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Economic development and democracy: An electoral connection

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Abstract. Scholars continue to debate whether economic development affects regime type. This article argues that a clear relationship exists between development and the electoral component of democracy, but not – or at least less so – between development and other components of broader understandings of democracy. This is so because development enhances the power resources of citizens and elections provide a focal point for collective action. The theory is tested with two new datasets – Varieties of Democracy and Lexical Index of Electoral Democracy – that allow us to disaggregate the concept of democracy into meso- and micro-level indicators. Results of these tests corroborate the theory: only election-centred indicators are robustly associated with economic development. This may help to account for apparent inconsistencies across extant studies and shed light on the mechanisms at work in a much-studied relationship. Further analysis shows that development affects electoral democracy by reducing electoral fraud, election violence and vote buying.

Keywords: democracy; democratisation; elections; economic development; modernisation

Introduction

In the heyday of modernisation theory it was widely accepted that economic development would favour democracy (Lipset 1959). In subsequent decades, this thesis was challenged. Early on, Moore (1966) and O'Donnell (1973) questioned the logic of the argument. More recent challenges focus on empirical relationships discernible from cross-national samples. Przeworski et al. (2000) find that richer countries are more likely to maintain democratic rule but that the initial transition to democracy is unrelated to economic development. Acemoglu et al. claim that even the former relationship is spurious, disappearing once country fixed effects are incorporated into statistical models (Acemoglu et al. 2008, 2009; see also Alexander et al. 2011; Moral-Benito & Bartolucci 2012). From this perspective, the correlation between income and democracy stems from some unmeasured confounder that affects both income and democracy. Countering these challenges to the orthodoxy, others argue that the relationship between development and democracy is restored if historical data stretching back to the nineteenth century is incorporated, if different estimators are used, or when conditioning the relationship on institutional or leadership changes having taken place (Benhabib et al. 2011; Boix 2011; Boix & Stokes 2003; Che et al. 2013; Epstein et al. 2006; Faria et al. 2014; Gundlach & Paldam 2009; Kennedy 2010; Treisman 2015). Thus, the modernisation debate rests upon a complex set of

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modeling choices. Left out of this long-running debate is an explicit consideration of the *outcome*.

A priori, there is no reason to expect economic development to have uniform effects across different dimensions of democracy (Aidt & Jensen 2017). Since democracy is a contested, multidimensional concept, open to many interpretations and operationalisations, the issue is non-trivial. We propose that the differential response of various aspects of democracy to changes in economic development, typically operationalised by per capita gross domestic product (GDP), helps to account for the fragility of this relationship and provides guidance to help resolve the ongoing debate about possible mechanisms at work in the development-democracy nexus. Specifically, we hypothesise that economic development primarily affects electoral contestation. Its impact on other aspects of democracy is less clear, and perhaps nonexistent.

The argument that leads to these hypotheses hinges on power resources and collective action dilemmas. We argue that economic development enhances the power resources of citizens *vis-à-vis* leaders. However, this shift does not lead to more democratic institutions unless citizens are able to overcome their collective action dilemma. Elections, unlike other aspects of democracy, provide focal points for collective action, allowing citizens clear opportunities to hold leaders accountable. The *combination of these two factors* – a shift in power resources and the focal role of elections – explains why development is robustly associated with electoral contestation but not so clearly with other democratic institutions.[1]

Our argument does not predict that indices that lump many features of democracy together (e.g., Polity) or indices that focus on non-electoral elements (e.g., constitutionalism, civil liberties) will have a clear empirical relationship to development, in contrast with measures tightly focused on the electoral component of democracy. The focal role of elections also suggests that the impact of development on contestation is asymmetric. Our theoretical argument yields no clear reason to expect that economically developed countries will be more likely to introduce elections. But once competitive elections are introduced we expect that it will be more difficult for leaders to abrogate 'well-functioning' electoral institutions in economically more advanced countries.

Testing this set of hypotheses requires disaggregating the concept of democracy so that its component features can be separately examined. To do so we enlist two new datasets, Varieties of Democracy (V-Dem) (Coppedge et al. 2017a,b; Pemstein et al. 2017) and the Lexical Index of Electoral Democracy (LIED) (Skaaning et al. 2015), and conduct extensive tests across a global sample of countries extending back over two centuries. These analyses support our contention that measures tightly focused on competitive multiparty elections are robustly and positively associated with economic development, whereas relationships are mixed or non-existent for other measures.

This article thus makes an empirical contribution to a longstanding debate in comparative politics. We show that economic development displays a robust relationship with the electoral aspect of democracy, but not with other aspects that belong to broader conceptions of democracy. Since these results are clearer when considering the impact of development on democratic downturns, our findings also resonate with Przeworski et al. (2000). Incidentally, these authors employ a measure focused on the electoral aspect of democracy.

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Yet, we add to the work by Przeworski et al. and others using electoral measures of democracy such as Boix and Stokes (2003) by using richer measures of electoral democracy that include several relevant indicators and that are graded rather than dichotomous. This also means that when we investigate democratic upturns and downturns separately, we expand on extant tests by including information on how income affects changes in democratic quality for regimes initially above any 'minimum-democracy' threshold and changes that take place below such thresholds. While we find much clearer results for income and democratic downturns than for democratic upturns, our results are thus not directly comparable to those in Przeworski et al. (2000) or Boix and Stokes (2003). Hence our results provide (only) indirect corroborating evidence to the so-called 'survival story' in the longstanding debate on income and different types of regime transitions.[2]

Importantly, since we use graded measures with long time-series, we can also account for the 'Acemoglu et al. criticism' by controlling for country fixed effects. Further, using novel, disaggregated data allows us to show, for the first time, that the robust relationship relates to the effect of development on the maintenance of particular features of clean – or 'free and fair' – elections; rich countries holding elections are far less likely to experience electoral violence, fraud or vote buying than poor countries holding elections. Finally, we systematically investigate the relationship with several other aspects of (broader conceptions of) democracy, shedding light on the extent to which these features are related to economic development.

We first elaborate on our theory before presenting the data and a benchmark model. After probing the robustness of our results, we conduct head-to-head contests between electoral and composite measures of democracy. We then disaggregate the key index of electoral democracy and analyse its component parts, which allows us to peek into the mechanisms that may be at work. Finally, we distinguish between democratic upturns and downturns, and present our conclusions.

Economic development and democracy

Democracy is a many-splendored concept embracing diverse elements such as electoral contestation, constitutionalism (horizontal accountability, rule of law, civil liberties), participation, deliberation and political equality (Coppedge et al. 2017c; Diamond & Morlino 2004; Held 2006; Munck 2016). These features are positively, but not perfectly, correlated. Countries scoring high on one dimension may score low, or middling, on another. Well-known examples include early-nineteenth-century Britain and Apartheid South Africa, which both scored relatively high on contestation, but low on participation.

It is plausible to suppose that economic development affects some dimensions of democracy more strongly than others, and that it might have no effect at all on other dimensions. Scholars need to theorise and assess these differential effects, rather than assume that economic prosperity is a juggernaut that brings all good things in its train. We argue that economic development favours the *electoral* aspect of democracy while having ambiguous effects on other aspects. To convey this idea we distinguish two players: *citizens* and *leaders* (incumbents).

While the preferences of both citizens and leaders may have evolved dramatically over the past two centuries (presumably, in a democratic direction), we assume, first, that citizens

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of a polity are more likely to prefer a democratic regime than its leaders.[3] Leaders may derive rents from controlling office (Rowley et al. 1988) and there are intrinsic rewards inhering in power and status, all of which may incline them to prefer holding onto their positions even in the face of popular opposition. By contrast, surveys of mass publics generally show strong support for democracy, especially when contrasted with other possible options (Chu et al. 2008; Inglehart 2003; Norris 2011).

We assume, second, that economic development increases the *relative power resources* of citizens *vis-à-vis* leaders. A richer, better educated, more urbanised, more connected citizenry is, by virtue of these traits, more powerful (Inglehart & Welzel 2005; Rueschemeyer et al. 1992). There are many reasons for this, but all point to wealthier and better educated urbanites being in a better position to engage in oppositional activities (Glaeser et al. 2007). Although development may also enhance the power resources of leaders, leaders in poor countries are *already* in control of considerable resources, especially in autocratic states (Bueno de Mesquita et al. 2003), where they are generally freer to engage in predation. Thus, we expect economic development to have a differential effect on the power resources of citizens and leaders, with citizens improving their relative position as a society develops.[4]

However, acquiring more power resources is insufficient, by itself, for ensuring a democratic outcome. No citizen, no matter how resourceful, can effectively challenge an incumbent leader alone. For citizens to affect the character of national institutions, they must overcome their collective action dilemma (Medina 2007). Otherwise, leaders are likely to win out, preserving power for themselves. A critical feature distinguishing electoral institutions from others is the role that elections play as a *focal point* for citizen action, mitigating collective action problems that would otherwise constrain popular mobilisation.[5] This protects against democratic backsliding, helping to ensure that electoral institutions, once established, are respected.

The focal role of elections stems from five key features of the electoral process. First, elections are high-stakes endeavours – for instance, authorising governments to enact policies influencing the distribution of resources. Second, they are highly visible. One can hardly hold elections in secret, and elections are often intensively canvassed by the media and informal networks. Third, actions that impair election quality (e.g., widespread vote-buying, voter intimidation and denial of access to the ballot to a major party) are often fairly easy to discern. Although clever leaders have developed subtle ways to manipulate elections (e.g., Birch 2011; Lehoucq 2003; Schedler 2002), gross infringements are hard to obscure, and the most severe infringement – outright cancellation of an election – is also the most visible. Fourth, elections occur during a short and well-delimited period of time and culminate in a single event: the announcement of a winner. At this point, it is natural for large numbers of people to mobilise if their preferences are not respected (see, e.g., Beaulieu 2014; Tucker 2007). Once a tipping point of engagement is reached – making it difficult for the police, army or paramilitary squads to control a crowd – peripheral actors may enter the fray with minimal risk (Bunce & Wolchik 2011; Beaulieu 2014; Kuran 1989; Lohmann 1994; Tucker 2007).

These characteristics set elections apart from other aspects of democracy, and the prospect of collective action ought to make leaders think twice before blatantly manipulating them. By way of contrast, one might consider a *non*-electoral feature of

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democracy such as civil liberties. While we do not deny that infringements of civil liberties can sometimes engender collective action by regime opponents, it is less likely that such infringements will provide as clear a focal point as major electoral fraud or the cancellation of elections. Leaders may infringe upon the right of free speech or violate the rule of law selectively, arresting a few individuals at a time without due process and allowing others to bask in (false) security. They may choose an opportune moment, when public attention is focused on another event of great salience (e.g., a natural disaster, international conflict or sporting event). They may also abridge civil liberties in a clandestine manner – for example, through disappearances managed by paramilitary groups or private contracts, thus avoiding direct responsibility. Using various tools of repression, great damage may be done to civil liberties without a high level of public awareness and without a single galvanising event prompting the general public to take action.

Additionally, elections are mass events, involving the entire citizenry (under conditions of universal suffrage). This sets them apart from many other aspects of democracy, which mostly centre on leader behaviour. When citizens are empowered by education and wealth they are more able to resist the blandishments and coercions of the leader and more likely to behave in a peaceful and orderly manner – all of which contribute to a free and fair election. This is most obvious for vote buying, which is a common strategy of electoral fraud. Mired in poverty, even public-spirited citizens may sell their votes for a modest sum. Well-off citizens, by contrast, are less likely to do so, or will require larger payments, raising the cost of vote buying (Jensen & Justesen 2014). Electoral fraud may also be less tolerated among wealthier, well-educated middle-class citizens on ideological grounds (Aidt & Jensen 2017; Inglehart & Welzel 2005; Stokes et al. 2013; Weitz-Shapiro 2013).

Importantly, focal points operate *only* where elections already exist. Otherwise, there is no event around which constituencies can mobilise. This suggests that development might have greater impact on maintaining electoral democracy than on the initial transition to electoral rule (see also Przeworski et al. 2000). Hence, our argument suggests that once established, elections will combine with economic development to form a safeguard against deterioration in electoral democracy. But before electoral institutions are in place, our theory has no clear implications for how economic development might affect the fate of electoral democracy.[6]

In sum, it is the *combination* of a resourceful, engaged citizenry (which comes from economic development) and a focal point allowing citizens to organise collectively (provided by elections) that allow for effective collective action. Anticipating this, leaders will be hesitant to manipulate or cancel elections in developed countries. This theoretical discussion suggests several hypotheses which will orient the empirical tests that follow. We expect that economic development is: (1) uncorrelated, or weakly correlated, with *non*-electoral aspects of democracy; (2) uncorrelated, or weakly correlated, with the inauguration of multiparty elections; (3) positively and strongly correlated with the persistence of contested multiparty elections, and with the quality of elections; and (4) positively and strongly correlated, more specifically, with *society-centred* aspects of electoral quality, such as vote buying, electoral violence and intimidation.

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Benchmark model

Our main hypotheses centre on the electoral dimension of democracy, which we define narrowly as 'clean multiparty elections'. Electoral democracy thus refers here to the *quality* of the electoral process itself, and not the extent of participation in that election (i.e., suffrage or turnout). Following Lipset (1959), we assume that economic development involves a set of factors, including income, industrialisation, changing sectoral composition, education, communications infrastructure and urbanisation. As such, economic development typically entails both increased specialisation in production, labour and capital markets, and social reorganization, for example, with a growing urban middle class. As discussed, various theories propose that such processes influence prospects for regime change. For instance, the empowerment of particular social classes and increased demand for strong property rights protection stemming from new asset classes (e.g., Ansell & Samuels 2014) or increased asset specificity (e.g., Boix 2003) may follow economic development and lead to increased pressures for democracy.[7]

Since the aforementioned indicators of economic development are causally interrelated (in ways that are difficult to model) and highly correlated, we adopt the usual expedient by which per capita GDP, transformed by the natural logarithm, serves as a proxy for the composite concept, using data from the Maddison Project (Bolt & Van Zanden 2014). Following standard practice (Boix 2011; Treisman 2015), missing data within a time-series is linearly interpolated. However, we provide robustness tests using an alternative proxy with long time-series and extensive cross-country coverage, urbanisation, in the Online Appendix (Tables B20–B21).

There is no well-established benchmark model for testing the association between income and democracy (Gassebner et al. 2011). Following Boix (2011) and Acemoglu et al. (2009), we employ a high threshold test in our benchmark because we want to minimise the possibility of spurious findings. The chosen model features an ordinary least squares (OLS) estimator with country and year fixed effects, a lagged dependent variable (LDV) and robust errors clustered by country. Right-side variables are lagged one period behind the outcome and data is analysed annually in the benchmark. The benchmark is intentionally sparse, disregarding additional factors that might possibly be confounders but also introduce post-treatment bias or truncate the sample. Our models include a lengthy time-series, extending for more than 100 years and sometimes up to two centuries, which should provide sufficient within-country information in a fixed effects framework to mitigate Nickell bias (Nickell 1982). Our benchmark includes all available country year observations, but we consider theoretically relevant sub-samples (e.g., only regimes with elections in place) further below.

We begin with measures that focus on *non-electoral* components of democracy. This includes four meso-level indices from V-Dem that measure Liberal, Participatory, Deliberative and Egalitarian components of democracy (Coppedge et al. 2017c). Additional V-Dem indices measure more specific aspects of democracy including Individual Liberty and Rule of Law, Judicial Constraints, Legislative Constraints, Free Expression, Alternative Sources of Information, Free Association, Executive Selection and (*de jure*) Adult Suffrage. Detailed variable definitions are located in Online Appendix Table A1 and descriptive statistics in Online Appendix Table A2. Note that all democracy measures are re-scaled to a 0–1 scale.

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These initial tests are shown across the first row of Table 1. None of the 12 non-electoral measures are clearly predicted, with the expected sign, by income. Somewhat surprisingly, higher income predicts *lower* suffrage. Alternate specifications are reported in Online Appendix B, showing that certain aspects of democracy relate to income in some specifications – for instance, the liberal component of democracy, free expression and judicial constraints. But none are robust across all specifications, leaving open the question of whether economic development affects non-electoral aspects of democracy. We cannot conclusively reject the null hypothesis.

Next, we examine composite indices commonly used to measure democracy in its entirety (following different understandings of the concept). This includes Polity2 from Marshall et al. (2014), Unified Democracy Scores (UDS) from Pemstein et al. (2010), and Political Rights and Civil Liberties indices from Freedom House (2014). While these indices have somewhat different focuses, they are all highly aggregated, including various underlying concepts and measures. Results, shown in columns 13–16 in Table 1, suggest that these composite indices are not clearly linked to income.

Of course, there are many additional issues to consider pertaining to samples (Boix 2011), estimators (Heid et al. 2012), and specifications (Boix & Stokes 2003). These are discussed below. Yet, these initial results indicate that whatever relationship may exist between economic development and macro-indices of democracy is not especially strong. Thus far, the 'sceptical view' promoted by, for example, Acemoglu et al. is upheld.

In the third section of Table 1 ('mostly electoral') we examine indices that focus primarily – but not exclusively – on the electoral component of democracy. We begin with the binary measure (BMR) from Boix et al. (2013).[8] BMR captures whether the legislature and executive are chosen (directly or indirectly) in free and fair elections in which at least a majority of adult men are enfranchised. The inclusion of suffrage is the only departure from a purely electoral indicator (following our definition). Next, we examine the Lexical Index (Skaaning et al. 2015), which is based on a cumulative aggregation of indicators capturing whether national elections are held, opposition parties can run, elections are competitive and suffrage is inclusive. Again, the suffrage criterion is the only departure from a purely electoral measure. Finally, we employ an Index of Electoral Contestation based on different V-Dem indicators including measures of Freedom of Association (including repression of political parties), Clean Elections and Executive Selection. These are combined through multiplication based on the idea that they are necessary and mutually dependent conditions for contestation. This also means that any clear relationship with income cannot stem from economic development promoting 'electoral authoritarianism', as having clean elections without fraud, violence and vote buying is a prerequisite for high scores. Results are shown in columns 17–19. All indices bear a positive relationship to income, though BMR does not surpass conventional thresholds of statistical significance.

In the final section of Table 1 ('purely electoral') we examine indicators that are tightly focused on electoral democracy, constituting our core dependent variables. Competitive Elections from Skaaning et al. (2015) measures the existence of competitive multiparty elections without any consideration of suffrage. The measure is coded 1 whenever the chief executive offices and seats in the effective legislative body are filled by multiparty elections characterised by uncertain outcomes – meaning that the elections are, in principle,

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Table 1. Varieties of democracy

	NON-ELECTORAL											
	1	2	3	4	5	6	7	8	9	10	11	12
Outcome	Liberal component	Participatory component	Deliberative component	Egalitarian component	Individual liberty Rule of law	Judicial constraints	Legislative constraints	Free expression	Alternative information	Free association	Executive selection	Adult suffrage
	(V-Dem)	*(V-Dem)*	*(V-Dem)*	*(V-Dem)*	*(V-Dem)*	*(V-Dem)*	*(V-Dem)*	*(V-Dem)*	*(V-Dem)*	*(V-Dem)*	*(V-Dem)*	*(V-Dem)*
GDPpc(ln)	0.000	0.001	0.001	–0.001	–0.001	0.003	0.003	0.000	–0.001	-0.000	0.006	–0.007*
	(0.002)	(0.001)	(0.002)	(0.001)	(0.002)	(0.002)	(0.003)	(0.002)	(0.002)	(0.002)	(0.006)	(0.003)
Years	111	111	111	111	111	111	111	111	111	111	111	111

	COMPOSITE				MOSTLY ELECTORAL			PURELY ELECTORAL	
	13	14	15	16	17	18	19	20	21
Outcome	Polity2	UDS	Political rights	Civil liberties	BMR	Lexical	Electoral contestation	Competitive elections	Clean elections
	(Polity IV)	*(Pemstein)*	*(FH)*	*(FH)*	*(Boix)*	*(Skaaning)*	*(V-Dem)*	*(Skaaning)*	*(V-Dem)*
GDPpc(ln)	0.002	0.001	–0.005	–0.000	0.007	0.010*	0.005*	0.013*	0.011**
	(0.003)	(0.002)	(0.006)	(0.005)	(0.005)	(0.005)	(0.002)	(0.005)	(0.004)
Years	211	65	39	39	207	211	111	211	111

Notes: Ordinary least squares regression with LDV, country and year fixed effects, and errors clustered by country. *Significant at the 0.05 level. **Significant at the 0.01 level. Units: country years. Right-side variables measured at T-1. Scales normalised to 0–1 (1 = most democratic).

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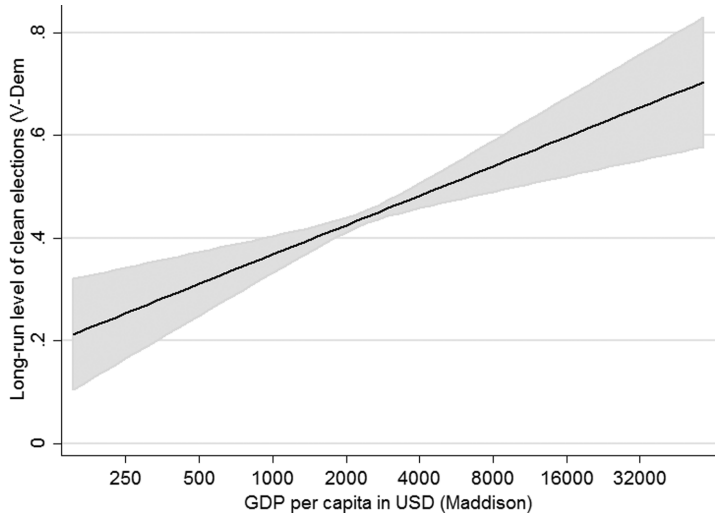

Figure 1. Long-run effects of income on Clean Elections Index, based on model 21, Table 1.

sufficiently free to enable the opposition to gain government power – and 0 otherwise. The regimes scoring 1 on this dummy thus corresponds to regimes scoring ≥4 on the aforementioned Lexical Scale.

Next, we measure Clean Elections, understood as the absence of registration fraud, systematic irregularities, government intimidation of the opposition, vote buying and election violence. The index, which is drawn from V-Dem and ranges from 0–1, is formed from a Bayesian factor analysis of eight indicators (presented and discussed more thoroughly in below).[9] Since the bulk of these indicators are only observed in election years, scores are repeated within election regime periods as defined by V-Dem.

Competitive Elections is a component of the ordinal Lexical Index and Clean Elections is a component of Electoral Contestation. These narrower indices are thus nested within the broader indices classified as 'mostly electoral'. Results, shown in columns 20–21, support our argument, as these measures are strongly correlated with prior levels of income.

To illustrate the estimated size of the effect, Figure 1 plots the logged GDP per capita on the long-run predicted equilibrium level on Clean Elections from model 21, Table 1, with 95 per cent confidence intervals.[10] Since our benchmark includes an LDV, the coefficient for income reveals only the short-term (yearly) effect: 0.011 for each unit increase in logged income. The long-run effect, however, is 0.011/(1–0.870), where 0.870 is the LDV coefficient, which amounts to roughly 0.085 on the 0–1 Clean Elections Index.

To put this in perspective, an extremely poor country, at US$250 per capita GDP, is expected to hover around 0.25 on the Clean Elections Index – approximately the level of PRI-Mexico in the 1980s. Quadrupling that income, to US$1,000, the expected long-run level of Clean Elections rises by about 0.1. A median income country by 2010's standards, roughly US$7,300, is expected to score right above the 0.5 midpoint of Clean Elections – corresponding (roughly) to late-1990s Ghana. These results suggest that economic development brings a substantial shift in the quality of elections.

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Additional tests

We have demonstrated that measures narrowly focused on the electoral component of democracy are more closely associated with changes in income than non-electoral measures or composite indices. But we have tested only one format: OLS with a LDV, country and year fixed effects, and clustered errors. In this section, we explore alternate specifications. We focus on Competitive Elections and Clean Elections since they are narrowly targeted on the concept of theoretical interest. (Similar robustness tests on other indices are reported in Online Appendix B.)

Table 2 focuses on Competitive Elections. Model 1 replicates our initial test – reported in column 20 from Table 1. Model 2 excludes the LDV. Model 3 substitutes a trend variable for the annual dummies. Model 4 includes several control variables that, following the literature, may affect regime type: Corruption (Birch 2011), Land inequality (Ansell & Samuels 2014), Neighbour diffusion (Brinks & Coppedge 2006), Internal conflict and External conflict (Reuveny & Li 2003), and (revenues from) Natural resources (Miller 2015). Descriptions of these variables can be found in Table A1 in the Online Appendix.

Model 5 repeats model 4 without the LDV. Model 6 returns to the benchmark but lags GDP by two decades. The effect of development on electoral democracy might work with a fairly long time-lag, and measuring the independent variable 20 years before the outcome should reduce concerns about the relationship being driven by a 'reverse effect' of electoral democracy on development.[11] (Results are stable for alternative lag structures.) Model 7 employs a five-year panel (all variables are five-year moving averages). Given the sluggish nature of right- and left-side variables, this might be regarded as a more plausible formulation, and the outcome is measured for the five-year period after the independent variables. Model 8 imputes missing data using Amelia II (Honaker & King 2010), extending our benchmark sample with an additional 10,000+ observations. Model 9 presents the second stage of a 2SLS model, where, following Acemoglu et al. (2008), instruments are constructed by using weighted income of trading partners to capture exogenous international shocks to domestic income.

All tests in Table 2 reveal a positive relationship between income and Competitive Elections, and actually suggest a stronger relationship – judging solely by coefficient estimates – than our benchmark, although coefficients are not directly comparable across dynamic and non-dynamic models. We tested alternative models using different sets of controls, and results are stable.

Except for model 9, the tests in Table 2 apply an OLS estimator – a choice that might seem odd given the binary outcome of interest. OLS provides ease of interpretation and consistency with estimators used for other outcomes. Moreover, such 'linear probability models' provide sensible estimates of the conditional expectation function without relying heavily on assumptions about the error term distribution to produce estimates, as do logit and probit models. Yet, to relieve concerns, the tests in Table 2 are replicated with a logit estimator. Results, shown in Table B22 in the Online Appendix, corroborate the OLS estimates.

Table 3 focuses on Clean Elections. Model 1 again replicates our initial test from Table 1. Subsequent models introduce variations in this benchmark, following the template of

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Table 2. Competitive elections

Estimator	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS	IV
	Full	Full	Full	Full	Full	Full	Five-year	MI	Full
Sample	1	2	3	4	5	6	7	8	9
GDPpc (ln)	0.013**	0.148***	0.104***	0.022**	0.170***		0.064***	0.040***	0.187**
	(0.005)	(0.036)	(0.035)	(0.011)	(0.048)		(0.020)	(0.008)	(0.090)
GDPpc (ln) L20						0.165***			
						(0.047)			
Lagged Y	0.890***			0.843***			0.578***	0.576***	
	(0.009)			(0.012)			(0.031)	(0.031)	
Trend			0.002***						
			(0.001)						
Corruption				–0.084**	–0.678***				
				(0.034)	(0.196)				
Land inequality				–0.000*	–0.000***				
				(0.000)	(0.000)				
Diffusion				2.150**	11.118**				
				(0.924)	(4.738)				
Internal conflict				0.007	–0.027				
				(0.010)	(0.034)				
External conflict				–0.007	–0.041				
				(0.008)	(0.034)				
Natural resources				0.000	0.000				
				(0.000)	(0.001)				
Country FE	√	√	√	√	√	√	√	√	√
Year FE	√	√		√	√	√	√	√	√
Countries	157	157	157	135	135	158	156	216	136
Years	211	211	211	99	99	193	42	213	191
Observations	12,947	13,081	13,081	6,734	6,747	12,053	2,509	23,445	9,610
R^2 (within)	0.849	0.287	0.239	0.765	0.218	0.289	0.521	0.670	0.252
Cragg-Donald									156.1

Notes: *Outcome*: Competitive elections. *Estimators*: OLS (ordinary least squares, with errors clustered by country), IV (instrumental variable, second-stage results). *Significant at the 0.1 level. **Significant at the 0.05 level. ***Significant at the 0.01 level. *Sample*: Full (all available data), five-year (data aggregated as moving averages at five-year intervals), MI (missing data imputed with Amelia II). *Units*: Country years, unless otherwise noted. Right-side variables measured at T-1.

Table 2 but with a few variations. The Clean Elections variable presents an uneven distribution, with multiple values at the left bound of 0, representing a non-electoral regime. To assure that results are not solely the product of an electoral transition (from no elections to elections), model 7 in Table 3 replicates the benchmark on the sub-sample of observations where an electoral regime was in place – a sub-sample for which our theoretical argument predicts a clear effect of income.

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Table 3. Clean elections

Estimator	OLS Full	OLS Full	OLS Full	OLS Full	OLS Full	OLS Full	OLS Y > 0	OLS Five-year	GMM Five-year	OLS MI	IV Full
Sample	1	2	3	4	5	6	7	8	9	10	11
GDPpc (ln)	0.011***	0.090***	0.070***	0.018***	0.128***		0.013***	0.033**	0.047***	0.008***	0.082
	(0.004)	(0.026)	(0.026)	(0.007)	(0.029)		(0.003)	(0.014)	(0.012)	(0.003)	(0.072)
GDPpc (ln) L20						0.062*					
						(0.034)					
Lagged Y	0.870***			0.823***			0.955***	0.546***	0.740***	0.839***	
	(0.009)			(0.015)			(0.006)	(0.032)	(0.040)	(0.014)	
Trend			0.003***								
			(0.000)								
Corruption				–0.127***	–0.678***						
Index				(0.024)	(0.119)						
Land				–0.000***	–0.000***						
inequality				(0.000)	(0.000)						
Diffusion				0.652	4.837						
				(0.605)	(2.955)						
Internal				–0.010	–0.020						
conflict				(0.006)	(0.019)						
External				–0.005	–0.020						
conflict				(0.006)	(0.016)						
Natural				–0.000	–0.000						
resources				(0.000)	(0.001)						
Country FE	√	√	√	√	√	√	√	√		√	√
Year FE	√	√		√	√	√	√	√	√	√	√
Countries	156	156	156	135	135	157	154	156	156	181	134
Years	111	112	112	99	99	117	111	22	22	116	92
Observations	11,685	11,785	11,785	6,800	6,800	11,268	8,828	2,304	2,304	18,860	8,084
R^2 (within)	0.840	0.315	0.261	0.800	0.376	0.358	0.852	0.529		0.910	0.187
Cragg-Donald											89.97

Notes: *Outcome*: Clean Elections Index. *Estimators*: OLS (ordinary least squares), GMM (generalised method of moments), IV (instrumental variables, second-stage), errors clustered by country. *Significant at the 0.1 level. **Significant at the 0.05 level. ***Significant at the 0.01 level. *Sample:* Full (all available data), Y > 0 (scores for Clean Elections that surpass 0; i.e., only electoral regimes), five-year (data aggregated at five-year intervals; moving averages), MI (missing data imputed with Amelia II). *Units*: Country years, unless otherwise noted. Right-side variables measured at T-1.

The continuous nature of Clean Elections allows for using the system generalised method of moments (GMM) estimator (Blundell & Bond 1998), reported as model 9. This version of GMM is regarded as appropriate for studying sluggish variables. We follow a standard approach for GMM models with long time-series in re-coding annual data at five-year intervals (as in model 8). This reduces the number of time-series units and thus the number of instruments, and allows for valid identification (following the assumptions of the model). We enter income and the LDV as endogenous and allow two lags for instrumentation. This yields 145 instruments, below the number of cross-sectional units (156), which is the rule-of-thumb threshold (Roodman 2009).[12]

Overall, Clean Elections is robust. Across 10 of the 11 models in Table 3, income is positively related to higher-quality elections and is highly signifiant. In model 11, income remains positive and substantial in size, but the standard error is very high for this particular

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specification. (Other IV specifications that we have tested yield clearer results.) Notably, and despite reducing the sample by about 2,700 observations, omitting the non-electoral regimes in model 7 slightly increases the point estimate and reduces the standard error for income. Thus, our results seem driven by an effect of income on the cleanness of elections in contexts where elections are already in place, as predicted by our argument.

Since economic development is a protean concept, amenable to many operational isations, these results might reflect some peculiarity of our GDP per capita measure. Thus, we replicate the tests in Tables 2 and 3 using Urbanisation. Results, shown in Tables B20–21 in the Online Appendix, are generally robust.

So far we have subjected two indicators of central theoretical concern – Competitive Elections and Clean Elections – to a litany of tests. But alternatives to these two measures have been tested in only one format, that of our benchmark model. This incongruity is remedied in Online Appendix B, where tests contained in Tables 2 and 3 are replicated for alternate democracy measures. In general, these results corroborate the initial findings presented in Table 1. Non-electoral measures, with the notable exception of Judicial Constraints, are not well-predicted (in the expected direction) by income (Tables B1–B12 in the Online Appendix). Nor are composite indices (Tables B13–B16 in the Online Appendix). By contrast, indices that focus mostly on the electoral component of democracy are consistently predicted by income (Tables B17–B19 in the Online Appendix). Indeed, the Lexical and Electoral Contestation indices are almost as robust as our 'purely electoral' indicators (Competitive Elections and Clean Elections).

The general picture emerging from these tests is that the relationship between economic development and democracy is dependent on an electoral connection. The closer an indicator homes in on the purely electoral component of democracy, the more sensitive it is to economic development.

Head-to-head contests

Measures of democracy are highly correlated. As such, one must be wary of over-interpreting fine differences in performance across indicators of very similar latent concepts – each of which is presumably affected by potential measurement error. One approach to this problem is to include both measures in the same model so that partial effects (the impact of X controlling for Z) can be calculated. In our setting, this strategy is more complicated since we are comparing rival measures of the outcome (Y). Even so, the strategy of testing rival hypotheses head-to-head is viable.

In Table 4, we build on the benchmark model to test our electoral measures of democracy against the most common composite measure of democracy: Polity2. In model 1, Competitive Elections is regressed on income along with Polity2 plus country and year fixed effects. In model 2, the analysis is replicated with Clean Elections as outcome. In both analyses, the relationship between income and electoral democracy is robust, even when 'controlling' for Polity2. Models 3 and 4 repeat this exercise in reverse. Here, Polity2 forms the outcome while Competitive Elections and Clean Elections are controls. Here, the result does not survive. Indeed, income turns negative in model 4. These results offer further evidence of our claim that the relationship with development is not similar across all aspects of democracy. Composite indices such as Polity2 are not robust to the inclusion

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Table 4. Head-to-head contests

	Competitive elections	Clean elections	Polity2	
Outcome	1	2	3	4
GDPpc (ln)	0.065**	0.080**	0.006	–0.036*
	(0.024)	(0.019)	(0.021)	(0.021)
Polity2	0.940**	0.502**		
	(0.042)	(0.029)		
Competitive elections			0.461**	
			(0.024)	
Clean elections				0.696**
				(0.040)
Country FE	√	√	√	√
Year FE	√	√	√	√
Countries	155	153	155	153
Years	211	112	211	112
Observations	12,543	10,063	12,543	10,063
R^2 (within)	0.599	0.549	0.632	0.505

Notes: Ordinary least squares regression with country and year fixed effects, errors clustered by country. *Significant at the 0.1 level. **Significant at the 0.01 level. Right-side variables measured at T-1. Units: Country years.

of electoral democracy, while electoral measures are robust to including a composite measure.

Inside the box

The Clean Elections Index offers a unique opportunity to peek inside the box of an intriguing relationship. This index is composed of eight variables, each measured separately in V-Dem. The eight indicators are all originally coded on five-point ordinal scales by several country experts (see Online Appendix Table A.1 for question wording and categories), before they are transformed to interval-scale measures by the V-Dem measurement model (Pemstein et al. 2017). By testing our benchmark with each of these outcomes separately we may gain additional insight into the mechanisms at work.

Four indicators tap into problems of electoral integrity that may be characterised as violence or fraud. *Government intimidation* inquires whether opposition candidates, parties or campaign workers were subjected to repression, intimidation, violence or harassment by the government, the ruling party or their agents. *Other violence* asks whether the campaign period, election day and post-election process were free from other types of campaign/election-related violence. *Vote buying* inquires into evidence of vote and/or turnout buying in an election. This refers to distribution of money or gifts to individuals, families or small groups in order to influence their voting decisions. *Other irregularities* refers to other dubious actions on the part of incumbent and/or opposition parties, such

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as double IDs, intentional lack of voting materials, ballot-stuffing, misreporting of votes and false collation of votes. Our argument suggests that these factors are affected by the the relative power of leaders and citizens, which in turn is responsive to economic development.

Three other indicators in Clean Elections measure the capabilities of states to manage election processes. *Voter registry* asks whether there was a reasonably accurate voter registry in place at the time of an election and whether it was utilised. *EMB capacity* measures whether the electoral management body (EMB) in charge of administering national elections has sufficient staff and resources to administer a well-run national election. *EMB autonomy* measures the ability of the EMB to apply election laws and administrative rules impartially in national elections, separate from pressures exerted by the government or governing party. While it is plausible to suppose that economic development enhances state capacity, this lies outside the ambit of our theory.

The final indicator is *Free and fair elections*. This provides a summary judgment of whether – taking all aspects of the pre-election period, election day and post-election process into account – the national election was free and fair. It does not consider suffrage, but only the fairness of an election for those entitled to vote. We regard this as an overall measure of electoral democracy, and hence falling within the ambit of our theory.

In Table 5, we regress each outcome on income in our benchmark. Not all indicators pass standard tests of statistical significance, suggesting that the meso-level concept – Clean Elections – is more responsive to economic development than several of its components. This could be a product of measurement error, which is generally minimised when several measures are combined in a single index. Another possible explanation is that these components do not necessarily move in lock-step with each other, and that they may even have substitutive functions in some contexts. When leaders clamp down on (or open up to) electoral democracy they may prioritise one or the other of these factors, leading to variability across time and countries that serves as noise in the crossnational estimator. For incumbents, picking one option from the 'menu of manipulation' may be sufficient for ensuring election victory (Schedler 2002). For instance, leaders could opt either to stuff ballot boxes or use party thugs to deter opposition members from voting; these strategies act as substitutes, and different contextual factors can affect the costs and benefits to leaders of employing a specific strategy (Van Ham & Lindberg 2015). This suggests that the individual strategies of election manipulation may not react as strongly or uniformly to economic development as the overall cleanness of the elections. Even so, it is worth comparing those indicators that pass our threshold test to those that do not. Table 5 shows that all indicators associated with electoral violence and fraud bear a strong relationship to income (models 1–4) while indicators reflective of state capacity do not (models 5–7).

These tests provides additional fodder for our argument that a richer economy empowers citizens to deter leaders from engaging in blatant manipulation of elections and weakens the incentives of leaders to do so. By contrast, other aspects of election quality that derive more from state capacity bear little relationship to income.

Upturns and downturns

Finally, we investigate whether the relationship between income and electoral democracy is symmetric or asymmetric. Does economic development enhance the probability of upturns

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Table 5. Clean elections, disaggregated

	Fraud and violence				Capacity			General
Outcome	Government intimidation 1	Other violence 2	Vote buying 3	Other irregularities 4	Voter registry 5	EMB capacity 6	EMB autonomy 7	Free and fair 8
GDPpc (ln)	0.032**	0.052**	0.036**	0.031**	0.004	−0.000	0.008	0.026*
	(0.012)	(0.016)	(0.011)	(0.011)	(0.011)	(0.009)	(0.010)	(0.012)
Lagged Y	0.910**	0.869**	0.909**	0.910**	0.903**	0.955**	0.949**	0.906**
	(0.006)	(0.010)	(0.008)	(0.007)	(0.009)	(0.004)	(0.005)	(0.007)
Countries	156	156	156	156	156	156	156	156
Years	111	111	111	111	111	111	111	111
Observations	11,538	11,538	11,538	11,538	11,535	11,680	11,675	11,538
R^2 (within)	0.841	0.778	0.842	0.841	0.859	0.949	0.934	0.839

Notes: *Outcomes*: Components of the Clean Elections Index. All components correspond to a single indicator from the V-Dem dataset, and all are originally coded on ordinal five-point scales, before they are transformed to interval-scale measures by the V-Dem measurement model. Ordinary least squares regression with country and year fixed effects, standard errors clustered by country. *Significant at the 0.05 level. **Significant at the 0.01 level. Right-side variables measured at T-1. *Units of analysis*: Country years.

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(transitions to greater democracy) *and* reduce the probability of downturns (to greater autocracy), as argued by Boix (2011), Boix and Stokes (2003) and Epstein et al. (2006)? Or does it only affect downturns, as argued by Przeworski et al. (2000)? Following our theoretical argument, elections cannot serve as focal points in a non-elective regime. Where the established method for selecting leaders is by appointment or inheritance, there are few recognised events – perhaps except the death or otherwise abrupt departure of the chief executive (Treisman 2015) – that can galvanise opposition at a single point in time. Thus, we expect that the impact of development is asymmetric – assisting in upholding an electoral regime but not (or only minimally) in the initial transition to an electoral regime.

To analyse this question we use our preferred measures of electoral democracy – Competitive Elections and Clean Elections – along with a third measure that registers the existence of an Electoral Regime (a regime in which regular elections are on course). Units of analysis are country years, but we also conduct tests with elections as the units to ensure that results are not driven by the expansion of observations related to counting non-election years. Annual data is generated from election data by filling in non-election years with scores from the previous election – unless there is an interruption in the electoral regime, which is coded as 0.

Since some of our dependent variables are continuous, we run two regressions for each dependent variable to differentiate movements in either direction – that is, toward, or away from, electoral democracy (see, e.g., Boix 2011; Teorell 2010; we also conduct tests using dynamic probit models on our dichotomous measures, following, e.g., Przeworski et al. 2000; Boix & Stokes 2003). The 'Up' model re-codes the outcome to register instances of positive change since the previous year, setting all cases of no change or negative change to 0. The 'Down' model re-codes the outcome to register instances of negative change since the previous year (positive coefficients imply that downturns are mitigated), setting no change or positive change to 0. By comparing the coefficients on GDP across these two regressions we can differentiate the influence of income on democratisation and on backsliding.

Results from these analyses, shown in Table 6, support the asymmetric hypothesis.[13] Higher income discourages downturns, but does not encourage upturns. This is so regardless of whether we focus on dichotomous measures – Competitive Elections (models 1–2) and Electoral Regime (models 3–4) – or the more fine-grained Clean Elections Index (models 5–8). It is so regardless of whether the sample includes the twentieth century only (models 3–8) or the entire modern period (models 1–2), and regardless of whether years (models 5–6) or elections (models 7–8) are units of analysis. (The latter tests suggest that the asymmetric relationship is not solely the product of electoral interruptions, which are not included in the election-year panel analysis.) As income rises, election quality is less likely to deteriorate.[14]

We tested dynamic probit models for our two binary measures (Electoral regime, V-Dem; Competitive Elections, Skaaning et al. 2015), differentiating between effects of development on the introduction of an electoral regime or competitive elections, respectively, and on their continuity (once adopted). The results for Electoral Regime, in Online Appendix Table B.23, follow those in Table 6: Whereas there is a highly significant coefficient of development on the survival of electoral regimes, there is no significant coefficient on transitions into becoming an electoral regime (the point estimate is actually negative). However, when

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Table 6. Upturns and (avoiding) downturns

Outcome	Competitive elections		Electoral regime		Clean elections		Clean election	
Sample	1801–2011		1901–2011		1901–2011		1901–2011	
Units	Country year		Country year		Country year		Election year	
Direction	Up	Down	Up	Down	Up	Down	Up	Down
	1	2	3	4	5	6	7	8
GDPpc (ln)	0.004	0.009**	–0.006	0.021**	0.000	0.010**	–0.009	0.005*
	(0.004)	(0.003)	(0.007)	(0.004)	(0.004)	(0.002)	(0.008)	(0.003)
Lagged Y	–0.057**	–0.052**	–0.144**	–0.058**	–0.090**	–0.040**	–0.089**	–0.047**
	(0.004)	(0.006)	(0.009)	(0.005)	(0.007)	(0.005)	(0.018)	(0.007)
Countries	157	157	156	156	156	156	154	154
Years/elections	211	211	111	111	111	111	56	56
Observations	12,947	12,970	11,735	11,740	11,685	11,692	2,825	2,826
R^2 (within)	0.047	0.051	0.115	0.034	0.084	0.033	0.0809	0.0864

Notes: Ordinary least squares regression with country and year fixed effects, standard errors clustered by country. *Significant at the 0.1 level. **Significant at the 0.01 level. Right-side variables measured at T-1. 'Up' (toward greater democracy): $D^{+}_{i,t} = \gamma_1 * D_{t-1} + \beta_1 * GDP_{t-1} + c_i + u_t + e_{i,t}$, where D is the democracy measure, and $D^{+}_{i,t} = \max(D_t, D_{t-1})$ after recoding. c_i and u_t are country and year fixed effects. 'Down' (avoiding backsliding): $D^{-}_{i,t} = \gamma_1 * D_{t-1} + \beta_1 * GDP_{t-1} + c_i + u_t + e_{i,t}$, where $D^{-}_{i,t} = \min(D_t, D_{t-1})$ after recoding. Please note that positive coefficients indicate that the independent variable mitigates democratic downturns.

Competitive Elections is the dependent variable, we actually find a positive coefficient significant at 1 per cent, both on the onset and survival of competitive elections. Given that this measure extends back to 1800 rather than 1900, the result corresponds well with those in Boix and Stokes (2003), suggesting that economic development might have had a stronger influence on democratic transitions in the nineteenth century.[15]

Nonetheless, we note that the dynamic probit models do not include country fixed effects, and that the results for development inducing introduction of competitive elections is at best mixed, given results from Table 6. In contrast, the stabilising effect of economic development on competitive elections is highly robust, conforming with our clear theoretical expectation that a combination of economic development and pre-existing elections should prevent leaders from discontinuing elections, or blatantly manipulating them.

Conclusion

Since democracy is a diffuse, multidimensional concept it stands to reason that if economic development affects democracy, connections are likely to be stronger for some aspects of democracy than for others. Only by disaggregating the concept can this issue be addressed. We find that the relationship between economic development and democracy is robust only with respect to the electoral component of democracy, narrowly construed as the existence of competitive national elections and the procedural integrity of the electoral process. Other

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aspects of democracy such as those associated with the participatory, deliberative, liberal and egalitarian ideals are not, or only weakly, related to income. This may help to explain why tests employing composite indices such as Polity2 or Freedom House show inconsistent results. We also find that while economic development prevents backsliding in electoral democracy it does not show a significant relationship to democratisation, corroborating the thesis of asymmetric effects (Przeworski et al. 2000).

We proposed a theoretical framework that may explain the differential effects of economic development on democracy. This framework suggests that development reduces the relative power and alters the utility calculus of leaders, who are in a position to respect or subvert multiparty elections. In a developed society, the direct costs of subversion (e.g., through vote buying) are raised while the opportunity costs of leaving office are lowered (by virtue of offering remunerative nongovernmental career options). Likewise, the focal role of elections provides a coordination mechanism for citizens who wish to see the 'will of the people' respected. All of these mechanisms are election-centred, having little applicability to other elements of democracy. This explanation is put forth in a stipulative fashion, based on extant studies, and is consistent with the evidence presented here. Future research should aim to get even further inside the box to reveal the micro-level mechanisms linking economic development to electoral democracy.

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Supporting Information

Additional Supporting Information may be found in the online version of this article at the publisher's web-site.

Notes

1. While this argument resembles Przeworski et al.'s (2000) 'survival story' in predicting a relationship conditional on the presence of certain institutional features, we note that multiparty elections exist in many authoritarian regimes and that the more specific mechanisms that we propose are different.
2. Another caveat is that some dynamic probit models on our dichotomous measure of electoral democracy find that income enhances chances of democratic transitions when extending the data back to the

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nineteenth century, which lends support to the 'endogenous democratisation' view espoused by, e.g., Boix and Stokes (2003) and Boix (2011).

3. This is a simplifying assumption made for our theoretical argument, and, empirically, there are exceptions and nuances. Some leaders might display strong normative preferences for democratic government (Inglehart & Welzel 2005). Further, certain sub-groups of citizens (if we open up for further division), such as landowners or business owners, may benefit economically from non-democratic rule and prefer autocratic regimes (Ansell & Samuels 2014). Yet, for our stylised argument with two groups of actors, we consider it a reasonable approximation for the relative preferences between groups.
4. There may be alternative mechanisms linking economic development to democracy: As highlighted by Boix and Stokes (2003) and Przeworski and Limongi (1997), development could weaken the *incentives* of incumbents to fight for maintaining their position if facing an organised (and potentially dangerous) opposition demanding that they liberalise.
5. On problems of collective action pertaining to democracy, see, e.g., Chong (1991) and Fearon (2011). On elections, and electoral fraud, as focal points, see, e.g., Tucker (2007).
6. One hypothesis is that 'onset' of electoral institutions is uncorrelated with development, given the lack of focal points. Yet, onsets might even be negatively associated with development, *if* leaders in rich autocracies can anticipate the logic of our argument – they should be fearful of providing citizens that have ample power resources with focal points for collective action. Hence, our expectations are not clear on this particular relationship.
7. Yet, these developments may also influence subsequent economic growth rates (e.g., Cervellati et al. 2006; Persson & Tabellini 2009). We further discuss issues of endogeneity and possible solutions later in the article.
8. We do not includethe binary Democracy-Dictatorship measure from Cheibub et al. (2010). here, due to its shorter time-series (post-Second World War).
9. For years where national elections are not on track because they have not been introduced *or* discontinued due to coups, etc., the score is 0.
10. The standard errors of the long-run coefficient are calculated using *nlcom* in Stata 13.
11. Studies on how democracy affects economic growth yields mixed results on the 'average' effect. Yet, several recent studies identify a positive net effect, suggesting that this reverse relationship should be modeled to obtain consistent estimates on how income affects democracy (Cervellati et al. 2006; Persson & Tabellini 2009). Further, analysis on variability in growth outcomes find that non-democracies vary much more, possibly reflecting greater variability in economic policy making within autocracies than democracies (Knutsen 2012). Finally, a large political economics literature analyses how different features of electoral processes influence economic development (e.g., Persson & Tabellini 2003), further suggesting that accounting for reverse causality is relevant for our analysis focusing on electoral aspects of democracy.
12. The Ar(2) test p-value is 0.20 but the Hansen J-test p-value is 0.02, raising possible issues with the over-identifying restrictions of model 9. Yet, the Hansen p-value is far higher for alternative specifications that we tested (e.g., $p = 0.47$ when adding an extra lag for instrumentation), and income remains positive and significant across specifications.
13. Coefficients on the LDV in Table 6 are negative because these models have change in the DV as the outcome, as opposed to our other tests where the current level is the outcome.
14. Moreover, models 3 and 4 indicate that there is also an 'interruptions/coup effect'; income does not foster the introduction of elections, but it decreases the chances of electoral interruptions such as coups or autogolpes (self-coups).
15. The coefficient (and t-value) on transitions is reduced when we restrict the sample to 1900 also for competitive elections.

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