

Working Paper No. 170

Public trust in elections: The role of media freedom and election management autonomy

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Abstract

As multiparty elections have become a global norm, scholars and policy experts regard public trust in elections as vital for regime legitimacy. However, very few cross-national studies have examined the consequences of electoral manipulation, including the manipulation of election administration and the media, on citizens' trust in elections. This paper addresses this gap by exploring how autonomy of election management bodies (EMBs) and media freedom individually and conjointly shape citizens' trust in elections. Citizens are more likely to express confidence in elections when EMBs display de facto autonomy and less likely to do so when mass media disseminate information independent of government control. Additionally, we suggest that EMB autonomy may not have a positive effect on public trust in elections if media freedom is low. Empirical findings based on recent survey data on public trust in elections in 47 countries and expert data on de facto EMB autonomy and media freedom support our hypotheses.

1. Introduction

On March 10, 2010, thousands of Nigerians marched through their capital, Abuja, bearing placards that indicated their disgust with the country's electoral management body (EMB) – the organization vested with the legal responsibility to organize, supervise, and adjudicate on some or all stages of the electoral process.¹ Nigerians from all walks of life demanded, among other things, the immediate sacking of the EMB commissioner, Professor Maurice Iwu, for his mismanagement of the 2007 elections and his alleged allegiance to the ruling Peoples Democratic Party. Across the world, citizens have staged similar mass protests demanding electoral reform and expressed their frustration with EMBs perceived as politically manipulable, complicit in electoral fraud, and ill-prepared for elections.

As multiparty elections have become a global norm, scholars and policy experts regard public trust in elections as vital for regime legitimacy (Moehler, 2009; Rose & Mishler, 2009; Norris, 2014). Incumbent regimes, like the Nigerian during the 2007 elections, often use elections as a way to gain legitimacy, while trying to reduce the risk of electoral defeat by employing various strategies of electoral fraud, including the manipulation of election administration.

Can manipulated elections confer popular legitimacy on elected representatives or even regime institutions? In the case of Nigeria, following the 2007 elections, popular legitimacy of the newly elected federal government and the country's multiparty system was significantly undermined because of the EMB's lack of autonomy during the electoral process. Support was only partially restored after the government embarked upon an electoral reform process that included the replacement of the EMB commissioner with Atahiru Jega, who was nationally regarded as politically independent (Lewis, 2011). However, blatant manipulation of election administration in countries such as Russia (Rose & Mishler, 2009) and Rwanda (Reyntjens, 2015) has not resulted in public outcry against incumbents or withdrawal of public support for these regimes.

The link between electoral manipulation and popular legitimacy, though much debated, has received less attention in the cross-national research on electoral manipulation. So far, studies have focused on documenting the “menu” of manipulative strategies and whether these strategies, used individually or in combination, could undermine regime legitimacy among political elites, collective domestic actors, and international actors (Birch, 2011; Schedler, 2013; Simpser, 2013; Gehlbach, Sonin, & Svulik, 2015; Van Ham & Lindberg, 2015).

This paper seeks to fill this gap in the literature by exploring how the manipulation of election administration and the media may influence citizens' trust in the integrity of elections. First, we focus on election administration as a venue of incumbent manipulation because it is one of the most frequently manipulated elements of the electoral process (Birch, 2011) and numerous case and policy-oriented studies associate EMB autonomy with electoral credibility (Lopez-Pintor, 2000; Wall, 2006). However, only a handful of cross-national studies have explored the link between EMB autonomy and citizens' perceptions of election quality (Birch, 2008; Hartlyn, McCoy, & Mustillo, 2008; Rosas, 2010). These studies use *de jure* indicators of EMB autonomy and assume that these formal-legal institutional characteristics will influence citizens' attitudes about the quality of elections. However, they have not provided empirical support for the notion that EMBs matter for citizens' perceptions of election quality.

We take a different approach in this paper by focusing on the *de facto* autonomy of EMBs.² Specifically, we argue that in countries where EMBs display *de facto* autonomy, citizens are

¹ For more information on the March 2010 protests, see LeVan and Ukata (2012).

² We define *de facto* EMB autonomy as the ability to make decisions and implement policy independent of the control of the incumbent and other political and societal actors. We use the terms autonomy and independence interchangeably throughout the text. We distinguish *de facto* EMB autonomy from *de jure* EMB autonomy, which reflects legally or constitutionally defined characteristics of the institution that may

more likely to express confidence in elections. *De facto* EMB autonomy is important for citizens because it provides information on the ability of the institution to resist incumbent manipulation and deter electoral fraud. To put it plainly, citizens' trust in elections is affected by the perceived neutrality of the electoral authorities and their expected capability to ensure that all political actors play by the rules. As a consequence, when EMBs are perceived to be in the back pocket of the incumbent (or any other political or societal interests), citizens are less likely to have confidence in the institution's ability to carry out its functions during the course of the elections. Most importantly, citizens will question the final results of the elections because EMB officials play such a critical role in voting operations.

In addition to EMBs, mass media also influence public trust in elections (Leeson, 2008; Birch, 2011; Schedler, 2013; Coffé, 2016). Nonetheless, research on how media freedom may structure citizens' trust in elections is relatively underdeveloped. Here we argue that citizens' ability to make election quality judgments is a function of the quantity and quality of information that they receive about the electoral process. When print and broadcast media can operate in an environment free of government censorship or backlash, they can provide a marketplace for citizens to gain varied, competing, and low-cost information about the quality of elections. Following this, we expect that when media freedom is high, citizens are *more* likely to become aware of electoral manipulation and therefore *less* likely to express confidence in elections when compared to countries where media freedom is restricted.

Along with exploring the direct effects of EMB autonomy and media freedom on citizens' trust in elections, we also consider whether the relationship between EMB autonomy and citizens' trust in elections may be conditional on the level of media freedom. Specifically, we believe that the positive effect of EMB autonomy on citizens' trust in elections is most likely to be observed when media freedom is sufficiently high. Conversely, at low levels of media freedom, EMB autonomy may have no discernable association with citizens' trust in elections, as citizens are less likely to be exposed to critical information on the performance of the EMB.

We examine these three hypotheses in 47 countries across a variety of regime types and world regions. Importantly, we incorporate public opinion data on citizens' trust in elections from the most recent rounds of the World Values Survey (WVS, 2015) and Afrobarometer (2015) as well as expert data on EMB autonomy and media freedom from Varieties of Democracy (V-Dem). The results of the empirical analyses support the main hypotheses. Mainly we find that EMB autonomy is associated with higher levels of public trust in elections, while media freedom seems to dampen public trust in elections. Moreover, we find some support for the conditional effect of media freedom on the association between EMB autonomy and citizens' trust in elections.

The following section provides an overview of the current debates on these issues and outlines the theoretical argument (Section 2). Then, we test our argument empirically (Section 3) and conclude with brief discussion of the implications of our findings (Section 4).

2 Current debates and theory

2.1 Citizen perceptions of election quality

Citizen trust in elections is essential for the legitimacy of elected representatives and the regime, especially in regimes with less experience with multiparty elections. Several empirical studies find that citizens who experience fraudulent, violence-ridden, or poorly organized

potentially influence its autonomy in practice. Some of these formal-legal characteristics include the inclusiveness of the appointment process of EMB commissioners, the organizational location of EMBs relative to the executive, and rules on whether partisan or professional individuals should serve as commissioners. We choose to focus on EMB *de facto* autonomy because numerous studies have highlighted the incongruence between *de jure* EMB characteristics and how the institution operates in practice, especially in contexts where informal politics is pervasive (e.g. Rosas, 2010).

elections are less likely to express confidence in the elected representatives and more likely to engage in anti-regime protests or violence (Rose & Mishler, 2009; Norris, 2014). In other words, incumbents who manipulate elections may run the risk of losing popular legitimacy.

Prior studies show that citizens possess the cognitive capacity to evaluate the quality of elections and develop these evaluations either through 1) personal experience during various stages of the electoral process or 2) information gathered from a variety of second-hand sources, including the media, political parties, and informal conversations (Bratton, 2013). In fact, empirical studies find that citizens' perceptions of electoral integrity are strongly correlated with various independently measured macro-level indicators of election quality, including expert perceptions of electoral integrity (Norris, 2014), the performance of election administration (Bowler, Brunell, Donovan, & Gronke, 2015), and the incidence of electoral violence (Mattes, 2014).

Despite empirical evidence pointing to the collective rationality of citizens in evaluating electoral processes, there are instances where citizens' perceptions, even when aggregated, may be incongruent with other aggregate-level indicators of election quality. For instance, there have been several elections that experts and international observers characterized as being excessively manipulated but that recorded seemingly high levels of public confidence.

One reason for this incongruence relates to citizens' unwillingness to reveal their true assessments of the election due to fear of repercussions from the government or because expressing such views may be socially unacceptable.³ A second, and more widely studied, reason is that citizens may place greater importance on specific political or economic factors when assessing electoral integrity. For instance, numerous cross-national studies find that citizens' party affiliation or status as electoral winners or losers remains an important predictor of election integrity assessments (Anderson, Blais, Bowler, & Donovan, 2005). Similarly, Rose and Mishler (2009) note that Russians with a positive assessment of the regime's political and economic performance were also more inclined to praise the quality of the 2007 Duma elections, despite the incumbent's egregious attempts to undermine the integrity of the vote. A third explanation for the incongruence, and the one we emphasize in this study, is that in some contexts citizens may not be able to develop a complete understanding of the quality of elections because they lack sufficient information about the nature and extent of manipulation.

2.2 *Autonomy of election management bodies*

Scholars and policy practitioners have widely recognized autonomous, professional, and transparent election administration as the linchpin of electoral credibility (Pastor, 1999; Elklit & Reynolds, 2002; Mozaffar, 2002). EMBs are often viewed as institutions that provide both *vertical* and *horizontal* accountability during elections by holding elites accountable to the rules of the electoral game and also ensuring that citizens' right to vote is not violated during various stages of the electoral process.

Ultimately, EMBs – if they are independent – can act as a bulwark against attempts to manipulate the electoral process. Conversely, installing biased EMBs is a key tool for incumbents to manipulate the electoral process. As van Ham and Lindberg (2015) note, this tool is relatively cheap compared to other forms of electoral manipulation, such as vote-buying. Schedler (2013) expects the legitimacy costs associated with electoral fraud – such as political influence on the EMB – to be lower than the cost of repressive or exclusionary tactics, because fraud would be more difficult to detect.

³ Self-censorship as a result of political fear and social desirability bias has been evinced in research on political campaigns and elections (e.g. Gonzalez-Ocantos, De Jonge, Meléndez, Osorio, & Nickerson, 2012; Bratton, Dulani, & Masunugure, 2016).

In general, cross-national research on the relationship between EMB autonomy and citizens' election quality perceptions has been limited. The few existing studies have relied primarily on macro-level measures of EMB *de jure* autonomy. These *de jure* measures include the organizational location of the EMBs relative to the executive, the partisan or professional composition of the EMB commissioners, the inclusiveness of the appointment process of EMB commissioners, and the security of tenure for EMB commissioners.⁴ Most of these studies find very little evidence for a positive correlation of EMB *de jure* autonomy with public trust in elections (Birch, 2008; Hartlyn, McCoy, & Mustillo, 2008; Rosas, 2010). In fact, many of these studies admit that citizens are less likely to respond to institutional characteristics of EMB autonomy as stated in law (i.e. *de jure* EMB autonomy) than to whether EMBs exercise autonomy in practice (i.e. *de facto* EMB autonomy). So far, very few studies have explored the link between EMB performance and public trust, and these studies have not empirically disentangled the effect of EMB *de facto* autonomy from other dimensions of EMB performance (e.g. Kerr, 2014; Bowler et al., 2015).⁵

Our work seeks to make two theoretical contributions to the cross-national literature on EMB autonomy. First, we conceptualize *de facto* EMB autonomy as the ability to make decisions and implement policy independent of the control of the incumbent and other political and societal actors.⁶ Second, we carefully evaluate the processes through which citizens access information about EMB autonomy when forming their judgments about the integrity of elections. In so doing, we focus on the characteristics of the media landscape and how the independence of media can mediate the link between EMB autonomy and public trust in elections.

2.3 Media freedom

Liberal democratic theorists have considered media freedom essential for the deepening of democracy (Gunther & Mughan, 2000; Besley & Prat, 2006) and prevention of democratic reversals (Teorell, 2010). Likewise, the role of the "fourth estate" is important during elections. Various scholars have noted how media freedom increases the costs of manipulation, not only 1) directly, as journalists investigate and expose electoral fraud, but also 2) indirectly, as media entities provide opposition parties, domestic civil society groups, and international observers with alternative venues to propagate their assessments of the election. According to Birch (2011, p. 59), independent media raise the domestic legitimacy costs of manipulation and provide an indication of "the extent to which the population is capable of monitoring, exposing, and reacting to various aspects of the electoral process." Additionally, Norris (2014, p. 96) argues that traditional and social media accounts that are critical of electoral manipulation "provide benchmarks that the general public uses to assess electoral malpractices." For Schedler (2013, p. 274), "media restrictions shape the window through which citizens see the political world."

It is no surprise, then, that media, especially the most independent entities and personalities, are often the target of repression and censorship because of their potential to inform citizens about the manipulative strategies of regime elites and what Schedler (2013, p. 67) refers to as "competing constructions of political reality." Numerous studies have formally modeled the dynamics of media manipulation and found that media manipulation can be an effective strategy for winning elections, especially in non-democratic regimes. Specifically, regime incumbents often manipulate media as well as other informational sources to sway

⁴ See Birch (2011) for a detailed assessment of *de jure* EMB autonomy measures.

⁵ Other single-country studies probe citizens' experiences with election administration and find that experiences that provide information about EMB *de facto* autonomy, such as the impartiality of poll workers, seemingly boost citizens' trust in elections (e.g. Alvarez, Hall, & Llewellyn, 2008).

⁶ This conceptualization is informed by prior research on EMB autonomy (Lopez-Pintor, 2000; Gazibo, 2006; Wall, 2006; Birch, 2011), as well as seminal work on bureaucratic autonomy (Hammond & Knott, 1996) and the autonomy of regulatory agencies (Cukierman, Webb, & Neyapti, 1992).

public opinion (Gehlbach & Sonin, 2014) or to discourage anti-regime mobilization (Egorov, Guriev, & Sonin, 2009).

Notwithstanding the theoretical relevance of the media, the existing literature has not fully explored how media freedom may structure the process through which citizens form their opinions about election quality.⁷ Most empirical studies have examined the impact of media by looking at the demand side of the equation (i.e. citizens' demand for or ability to process political information) and found that citizens' demand for or exposure to different media sources can influence their electoral integrity judgments (Moehler, 2009; Robertson, 2015). To the best of our knowledge, only Coffé (2016) examines the role of the media environment (i.e. supply side of the equation) and how the degree of media freedom may influence the quantity and quality of information citizens can potentially access about the quality of elections. Coffé's results are instructive for our research as they indicate that the relationship between media exposure and the accuracy of citizens' election integrity evaluations may vary by the level of press freedom within a country.⁸ We build upon Coffé's research by arguing that citizens' evaluations of election quality may depend on characteristics of the media landscape, specifically whether media institutions exercise some autonomy by disseminating information that potentially undermines the credibility of the electoral process.

We conceptualize media freedom as the ability of media entities to collect and publicly disseminate political and official information, independent of government control or interference.⁹ Media freedom is most clearly demonstrated when media entities routinely monitor and publicly criticize government activity. Consequently, if media lack independence, citizens are less likely to be exposed to elite interpretations that may reveal information about electoral manipulation, including attempts to undermine the quality of election management bodies, bribe voters, or stifle opposition candidates. In short, if media are biased in favor of the incumbent, voices criticizing the quality of elections are less likely to be reflected, and consequently citizens are less likely to become aware of electoral manipulation. This may result in relatively favourable views about the quality of elections. The reverse is also true. When mass media exercise greater freedom from government control, interpretations of election quality become more pluralistic, and in contexts where manipulation occurs or is alleged to have occurred, citizens are more likely to gain knowledge about it. This knowledge could potentially influence the process through which citizens form judgments about the quality of elections.

2.4 The conditional effect of media freedom on the relationship between EMB autonomy and public trust in elections

Not only may media freedom have a direct effect on public trust in elections, but it may also moderate the association between EMB autonomy and citizens' trust. The main aspects of our theory concerning the mediating role of media on the relationship between EMB autonomy and citizens' trust are summarized in Figure 1. To begin with, we assume that citizens are likely to receive information about the quality of election management from two main sources: 1) personal experience with election administration and 2) the media (broadcast, print, and electronic).¹⁰ Our theoretical account focuses primarily on the media

⁷ Other studies have empirically probed the consequences of media control for citizens' electoral attitudes and political behavior (e.g. Leeson, 2008), but very few focus on the consequences for public trust in elections.

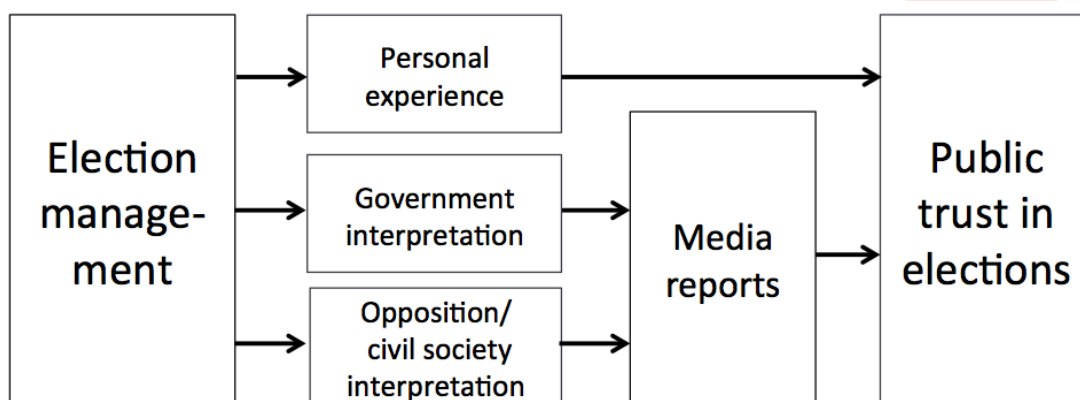
⁸ Specifically for Coffé (2016), accuracy refers to the degree of association between citizens' election quality perceptions and experts' opinion of election quality.

⁹ Recent scholarship on media freedom has informed this conceptualization (e.g. Bairett, 2015; Kellam & Stein, 2015).

¹⁰ Citizens also form opinions in direct interaction with party activists and based on word of mouth. However, third-party statements are informed by individual perceptions as well as media and hence are not conceptualized here separately.

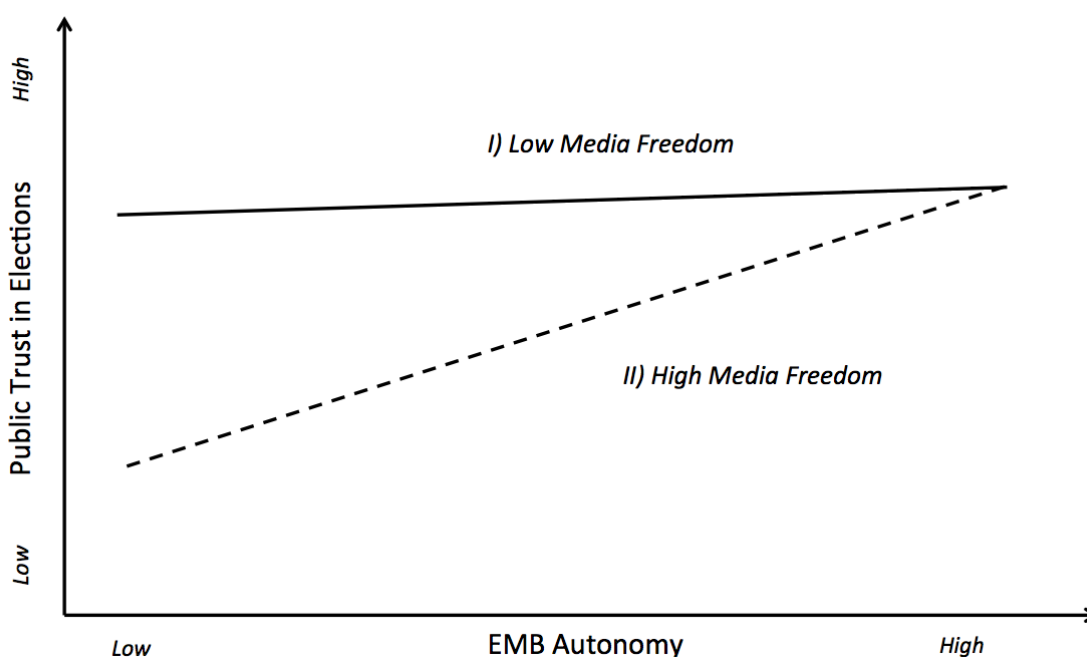
because they are a key source of information for many citizens and have not been studied extensively in the context of perceptions of election quality.

Figure 1: How media link election management to public trust in elections



Because of the centrality of election administration to the integrity of the electoral process, election stakeholders – including the incumbent, opposition, and domestic and international observers – are incentivized to provide assessments of the quality of election administration during different stages of the electoral cycle, and most certainly after an election. As many scholars have indicated, media filter the dissemination of these elite frames concerning the integrity of elections to the public. We contend that the extent to which the public becomes aware of these diverse and potentially competing interpretations of election management quality depends in part on the degree of media freedom. This relationship is depicted in Figure 2. Specifically, we expect that when media freedom is high, improvements in EMB autonomy are positively associated with public trust in elections. In such contexts, if EMB manipulation occurs, there is a greater likelihood that citizens will be exposed to information about the flaws in election administration, which could consequently reduce their trust in elections.

Figure 2: Effect of EMB autonomy on public trust in elections in two different scenarios of media freedom



Conversely, Figure 2 also shows that at low levels of media freedom, improvements in EMB autonomy are less likely to boost citizens' trust in elections. In fact, we believe that when media freedom is low, there may be no significant difference in public trust in elections between EMBs with high and low levels of autonomy. One reason for this is that in such contexts, media reports are less likely to reflect opposition or civil society viewpoints that could potentially reveal information about EMB performance. Hence, the positive effect of EMB manipulation on citizens' trust in elections is most likely to be observed during elections where media exercise some degree of independence from government control. In other words, rulers who manipulate election management as well as the media seem to be more likely to avoid a public backlash than those who allow public media to flourish.

2.5 Summary and hypotheses

In summary, we suggest that the autonomy of election management has a strong and positive influence on citizens' evaluations of electoral processes. Hence,

H1: In countries with higher levels of EMB autonomy, citizens are more likely to display trust in elections (relative to countries with lower EMB autonomy).

Furthermore, many regimes exert control over the media and use this control to block critical debate and analysis of elections. If citizens are mainly exposed to state propaganda about elections, they are more likely to believe the government's interpretation of election quality. On the other hand, if media are free of government restrictions, citizens are more likely to become aware of alternative views of elections, which may include information on electoral manipulation, and to use this information when evaluating the quality of elections. Therefore,

H2: In countries with higher levels of media freedom, citizens are less likely to display trust in elections (relative to citizens in countries with lower media freedom).

Finally, because the extent of media freedom may specifically influence the type of information that citizens have about EMB performance, we contend that the positive relationship between EMB autonomy and citizens' trust in elections may be conditional on media freedom. Hence,

H3 (conditional): In countries with lower levels of EMB autonomy, citizens are more likely to display trust in elections if media freedom is low (relative to citizens in countries with low levels of EMB autonomy and free media).

3 Empirical analysis

3.1 Data

3.1.1 Dependent variable (DV): Public trust in vote count

The dependent variable of this study is public trust in the fairness of the vote count (*public trust in vote count*). We construct our measure from an identical question in the sixth wave of the World Values Survey (WVS, 2010-2014) and the sixth round of Afrobarometer (AB, 2014-2015), in which respondents were asked to evaluate how often in their country's elections "votes are counted fairly." We combine data from both surveys.¹¹ This gives us reliable survey data from 59,904 respondents across 47 election periods and multiple world regions (see Table A.1 in the Appendix).¹² We selected public trust in the vote count as our measure of public trust in elections because it represents the stage of the electoral process that citizens are most likely to be intricately focused on and associate with the impartiality of election

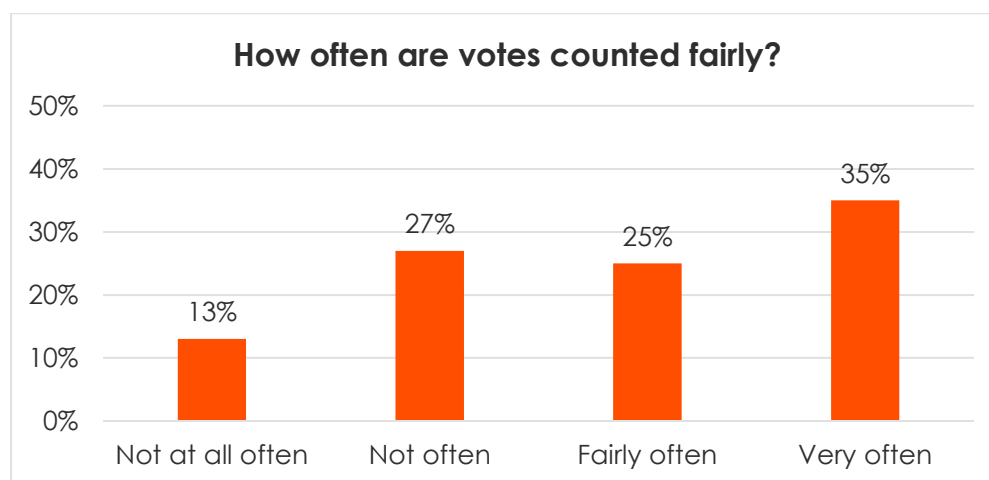
¹¹ We use the WVS response options ("very often," "fairly often," "not often," "not at all often"), which are comparable to those used in the Afrobarometer surveys ("always," "often," "sometimes," "never").

¹² For a few country cases in Africa, both WVS and Afrobarometer conducted surveys. When this occurred, we included in our analysis only the survey data collected by Afrobarometer.

administration.¹³ In most countries, EMBs are constitutionally responsible for counting and tabulating votes (Wall, 2006). Therefore it is not unrealistic to expect that citizens will consider the autonomy of EMBs when making assessments of the integrity of the counting process. Furthermore, numerous other studies have used citizens' confidence in the vote-counting process as an indicator of public trust in elections (see Gronke, 2013).

Response options for *public trust in vote count* are reversed so that higher values correspond to high levels of public trust.¹⁴ *Public trust in vote count* has a mean of 2.8 with a standard deviation of 1.1. As shown in Figure 3, 60% of respondents worldwide express their confidence that votes are counted fairly (fairly often 25%, very often 35%). Across 47 countries in our sample, German citizens (2013) display the highest level of trust in the vote count (mean 3.82), while citizens in Nigeria (2011) are least trusting (mean 2.08).

Figure 3: Public trust in the vote count in 47 countries (2008-2015)



Source: WVS Wave 6, Afrobarometer Round 6; without item non-responses

Respondents were asked: In your view, how often do the following things occur in this country's elections: Votes are counted fairly?

3.1.2 Main independent variable (IV): *De facto* EMB autonomy

Election quality is notoriously difficult to measure. Numerous studies have relied on the assessment of experts in the form of national or international election observers or country specialists (van Ham, 2014). The Varieties of Democracy (V-Dem) data provide detailed, expert-based indicators on the quality of the election included in our study (Version 6.0; Coppedge et al., 2016).¹⁵ In particular, the V-Dem data set includes an indicator of the *de facto* autonomy of electoral management bodies (*EMB autonomy*).¹⁶ V-Dem expert

¹³ We considered creating an index of public trust in elections that includes the “votes counted fairly” item as well as other indicators of electoral integrity (e.g. Norris, 2013). However, when we attempted to develop such an index across the six electoral-integrity items available in the AB and WVS data, we found that the Cronbach’s alpha is quite low for the pooled sample ($\alpha=0.39$). As a result, we prefer to rely on a single item that most effectively captures the concept we are aiming to measure.

¹⁴ See Table A.2 for the summary statistics. Observations with item non-responses (“Don’t know,” “No answer,” etc.) are excluded from the analysis.

¹⁵ The V-Dem project has compiled a data set on 400 aspects of democracy with the help of more than 2,600 expert coders, typically academics from the respective country who are recognized experts on a specific subset of V-Dem indicators (Coppedge et al., 2016, pp. 2-3). To ensure reliability of the indicators, V-Dem assigns five expert coders per country to each indicator. Ratings are then aggregated based on a Bayesian ordinal item response theory model – which takes the reliability of individual coders into account – to point estimates used in the regression analysis of this paper (Pemstein et al., 2015).

¹⁶ *EMB autonomy* corresponds to the last election before the WVS or AB was administered.

coders were asked, “Does the election management body (EMB) have the autonomy from the government to apply election laws and administrative rules impartially in national elections?” Potential responses ranged on a scale from 0 (“No. The EMB is controlled by the incumbent government, the military, or other *de facto* ruling body.”) to 4 (“Yes. The EMB is autonomous and impartially applies elections laws and administrative rules.”) (Coppedge et al., 2016, p. 76).¹⁷ Notably, the EMB autonomy indicator gauges the extent to which EMB autonomy is realized in practice (*de facto*) – a key distinction from studies that use formal-legal (*de jure*) indicators of EMB autonomy.

While there are a handful of cross-national data sets that include relevant indicators of electoral administrative autonomy, we specifically utilize the *EMB autonomy* measure from V-Dem because it is the only one, to our knowledge, that provides temporal and geographic coverage that corresponds to our survey data from Afrobarometer and the WVS (2008-2015). All other relevant data sources either fail to cover a significant proportion of countries in our survey sample (e.g. Birch, 2011) or their temporal coverage does not overlap with all the elections covered by Afrobarometer and WVS (e.g. Bishop & Hoeffler, 2016).

Moreover, we are confident that V-Dem's *EMB autonomy* indicator validly measures the concept of *de facto* electoral administrative autonomy as reflected in the existing theoretical and empirical literatures. Specifically, V-Dem's indicator attempts to capture the extent to which EMBs exercise independence (and impartiality) in decision-making and the implementation of the law, which various scholars of electoral management have associated with the concept of *de facto* autonomy. For instance, Birch (2011, p. 179) operationalizes the concept of electoral authority independence through an indicator that gauges “whether the electoral authorities in practice exhibit independence and impartiality.” Similarly, Gazibo (2006, p. 616) regards autonomy as “an institution's capacity to enforce its rules.” Meanwhile, Wall (2006, p. 23) focuses on the concept of normative EMB independence, which entails “independence of decision and action.” This conceptualization is closely linked to notions of impartiality, as EMBs should “treat all election participants equally, fairly and even-handedly, without giving advantage to any political tendency or interest group” (Wall, 2006, p. 23).

Our confidence in the validity of V-Dem's *EMB autonomy* measure is further strengthened as we find that it corresponds with prior knowledge of specific country cases. Across the country-election years in our sample, countries such as Chile (2010) and Germany (2013) rank higher in EMB autonomy, as expected, than Ukraine (2010) and Zimbabwe (2011). Furthermore, the *EMB autonomy* measure also reflects well-documented improvements over time in EMB autonomy in countries such as Nigeria and Tunisia, as well as recent declines in Ghana and Ukraine (see Figure A.1 in the Appendix).

As a first step in assessing the relationship between citizens' trust and EMB autonomy across our sample, we conduct a bivariate analysis. As expected, citizens' trust in elections (country average) and the autonomy of the EMB are moderately correlated ($r=0.52$) (Figure 4). However, Figure 4 also shows clearly that EMB autonomy influences but does not perfectly predict citizens' perceptions of election quality, as many citizens express trust even in elections without autonomous EMBs.

Furthermore, citizens seem to agree more in their assessments of their elections as autonomy of the EMB increases. Figure 5 illustrates that the standard deviation of citizens' assessments of vote count by country decreases as EMB autonomy increases ($r= -0.46$). If it is beyond doubt that elections were independently managed, assessments of vote count might converge because challenges to election quality lack empirical foundation and hence are less often made. Conversely – as discussed above – in countries with less autonomous EMBs, the interpretation of election quality becomes subject to an intense political struggle, which might explain the higher variance of citizens' assessments of elections in such countries.

¹⁷ These ratings were then aggregated based on a custom-designed measurement model to point estimates (Pemstein et al., 2015). The version used here reconverted the data back to the original scale.

Hence, these different patterns in country-level standard deviations support our notion that the relationship between EMB autonomy and citizens' assessments of election quality could be contingent on additional factors, such as media freedom.

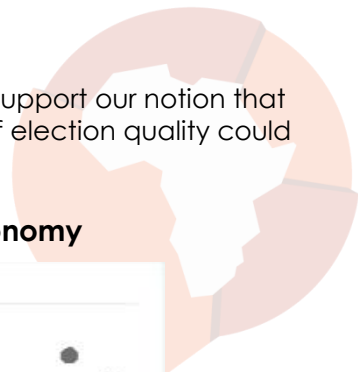


Figure 4: Trust in the vote count (country average) by EMB autonomy

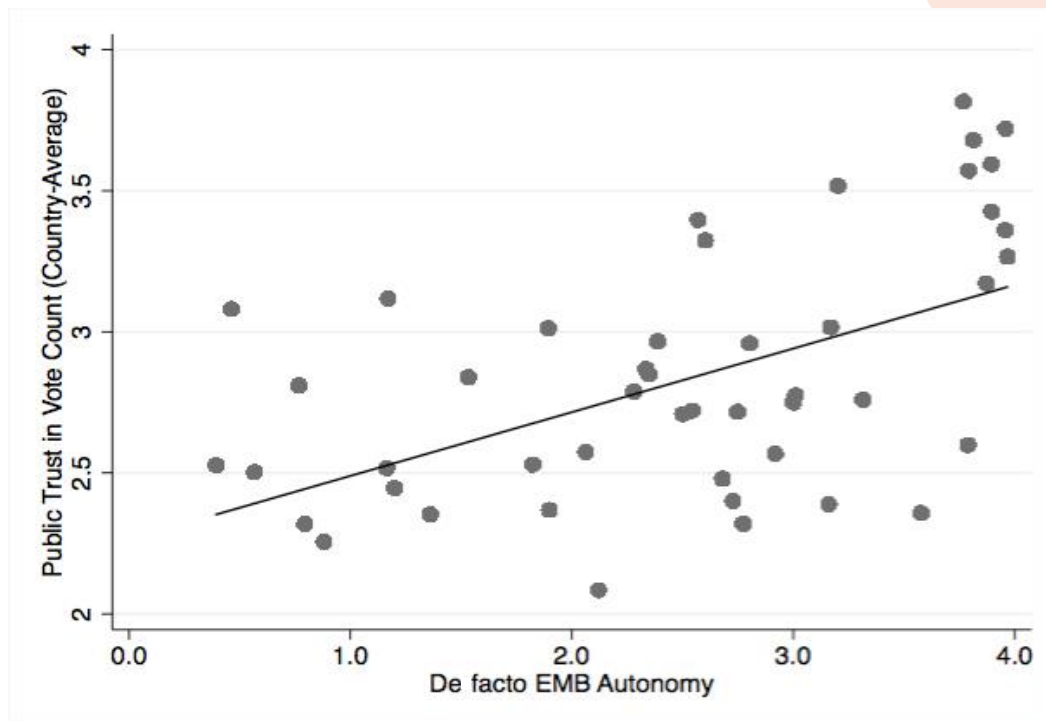
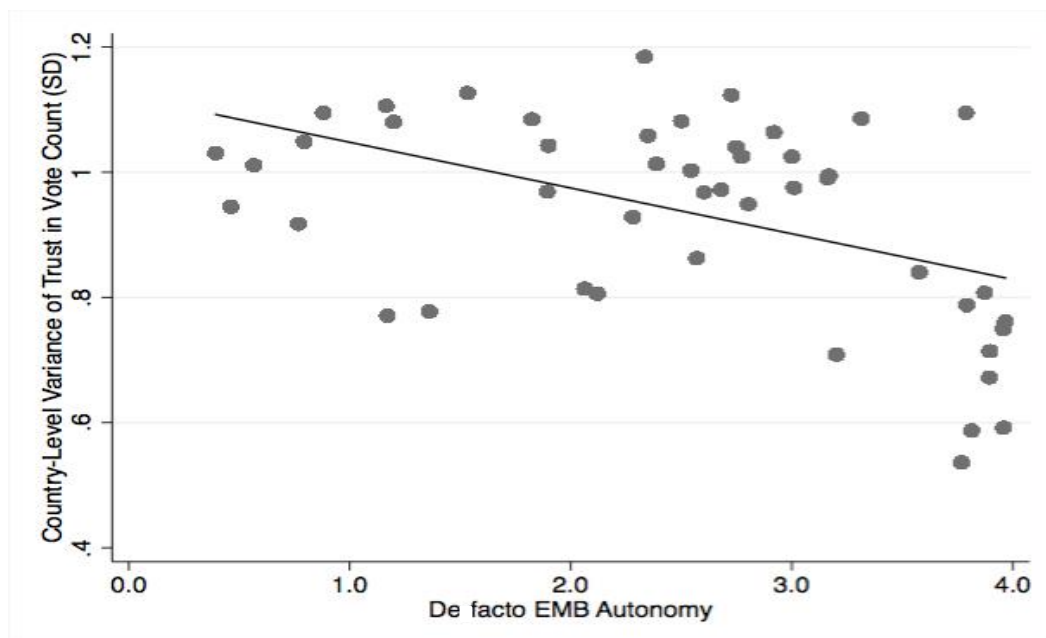


Figure 5: Variance of trust in the vote count within countries by EMB autonomy



3.1.3 Main IV: Media freedom

We operationalize our concept of media freedom using an indicator from the V-Dem data set that reflects the degree to which major print and broadcast outlets "routinely criticize the

government.”¹⁸ Unlike traditional indicators of media freedom, our *media freedom* indicator not only measures whether mass media are free to criticize the government, but whether they actually do so in practice. Essentially, and similar to the *EMB autonomy* indicator, we are able to capture *de facto* characteristics of the media environment. Recall that we also consider the conditional effect of *EMB autonomy* on public trust in elections, modeling this conditional effect by creating a multiplicative interaction term (*EMB autonomy*media freedom*).

3.1.4 Macro-level controls

We also consider other macro-level controls that previous studies have identified as important correlates of public trust in elections. First we control for *GDP per capita (log)* with the expectation that a country's level of income might influence citizens' evaluations of their elections, because indicators for social and economic performance of a country are often used to judge the performance of a government and administration (Roller, 2005). We also account for the proportionality of the electoral system, because research has shown that citizens' trust in elections is boosted in countries under proportional representation (PR) electoral rules, since in these electoral configurations minorities and women are represented more frequently than in majoritarian systems (Elklit & Reynolds, 2002; Birch, 2008).¹⁹

3.1.5 Micro-level controls

There are several individual-level characteristics that prior research has found to be correlated with citizens' trust in elections. First we control for citizens' electoral support for the political party (or parties) that won the last elections (*support winner*). Previous research has consistently found that citizens affiliated with a party that wins an election tend to evaluate elections more positively than citizens affiliated with losing parties or those who report no partisan affiliation (Anderson et al., 2005). Furthermore, because voters tend to espouse more favourable opinions regarding election quality than non-voters (Hall & Stewart, 2014), we account for whether citizens did not participate in the last election (*did not vote*). Next we model citizens' political sophistication through three variables: *media exposure*, *political interest*, and *education*. Of these three, media exposure is most relevant to our analysis, as research by Coffé (2016) shows that frequency of media use influences perceptions of election quality. Finally, we use a series of demographic controls, including age, gender (*female*), and respondents' socio-economic status (*lived poverty index*).

3.2 Regression analyses

Our theoretical arguments have three main empirical implications. First, election management autonomy should be positively correlated with public trust in elections. Second, public trust in elections should decrease the more media are allowed to report critically. Third, the effect of *EMB autonomy* on public trust in elections may be conditional on the degree of media freedom. That is, *EMB autonomy* is less likely to increase public trust in elections if media freedom is low. In order to test these hypotheses, we conduct a multi-level regression analysis (random-intercept) with individual-level trust in the fairness of the vote count as dependent variable and *EMB autonomy* and media freedom, measured at the

¹⁸ The indicator captures responses to the question, “Of the major print and broadcast outlets, how many routinely criticize the government?” on a scale from 0 (“None”) to 3 (“All major media outlets criticize the government at least occasionally”).

¹⁹ Due to our multi-level modeling strategy, we pay close attention to the number of election-level control variables we include in the analyses. We do, however, examine the robustness of our main models by accounting for other election-level covariates that studies have found to be associated with trust in elections (see Section 3.3).

election level, as our main independent variables (Steenbergen & Jones, 2002; Snijders & Bosker, 2012).²⁰

The main results from the regression are displayed in Table 1. Model 1 includes our indicators of *EMB autonomy* and *media freedom* along with other country-election year and individual-level controls.²¹ The results support our expectations regarding Hypothesis 1, as the coefficient for *EMB autonomy* is positive and statistically significant. This finding suggests that in countries where EMBs display higher levels of autonomy, citizens are, on average, more likely to consider the vote-counting process fair, even after we control for media freedom and other individual- and country-election-year-level correlates. Figure 6 provides a substantive interpretation of this finding. Mainly, it shows that as EMB autonomy increases, the adjusted means of public trust in elections are also predicted to increase.

Consistent with Hypothesis 2, the coefficient for *media freedom* is negative and statistically significant. This supports our contention that the presence of critical media is negatively associated with public trust in elections. To put it simply, countries where media have been critical of government, citizens, on average, report having less confidence in the vote count than in countries with lower levels of media freedom, all else being equal. As shown in Figure 7, media freedom is negatively associated with the predicted means of citizens' trust in the vote count.²²

To examine our conditional hypothesis (3) that the positive relationship between EMB autonomy and public trust in elections may be moderated by the degree of media freedom, we include a multiplicative interaction (*EMB autonomy*media freedom*) in Model 2.²³ The coefficient for the interaction is positive but fails to gain statistical significance in our model. However, as emphasized by Brambor, Clark, & Golder (2006, p. 70), even though the interaction term is statistically non-significant, the interaction might be statistically distinguishable from 0 at least at some levels of EMB autonomy. Therefore we graphically depict the interaction by showing how the adjusted means of trust in the vote count vary by level of EMB autonomy when media freedom is at its lowest and highest levels in our sample.²⁴ As shown in Figure 8, when media freedom is at its lowest levels in the sample (1.026), public trust in elections is predicted to be relatively high (around 3), and there is no statistically significant effect of EMB autonomy on public trust in elections. Compare this to the level of public trust in elections when media freedom is at its highest level in the sample (2.953). This slope is much steeper than the first, indicating a strong increase in predicted values for trust in the vote count, from about below 2 to above 3, as EMB autonomy increases from its lowest to its highest levels. When both relationships are considered

²⁰ We selected the multi-level estimation strategy because our sample includes data measured at two levels of analysis (i.e. individual-level & election-year-level) resulting in 59,904 respondents being nested in 47 country-election years. The intra-class correlation (ICC), which indicates the proportion of total variance that exists between countries (election years), is .160. We estimated random-intercept models in which we assume that the election-level intercepts vary based on our main election-level predictors, including *EMB autonomy* and *media freedom*. The model is estimated using the XTREG command in STATA. To ensure the meaningful interpretation of the model intercept, we grand-mean center the individual-level independent variables (except for dummy variables).

²¹ As suggested by Raudenbush and Bryk (2002) the pseudo-R², or the proportional reduction of error (PRE) for Model 1, is 3.96% at the individual-level and 48.42% at the election-level.

²² We re-ran our analysis in Model 1 by restricting our sample to countries surveyed by Afrobarometer. The results, not shown but available upon request, are substantively similar to those presented in Model 1. Mainly we find that EMB autonomy is positively associated with Africans' trust in elections, while media freedom has a negative association.

²³ The pseudo-R², or the proportional reduction of error (PRE) for Model 2, is 3.96% at the individual level and 50.46% at the election level.

²⁴ We also graphically display how the average marginal effects of EMB autonomy on trust change across different levels of media freedom (see Figure A.2 and Figure A.3 in Appendix).

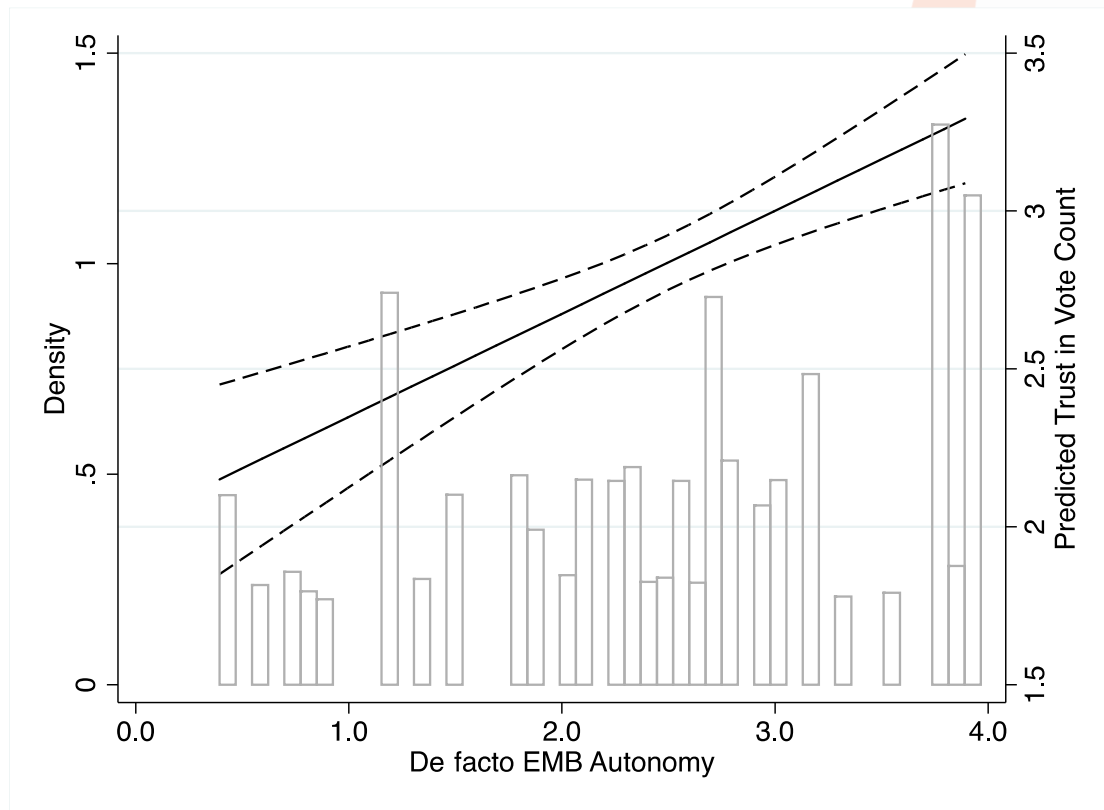
simultaneously, we see that media freedom is predicted to influence the effect of EMB autonomy on citizens' trust in the vote count at a statistically significant level in contexts where EMB autonomy is at relatively low to medium levels. At high levels of EMB autonomy, an effect of media freedom on this relationship is less likely to be diagnosed. In other words, citizens of countries with low levels of EMB autonomy display higher levels of trust in elections if media freedom is low when compared to when it is high. In fact, the results in Figure 8 closely resemble our proposed theory depicted in Figure 2 (Section 2).

Table 1: Multi-level models of public trust in vote count (DV)

DV: Fair vote count	Model 1	Model 2
Constant	2.235*** (0.313)	2.939*** (0.603)
Election-level		
EMB autonomy	0.326*** (0.0688)	0.0311 (0.228)
Media freedom	- (0.143)	-0.660*** (0.219)
EMB autonomy*Media freedom	- (0.0983)	0.133 (0.0983)
GDP per capita (log)	0.0997** (0.0338)	0.0642 (0.0422)
Majoritarian (ref: PR electoral)	-0.0511 (0.101)	-0.0419 (0.0992)
Mixed (ref: PR electoral systems)	-0.0750 (0.124)	-0.0322 (0.125)
Individual-level		
Support winners	0.301*** (0.00929)	0.301*** (0.00929)
Did not vote	- (0.00998)	-0.164*** (0.00998)
Media exposure index	- (0.0194)	-0.0554*** (0.0194)
Political interest	0.0133** (0.00401)	0.0133*** (0.00401)
Education	- (0.00291)	-0.0213*** (0.00291)
Age	0.000580 (0.00027)	0.000578** (0.000279)
Female	0.00851 (0.00782)	0.00849 (0.00782)
Lived poverty index	- (0.0155)	-0.216*** (0.0155)
Variance components		
Individual-level	0.938*** (0.00271)	0.938*** (0.00271)
Election-level	0.300*** (0.0312)	0.294*** (0.0306)
-2* Log-likelihood	-81306	-81305
Observations	59,904	59,904
Elections	47	47

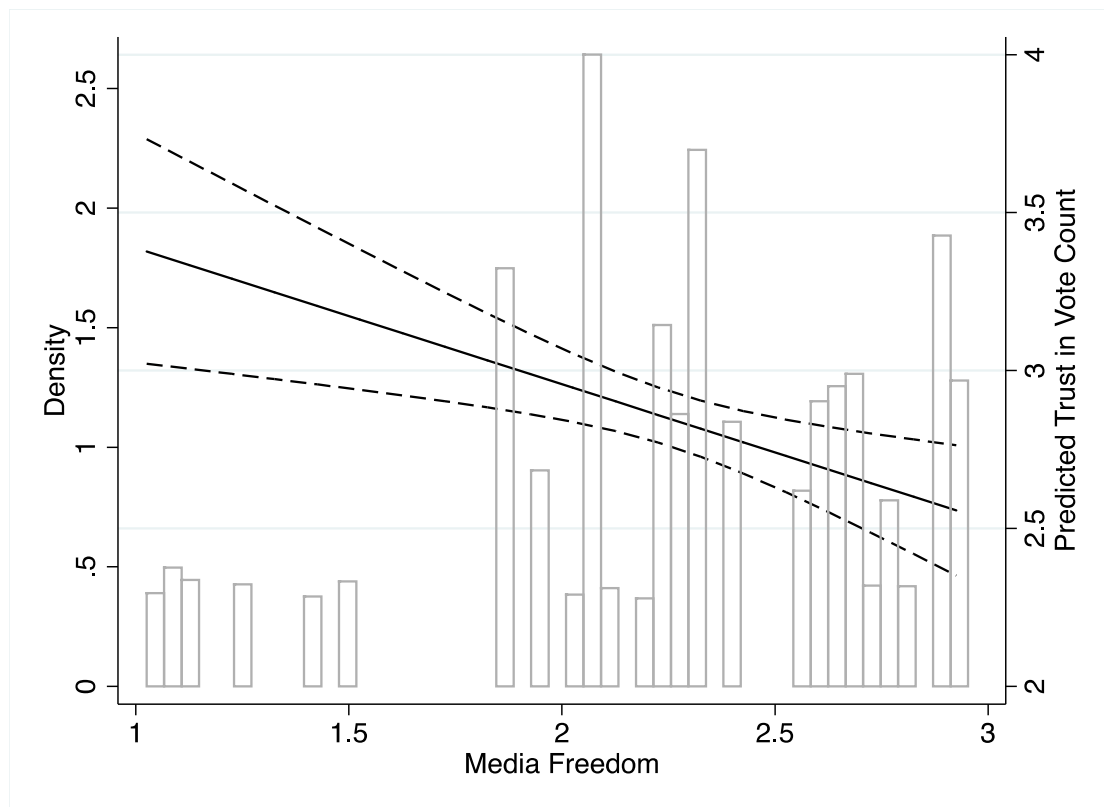
Note: Multi-level (random-intercept) regression using XTREG in STATA. The maximum-likelihood estimator is used. Standard errors are in parentheses. All individual-level control variables (excluding dummies) are grand-mean-centered. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Figure 6: Predicted trust in vote count and EMB autonomy (Model 1)



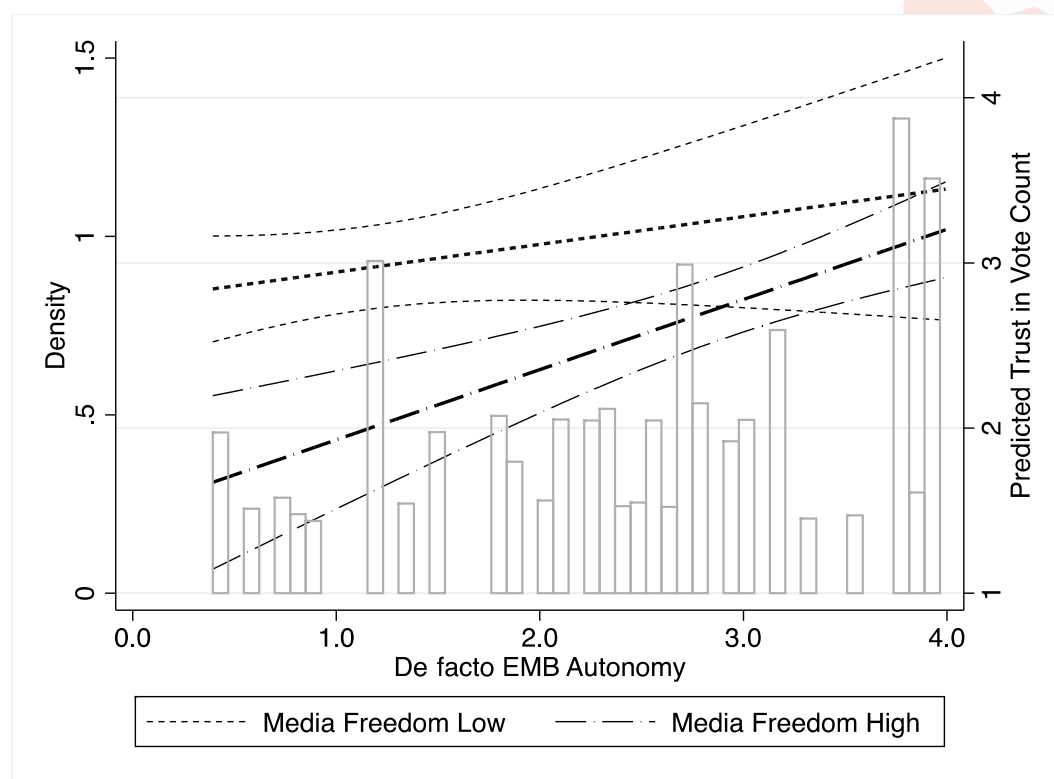
Note: Dashed lines give 95% confidence intervals. Grey bars represent histogram of EMB autonomy.

Figure 7: Predicted trust in vote count and media freedom (Model 1)



Note: Dashed lines give 95% confidence intervals. Grey bars represent histogram of media freedom.

Figure 8: Predicted trust in vote count and EMB autonomy, at high and low levels of media freedom (Model 2)



Note: Dashed, thin outside lines give 95% confidence intervals. Grey bars represent histogram of EMB autonomy.

Turning to the controls in Model 2, we find, with respect to our country-election year controls, that *GDP per capita (Log)* is not statistically significant, while neither mixed nor majoritarian electoral systems are more likely to enhance public trust in elections relative to PR electoral systems. At the individual level, our results show that supporters of winning candidates, politically interested respondents, and the elderly are more likely to express confidence in the vote-counting process. At the same time, those who did not participate in elections, those who report higher levels of media exposure, the educated, and the poor are less likely to express confidence in the vote count.

3.3 Robustness checks

To verify the reliability of our main findings, we conducted a series of robustness checks. First, we account for omitted variable bias by estimating several models that incorporate additional election-level covariates of citizens' trust in the fairness of the vote count. These include actions of political elites (whether opposition parties boycott elections or accept election results), the level of democracy (Freedom House civil-liberties and political-rights sub-scores and the combined Freedom House and Polity V indices), economic growth, and natural resource endowments. Importantly, our main findings, as reported in Model 2, are not affected by the inclusion of these covariates (data not shown, but available upon request).²⁵ Second, we estimated our original analyses (models 1 and 2) using linear random-intercept models, relaxed this assumption and re-ran the analysis using an ordinal logistic multi-level model, and the substantive results were not affected (data not shown, but available upon

²⁵ As additional robustness checks, we controlled for other indicators of electoral integrity, including the extent of election violence, government intimidation, and voting irregularities, and the results in Model 2 hold. Results are not shown, due to space considerations, but are available upon request.



request). Furthermore, because the empirical results may be sensitive to influential country cases, we carried out the jackknife estimation procedure, where one election at a time is left out of the analysis, and found that our substantive results did not change. Finally, problematic thresholds for commonly used tests for multicollinearity are not reached in Model 2.²⁶

In sum, our main findings seem robust to several alternative model specifications and model diagnostics. More importantly, we have been able to demonstrate that across our sample of 47 countries, public trust in the vote count is positively associated with EMB autonomy and negatively correlated with media freedom. Hence, our findings provide strong empirical support for the notion that, *ceteris paribus*, manipulation of election management tends to reduce public trust in elections – as do improvements in media freedom. Moreover, our findings concerning the moderating effect of EMB autonomy on citizens' trust are confirmed. Although the coefficient of the interaction term is not statistically significant, we were able to demonstrate through estimating predicted margins that EMB autonomy may not have a positive effect on public trust in elections if media freedom is low.

4 Conclusion

Despite the importance of public trust in elections for regime legitimacy, the link between electoral manipulation and public trust in elections has been theoretically and empirically underdeveloped in the existing literature. By focusing specifically on the manipulation of election management bodies (EMBs) and media freedom, this paper offers a detailed assessment of the relevance of electoral manipulation for public trust in elections. Using data from Afrobarometer and the World Values Survey on public trust in elections as well as data from the V-Dem project on EMB autonomy and media freedom, we find that autonomy of election administration seems to increase public trust in elections, while media freedom reduces public trust in elections. Furthermore, media freedom seems to condition the positive effect of EMB autonomy on public trust in elections: EMB autonomy is less likely to be positively associated with public trust in elections in contexts where media freedom is low (compared to contexts where media freedom is high).

We believe that our research makes key academic contributions. First, we expand upon the empirical and theoretical literature on electoral manipulation (Birch, 2011; Schedler, 2013; Simpser, 2013; Gehlbach et al., 2015) by demonstrating how attempts to undermine the autonomy of election administration may result in popular legitimacy costs in the form of lower perceptions of electoral integrity. However, the extent to which manipulation can undermine popular legitimacy depends in part on characteristics of the institutional setting, such as the degree of media freedom, which may allow incumbents to influence citizens' awareness of other manipulative strategies.

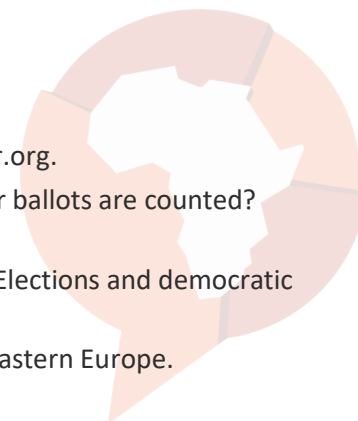
Second, our findings advance research on election administration by unearthing potential mechanisms through which citizens gain information about the autonomy of EMBs and make assessments of election quality. To the best of our knowledge, our study is the first to incorporate a measure of EMB *de facto* autonomy and examine its effect on citizens' trust in elections across a variety of regime types and world regions. Moreover, we are also unique in our attempt to theoretically and empirically model the potentially mediating effect of media freedom on the relationship between EMB autonomy and public trust in elections.

Our findings have mixed implications for policymakers. On the one hand, our results suggest that promoting media freedom might be an effective policy instrument to deter electoral fraud because of how media freedom can potentially increase the legitimacy costs of electoral manipulation. This policy could also extend to making alternative sources of information, such as the Internet, more available to citizens. For instance, Coffé (2016) shows

²⁶ We calculated the variance inflation factors (VIF) for all covariates after estimating Model 2 as regular OLS model, and they are below the critical threshold for multicollinearity.

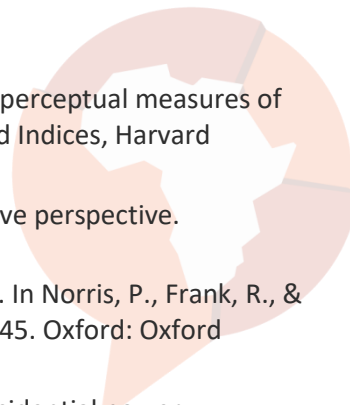
that frequent use of the Internet enhances the accuracy of citizens' assessments of the electoral process, even in countries with limited media freedom. On the other hand, the negative effect of media freedom on public trust in elections may be particularly damaging for regimes attempting to improve the quality of election administration and media freedom simultaneously. Increased media freedom may dampen improvements in public perceptions of election quality that arise when EMBs become more autonomous. This can add to the chronic instability of countries in the gray zone between established democracy and autocracies, as well as to the challenges of democracy promotion in such contexts.

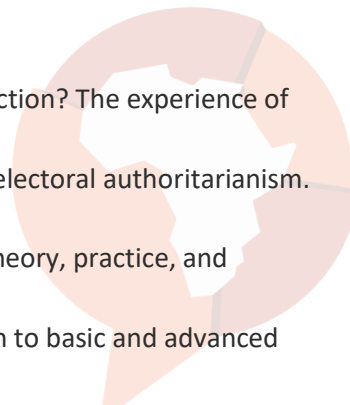
Further research is needed to shed light on this “paradox of media freedom” and its implications for policymakers. Moreover, scholars could also examine how individual-level factors – such as media consumption and winner/loser status – may affect the relationship between EMB autonomy and public trust in elections.



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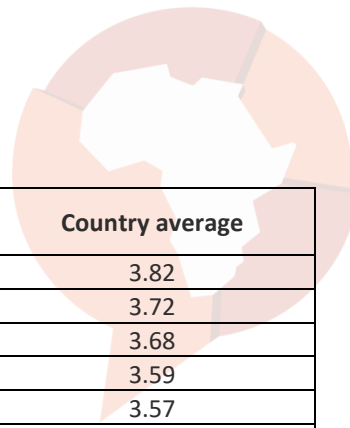
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Appendix

Table A.1: How often are votes counted fairly? | 47 countries



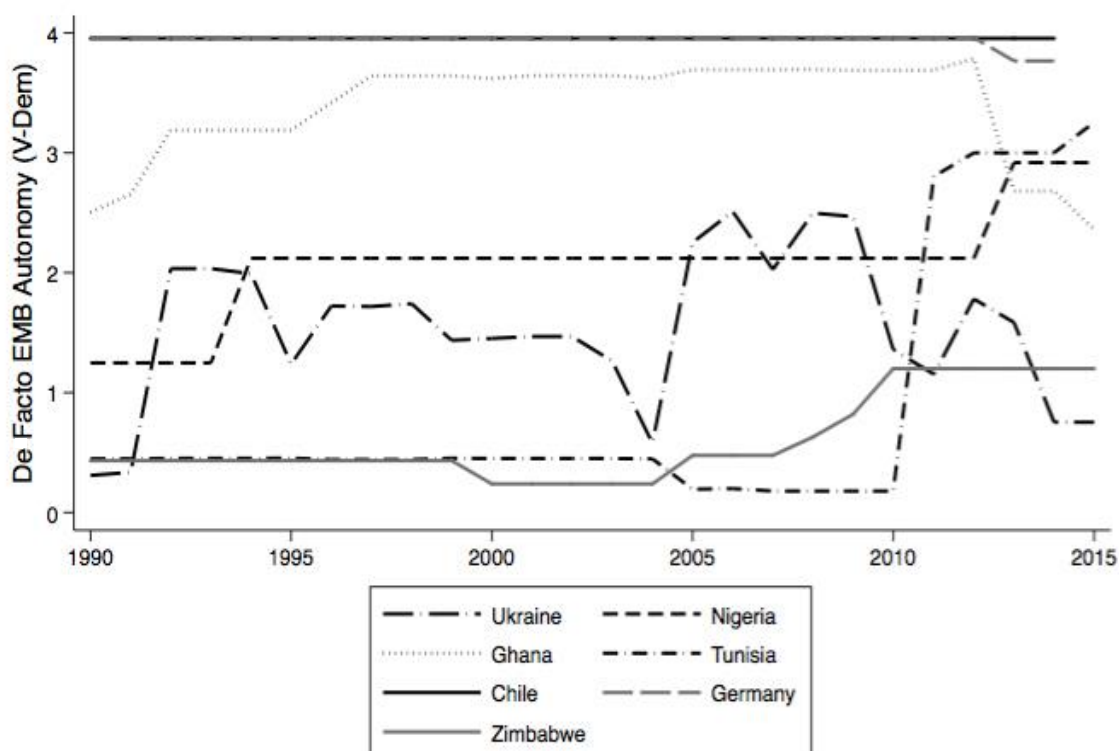
Country	Last national election preceding survey	Survey	Country average
Germany	2013	WVS	3.82
Netherlands	2012	WVS	3.72
Australia	2010	WVS	3.68
Mauritius	2010	AB	3.59
Niger	2011	AB	3.57
Taiwan	2012	WVS	3.52
Uruguay	2009	WVS	3.43
Namibia	2009	AB	3.40
Chile	2010	WVS	3.36
Botswana	2009	AB	3.32
Poland	2011	WVS	3.27
Estonia	2011	WVS	3.17
Malaysia	2008	WVS	3.12
Rwanda	2010	WVS	3.08
Lesotho	2012	AB	3.02
Burundi	2010	AB	3.01
Burkina Faso	2010	AB	2.97
Benin	2011	AB	2.96
Sierra Leone	2012	AB	2.87
Libya	2012	WVS	2.85
Uganda	2011	AB	2.84
Kazakhstan	2011	WVS	2.81
Tanzania	2010	AB	2.79
Philippines	2010	WVS	2.77
Cape Verde	2011	AB	2.76
Tunisia	2014	AB	2.75
Pakistan	2008	WVS	2.72
Zambia	2011	AB	2.72
Côte d'Ivoire	2011	AB	2.71
Ghana	2012	AB	2.60
Kyrgyzstan	2011	WVS	2.57
Mexico	2008	WVS	2.57
Kenya	2013	AB	2.53
Azerbaijan	2010	WVS	2.53
Cameroon	2013	AB	2.52
Jordan	2010	WVS	2.50
Liberia	2011	AB	2.48
Zimbabwe	2011	AB	2.45
Malawi	2009	AB	2.40
Colombia	2010	WVS	2.39
Yemen	2012	WVS	2.37
Peru	2011	WVS	2.36
Ukraine	2010	WVS	2.35
Romania	2012	WVS	2.32
Algeria	2014	AB	2.32
Sudan	2015	AB	2.26
Nigeria	2011	AB	2.08

Note: Scale ranges between 1 ("Not at all often") and 4 ("Very often").

Table A.2: Summary statistics

Variable	Obs.	Mean	Std. dev.	Min	Max
Votes counted fairly	59,904	2.83	1.05	1	4
EMB autonomy	59,904	2.49	1.03	0.39	3.97
Media freedom	59,904	2.28	0.48	1.03	2.95
GDP p.c. (log)	59,904	7.57	1.50	4.99	10.68
Electoral system					
Proportional	59,904	0.35	0.48	0	1
Mixed	59,904	0.20	0.40	0	1
Supported winning candidate	59,904	0.30	0.46	0.00	1.00
Non-voter	59,904	0.23	0.42	0.00	1.00
Media exposure	59,904	0.00	0.28	-0.52	0.48
Political interest	59,904	0.05	1.04	-1.49	1.51
Education	59,904	0.10	1.77	-3.05	2.95
Age	59,904	0.03	1.00	-1.42	4.05
Female	59,904	0.50	0.50	0.00	1.00
Lived poverty	59,904	0.00	0.30	-0.32	0.68

Figure A.1: V-Dem de facto EMB autonomy time trends for selected countries



Source: V-Dem data set v6 (Coppedge et al., 2016).

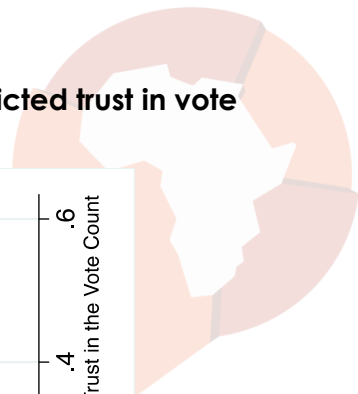
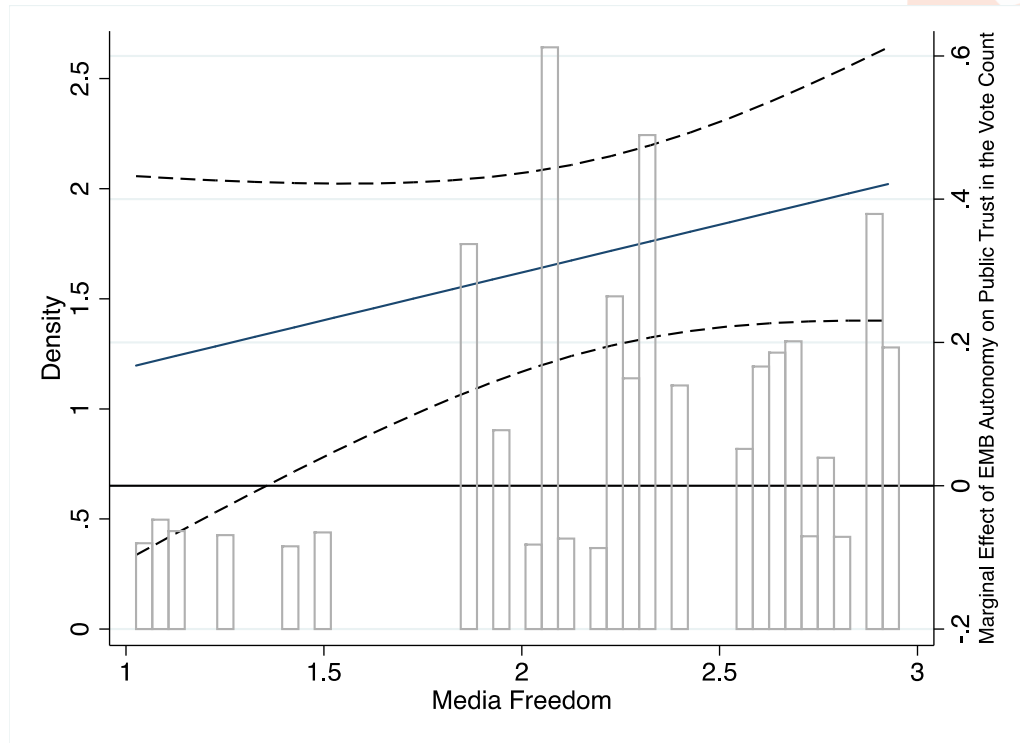
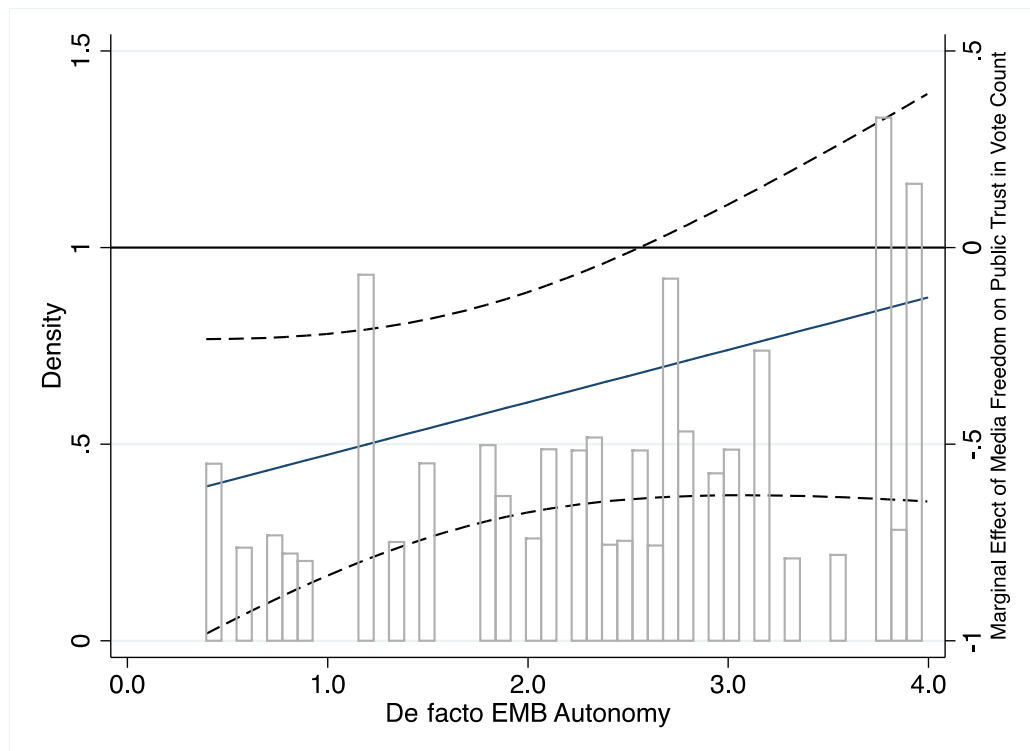


Figure A.2: Average marginal effect of EMB autonomy on predicted trust in vote count by media freedom (Model 2)



Note: Dashed lines give 95% confidence intervals. Gray bars represent histogram of EMB autonomy.

Figure A.3: Average marginal effect of media freedom on predicted trust in vote count by EMB autonomy (Model 2)



Note: Dashed lines give 95% confidence intervals. Gray bars represent histogram of media freedom.

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