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Public Trust in Elections: The Role of Election Administration Autonomy and Media Freedom

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Public Trust in Elections: The Role of Election Administration Autonomy and Media Freedom[*]

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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 media entities 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 47 elections 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, meanwhile these regimes try 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 regime institutions and elected representatives? In the case of Nigeria, following the 2007 elections, popular legitimacy in electoral processes was significantly undermined because of the EMB's lack of impartiality, and was only restored after the government embarked upon an electoral reform process that included, among other things, the replacement of the EMB commissioner with Atahiru Jega who was nationally regarded as politically independent (Lewis, 2011). However, after recent elections in countries such as Russia (Rose & Mishler, 2009) or Rwanda (Reyntjens, 2015) blatant manipulation of election administration has not resulted in public outcry.

The link between electoral manipulation and popular legitimacy, though much debated, has received relatively 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 et al., 2015; Van Ham & Lindberg, 2015).

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

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 the 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 et al., 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 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, the media also influences 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 electronic, print, and social media can operate in an environment free of government censorship or backlash, the media can provide a marketplace for citizens to gain varied, competing, and low-cost information about the quality of

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[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 that reflects legally or constitutionally defined characteristics of the institution that may 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 2008).

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 elections 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) and Afrobarometer 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 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 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 et al., 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 in which experts and international observers characterized excessively manipulated 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' status as a winner or loser, or their party affiliation remains an important predictor of election integrity assessments (Anderson et al., 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 lynchpin 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.

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[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 et al., 2012; Bratton et al., 2016).

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.

In general, cross-national research on the relationship between EMB autonomy and citizens' election quality perceptions so far 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 et al., 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), but instead to whether EMBs exercise autonomy in practice (i.e. *de-facto* EMB autonomy). So far, only 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.

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[4] See Birch (2011) for a detailed assessment of the *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 et al., 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 et al., 1992).

2.3. Media Freedom

Liberal democratic theorists have considered media freedom essential for the deepening of democracy (Gunther & Mughan, 2000; Besley & Prat, 2006) and preventing 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 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: 59), independent media raise the domestic legitimacy costs of manipulation and provides 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: 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: 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 expose citizens to the manipulative strategies of regime elites and to what Schedler (2013: 67) refers to as "competing constructions of political reality". Numerous studies have formally modeled the dynamics of media manipulation and find 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 public opinion (Gehlbach & Sonin, 2014) or to discourage anti-regime mobilization (Egorov et al., 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 find 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

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

exposure and the accuracy of citizens' election integrity evaluations may vary by the level of press freedom within a country.[8] We build upon the 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 lacks 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 is biased towards 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 favorable views about the quality of elections. The reverse is also true. When media environment exercises 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

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[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).

electronic). [10] Our theoretical account focuses primarily on the second source – media – because it is a key source of information for many citizens and has not been studied extensively in the context of perceptions of election quality.

Figure 1: How Media Links Election Management to Public Trust in Elections
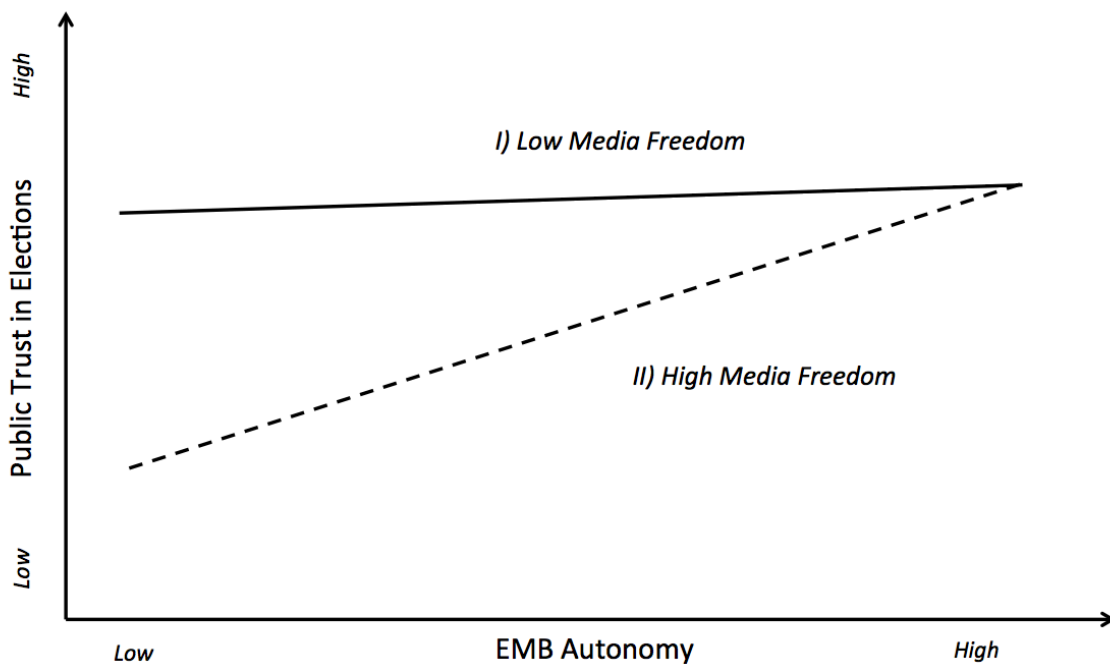

Note: The last part of the figure is in grey because the causal link between public trust in elections and regime legitimacy will not be studied empirically in this paper.

Because of the centrality of election administration to the integrity of the electoral process, election stakeholders, including the incumbent, opposition, 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 filters the dissemination of these elite frames concerning the integrity of the 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 are exposed to information about the flaws in election administration, which could consequently reduce their trust in elections. 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

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[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.

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 the public backlash, relative to those who allow public media to flourish.

Figure 2: The Effect of EMB Autonomy on Public Trust in Elections in Two Different Scenarios of Media Freedom

2.5 Summary and Hypotheses

In summary we suggest 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 the elections. If citizens are mainly exposed to state propaganda about elections, they are also more likely to believe the government's interpretation of election quality. On the other hand, however, if media lack government restrictions, citizens are more

likely to become aware of alternative views of the election that may include information on electoral manipulation, and 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

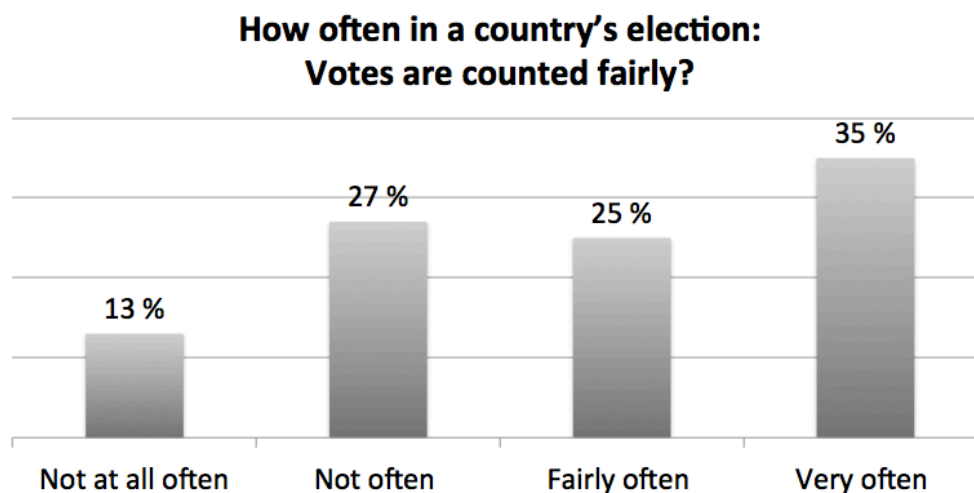### 3.1.1. DV: Public trust in vote count

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 found on the 6th Wave of the World Values Survey (WVS, 2010 to 2014) and the 6th Round of the Afrobarometer (AB, 2014-15), in which respondents were asked to evaluate how often in their country's elections "votes are counted fairly." We combine data from both surveys. This gives us reliable survey data with 59,904 respondents in 47 elections across multiple world regions (see Table A1 in Appendix). We selected public trust in the vote counting process 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 administration.[11] If you recall, in most countries EMBs are constitutionally responsible for counting and tabulating votes

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[11] 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, we attempted to develop such an index across the 6 electoral integrity items available in the AB and WVS data and found that the Cronbach's alpha is quite low for the pooled sample (a =0.39). As a result, we prefer to rely on a single item that most effectively captures the concept we are aiming to measure.

(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.[12] *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 were counted fairly (fairly often 25%; very often 35%). Moreover, across 47 election periods in our sample, German citizens (2013) displayed the highest level of trust in the vote count (mean 3.8), while citizens in Nigeria (2011) were least trusting (mean 2.08).

Figure 3: Public Trust in the Vote Count in 47 National Elections (2008-2015)

How often in a country's election: Votes are counted fairly?

Source: 6. Wave WVS and 6. Round Afrobarometer; Without item-non-responses.

3.1.2. Main IV: De-facto EMB autonomy

Election quality is notoriously difficult to measure. Numerous studies have relied on the assessment of experts either 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).[13] In particular, the V-Dem dataset includes an indicator of the *de-facto*

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[12] Observations with item non-responses ("Don't know" "No answer" etc.) are excluded from the analysis.

[13] The V-Dem project has compiled a data set on 400 different aspects of democracy with the help of more than 2600 expert coders. Expert coders are typically academics from the respective country and are recognized experts

autonomy of Electoral Management bodies (EMB autonomy).[14] V-Dem expert 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: 76).[15] 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 datasets 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 exiting 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: 179) operationalizes the concept of electoral authority independence through an indictor that gauges "whether the electoral authorities in practice exhibit independence and impartiality". Similarly, Gazibo (2006: 616) regards autonomy as "an institution's capacity to enforce its rules". Meanwhile, Wall (2006: 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: 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.

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on a specific sub-set of V-Dem indicators (Coppedge et al., 2016: 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 paper (Pemstein et al., 2015).

[14] *EMB autonomy* corresponds to the last election before the WVS or AB was administered.

[15] 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.

Across the country-election years in our sample, countries like Chile (2010) and Germany (2013) expectedly rank higher in EMB autonomy than Ukraine (2010) and Zimbabwe (2011). Furthermore the EMB autonomy measure also reflects well-documented improvements over time in EMB autonomy in countries like Nigeria and Tunisia as well as recent declines in Ghana and Ukraine (see Figure A1 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 about the assessment 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. Hence, these different patterns in country-level standard deviations support our notion that the relationship between EMB autonomy and citizens' assessments of EMB autonomy could be contingent on additional factors such as media freedom.

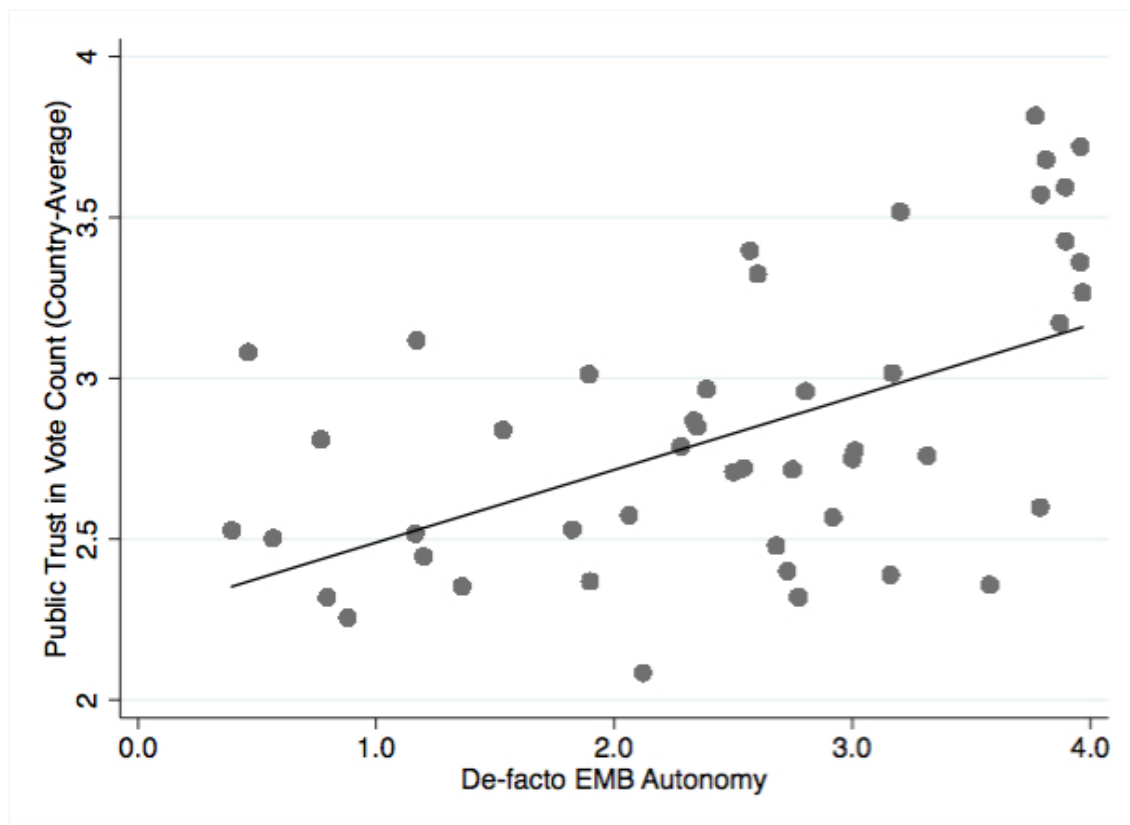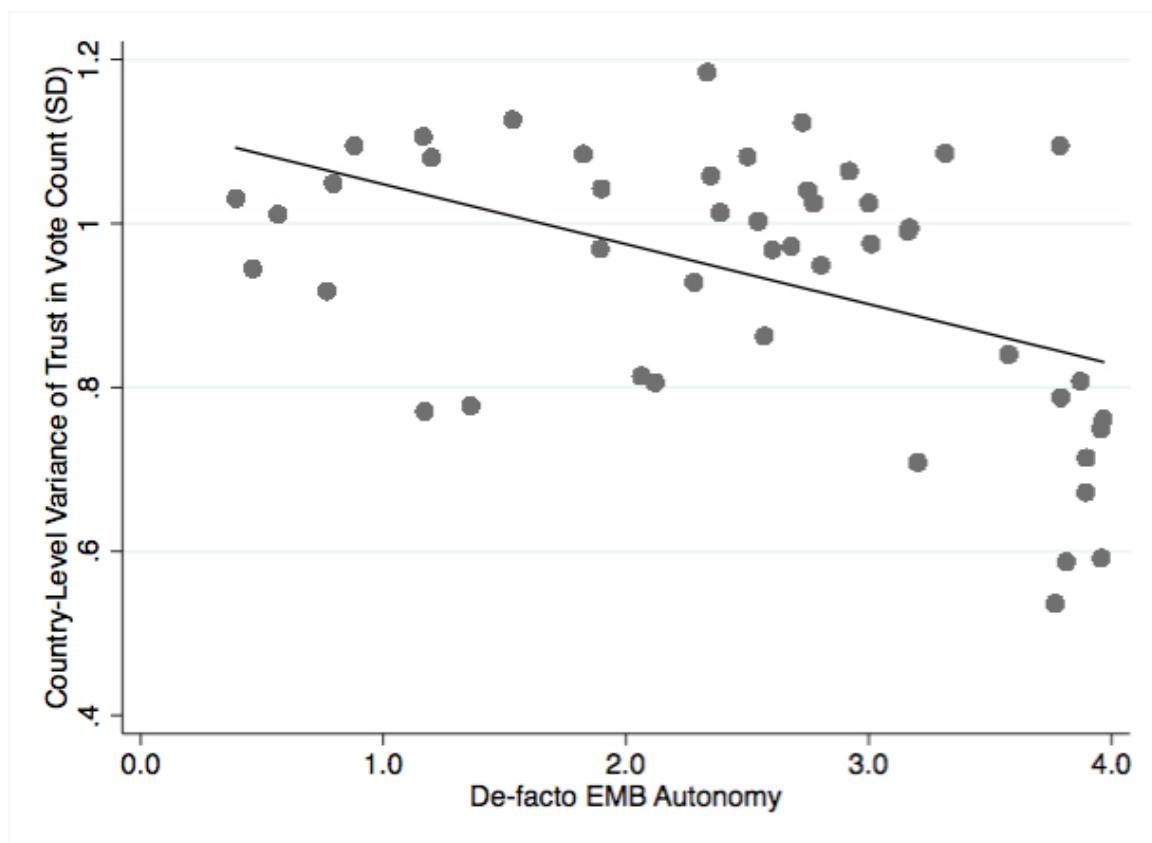**Figure 4: Scatter Plot of Trust in the Vote Count (country average) by EMB Autonomy**

Figure 5: Scatterplot Variance of Trust in 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 dataset, which reflects the degree to which major print and broadcast outlets "routinely criticize the government."[16] Unlike traditional indictors of media freedom, our *media freedom* indicator not only measures if the media is free to criticize the government, but if it actually does 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, we model 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 indictors 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 are boosted in countries under PR electoral rules, since in these electoral configurations minorities and women are represented more frequently than in majoritarian systems (Elklit & Reynolds, 2002; Birch, 2008).[17]

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 that citizens affiliated with losing parties or those that report no partisan affiliation (Anderson et al., 2005). Furthermore, because voters tend to espouse more favorable opinions towards 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

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[16] The indictor captures the following 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.")

[17] Due to our multi-level modeling strategy we pay very close attention to the number of election-level control variables we include within the analyses. We, 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).

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 include 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 multilevel regression analyses (random-intercept) with individual-level trust in the fairness of the vote-count as dependent variable (Steenbergen & Jones, 2002; Snijders & Bosker, 2012).[18]

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.[19] The results support our expectations regarding hypothesis 1 as the coefficient for EMB autonomy is positive and statistically significant.[20] 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 controlling 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.

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[18] We selected the multilevel 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*. Formally, our basic multilevel model (Model 1) includes the following two equations:

$(Trust\ in\ Vote\ Count)_{ij} = \beta_{0j} + \beta_{1j}\ (Support\ Winner) + \beta_{2j}\ (Did\ Not\ Vote) + \beta_{3j}\ (Media\ Exposure) + \beta_{4j}\ (Political\ Interest) + \beta_{5j}\ (Education) + \beta_{6j}\ (Age) + \beta_{7j}\ (Female) + \beta_{8j}\ (Lived\ Poverty) + \varepsilon_{ij}$

$\beta_{0j} = \gamma_{00} + \gamma_{01}(EMB\ Autonomy)_j + \gamma_{02}(Media\ Freedom)_j + \gamma_{03}(GDP)_j + \gamma_{04}(\ Electoral\ System)_j + \delta_{0j}$

where subscripts $i \in \{1,2,\cdots,N\}$ and $j \in \{1,2,\cdots,J\}$ represent for units in the individual and the country election year levels, respectively. 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).

[19] As suggested by Raudenbush and Bryk (2002) the pseudo-R^2, or the proportional reduction of error (PRE) for Model 1, is 3.96% at the level-1 and 48.42% at the level-2.

[20] We estimated a model similar to Model 1 (not shown) that did not include media freedom and the coefficient for EMB autonomy was positive and statistically significant.

Consistent with hypotheses 2, the coefficient for *media freedom* is negative and statistically significant.[21] 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 has 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.

Figure 6: Predicted Trust in Vote Count and EMB Autonomy (Model 1)

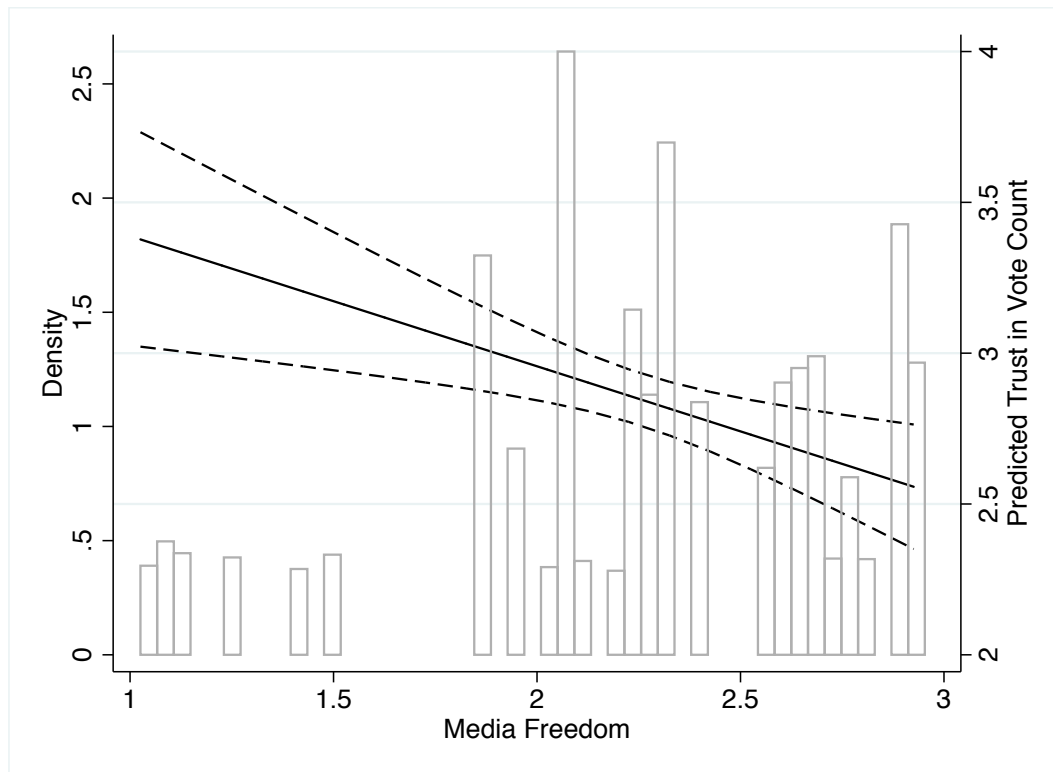*Note:* Dashed lines give 95% confidence intervals. Grey bars represent histogram of EMB autonomy.

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[21] We estimated a model similar to Model 1 (not shown) that did not include EMB autonomy and the coefficient for media freedom was negative and statistically significant.

Table 1: Multi-level Models of Public Trust in Vote Count (DV)

DV: Fair Vote Count	Model 1	Model 2
Constant	2.235***	2.939***
	(0.313)	(0.603)
Election Level		
EMB autonomy	0.326***	0.0311
	(0.0688)	(0.228)
Media freedom	-0.432***	-0.660***
	(0.143)	(0.219)
EMB autonomy *Media freedom	–	0.133
	–	(0.0983)
GDP per capita (LOG)	0.0997***	0.0642
	(0.0338)	(0.0422)
Majoritarian (ref: PR electoral systems)	-0.0511	-0.0419
	(0.101)	(0.0992)
Mixed (ref: PR electoral systems)	-0.0750	-0.0322
	(0.124)	(0.125)
Individual Level		
Support winners	0.301***	0.301***
	(0.00929)	(0.00929)
Did not vote	-0.164***	-0.164***
	(0.00998)	-0.00998
Media exposure index	-0.0552***	-0.0554***
	(0.0194)	-0.0194
Political interest	0.0133***	0.0133***
	(0.00401)	(0.00401)
Education	-0.0213***	-0.0213***
	(0.00291)	(0.00291)
Age	0.000580**	0.000578**
	(0.000279)	(0.000279)
Female	0.00851	0.00849
	(0.00782)	(0.00782)
Lived poverty index	-0.216***	-0.216***
	(0.0155)	(0.0155)
Variance Components		
Individual-level	0.938***	0.938***
	(0.00271)	(0.00271)
Election-level	0.300***	0.294***
	(0.0312)	(0.0306)
-2* Log-Likelihood	-81306	-81305
Observations	59,904	59,904
Elections	47	47

Note: Multilevel (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 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.
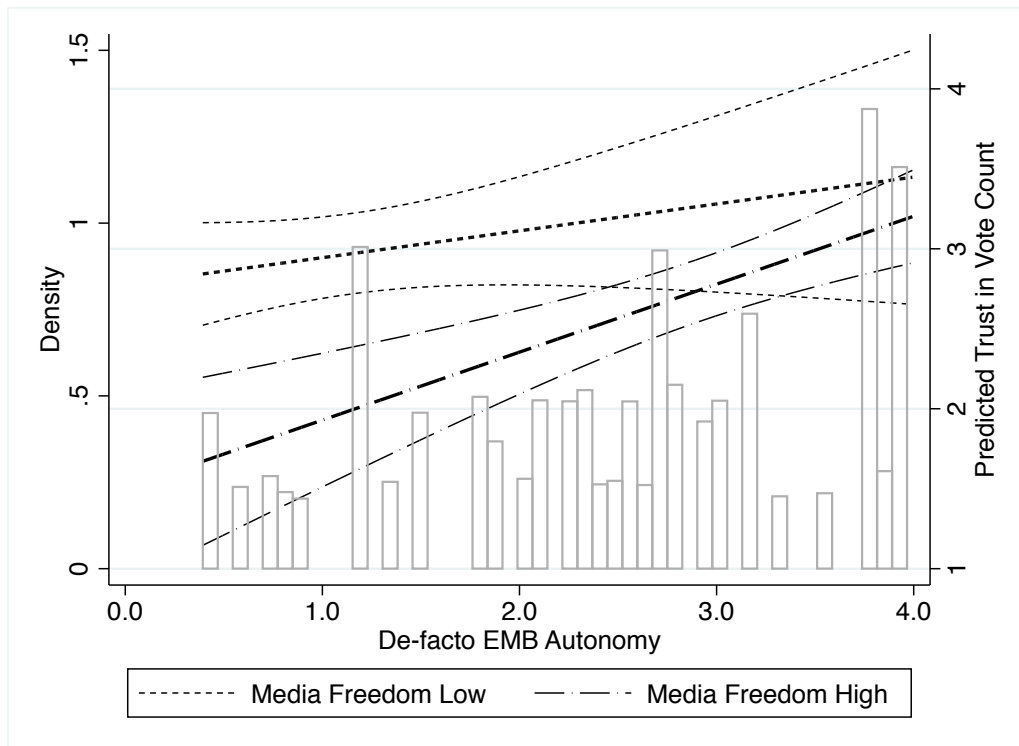
To examine our conditional hypothesis (3) that the positive relationship between EMB autonomy and public trust in elections may be moderated by the degree of media freedom, we include a multiplicative interaction (EMB autonomy*media freedom) in Model 2.[22] The coefficient for the interaction is positive but fails to gain statistical significance in our model. However, as emphasized by Brambor et al. (2006: 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.[23] As shown in Figure 8, when media freedom is at the 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 the 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

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[22] The pseudo-R[2], or the proportional reduction of error (PRE) for Model 2, is 3.96% at the level-1 and 50.46% at the level-2.

[23] We also graphically display how the average marginal effects of EMB autonomy on trust changes across different levels of media freedom (see Figures A2 and A3 in Appendix).

above 3 as EMB autonomy increases from its lowest to its highest level. When both relationships are considered 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).

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 now to the controls in Model 2. First, with respect to our country-election year controls, we find that GDP per capita (Log) is not statistically significant, while neither mixed nor majoritarian electoral systems were more likely to enhance public trust in elections relative to PR electoral systems. At the individual-level our results show that supporters of the winning candidates, politically interested and elderly were 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 were 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, 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 (see Appendix Table A3: Models 3-9). [24] Second, we estimated our original analyses (Models 1 & 2) using linear random-intercept models on the assumption that or main dependent variable was continuous, we relaxed this assumption and re-ran the analysis using an ordinal logistic multilevel model and the substantive results were not affected (see Appendix Table A4: Model 10). Furthermore, because the empirical results may be sensitive to influential country-cases, we carry out the jackknife estimation procedure, where one election at a time is left out of the analysis and find that our substantive results do not change. Finally, problematic thresholds for commonly used tests for multicollinearity are not are reached in Model 2. [25]

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 country-election years public trust in the vote count process 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.

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[24] 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.

[25] 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.

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, this paper offers a detailed assessment of the relevance of electoral manipulation for public trust in elections. Using data from Afrobarometer and 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 context 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 the 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 also 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 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 grey zone between established democracy and autocracies and the challenges of democracy promotion in such contexts.

Further research is needed to shed light on this "paradox of media freedom" and the 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.

References

Afrobarometer. (2015). *Round 6 (2014-2015).* Retrieved from: http://www.afrobarometer.org

Alvarez, M., Hall, T., & Llewellyn, M. (2008). Are Americans confident their ballots are counted? *The Journal of Politics, 70*(03), 754-766.

Anderson, C., Blais, A., Bowler, S., & Donovan, T. (2005). *Losers' consent: Elections and democratic legitimacy.* Oxford ; New York: Oxford University Press.

Bairett, R. L. (2015). Executive power and media freedom in Central and Eastern Europe. *Comparative Political Studies, 48*(10), 1260-1292.

Besley, T., & Prat, A. (2006). Handcuffs for the grabbing hand? Media capture and government accountability. *The American Economic Review, 96*(3), 720-736.

Birch, S. (2008). Electoral institutions and popular confidence in electoral processes: A cross-national analysis. *Electoral Studies, 27*(2), 305-321.

Birch, S. (2011). *Electoral malpractice.* Oxford ; New York: Oxford University Press.

Bishop, S., & Hoeffler, A. (2016). Free and fair elections a new database. *Journal of Peace Research, 53*(2), 608-617.

Bowler, S., Brunell, T., Donovan, T., & Gronke, P. (2015). Election administration and perceptions of fair elections. *Electoral Studies, 38*, 1-9.

Brambor, T., Clark, W. R., & Golder, M. (2006). Understanding interaction models: Improving empirical analyses. *Political Analysis, 14*(1), 63-82.

Bratton, M. (2013). *Voting and democratic citizenship in Africa.* Boulder, Colo.: Lynne Rienner Publishers.

Bratton, M., Dulani, B., & Masunungure, E. (2016). Detecting manipulation in authoritarian elections: Survey-based methods in Zimbabwe. *Electoral Studies, 42*, 10-21.

Coffé, H. (2016). Citizens' media use and the accuracy of their perceptions of electoral integrity. *International Political Science Review, 37*(3), 1-18.

Coppedge, M., John Gerring, Staffan I. Lindberg, Svend-Erik Skaaning, Jan Teorell, David Altman, Frida Andersson, Michael Bernhard, M. Steven Fish, Adam Glynn, Allen Hicken, Carl Henrik Knutsen, Kelly McMann, Valeriya Mechkova, Farhad Miri, Pamela Paxton, Daniel Pemstein, Rachel Sigman, Jeffrey Staton, & Brigitte Zimmerman. (2016). *V-Dem Codebook v6. Varieties of Democracy (V-Dem) Project.*

Cukierman, A., Webb, S. B., & Neyapti, B. (1992). Measuring the independence of Central banks and its effects on policy outcomes. *World Bank Economic Review, 6*(3), 353-398.

Egorov, G., Guriev, S., & Sonin, K. (2009). Why resource-poor dictators allow freer media: A theory and evidence from panel data. *American Political Science Review, 103*(4), 645-668.

Elklit, J., & Reynolds, A. (2002). The impact of election administration on the legitimacy of emerging democracies: A new comparative politics research agenda. *Commonwealth and Comparative Politics, 40*(2), 86-119.

Gazibo, M. (2006). The forging of institutional autonomy: A comparative study of electoral management commissions in Africa. *Canadian Journal of Political Science, 39*(3), 22.

Gehlbach, S., & Sonin, K. (2014). Government control of the media. *Journal of Public Economics, 118*, 163-171.

Gehlbach, S., Sonin, K., & Svolik, M. (2015). Formal models of nondemocratic politics. *Annual Review of Political Science, 19*, 565-584.

Gonzalez‑Ocantos, E., De Jonge, C. K., Meléndez, C., Osorio, J., & Nickerson, D. W. (2012). Vote buying and social desirability bias: Experimental evidence from Nicaragua. *American Journal of Political Science, 56*(1), 202-217.

Gronke, P. (2013). *Are we confident in voter confidence? Observations on perceptual measures of election integrity.* Paper presented at the Electoral Integrity 2013 Workshop: Concepts and Indices, Harvard University.

Gunther, R., & Mughan, A. (2000). *Democracy and the media: A comparative perspective.* Cambridge; New York: Cambridge University Press.

Hall, T. E., & Stewart, C. (2014). American attitudes towards election fraud. In P. Norris, R. Frank, & F. Martínez i Coma (Eds.), *Advancing electoral integrity* (pp. 229-245). Oxford Oxford University Press.

Hammond, T. H., & Knott, J. H. (1996). Who controls the bureaucracy?: Presidential power, congressional dominance, legal constraints, and bureaucratic autonomy in a model of multi-institutional policy-making. *Journal of Law Economics & Organization, 12*(1), 119-166.

Hartlyn, J., McCoy, J., & Mustillo, T. M. (2008). Electoral governance matters - explaining the quality of elections in contemporary Latin America. *Comparative Political Studies, 41*, 73-98.

Kellam, M., & Stein, E. A. (2015). Silencing critics why and how presidents restrict media freedom in democracies. *Comparative Political Studies, 49*(1), 36-77.

Kerr, N. N. (2014). EMB performance and perceptions of electoral integrity in Africa. In P. Norris, R. Frank, & F. Martinez i Coma (Eds.), *Advancing electoral integrity* (pp. 189-210). New York, NY: Oxford University Press.

Leeson, P. T. (2008). Media freedom, political knowledge, and participation. *The Journal of Economic Perspectives, 22*(2), 155-155.

LeVan, C., & Ukata, P. (2012). Nigeria: Countries at the crossroads *Freedom House.*

Lewis, P. M. (2011). Nigeria votes: More openness, more conflict. *Journal Of Democracy, 22*(4), 15.

Lopez-Pintor, R. (2000). *Electoral management bodies as institutions of governance.* New York United Nations Development Program.

Mattes, R. (2014). Electoral integrity and democratic legitimacy in Africa. In P. Norris, R. Frank, & F. Martínez i Coma (Eds.), *Advancing electoral integrity* (pp. 211-228). Oxford Oxford University Press.

Moehler, D. C. (2009). Critical citizens and submissive subjects: Election losers and winners in Africa. *British Journal of Political Science, 39*(02), 345-366.

Mozaffar, S. (2002). Patterns of electoral governance in Africa's emerging democracies. *International Political Science Review, 23*(1), 85-101.

Norris, P. (2013). Does the world agree about standards of electoral integrity? Evidence for the diffusion of global norms. *Electoral Studies, 32*(4), 13.

Norris, P. (2014). *Why electoral integrity matters.* New York: Cambridge Univeristy Press.

Pastor, R. A. (1999). The role of electoral administration in democratic transitions: Implications for policy and research. *Democratization, 6*(4), 28.

Pemstein, D., Marquardt, K. L., Tzelgov, E., Wang, Y., & Miri, F. (2015). The V-Dem measurement model: Latent variable analysis for cross-national and cross-temporal expert-coded data. *V-Dem Working Paper, 21.*

Reyntjens, F. (2015). Rwanda: Progress or powder keg? *Journal Of Democracy, 26*(3), 19-33.

Robertson, G. (2015). Political orientation, information and perceptions of election fraud: Evidence from Russia. *British Journal of Political Science*, 1-20.

Roller, E. (2005). *Performance of democracies: Political institutions and public policies.* Oxford, UK ; New York: Oxford University Press, Inc.

Rosas, G. (2010). Trust in elections and the institutional design of electoral authorities: Evidence from Latin America. *Electoral Studies, 29*(1), 74-90.

Rose, R., & Mishler, W. (2009). How do electors respond to an "unfair" election? The experience of russians. *Post-Soviet Affairs, 25*(2), 118-136.

Schedler, A. (2013). *The politics of uncertainty: Sustaining and subverting electoral authoritarianism.* Oxford: New York: Oxford University Press.

Simpser, A. (2013). *Why governments and parties manipulate elections : Theory, practice, and implications.* Cambridge: Cambridge University Press.

Snijders, T. A. B., & Bosker, R. J. (2012). *Multilevel analysis : An introduction to basic and advanced multilevel modeling* (2nd ed.). Los Angeles: Sage.

Steenbergen, M. R., & Jones, B. S. (2002). Modeling multilevel data structures. *American Journal of Political Science, 46*(1), 218-237.

Teorell, J. (2010). *Determinants of democratization: Explaining regime change in the world, 1972-2006*. Cambridge: Cambridge University Press.

Van Ham, C. (2014). Getting elections right? Measuring electoral integrity. *Democratization, 22*(4), 1-24.

Van Ham, C., & Lindberg, S. I. (2015). From sticks to carrots: Electoral manipulation in Africa, 1986–2012. *Government and Opposition, 50*(3), 521-548.

Wall, A. S. (2006). *Electoral management design : The international IDEA handbook.* Stockholm: International IDEA.

WVS. (2015). *Wave 6 (2010-2014) official aggregate v.20150418. World Values Survey Association.* Retrieved from: http://www.worldvaluessurvey.org

Appendix

Table A1: How Often Were Votes Counted Fairly?

CountryElectionyear_Survey	Country average
Germany2013_1	3.82
Netherlands2012_1	3.72
Australia2010_1	3.68
Mauritius2010_0	3.59
Niger2011_0	3.57
Taiwan2012_1	3.52
Uruguay2009_1	3.43
Namibia2009_0	3.40
Chile2010_1	3.36
Botswana2009_0	3.32
Poland2011_1	3.27
Estonia2011_1	3.17
Malaysia2008_1	3.12
Rwanda2010_1	3.08
Lesotho2012_0	3.02
Burundi2010_0	3.01
Burkina Faso2010_0	2.97
Benin2011_0	2.96
Sierra Leone2012_0	2.87
Libya2012_1	2.85
Uganda2011_0	2.84
Kazakhstan2011_1	2.81
Tanzania2010_0	2.79
Philippines2010_1	2.77
Cape Verde2011_0	2.76
Tunisia2014_0	2.75
Pakistan2008_1	2.72
Zambia2011_0	2.72
Ivory Coast2011_0	2.71
Ghana2012_0	2.60
Kyrgyzstan2011_1	2.57
Mexico2008_1	2.57
Kenya2013_0	2.53
Azerbaijan2010_1	2.53
Cameroon2013_0	2.52
Jordan2010_1	2.50
Liberia2011_0	2.48
Zimbabwe2011_0	2.45
Malawi2009_0	2.40
Colombia2010_1	2.39
Yemen2012_1	2.37
Peru2011_1	2.36
Ukraine2010_1	2.35
Romania2012_1	2.32
Algeria2014_0	2.32
Sudan2015_0	2.26
Nigeria2011_0	2.08

Source: Suffix of election year indicates whether source was the 6. Wave World Value Survey (_1) or 6. Round Afrobarometer (_0); Scale ranges between 1 and 4 (1="Not at all often"; 4="Very often")

Table A2: 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

Table A3: Alternative Model Specifications: Multi-level Models of Perceived Trust in the Fairness of the Vote Count (DV)

DV: Fair Vote Count	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
Constant	3.112***	3.020***	3.391***	2.904***	3.003***	3.007***	2.907***
	(0.593)	(0.583)	(0.669)	(0.718)	(0.628)	(0.616)	(0.604)
Election Level							
EMB Autonomy	0.0131	0.0460	0.00374	-0.000610	0.0420	0.0127	0.0312
	(0.226)	(0.224)	(0.223)	(0.230)	(0.256)	(0.228)	(0.228)
Media freedom	-0.702***	-0.714***	-0.617***	-0.721***	-0.679***	-0.680***	-0.662***
	(0.217)	(0.212)	(0.216)	(0.217)	(0.232)	(0.220)	(0.221)
EMB autonomy*Media freedom	0.143	0.145	0.111	0.153	0.130	0.138	0.134
	(0.0963)	(0.0945)	(0.0971)	(0.0969)	(0.102)	(0.0980)	(0.0984)
GDP per capita (LOG)	0.0765*	0.0937**	0.0449	0.0684	0.0654	0.0633	0.0641
	(0.0423)	(0.0439)	(0.0431)	(0.0425)	(0.0454)	(0.0420)	(0.0423)
Majoritarian (ref: PR electoral systems)	-0.0453	-0.0721	-0.0232	-0.0455	-0.0246	-0.0389	-0.0417
	(0.0979)	(0.0961)	(0.0976)	(0.0970)	(0.104)	(0.0988)	(0.0993)
Mixed (ref: PR electoral systems)	0.0468	0.0519	0.0213	0.0392	0.0349	-0.0278	-0.0339
	(0.128)	(0.126)	(0.127)	(0.129)	(0.135)	(0.125)	(0.128)
Opposition boycotts	-0.0689						
	(0.0641)						
Losers accept results		-0.114					
		(0.0695)					
Democracy (FH civil liberties)			-0.0723				
			(0.0474)				
Democracy (FH political rights)				0.0197			
				(0.0509)			
Democracy (FH & Polity IV)					-0.00869		
					(0.0424)		
GDP growth						-0.00276	
						(0.00380)	
Total natural resources (%GDP)							0.000192
							(0.00296)
Individual Level (not shown)							
Variance Components							
Individual-level	0.932***	0.932***	0.938***	0.936***	0.931***	0.938***	0.938***
	(0.00274)	(0.00274)	(0.00271)	(0.00273)	(0.00280)	(0.00271)	(0.00271)

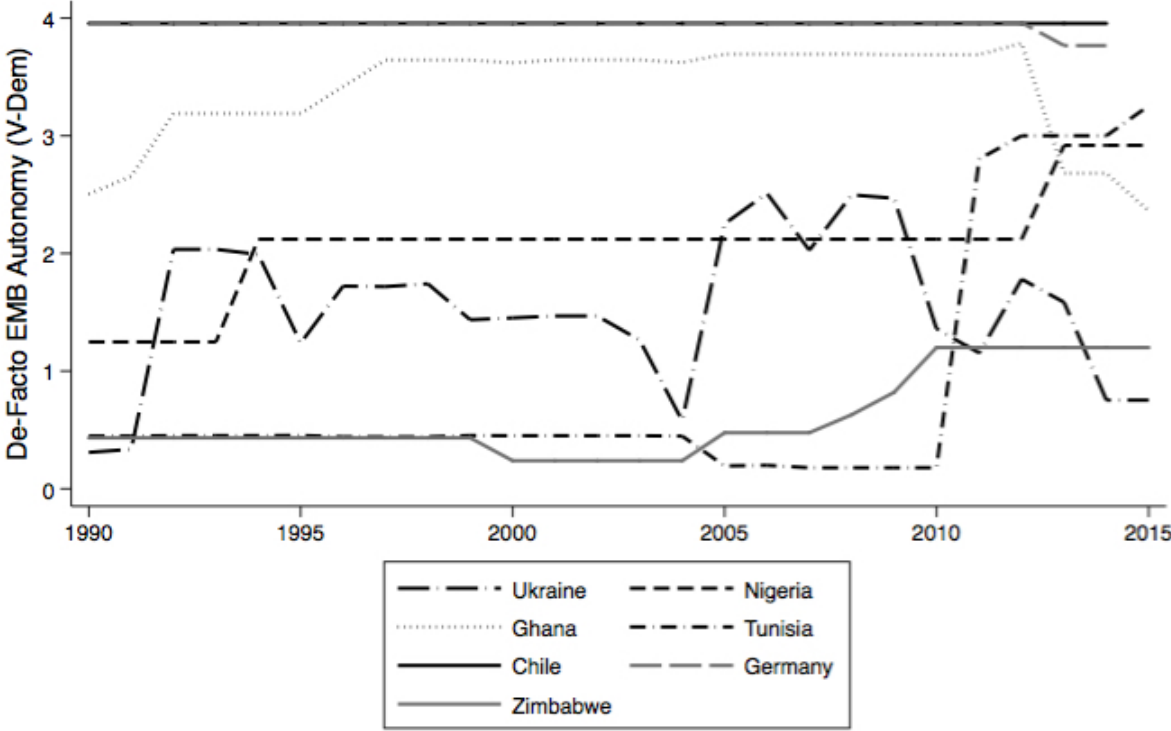|							
Election-level	0.285***	0.281***	0.287***	0.287***	0.299***	0.292***	0.294***
	(0.0303)	(0.0299)	(0.0299)	(0.0302)	(0.0325)	(0.0304)	(0.0306)
-2* Log-Likelihood	-78413	-78412	-81304	-79900	-74374	-81305	-81305
Observations	58,077	58,077	59,904	58,981	55,141	59,904	59,904
Number of Elections	45	45	47	46	43	47	47

Note: The alternative model specifications were estimated on Model 3 (Table 1). Multilevel regression using XTREG in STATA. The maximum likelihood estimator is used. Standard errors are in parentheses. Individual-level variables are country-mean centered but not shown in this model.*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table A4: Alternative Model Specifications: Multi-level Ordinal Logit Regression Model

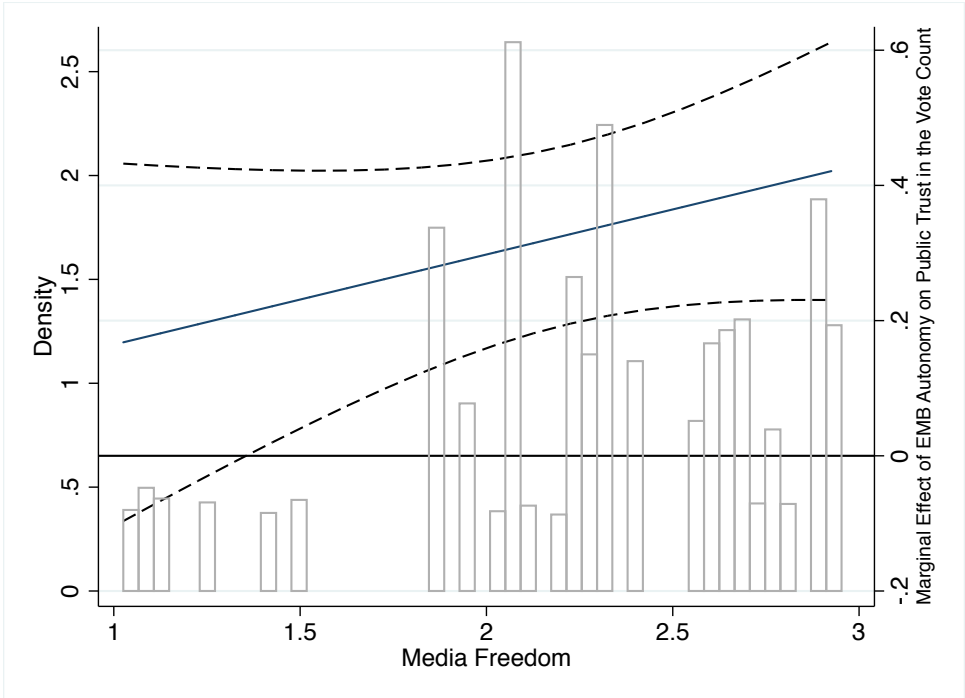| DV: Fair Vote Count	Model 10
Election Level	
EMB autonomy	0.0814
	(0.485)
Media freedom	-1.241***
	(0.466)
EMB autonomy *Media freedom	0.253
	(0.209)
GDP per capita (LOG)	0.146
	(0.0899)
Majoritarian (ref: PR electoral systems)	-0.0239
	(0.211)
Mixed (ref: PR electoral systems)	0.0416
	(0.267)
Individual Level (not shown)	
Cutpoint 1	-2.020
	(1.283)
Cutpoint 2	-0.358
	(1.283)
Cutpoint 3	0.892
	(1.283)
Variance Components	
Election-level	0.391***
	(0.0815)
-2* Log-Likelihood	-72685
Observations	59904
Elections	47

Note: The alternative model specification was estimated on Model 2 (Table 1). Ordinal logit multilevel regression using MEOLGIT in STATA. The maximum likelihood estimator is used. Standard errors are in parentheses. Individual-level variables are country-mean centered but not shown in this model. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Figure A1: V-Dem De-Facto EMB Autonomy Time Trends for Selected Countries
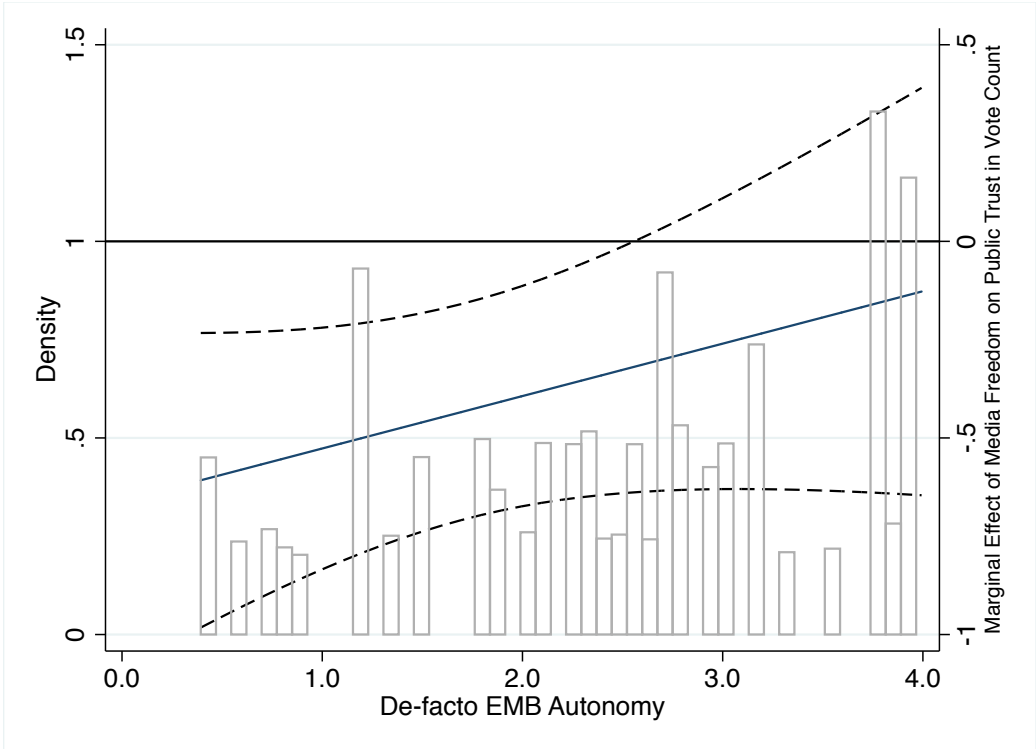

Source: V-Dem data set v6 (Coppedge et al 2016).

Figure A2: Average Marginal Effect of EMB Autonomy on Predicted Trust in Vote Count by Media Freedom (Model 2)

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

Figure A3: Average Marginal Effect of Media Freedom on Predicted Trust in Vote Count by EMB Autonomy (Model 2)

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