIF) across the board, which suggests the absence of multicollinearity.

Conclusion

One of the most popular narratives of recent election campaigns is that the political rhetoric is increasingly dominated by negative messages and political attacks, often accused of poisoning the political discourse and eroding the foundations of liberal democracy (Ansolabehere and Iyengar, 1995; Thorson et al., 2000; Yoon et al., 2005; Cappella & Jamieson 1997). In the past, a great number of studies has investigated individual and strategic reasons incentivizing competing candidates to "go negative" on their rivals (e.g., Benoit 2017; Maier & Jansen 2017; Walter, van der Brug & van Praag 2014; Nai 2020). However, this literature has mostly remained silent about the macro-level determinants of campaign negativity, also due to understandable hurdles to generating large-scale comparative inventories of campaign content across time and space. The outstanding question whether democracies are trapped in campaign negativity due to their institutional design or their specific historical experiences at the cultural and societal level remains unanswered.

In our article, we presented what we believe is the first large-scale assessment of the macro-level determinants of campaign negativity in national elections across the globe. We did so using a comparative dataset mapping the content of election campaigns worldwide via aggregated expert ratings (Nai 2020; Maier & Nai, 2020). The main findings of our study, broadly speaking, provide a strong confirmation for our overarching expectation that deep-seated conflicts are associated with more aggressive election campaigns. In a nutshell, our results suggest that (1) negativity seems to come "by design" as countries in which elections at the national level are fought under a majoritarian or plurality rule tend to be characterized by higher negativity; (2) cultural and economic cleavages matter as countries characterized by higher income inequality, deeper ethnic fragmentation, and higher individualism are all characterized by more negative campaigns; (3) negativity is also affected by short-term conjunctural dynamics at the macro-level as higher election competitiveness and ideological diversity of competing actors both tend to be associated with a greater use of negative campaigning - suggesting that political disagreements and uncertain electoral results provide incentives for a more aggres-

sive rhetoric. Finally, (4) a sensationalistic media coverage goes hand in hand with greater campaign negativity, especially during non-competitive races.

To be sure, these results do not come without caveats. First, even though our investigation covers a large palette of elections and countries worldwide (136 elections in more than 100 countries), we cannot claim that our sample is "representative" of all elections and countries across the globe - it simply reflects all national elections that happened in the period under investigation. Nonetheless, the fact that almost 50% of all countries worldwide are included in our analysis indicates a rather good coverage. Second, the relatively limited number of observations included in our models does not allow for extremely fine-grained or complex analyses. The too-many-variables-too-few-cases problem keeps us, for instance, from simultaneously estimating the effects of all variables within a single model, or from investigating more complex configurations of factors, for example, the idea that a cumulative effect among different conflict lines could be at play in some cases. Yet, even with this critique in mind, our investigation represents, to the best of our knowledge, the single largest comparative assessment of the drivers of negative campaigning. Third, conceptually, our measurement of campaign negativity is necessarily a relatively general one. Negative campaigns can assume many different forms, from polite policy critiques to uncivil ad-hominem attacks, all likely to be affected by different dynamics. Further research should strive to identify the (differential) effects of macro-level factors on different forms of negativity (on this, see Gerstlé and Nai, 2019). Finally, the use of experts to measure the content of election campaigns is not without risks. Aggregating their ratings into standardized measures presupposes that (i) experts share a common understanding of the phenomena they are asked to evaluate, and (ii) their personal profile plays a limited role in their assessments. In our case, we have good reasons to believe that both criteria are met. Experts rated the six "vignettes" used to adjust the main dependent variable (see section 3.2) quite consensually; for instance, 68% of *all* experts in our database (N = 2,021) rated the sixth vignette ("My opponent is dishonest and corrupt") with a score between -7 and -10 on the negativity scale (M = -7.0, SD = 3.9), signaling a very negative tone. Furthermore, it is unlikely that the ideological profile of experts substantially sway the results as shown in several robustness checks. A series of triangulations discussed elsewhere (Maier & Nai 2020) suggest finally that expert ratings of campaign negativity are strongly correlated with the negativity of candidates' campaigns in social media and TV ads, suggesting that expert ratings are a reliable approach to achieve the seemingly impossible, namely to generate systematic comparative data on evanescent phenomena such as campaign rhetoric in countries as different as Belarus, Brazil, Bosnia and Herzegovina, and Botswana.

Despite these limitations, our analysis provides a unique contribution to the research on negative campaigning and its underpinnings by highlighting the fundamental role of macro-level factors that impel political actors to go negative and by presenting what, to the best of our knowledge, is the single largest comparative investigation on the drivers of campaign negativity. Taken together, our results re-establish the fundamental role of structural constraints for political dynamics, as shown in research on agenda setting and conflict expansion (e.g., Baumgartner & Jones 1993; Schattschneider 1960). Stemming directly from this assessment is the somewhat bleak realization that, above and beyond the role of political dynamics and candidate profile, overarching structuring factors set a rather stable stage for the presence of campaign negativity. Especially with the knowledge of its likely detrimental effect of on political and systemic attitudes - for instance, in terms of increased affective polarization (Iyengar et al., 2012) - such stable and structuring incentives for rhetorical aggressiveness could stymie any societal interventions aimed at curbing the presence or effects of political negativity. This normative question notwithstanding, more research is needed to understand the role of contextual factors in driving campaign negativity, especially when it

---

[17] In five countries (Austria, Iceland, Israel, Japan, Spain) *three* elections happened in the period under investigation. The third election, in all five countries, was excluded from these robustness checks.

comes to their interplay with candidates' profiles. Increasing research suggests, for instance, that the personality of candidates matters greatly for their decision to go negative - for instance, candidates with "darker" personality traits tend to use a more aggressive rhetoric (e.g., Nai et al. 2019; Nai & Maier 2020). Whether the structuring role of the context also alters the role of such psychological dispositions, thus not only setting the stage but concretely altering the rules of the game when it comes to the decision to go negative, is a question that remains to be investigated. Ultimately, our results pave the way for a deeper and more nuanced understanding about the drivers of *ideological leadership* – a style characterized by the use of criticism and negative emotions (e.g., Lovelace et al. 2019; Mumford 2006), beyond the traditional focus on charisma (e.g., Bligh & Kohles 2009; Wasike 2017; Williams et al. 2012; Pillai & Williams 1998).

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgements

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.leaqua.2021.101564.

References

Albæk, E., Van Dalen, A., Jebril, N., & de Vreese, C. H. (2014). *Political journalism in comparative perspective*. New York: Cambridge University Press.

Alesina, A., Devleeschauwer, A., Easterly, W., Kurlat, S., & Wacziarg, R. (2003). Fractionalization. *Journal of Economic Growth, 8*(2), 155–194.

Ansolabehere, S. D., & Iyengar, S. (1995). *Going negative. How attack ads shrink and polarize the electorate*. New York: Free Press.

Baumgartner, F. R., & Jones, B. D. (1993). *Agendas and Instability in American Politics*. Chicago: University of Chicago Press.

Benoit, W. L. (2007). *Communication in political campaigns*. New York: Peter Lang.

Benoit, W. L. (2017). Meta-analysis of research on the functional theory of political campaign discourse. *Speaker & Gavel, 54*(1), 7–50.

Bligh, M. C., & Kohles, J. C. (2009). The enduring allure of charisma. How Barack Obama won the historic 2008 presidential election. *Leadership Quarterly, 20*(3), 483–492.

Brants, K. (1998). Who's afraid of infotainment? *European Journal of Communication, 13*(3), 315–335.

Buell, E. H., & Sigelman, L. (2009). *Attack politics. Negativity in presidential campaigns since 1960* (2nd edition). Lawrence: University Press of Kansas.

Capella, J. N., & Jamieson, K. H. (1997). *Spiral of cynicism. The press and the public good*. Oxford: Oxford University Press.

Curini, L. (2010). Expert's Political Preferences and their Impact on Ideological Bias. *Party Politics, 16*(3), 299–321.

Curini, L., & Martelli, P. (2010). Ideological proximity and valence competition. Negative campaigning through allegation of corruption in the Italian legislative arena from 1946 to 1994. *Electoral Studies, 29*(4), 636–647.

Dahl, R. A. (1982). *Dilemmas of pluralist democracy. Autonomy vs. control*. Binghamton: Yale University Press.

de Vreese, C., Esser, F., & Hopmann, D. N. (Eds.). (2017). *Comparing political journalism*. New York: Routledge.

Dickson, M. W., Den Hartog, D. N., & Mitchelson, J. K. (2003). Research on leadership in a cross-cultural context. Making progress, and raising new questions. *Leadership Quarterly, 14*(6), 729–768.

Dolezal, M., Ensser-Jedenastik, L., & Müller, W. C. (2015). When do parties attack their competitors? Negative campaigning in Austria, 2002–08. In A. S. Walter (Ed.), *Nai, A* (pp. 165–182). New perspectives on negative campaigning. Why attack politics matters. Colchester: ECPR Press.

Drazanova, L. (2019). Historical Index of Ethnic Fractionalization Dataset (HIEF). *Harvard Dataverse, V1*. https://doi.org/10.7910/DVN/4JQRCL.

Druckman, James N., Kifer, Martin J., & Parkin, Michael (2009). Campaign communications in U.S. congressional elections. *American Political Science Review, 103*(3), 343–366.

Elmelund-Præstekær, C. (2008). Negative campaigning in a multiparty system. *Representation, 44*(1), 27–39.

Elmelund-Præstekær, C. (2010). Beyond American negativity. Toward a general understanding of the determinants of negative campaigning. *European Political Science Review, 2*(1), 137–156.

Elmelund-Præstekær, C., & Svensson, H. M. (2014). Ebbs and flows of negative campaigning. A longitudinal study of contextual factors' influence on Danish campaign rhetoric. *European Journal of Communication, 29*(2), 230–239.

Esser, F., Engesser, S., Matthes, J., & Berganza, R. (2017). Negativity. In C. de Vreese, F. Esser, & D. N. Hopmann (Eds.), *Comparing political journalism* (pp. 71–91). New York: Routledge.

Farah, B., Elias, R., De Clercy, C., & Rowe, G. (2020). Leadership succession in different types of organizations: What business and political successions may learn from each other. *Leadership Quarterly, 31*(1), 101289. https://doi.org/10.1016/j.leaqua.2019.03.004.

Finkel, S. E., & Geer, J. G. (1998). A spot check: Casting doubt on the demobilizing effect of attack advertising. *American Journal of Political Science, 42*(2), 573–595.

Fridkin, K. L., & Kenney, P. J. (2004). Do negative messages work? The impact of negativity on citizens' evaluations of candidates. *American Politics Research, 32*(5), 570–605.

Fridkin, K. L., & Kenney, P. J. (2008). The dimensions of negative messages. *American Politics Research, 36*(5), 694–723.

Fridkin, K. L., & Kenney, P. J. (2012). The impact of negative campaigning on citizens' actions and attitudes. In H. A. Semetko & M. Scammell (Eds.), *The SAGE handbook of political communication* (pp. 173–185). Los Angeles: Sage.

Galasso, V., Nannicini, T., & Nunnari, S. (2020). Positive Spillovers from Negative Campaigning. *American Journal of Political Science*. https://doi.org/10.1111/ajps.12610.

Gallagher, M. (2014). Electoral institutions and representation. In L. LeDuc, R. Niemi, & P. Norris (Eds.), *Comparing democracies 4* (pp. 11–31). London: Sage.

Gallagher, M., & Mitchell, P. (Eds.). (2005). *The politics of electoral systems*. Oxford: Oxford University Press.

Garramone, G. M. (1984). Voter response to negative political ads. *Journalism Quarterly, 61*(2), 250–259.

Garzia, D., & Ferreira da Silva, F. (2021). Negative personalization and voting behavior in 14 parliamentary democracies, 1961–2018. *Electoral Studies, 71*, 102300. https://doi.org/10.1016/j.electstud.2021.102300.

Geer, J. G. (2006). *In defense of negativity. Attack ads in presidential campaigns*. Chicago: University of Chicago Press.

Geer, J. G. (2012). The news media and the rise of negativity in presidential campaigns. *PS. Political Science & Politics, 45*(3), 422–427.

Gélineau, F., & Blais, A. (2015). Comparing measures of campaign negativity. Expert judgments, manifestos, debates and ads. In A. Nai & A. S. Walter (Eds.), *New perspectives on negative campaigning. Why attack politics matters* (pp. 63–74). Colchester: ECPR Press.

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.

Grabe, M. E., & Bucy, E. P. (2009). *Image bite politics: News and the visual framing of elections*. Oxford University Press.

Hainmueller, J., Mummolo, J., & Xu, Y. (2019). How much should we trust estimates from multiplicative interaction models? Simple tools to improve empirical practice. *Political Analysis, 27*(2), 163–192.

Hale, J. F., Fox, J. C., & Farmer, R. (1996). Negative advertisements in US Senate campaigns. The influence of campaign context. *Social Science Quarterly, 77*(2), 329–343.

Haselmayer, M., Meyer, T. M., & Wagner, M. (2019). Fighting for attention. Media coverage of negative campaign messages. *Party Politics, 25*(3), 412–423.

Haynes, A. A., & Rhine, S. L. (1998). Attack politics in presidential nomination campaigns. An examination of the frequency and determinants of intermediated negative messages against opponents. *Political Research Quarterly, 51*(3), 691–721.

Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and organizations – software of the mind. Intercultural cooperation and its importance for survival* (3rd edition). New York: McGraw-Hill.

Hopkins, D. J., & King, G. (2010). Improving anchoring vignettes designing surveys to correct interpersonal incomparability. *Public Opinion Quarterly, 74*(2), 201–222.

Hysa, E. (2020). Impact of Cultural Diversity on Western Balkan Countries' Performance. *Journal of Ethnic and Cultural Studies, 7*(1), 20–40.

Iyengar, S., & Kinder, D. R. (1987). *News that matters. Television and American opinion*. Chicago: University of Chicago Press.

Iyengar, S., Sood, G., & Lelkes, Y. (2012). Affect, not ideology. A social identity perspective on polarization. *Public Opinion Quarterly, 76*(3), 405–431.

Kahn, K. F., & Kenney, P. J. (2004). *No holds barred. Negativity in U.S. Senate campaigns*. Upper Saddle River: Pearson.

King, Gary, Murray, Christopher J. L., Salomon, Joshua A., & Tandon, Ajay (2004). Enhancing the validity and cross-cultural comparability of measurement in survey research. *American Political Science Review, 98*(1), 191–207.

Klandermans, B., & de Weerd, M. (2000). Group identification and political protest. In S. Stryker, T. J. Owens, & R. W. White (Eds.), *Self, identity, and social movements* (pp. 68–90). Minneapolis: University of Minneapolis Press.

Kolo, P. (2012). *Measuring a new aspect of ethnicity: The appropriate diversity index* (No. 221). Discussion Papers, Ibero America Institute for Economic Research.

Laakso, M., & Taagepera, R. (1979). 'Effective' number of parties. A measure with application to West Europe. *Comparative Political Studies, 12*(1), 3–27.

Lau, R. R., & Pomper, G. M. (2002). Effectiveness of negative campaigning in U.S. Senate elections. *American Journal of Political Science, 46*(1), 47–66.

Lau, R. R., & Pomper, G. M. (2004). *Negative Campaigning. An analysis of U.S. Senate elections.* Oxford: Rowman and Littlefield.

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.

Lau, R. R., Sigelman, L., Heldman, C., & Babbitt, P. (1999). The effects of negative political advertisements. A meta-analytic assessment. *American Political Science Review, 93*(4), 851–875.

Lengauer, G., Esser, F., & Berganza, R. (2011). Negativity in political news. A review of concepts, operationalizations and key findings. *Journalism, 13*(2), 179–202.

Lijphart, A. (1984). *Democracies. Patterns of majoritarian and consensus government in twenty-one countries.* New Haven: Yale University Press.

Lijphart, A. (2012). *Patterns of democracy. Government forms and performance in thirty-six countries* (2nd edition). New Haven: Yale University Press.

Lilienfeld, S. O., Waldman, I. D., Landfield, K., Watts, A. L., Rubenzer, S., & Faschingbauer, T. R. (2012). Fearless dominance and the US presidency: Implications of psychopathic personality traits for successful and unsuccessful political leadership. *Journal of Personality and Social Psychology, 103*(3), 489–505.

Lipset, S. M., & Rokkan, S. (1967). Cleavage structures, party systems, and voter alignments. An introduction. In S. M. Lipset & S. Rokkan (Eds.), *Party systems and voter alignments. Cross-national perspectives* (pp. 1–64). New York: Free Press.

Lipsitz, K., Trost, C., Grossmann, M., & Sides, J. (2005). What voters want from political campaign communication. *Political Communication, 22*(3), 337–354.

Lovelace, J. B., Neely, B. H., Allen, J. B., & Hunter, S. T. (2019). Charismatic, ideological, & pragmatic (CIP) model of leadership. A critical review and agenda for future research. *Leadership Quarterly, 30*(1), 96–110.

Maier, J., & Jansen, C. (2017). When do candidates attack in election campaigns? Exploring the determinants of negative candidate messages in German televised debates. *Party Politics, 23*(5), 549–559.

Maier, J. & Nai, A. (2020). Roaring candidates in the spotlight. Campaign negativity, emotions, and media coverage in 107 national elections. The International Journal of Press/Politics, doi: 1940161220919093.

Martin, P. S. (2004). Inside the black box of negative campaign effects: Three reasons why negative campaigns mobilize. *Political Psychology, 25*(4), 545–562.

Martínez i Coma, F. & Nai, A. (2017). Ethnic diversity decreases turnout. Comparative evidence from over 650 elections around the world. Electoral Studies 49, 75-95.

Mazzoleni, G., & Schulz, W. (1999). "Mediatization" of politics: A challenge for democracy? *Political Communication, 16*(3), 247–261.

McCombs, M. E., & Shaw, D. L. (1972). The agenda-setting function of the mass media public. *Public Opinion Quarterly, 36*, 176–187.

Mumford, M. D. (2006). Pathways to outstanding leadership. A comparative analysis of charismatic, ideological, and pragmatic leaders. *Mahwah: Erlbaum.*.

Nai, A. (2020). Going negative, worldwide. Towards a general understanding of determinants and targets of negative campaigning. *Government & Opposition, 55*(3), 430–455.

Nai, A., & Maier, J. (2020). Dark necessities? Candidates' aversive personality traits and negative campaigning in the 2018 American Midterms. *Electoral Studies, 68*, 102233. https://doi.org/10.1016/j.electstud.2020.102233.

Nai, A., Martinez i Coma, F. & Maier, J. (2019). Donald Trump, populism, and the age of extremes: Comparing the personality traits and campaigning style of Trump and other leaders worldwide. Presidential Studies Quarterly 49(3), 609-643.

Nai, A., & Walter, A. (2015). The war of the words. The art of negative campaigning. In A. Nai & A. S. Walter (Eds.), *New perspectives on negative campaigning. Why attack politics matters* (pp. 1–31). Colchester: ECPR Press.

Niedenthal, Paula M., Rychlowska, Magdalena, Wood, Adrienne, & Zhao, Fangyun (2018). Heterogeneity of long-history migration predicts smiling, laughter and positive emotion across the globe and within the United States. *PloS one, 13*(8), e0197651. https://doi.org/10.1371/journal.pone.0197651.

Papp, Zsófia, & Patkós, Veronika (2019). The macro-level driving factors of negative campaigning in Europe. *International Journal of Press/Politics, 24*(1), 27–48.

Patterson, Thomas E., (1993). *Out of Order.*. New York: Vintage Books.

Peterson, D.A.M. & Djupe, P.A. (2005). When primary campaigns go negative. The determinants of campaign negativity. Political Research Quarterly 58(1), 45-54.

Pillai, Rajnandini, & Williams, Ethlyn A. (1998). Does leadership matter in the political arena? Voter perceptions of candidates' transformational and charismatic leadership and the 1996 U.S. president. *Leadership Quarterly, 9*(3), 397–416.

Pinkleton, Bruce (1997). The effects of negative comparative political advertising on candidate evaluations and advertising evaluations. An Exploration. *Journal of Advertising, 26*(1), 19–29.

Plasser, Fritz (2005). From hard to soft news standards? How political journalists in different media systems evaluate the shifting quality of news. *Harvard International Journal of Press/Politics, 10*(2), 47–68.

Prior, Markus (2003). Any good news in soft news? The impact of soft news preference on political knowledge. *Political communication, 20*(2), 149–171.

Pruysers, S., & Cross, W. (2016). "Negative" personalization. Party leaders and party strategy. *Canadian Journal of Political Science, 49*(3), 539–558.

Reinemann, C., Stanyer, J., Scherr, S., & Legnante, G. (2012). Hard and soft news. A review of concepts, operationalizations and key findings. *Journalism, 13*(2), 221–239.

Ridout, Travis N., & Smith, Glen R. (2008). Free advertising. How the media amplify campaign messages. *Political Research Quarterly, 61*(4), 598–608.

Roese, N. J., & Sande, G. N. (1993). Backlash effects in attack politics. *Journal of Applied Social Psychology, 23*(8), 632–653.

Rozin, Paul, & Royzman, Edward B. (2001). Negativity bias, negativity dominance, and contagion. *Personality and Social Psychology Review, 5*(4), 296–320.

Rudnev, Maksim, Magun, Vladimir, & Schwartz, Shalom (2018). Relations among higher order values around the world. *Journal of Cross-Cultural Psychology, 49*(8), 1165–1182.

Sartori, G. (1968). The sociology of parties. A critical review. In O. Stammer (Ed.), *Party systems, party organizations, and the politics of new masses* (pp. 1–25). Berlin: Institut für politische Wissenschaft an der Freien Universität Berlin.

Schattschneider, E. E. (1960). *The Semi-Sovereign People.* New York: Holt, Rinehart & Winston.

Schmitt, David P., Allik, Jüri, McCrae, Robert R., & Benet-Martínez, Verónica (2007). The geographic distribution of Big Five personality traits. Patterns and profiles of human self-description across 56 nations. *Journal of Cross-Cultural Psychology, 38*(2), 173–212.

Schoen, Harald, & Schumann, Siegfried (2007). Personality traits, partisan attitudes, and voting behavior. *Evidence from Germany. Political Psychology, 28*(4), 471–498.

Soroka, Stuart, Fournier, Patrick, & Nir, Lilach (2019). Cross-national evidence of a negativity bias in psychophysiological reactions to news. *Proceedings of the National Academy of Sciences, 116*(38), 18888–18892.

Strömbäck, J. (2008). Swedish election news coverage. Towards increasing mediatization. In J. Strömbäck & L. L. Kaid (Eds.), *The handbook of election news coverage around the world* (pp. 160–174). New York: Routledge.

Sullivan, Jonathan, & Sapir, Eliyahu V. (2012). Modelling negative campaign advertising. Evidence from Taiwan. *Asian Journal of Communication, 22*(3), 289–303.

Swanson, D. L., & Mancini, P. (1996). *Politics, media, and modern democracy: An international study of innovations in electoral campaigning and their consequences.* Westport: Praeger.

Thorson, Esther, Ognianova, Ekaterina, Coyle, James, & Denton, Frank (2000). Negative political ads and negative citizen orientations toward politics. *Journal of Current Issues & Research in Advertising, 22*(1), 13–40.

Van Elst, O. P., Sheafer, T., Hubé, N., & Papathanassopoulos, S. (2017). Personalisation. In C. de Vreese, F. Esser, & D. N. Hopmann (Eds.), *Comparing political journalism* (pp. 71–91). New York: Routledge.

Van Heerde-Hudson, J. (2011). The Americanization of British party advertising? Negativity in partly election broadcast, 1964–2005. *British Politics, 6*(1), 52–77.

Van Zoonen, L., & Holtz-Bacha, C. (2000). Personalisation in Dutch and German politics. *The case of talk show. Javnost, 7*(2), 45–56.

Walter, Annemarie S. (2014). Negative campaigning in Western Europe: Similar or different? *Political Studies, 62*(1_suppl), 42–60.

Walter, Annemarie S (2014). Choosing the enemy. Attack behaviour in a multiparty system. *Party Politics, 20*(3), 311–323.

Walter, Annemarie S., & van der Eijk, Cees (2019). Measures of campaign negativity. Comparing approaches and eliminating partisan bias. *International Journal of Press/ Politics., 24*(3), 363–382.

Walter, Annemarie S., & Vliegenthart, Rens (2010). Negative campaigning across different communication channels: Different ballgames? *Harvard International Journal of Press/Politics, 15*(4), 441–461.

Walter, A. S., & Nai, A. (2015). Explaining the Use of Attack Behaviour in the Electoral Battlefield. A Literature Overview. In A. Nai & A. S. Walter (Eds.), *New perspectives on negative campaigning. Why attack politics matters* (pp. 97–114). Colchester: ECPR Press.

Wasike, B. (2017). Charismatic rhetoric, integrative complexity and the U.S. Presidency. An analysis of the State of the Union Address (SOTU) from George Washington to Barack Obama. *Leadership Quarterly, 28*(6), 812–826.

West, D. M. (2018). *Air wars. Television advertising and social media in election campaigns 1952–2016* (7th edition). Thousand Oaks: Sage.

Williams, E. A., Pillai, R., Deptula, B., & Lowe, K. B. (2012). The effects of crisis, cynicism about change, and value congruence on perception of authentic leadership and attributed charisma in the 2008 presidential election. *Leadership Quarterly, 23*(3), 324–341.

Yoon, Kak, Pinkleton, Bruce E., & Ko, Wonjun (2005). Effects of negative political advertising on voting intention: An exploration of the roles of involvement and source credibility in the development of voter cynicism. *Journal of Marketing Communications, 11*(2), 95–112.