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The three stages of the anti-incumbency vote: Retrospective economic voting in young and established democracies

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Abstract. Economic prosperity is the best recipe for an incumbent government to be re-elected. However, the financial crisis was significantly more consequential for governing parties in young rather than in established democracies. This article introduces the age of democracy as a contextual explanation which moderates the degree to which citizens vote retrospectively. It shows a curvilinear effect of the age of democracy on retrospective economic voting. In a first stage after the transition to democracy, reform governments suffer from a general anti-incumbency effect, unrelated to economic performance. In a second step, citizens in young democracies relate the legitimacy of democratic actors to their economic performance rather than to procedural rules, and connect economic outcomes closely to incumbent support. As democracies mature, actors profit from a reservoir of legitimacy, and retrospective voting declines. Empirically, these hypotheses are corroborated by data on vote change and economic performance in 59 democracies worldwide, over 25 years.

Keywords: retrospective voting; electoral volatility; democratisation; democratic legitimacy; economic crisis

Introduction

Elections in new democracies regularly resemble political earthquakes (Roberts & Wibbels 1999; Roberts 2008; Sikk 2012). Bulgaria is a prime example of a new democracy where political outsiders regularly enjoy dramatic success in elections. Here, virtually every government has been ousted from power after one legislative period. In the new democracies of Central and Eastern Europe, inter-election volatility is more than twice as high as either in Western or Southern Europe, and most often, it hits the incumbent parties in government. Latin American and Asian democracies follow closely behind (e.g., Roberts & Wibbels 1999: 577; Mainwaring 1998).[1]

Are citizens in young democracies notoriously unreliable and easily mobilised by oppositions or political outsiders defying their governments? Or are economic turbulences during the transition period with massive repercussions for parts of the population responsible for this anti-incumbent effect? This article compares anti-incumbent voting in young democracies to established democracies. We draw on the retrospective economic voting model to explain government support, but add a novel contextual variation. In particular, we analyse how the economic effect on (anti-)incumbency vote change is moderated by the age of democracy.

Our panel dataset covers one of the largest samples of countries used in research on retrospective economic voting. We measure anti-incumbency vote change as the loss which governing parties experience in elections.[2] Furthermore, we rely on aggregated data on economic prosperity (growth, unemployment and inflation), as well as on a large range of contextual data. The data covers 59 democracies from Europe, North and South America, Asia and Oceania over a period of 25 years from 1990 to 2014. This allows us to assess and compare several explanations related to retrospective voting after political transitions systematically.

A multifaceted literature documents retrospective and/or economic voting in young democracies.[3] In particular, previous research has identified either Central and Eastern European, or Latin American democracies as outliers (Wilkin et al. 1997: 313; Roberts 2008; Singer 2013a; Kriesi 2014). According to some accounts, the electorate in these democracies is hyper-volatile (Roberts 2008). Other studies argue that voters in post-transition countries only slowly develop the preconditions needed for an economic vote (Duch 2001). Hernández and Kriesi (2016), by contrast, show that the economic crisis has destabilised party systems in Western Europe, whereas Central and Eastern European countries have experienced high volatility ever since their democratic transition.

Responding to these contradictory findings, this article shows that the effect of democratic experience on the degree of economic voting is curvilinear. In the very early period after the transition, there is no homogeneous reaction to macroeconomic performance. Instead, political and economic reforms lead to a new divide between winners and losers of the transition. Economic voting is primarily determined by the relative socioeconomic position of citizens, not by macroeconomic performance, and leads to wide regional differences in the vote and massive electoral losses for reform governments (Tavits 2005: 287). This gives way to a second period, where citizens in countries with a relatively short democratic experience tie their support for the government to its output. This explains why voters in new democracies, especially in Central and Eastern Europe, have reacted with an electoral turmoil to the recent economic crisis. This effect declines as citizens develop a more procedural understanding of democracy, where the electoral regime allows citizens' preferences to be represented and translated into policies, and they vote both based on (prospective) party programmes and on retrospective information.

Theory

To decide for whom to vote, citizens rely on long-term party affiliation or they combine different sets of information, including both prospective and retrospective information about the parties' programmes as well as about their past performance in office (Fiorina 1981). This includes information about the past economic performance. In the 'sanctioning model' of retrospective economic voting, which we rely upon, citizens judge the government's competence based on past economic performance. 'On the basis of that assessment [the elector] votes for or against the political incumbent' (Lewis-Beck & Stegmaier 2008: 30). Evidence for retrospective economic voting is available for very different democracies. This article argues, however, that the extent of retrospective voting is context-specific and will be more frequent in some types of democracies. Differences are explained by the type of legitimacy which citizens attribute to their regime.

Retrospective voting

To obtain a rough idea about a party's possible performance in a future legislative period, voters can evaluate past performance and anticipate future actions of the incumbent. If voters consider retrospective information, this also creates an indirect limit on the mandate of the government: their mandate will only be renewed if incumbents live up to their promises. This is crucial if governments are to be accountable to their voters (Bartolini 1999). In the literature, retrospective voting is primarily translated into voters' reaction to economic performance (Lewis-Beck 1986; Fiorina 1981).[4] When voters' personal and/or the country's economic situation prosper, the government will be rewarded. In periods of poor economic performance, by contrast, the government might lose some of its previous voters to the opposition.

Myriad questions arise to complicate the picture. Is the national government responsible for the economic performance (Hellwig 2001), or can it be attributed to a global trend (Duch & Stevenson 2008: 339; Hellwig & Samuels 2007b; Bartels 2014)? In coalition governments, is the party responsible for the economic performance clearly identifiable (Powell & Whitten 1993; Duch & Stevenson 2008; Anderson 2000)? Does the party system offer viable electoral alternatives to the governing party (Remmer 1991)? Are all voters equally affected by the economy (sociotropic model), or do they differ according to the individual consequences they face (pocketbook model) (Alvarez & Nagler 1998; Duch & Stevenson 2008)? And do citizens perceive economic situations subjectively, so that partisans of the incumbent parties are more positive about the economy than opposition supporters (Bartels 2002; Evans & Andersen 2006)?

In spite of these amendments, findings robustly show that macroeconomic success is positively related to the vote gains of parties in government (Lewis-Beck & Stegmaier 2007: 527). This informs our first hypothesis:

> *H1*: Strong indicators of macroeconomic performance will be positively related to electoral gains for incumbent parties.

Retrospective voting and political transitions

Retrospective voting varies between contexts. We ask how retrospective economic voting evolves in the context of transitions to democracy. Numerous studies show that economic voting is not *per se* tied to democracies of a particular age or region (see Lewis-Beck & Stegmaier (2008) for an overview). However, there are two main lines of argument as to why retrospective economic voting can be expected to be weaker in recently democratised countries.[5] According to a first set of studies, citizens already vote economically in the first decade after the transition to democracy. In this first period, often characterised by major economic reforms, economic voting primarily reflects the fast and large social changes. We observe the articulation of a new cleavage, separating economic winners – educated, young people, living in urban centres, with employment in the service sector – from perceived economic losers, living in rural or industrial regions, with lower education levels or higher age (Pacek 1994; Tucker 2006). Under these circumstances, the national macroeconomy is not a suitable reference for economic voting; instead, the economic vote in transition democracies reflects the economic situation of economic groups or regions (e.g., Fidrmuc 2000; Przeworski 1996).

A second line of argument questions whether economic voting occurs immediately after transition to democracy. Klašnja (2016) shows that incumbents shortly after transition tend to suffer from an incumbency disadvantage. Others highlight that in the first year after the transition, upon dramatic changes in the political and economic sphere, the necessary conditions for retrospective macroeconomic voting are not fulfilled. Endemic party splits make it hard to distinguish incumbents from the opposition (Roberts 2008: 535) and more difficult to cast a meaningful vote (Tavits 2005).[6] Citizens develop the trust and understanding of political and economic mechanisms needed for retrospective economic voting only with more democratic experience (Duch 2001). Many citizens blame the previous regime rather than the reformers for the state of the economy (Stokes 2001).

We hypothesise:

H2: In countries which have recently transitioned to democratic rule, the impact of economic performance on the electoral gains and losses of the incumbent will be weaker than in older democracies.

H3: In countries which have recently transitioned to democratic rule, incumbents will tend to lose more votes in elections than in established democracies, irrespective of the state of the economy.

Democratic legitimacy and retrospective voting in young democracies

We qualify this explanation with a second view of retrospective voting that is based on the type of political support voters express towards their regime. We differentiate between two different perspectives of how citizens assess the legitimacy of democratic regimes and their institutions: the procedural and the performance-based perspective. Citizens with a performance-oriented view assess their democratic regimes and institutions based on the economic outcomes. Democratic institutions are legitimate because they provide their citizens with economic welfare. In the procedural view, democratic regimes gain their legitimacy because they operate through democratic procedures, according to the institutional rules (Gilley 2006; Rothstein 2009).

Citizens differ with regards to the importance that they accord to either of the two views. Citizens in countries with communist legacies (Mishler & Rose 1996) and citizens in young democracies (Huang et al. 2008) tend to see democracies as legitimate because of the (expected) economic performance. In societies with a long practice of democratic institutions and procedures, by contrast, citizens acquire a procedural understanding of democracy (Huang et al. 2008; Mishler & Rose 2001; Booth & Seligson 2009).

Retrospective economic voting can occur both among procedural and performance-oriented democrats. Procedural democrats see their regimes as a set of institutions. The electoral regime allows citizens' preferences to be represented, and translated into policies (Huang et al. 2008; Rothstein 2009). This type of citizen is reflected in the standard models of (retrospective) voting: they see their role in democracies as expressing their preferences about who governs, primarily based on ideology and issue preferences. In order to evaluate the effectiveness and competence of a government, they also take past economic performance into account. Performance-oriented democrats, on the other hand, emphasise outcomes over the democratic process. Thus, their support for the democratic regime, but also for institutions and actors, stems primarily from their success in producing (economic) outcomes. While programmatic representation is closely linked to the procedural view of democracy, for performance-oriented democrats, elections are predominantly a referendum on the government's performance. Therefore, in countries where citizens are primarily performance-oriented, governments live with a 'legitimacy straightjacket' (Gilley 2009: 58; Mishler & Rose 1996): if the (economic) expectations are not met, performance-oriented citizens are quickly dissatisfied with the political actors and will withdraw their support.[7] Conversely, procedural democrats combine programmatic information (e.g., election manifestos) with their retrospective evaluation. Hence, while both procedural- and performance-oriented citizens will resort to retrospective information about the economy, citizens with a performance-oriented view tend to be dissatisfied by their governments more quickly than procedural democrats, and consequently sanction their governments more severely when the economy goes badly.

H4: In young democracies the impact of economic performance on the electoral gains and losses of the incumbent will be stronger than in old democracies.

H5: In countries where citizens tend to express a performance-based view of democratic legitimacy, economic performance will have a stronger effect on the electoral gains and losses of the governing incumbents.

The two sets of hypotheses run into opposing directions. *H2* and *H3* imply that economic voting requires at least some experience with elections, and thus evolves roughly over the first decade after the transition to democracy. *H4* and *H5* argue that when young democracies mature, the performance-orientation of citizens and thus the degree of economic voting decreases.

Election experience, and the creation of recognisable parties needed to cast a meaningful economic vote (Roberts 2008: 535; Tavits 2005), is a faster process than the replacement of performance with procedural legitimacy of democracy. Also the latter process is conditioned by the first, as procedural legitimacy of democracy presupposes experience with democratic procedures. Hence, the first effect (gaining experience, leading to a rise of economic voting) happens earlier than the second effect (change in the type of democratic legitimacy, followed by a drop in economic voting). Thus, we expect an inverted curvilinear effect, where economic voting emerges after the first few years of democracy, and then declines somewhat when that democracy matures. To our knowledge, earlier research has not jointly tested these different contextual effects of the age of a democracy on retrospective economic voting.[8]

H6: The impact of economic performance on the electoral gains and losses of the incumbent increases in young democracies, as they age, and decreases in a later stage, as democracies get established.

Operationalisation

Along with the retrospective economic voting model, the empirical section analyses to what extent incumbent government parties are rewarded or punished by their voters for macroeconomic performance. In contrast to previous analyses, we consider the age of democracy and operationalise this with a curvilinear term. Our units of analysis are thus the electoral gains and losses of political parties in elections. We distinguish between the electoral swings of governmental and opposition parties. Hence, our dependent variable goes beyond the common measures of electoral volatility. Volatility measures, most prominently Pedersen's (1983) or Gallagher's (1991) indices, deal with vote changes between parties irrespective of who wins or loses. We, however, ask whether the governing coalition profits from electoral change and disregard vote shifts *within* the government coalition. Therefore, we calculate incumbency vote change as the cumulated vote change for all parties of the incumbent governmental coalition, varying between negative (vote losses) and positive values (vote gains).

To measure incumbency vote swings, we have compiled one of the largest datasets to date on vote change. It tracks political parties in 59 democracies in Europe, South, Central and North America, Asia and Oceania,[9] and for a period of 25 years from 1990 to 2014. We partially build on data from Mainwaring and Zoco (2007), Bochsler (2009), Lane and Ersson (2007) and Ruth (2014). For all countries, we have used our own coding criteria (see below) in order to match the parties over election periods, and we have significantly extended earlier data collections in order to cover the full time period. We rely on information from the EJPR *Political Data Yearbook*, *Electoral Studies'* Notes on Elections, and country-specific information to update previous sources.

As long as political parties are stable the calculation of incumbency vote change is straightforward and we can compare the (aggregated) vote difference between two elections. Many of the countries covered in our project are characterised by frequent party splits and mergers. For splits and mergers, we follow Sikk's (2005) advice: where two parties merge, we measure whether the new party's election results improve or worsen overall as compared to their joint vote share in the previous election. If a party splits, we compare the election result of the old party with the joint vote share of the successor parties (see Online Appendix A).[10]

We use different operationalisations for government parties; the measure reported in the main model identifies parties that have stayed in the coalition for at least half the legislative period. We test for the government coalition and the prime minister's party separately.[11] This ensures that the most important ruling parties of a governing period – those mainly responsible for economic outcomes – are coded rather than those who came to power towards the end of an electoral period.[12]

Figures 1 and 2 illustrate the empirical distribution of incumbent and opposition vote change by region (left-hand panel). Incumbent and opposition vote change is particularly pronounced in Central and Eastern Europe (Figure 1), where it is roughly twice as high as in either Southern Europe or Western Democracies. Latin America and Asia lie in-between these regions. In recent years, anti-incumbency vote change has also increased in established Western democracies. Hernández and Kriesi (2016) explain this for Western Europe by the dissolution of the party system after the economic crisis of 2008. Differences in vote swings between the regions persist over time, although in Central and Eastern Europe the anti-incumbent effect has declined (Figure 2). The inter-regional differences are similar to those observed by standard indices of volatility (Pedersen or Gallagher; middle and right-hand panel).

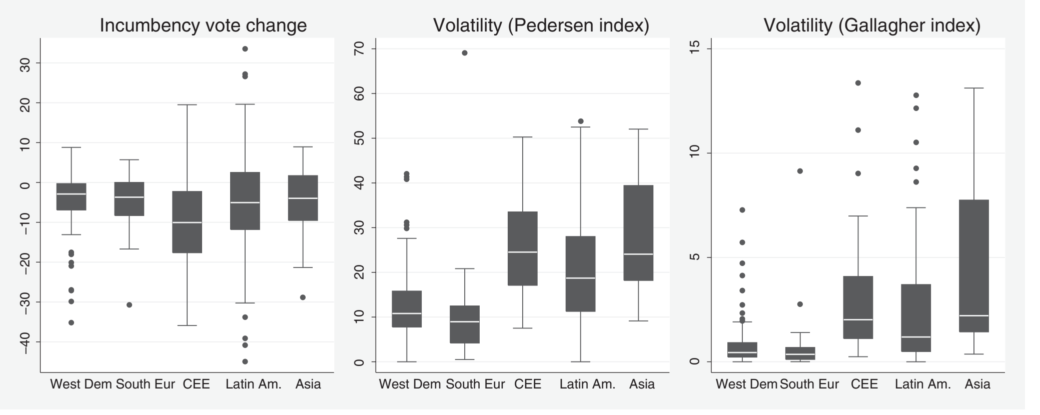

Figure 1. Vote change in Europe and America, 1990–2014 by region: Incumbency vote change versus common measures of volatility.
Notes: Volatility indices according to Pedersen (1983) and Gallagher (1991). Regions are: Central and Eastern Europe, Southern Europe (Spain, Portugal, Greece, Malta), Western Democracies (Western Europe, North America, Oceania), Latin America and Asia.
Incumbency vote change: Net vote change for parties of the incumbent government (parties who were part of the coalition during more than half the legislative period).

Explanatory variables

The model in this article explains incumbent vote change in terms of macroeconomic performance and democratic experience. In a second step, we analyse the mechanism driving the differences in retrospective voting, and therefore replace democratic experience with the extent of performance-based support.

Economic performance is measured by economic growth (World Bank 2016). We also include results for changes in unemployment levels and inflation – two other prominent measures in the literature on economic voting[13] – and we have tested several transformations of growth, capturing possible differences between positive growth and economic recessions.[14] In line with other macro-level studies of economic voting, we consider performance indicators from earlier parts of the legislative period as less important, and we assume a one-year lag in the effect, lagging the economic indicators by one year for all elections taking place before November.

We measure *democratic experience* based on the number of (uninterrupted) years a country has scored as a democracy in Polity IV (a value ≥6 on the combined Polity score). We count the number of years since the last transition, in the linear and its squared form.[15]

We measure the extent of *performance-based support* for democracy with aggregated survey data. There is scarce comparative data on citizens' perceptions of democracy. The World Values Survey (wave 5, 2005–2009) includes a battery of variables on the type of democratic legitimacy for a subset of 23 countries in our sample. We analyse whether citizens see economic performance as an essential characteristic of democracy. We use country averages for models on the country level.

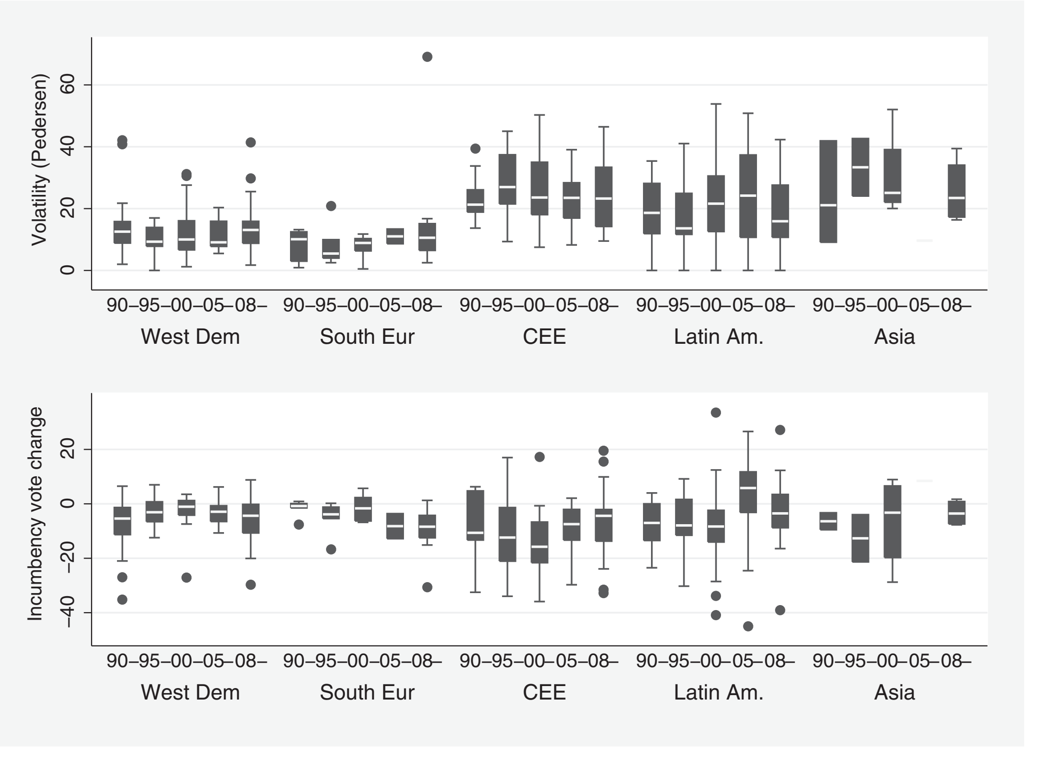

Figure 2. Vote change in Europe and America, 1990–2014 by five-year period (1990–1994 through to 2008–2014) and region: Incumbency vote change and common volatility measure.
Notes: Volatility index according to Pedersen (1983). Regions are: Central and Eastern Europe, Southern Europe (Spain, Portugal, Greece), Western Democracies (Western Europe, North America, Oceania), Latin America and Asia. Incumbency vote change: Net vote change for parties of the incumbent government (parties who were part of the coalition during more than half the legislative period). No elections took place in Asia (South Korea and Japan) from 2005 to 2007.

> Many things may be desirable, but not all of them are essential characteristics of democracy. Please tell me … how essential you think it is as a characteristic of democracy [that the economy is prospering].

This item is captured on a scale from 1 (non-essential) to 10 (essential), with country averages ranging from 5.5 to 9.5.

Control variables

Our models also include several control variables that are closely related to the age of the democracy in question: regional effects, countries democratising in the course of the third wave of democracy,[16] and the effect of the legacy of the authoritarian past. Furthermore, acknowledging that voters might not only vote retrospectively based on a country's economic performance, but also on its level of corruption, we include corruption as a control in our models (PRS Group 2013) (rescaled). Features of the political system can affect the degree of economic voting, mainly due to the clarity of government (parties') responsibility and the number of electoral alternatives. We control for the existence of a *government coalition* (as opposed to single-party regimes) for presidential regimes, which we code as regimes with a popularly elected fixed-term president (for presidential and semi-presidential regimes) (Elgie 2016; Crux et al. 2016), the number of effective parties at the electoral level (Enep) (data from WZB), and for the period of time since the last elections (Singer & Carlin 2013). Strong social cleavages, reflected in strong party-citizen ties or in ethnic divides, might weaken the availability of voters (Kayser & Wlezien 2011; Birnir 2007: 103–111), so we measure the number of party members as a share of the total population (Van Biezen et al. 2012), the strength of party-voter linkages (Kitschelt 2014), as well as ethnic diversity (Cederman et al. 2010). In economic terms, governments might not be responsible for an economic crisis if the countries' economies are strongly integrated in global markets (Hellwig 2001). We measure trade as total exports and imports as a share of gross domestic product (GDP) (World Bank 2016). Relatedly, we control for capital in- and outflows (World Bank 2016). In addition, strong welfare states (especially in Western Europe) might weaken the degree to which citizens' economic prospects depend on the national economy, so we control for social expenditures as a share of GDP[17] (OECD 2016). As the economy might be more salient in poorer countries (Singer & Carlin 2013), we also introduce the GDP per capita (log) and government debts (World Bank 2016) as a contextual variable.

Models

Recognising that the electoral consequences of economic crises vary widely across countries, in this section we test our contextual model of economic voting. The latest large economic crisis – the financial crisis of 2008 – had very different repercussions for governments across the world. Three democracies in three different regions – Bulgaria, Luxembourg and Mexico – held elections in June or July 2009. All were hit similarly by the crisis, experiencing negative growth rates of around –5 to –6 per cent before elections, but the political outcome could not differ more. In Luxembourg, just three parliamentary seats (out of 60) changed party, and the prime minister's Christian Social People's Party even improved its lead in the elections. Conversely, the main governing parties of Mexico and Bulgaria, as well as the junior governing party in Bulgaria, lost 12–20 per cent of their previous votes, amounting to a vote loss of 30 per cent in Bulgaria, while a newcomer party ('GERB') swept the floor with them and received 40 per cent of the votes.

While previous cross-country studies found evidence for economic voting in most regions, there are substantial differences in the size of the effect. Kriesi (2014) finds that governments in Central and Eastern Europe are more likely to be blamed for the financial crisis than Western European governments. In contrast, in Latin America, the effect of economic growth on the electoral support for governments or presidents has varied over the decades. Remmer (1991) finds that each percentage of economic growth benefitted the party of the incumbent president by 0.6 per cent of the votes in the 1980s, but this effect doubled in the 2000s (Singer 2013a: 179).[18] Comparable figures for Europe estimate the effect of growth to 0.5 or 0.6 per cent of the vote (Powell & Whitten 1993; Dassonneville & Lewis-Beck 2014). While age of democracy is addressed in some of these studies as a contextual explanation, the comparative findings are puzzling: the age of democracy is sometimes positively correlated with economic voting, and sometimes negatively.

In the remainder of this section, we aim to explain these differences in the strength of retrospective economic voting, and look in particular at a set of explanations which relate to differences between established Western democracies and third-wave democracies in Latin America, Central and Eastern Europe, and South Korea. We rely on aggregated data on incumbency vote change in order to show the consequences of economic performance for governments and to test our propositions over a large set of countries, covering young and established democracies, and with temporal variance. Objective data on the economic performance, rather than citizens' perception thereof, also allows us to avoid the common problem of endogeneity in this type of studies. We complement our data with information on the citizens' perception of regime legitimacy in order to investigate the underlying mechanism.

In our multivariate models, we employ different dependent variables. We measure the (cumulative) electoral gains and losses, either for the parties of the governing coalitions, or for the party of the prime minister. We also run models based on the cumulative votes gained by the governing parties, with a lagged dependent variable.

For a first illustration of the model, we look at our main dependent variable, referring to the electoral gains or losses of the prime minister's party (Figure 3, right panel) and the government coalition (we pool all government parties by election, using the cumulated electoral change; left panel). We argue that the inter-regional differences in the strength of economic voting that previous studies found are a function of the age of democracy. In very young and in well-established democracies, the effect of economic growth on the electoral gains and losses of the incumbent are weak or moderate, whereas in-between, in adult, but rather young democracies, the effect of retrospective economic voting is strong. The picture is somewhat less clear when we rely on the party of the prime minister (right panel), but the trends remain.

The following paragraphs discuss the results of our multivariate analyses. We begin by evaluating the direct effect of economic growth on incumbency vote change (*H1*) before turning to contextual effects on retrospective economic voting (*H2–H4*). First, we show the models with democratic experience as a context variable before considering alternative explanations such as the legacies of authoritarian regimes, regional effects or cohort effects of the period of democratisation. We go on to discuss and test the proposed causal mechanism underlying the contextual explanation, replacing democratic experience with a measure of the degree of performance legitimacy (*H5*).

Multivariate models of retrospective economic voting

There are different modelling strategies for estimating retrospective economic voting with aggregated models. We estimate a mixed-effect model with yearly fixed effects (for the general economic trend) and with the electoral gains/losses of the government coalition parties as the dependent variable, but we also provide alternative models (see below). As we expect that democratic experience (*demexp*) is related in different ways to economic voting, we specify it as a curvilinear function and interact it with different measures of economic performance. Electoral change in country j and time-point i is explained by an

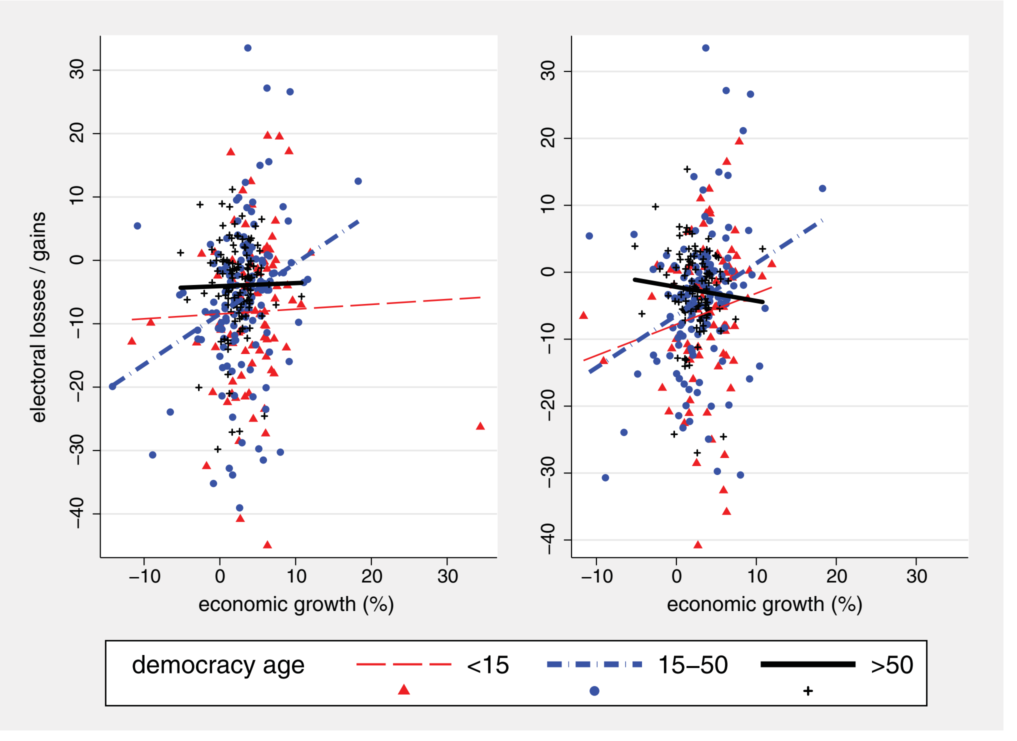

Figure 3. Economic growth (one-year lag) and the electoral gains and losses of the incumbent (left: all parties of the governing coalition; right: prime minister's party). [Colour figure can be viewed at wileyonlinelibrary.com]
Note: Effect is robust to the exclusion of the outlier, Bosnia and Herzegovina 1998, with 34 per cent growth.

overall mean (α_{0j}), time-dependent country variables and controls (ij) and time-invariant controls (j), unexplained country variation (μ_j) and unexplained time-variation (ε_{ij}).

$$\begin{aligned} \textit{electoral change}_{ij} = {} & \alpha_{0j} + \beta_1 \cdot \textit{economy}_{ij} + \beta_2 \cdot \textit{demexp}_{ij} + \beta_3 \cdot \textit{demexp}^2_{ij}\ \beta_4 \cdot \textit{economy}_{ij} \\ & \cdot \textit{demexp}_{ij} + \beta_5 \cdot \textit{economy}_{ij} \cdot \textit{demexp}^2_{ij} + \beta_5 \cdot \textit{time-variant controls}_{ij} \\ & + \beta_6 \cdot \textit{time-invariant controls}_j + \mu_j + \varepsilon_{ij} \end{aligned} \tag{1}$$

Results are reported in Table 1. The first specification is a linear model of economic growth on electoral performance of the government coalition parties; the second model an interaction effect of the age of democracy (linear) with economic growth. In the third model, we specify the moderating effect of the age of democracy on retrospective economic voting as a curvilinear effect. The fourth specification is similar to some of the economic vote models in the literature (e.g., Whitten & Palmer 1999), with the election result of the government parties as dependent variable, under inclusion of the lagged dependent variable. In the fifth specification, we look at the electoral gains or losses of the prime minister's party as the dependent variable.

Table 1. Explaining incumbent gains or losses in elections

	(1) Incumbency vote change	(2) Incumbency vote change	(3) Incumbency vote change	(4) Incumbency vote change %	(5) PM party vote change
Economic growth	0.66***	0.54*	−0.00	−0.06	−0.30
	(0.19)	(0.26)	(0.40)	(0.39)	(0.38)
Corruption	−1.08	−1.06	−0.99	−1.03	−0.49
	(0.77)	(0.77)	(0.76)	(0.77)	(0.74)
Effective number of parties	0.63^{+}	0.63^{+}	0.56	−0.06	0.97**
	(0.38)	(0.38)	(0.38)	(0.42)	(0.37)
Single-party government (binary)	−2.30^{+}	−2.34^{+}	−2.66^{+}	1.07	0.17
	(1.37)	(1.38)	(1.37)	(1.60)	(1.30)
Latin America (binary)	1.77	1.10	2.20	2.44	1.12
	(2.44)	(2.92)	(2.90)	(3.05)	(2.95)
Central Eastern Europe (binary)	−3.78^{+}	−4.69	−2.24	−2.35	−2.92
	(2.29)	(3.12)	(3.26)	(3.42)	(3.25)
Southern Europe (binary)	−1.67	−2.23	−2.65	−1.63	−1.76
	(2.40)	(2.78)	(2.70)	(2.88)	(2.72)
Asia (binary)	−1.87	−2.15	−2.29	−3.90	0.26
	(3.32)	(3.49)	(3.37)	(3.67)	(3.68)
Presidentialism (binary)	−2.15	−2.35	−2.28	−2.22	−1.67
	(1.57)	(1.60)	(1.54)	(1.65)	(1.53)
Crisis (binary)	4.45	4.97	6.14	4.91	6.00
	(6.34)	(6.37)	(6.32)	(6.12)	(5.79)
Democracy years†		−0.29	0.99	0.51	0.82
		(0.47)	(1.39)	(1.39)	(1.33)
Growth * Democracy years		0.05	0.49^{+}	0.59*	0.65**
		(0.07)	(0.25)	(0.24)	(0.23)
Democracy years^2			−0.10	−0.04	−0.08
			(0.13)	(0.13)	(0.13)
Growth * Democracy years^2			−0.05^{+}	−0.06*	−0.07**
			(0.03)	(0.03)	(0.03)
Lagged dependent variable				0.80***	
				(0.05)	
Year fixed effects			Included		
Constant	−6.96^{+}	−5.67	−9.12^{+}	2.52	−11.82*
	(3.62)	(4.54)	(4.93)	(5.81)	(4.74)
Country-level variance (intercept)	2.72	2.41	1.47	5.38^{+}	3.25
	(4.63)	(4.56)	(4.15)	(4.91)	(4.27)
Election-level variance	90.91***	91.01***	89.47***	81.88***	72.33***
	(8.13)	(8.14)	(7.95)	(7.36)	(6.79)

(*Continued*)

Table 1. Continued

	(1) Incumbency vote change	(2) Incumbency vote change	(3) Incumbency vote change	(4) Incumbency vote change %	(5) PM party vote change
N	330	330	330	330	309
BIC	2648.37	2659.38	2662.42	2652.03	2447.19
Log-likelihood	−1216.90	−1216.61	−1212.33	−1204.24	−1106.06

Notes: Hierarchical models calculated with Stata14 xtmixed command; models include random slopes and intercepts. Standard errors in parentheses; $^{+}p < 0.10$; $^{*}p < 0.05$; $^{**}p < 0.01$; $^{***}p < 0.001$. PM = Prime minister. †We report age of democracy in decades to make the effect size visible.

The first specification reports a highly significant effect of economic growth on incumbency vote change – that is, for every percentage of economic growth, the government coalition wins some 0.66 percentage points of votes (*H1*). This effect is in line with earlier investigations of economic voting in Europe (e.g., Dassonneville & Lewis-Beck 2014) and Latin America (Singer 2013a). While years of democracy in their linear operationalisation (model 2) seem not to alter the economic vote, they do so once we include them in a curvilinear specification (models 3–5). To facilitate the interpretation of the curvilinear interaction function, we display the results graphically in Figure 4 (coefficients are reported in Table 1, models 3 and 5). For young democracies, we find little or no evidence for macroeconomic effects on the vote (similar: Duch 2001). Only after a few repeated elections, economic growth starts affecting the incumbent's electoral performance, reaching its peak (a gradient above 1) after 20–25 years of democratic experience. Hence, in young democracies, which have suffered severe economic crises before the elections, such as Hungary, Slovakia and Latvia in 2010 and Argentina in 2003, our models estimate that the incumbent parties lose one vote percentage for every negative growth per cent.[19] Economic voting is estimated to cost the incumbents more than 10 per cent of their votes in Argentina in the 2003 elections (–11 per cent growth) or in Latvia in 2010 (–14 per cent growth). This is twice as high as the effects reported in most cross-country studies of retrospective economic voting, although similar findings have been reported for Latin American democracies in the 2000s (Singer 2013a).[20] The effect declines again in established democracies with more than 40 years of democratic experience.[21] Different modelling strategies, either with incumbency vote change as dependent variable (models 1–3) or the incumbent coalitions' cumulative vote share (model 4), reveal comparable effects. The curvilinear effect of democratic experience also remains robust if we only analyse the effect on the prime minister's party (model 5, Figure 4, right-hand panel). This supports *H2*, *H4* and *H6*, and the inverted U-shaped effect of democracy age on economic voting.

Figure 5 shows the general incumbency effect – that is, the electoral gains and losses of the incumbent, irrespective of economic performance (*H3*). In contrast to *H3*, our model does not report any statistically significant variation with the age of democracy (curvilinear, see above), and neither do alternative specifications, reported in Online Appendix B1 (Figures B3–B4). Thus, the high electoral volatility in young democracies, reported by studies of

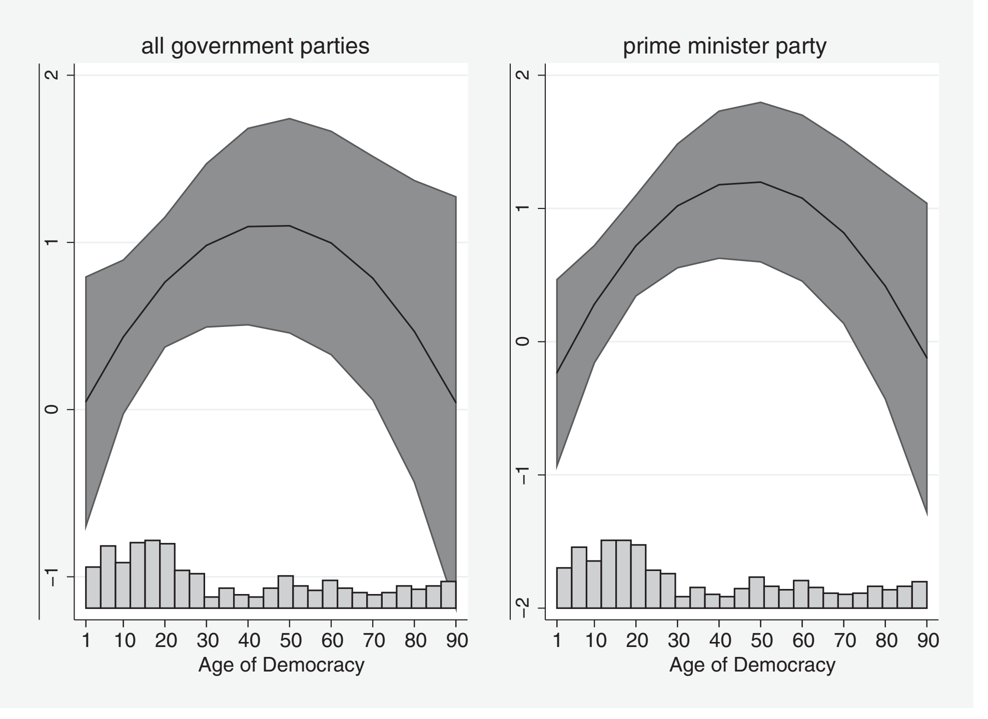

Figure 4. Marginal effect of economic growth on the incumbency vote change as the age of democracy changes.
Notes: Average marginal effect (95 per cent confidence intervals) of economic growth on incumbency vote change over increasing age of democracy. Graphs based on models 3 and 5 in Table 1.

general inter-election volatility (Sikk 2005; Tavits 2005), is not mirrored in a strong anti-incumbent vote.

Unemployment (change compared to previous year) shows a similar pattern to economic growth – although naturally in the inverse direction. While voters reward incumbents for economic prosperity, they punish them for rising unemployment. However, the curvilinear effect is only partly significant: in the full sample (Figure 6, left panel), we see that the effect of unemployment on government electoral losses initially increases as a population's experience with democracy grows. This effect stalls after 20 years of democratic experience, and thereafter we can no longer observe a statistically significant change with the age of democracy. The lack of clear findings for unemployment is in line with previous research on retrospective voting in Central and Eastern Europe, where studies have reached contradictory results for different time periods (Roberts 2008: 541; Kriesi 2014: 310).[22]

Regarding our control variables, elections with a higher number of effective parties tend to be associated with higher pro-incumbent votes, and elections featuring single-party governments tend to display more anti-incumbent votes, although the effects are only significant in some of the models. Furthermore, neither corruption nor the economic crisis has a significant effect.

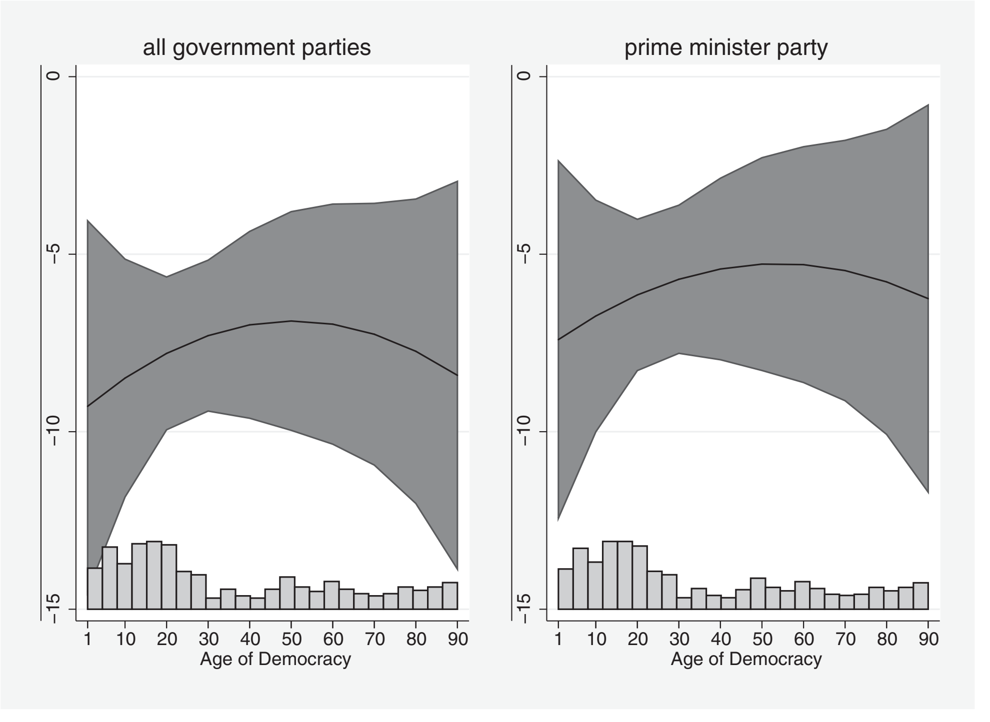

Figure 5. Incumbency effect as the age of democracy changes.
Note: Economic growth held at 0 per cent.

Control variables and robustness checks

We subjected our results to a series of robustness checks, both in terms of modelling strategies as well as alternative operationalisations, subsamples and consideration of further controls. First, effects remain if we estimate the models with ordinary least square regressions with robust standard errors and thereby also report the R^2, which cannot be calculated for mixed-effect models (see Online Appendix B8[23]). The same holds true for fixed effect models which only use within-country variation and thus provide a more conservative test of our hypotheses (see Online Appendix B8).

Second, we have run our models with several alternative measures of economic performance and government coalition. Results are robust for different transformations of economic growth. In particular, we have tested whether the (negative) effect of the economic crisis on incumbent votes is more prevalent than the (positive) effect of economic growth, with various cut-off points and nonlinear transformations of the variable. Our results were also tested against alternative operationalisations of government coalitions (see Online Appendix B6). Results remain stable when we measure government parties as those parties in government at the end of the period, or 120 days before the elections.

Third, while results are robust for different operationalisations of economic growth and government coalition, we are particularly concerned that age of democracy might hide

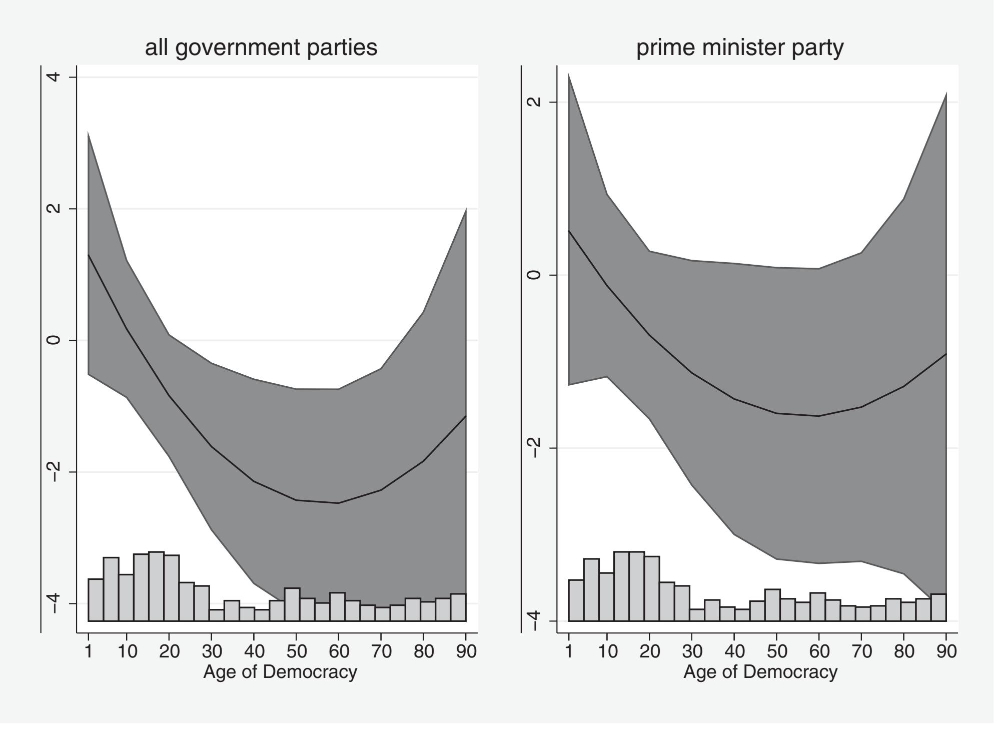

Figure 6. Marginal effect of unemployment change on incumbency vote change as the age of democracy changes.
Note: Average marginal effect (95 per cent confidence intervals) of unemployment change (compared to previous year) on incumbency vote change over increasing age of democracy.

another effect. In our sample, the countries with the longest democratic experience are primarily located in North America or in Western Europe. We, therefore, test the effects in different subsamples. On the one hand, there might be other effects which relate to the regional variance between Western Europe, North America, Oceania and Japan (established democracies) versus newly democratised countries (Central and Eastern Europe, Latin America, South Korea). On the other hand, the effect of economic voting might vary over the period of investigation, as reported by Singer (2013a), or it might vary in light of the financial crisis of 2008 (Singer 2013b; Kriesi 2014; Dassonneville & Lewis-Beck 2014). Finally, the curvilinear effect might result from nonlinearities in the model and an uneven distribution of the cases.

With regard to the first concern, we rely on the literature which has identified several factors that might also drive cross-regional differences in economic voting, and has therefore introduced a set of additional *contextual* control variables that might moderate the economic vote. The effect of the age of democracy on the economic vote, reported in Online Appendix B1, remains stable after the introduction of a set of additional contextual control variables in interaction with economic growth: welfare state expenditures, trade, (semi-) presidential regimes, multiparty coalition governments, ethnic fractionalisation, capital flows, government debts, party-voter linkages, ethnic heterogeneity and time since the last

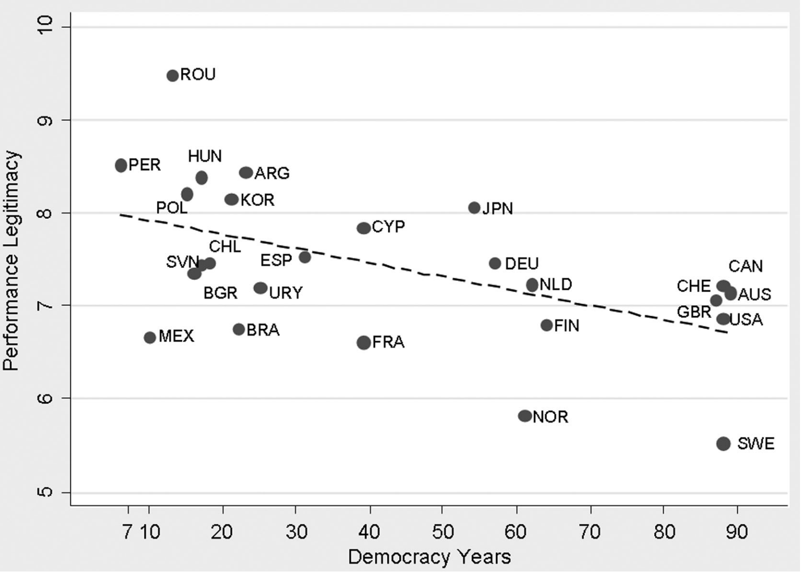

Figure 7. Correlation between age of democracy (logarithm) and performance legitimacy.
Note: Correlation based on age of democracy at first election in/after 2005 in each country.
Source: World Value Survey, 2005–2009.

elections.[24] As these contextual control variables are introduced in interaction with the economic performance, we introduce them sequentially. Furthermore, we have re-run our models, controlling for single-party cabinets and for presidential regimes, and including only single-party regimes, as well as including only parliamentary regimes,[25] thus excluding, among others, all Latin American democracies and the United States (results in Online Appendix B1).

To address our second concern, we have run further models to test whether the observed pattern is produced by external shocks (here: the financial crisis of 2008) or whether it is due to regional or cohort effects of countries democratising in the course of the third wave of democratisation, and/or with a specific authoritarian legacy. Results are robust if we split our sample for elections taking place before and after the global financial crisis (see Online Appendix B4) and if we control for cohort effects of countries undergoing transition towards democracy in the third wave. Additionally, we test whether democracies in Central and Eastern Europe with a communist legacy, and supposedly more performance-oriented citizens (Bohle & Greskovits 2012: 72), show higher degrees of economic voting (see Online Appendix B5). Models with these alternative operationalisations do not show any statistically significant effects, adding confidence to our explanation, relating economic voting to the age of democracy.

To rule out that the curvilinear effect is driven from nonlinearities in the model or an uneven distribution of the cases, we tested whether the inverted U-shape reported in the models above is robust to alternative functional shapes. We have repeated the analysis for different subsamples, distinguishing young and old democracies. In the subsample of young democracies, age of democracy should be positively related to the intensity of

Table 2. The contextual effect of performance legitimacy

	(1) Incumbency vote change	(2) Prime minister party vote change
Growth	-7.66^{**} (2.43)	-4.95^{+} (2.81)
Performance legitimacy	-6.66^{+} (3.77)	-4.03^{+} (2.29)
Growth * Performance legitimacy	1.14^{***} (0.31)	0.80^{*} (0.35)
Corruption	−3.04 (2.68)	−1.85 (2.64)
Effective number of parties	−1.57 (1.23)	0.86 (0.94)
Coalition government (binary)	−0.32 (3.44)	−4.12 (3.21)
Latin America (binary)	4.90 (8.56)	0.56 (6.22)
Central Eastern Europe (binary)	3.60 (9.78)	−0.59 (7.15)
Southern Europe (binary)	−3.42 (13.09)	−3.11 (7.05)
Asia (binary)	6.68 (10.90)	18.96^{*} (8.42)
Presidentialism	−4.52 (6.21)	−4.95 (3.65)
Crisis (dummy)	−2.59 (5.65)	9.81 (8.12)
Yearly fixed effects	Yes	Yes
Constant	53.86^{+} (28.11)	25.59 (18.33)
Country-level variance (intercept)	117.68^{***} (39.93)	0.00^{***} (0.00)
Election-level variance	21.68^{***} (6.55)	57.82^{***} (13.71)
N	52	48
BIC	453.53	412.27
Log-Likelihood	−185.28	−165.49

Notes: Hierarchical models calculated with Stata14 xtmixed command; models include random slopes and intercepts. We report results for the period where we have data – that is, elections around 2005 (specifically we consider elections between 2004 and 2010, which leaves us with an average of two elections per country). Standard errors in parentheses; $^{+}p < 0.10$; $^{*}p < 0.05$; $^{**}p < 0.01$; $^{***}p < 0.001$.

retrospective voting. In the subsample of established democracies, the same relationship should be negative. For each subsample, we have estimated the linear effect of age of democracy on retrospective economic voting (see Online Appendix B4). The results confirm our interpretation of the results of the curvilinear models: retrospective economic voting increases over time in countries with less than 20 years of democratic rule, and decreases in countries with more than 25 years of democratic experience.[26] Results are not the artefact of the comparison across regions: neither the exclusion of Central and Eastern Europe, nor of Latin America, affects the results (see Online Appendix B1, Figures B1–B2).

Performance legitimacy

We argue that the effect of democratic experience is substantially driven by the orientation of citizens in young democracies to an economic type of legitimacy. In this subsection, we more closely test the hypothesised theoretical mechanism that underlies the contextual effect of retrospective voting. To reiterate our explanation, we argue that citizens in young

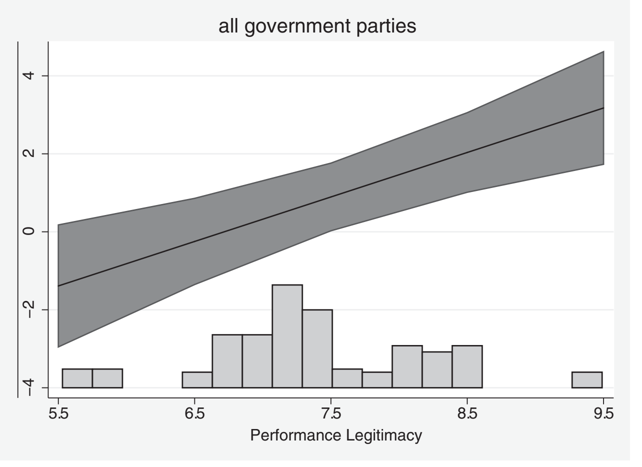

Figure 8. Marginal effect of economic growth on incumbency vote change as performance legitimacy changes.
Notes: Average marginal effect (95 per cent confidence intervals) of economic growth on incumbency vote change over increasing levels of performance legitimacy. Graph based on model 1 in Table 2. Results for the party of the prime minister (model 2) are identical apart from a slightly stronger effect size.

democracies have a more performance-based view of democracy than citizens in older democracies (*H5*). Therefore, they evaluate the democratic regime and the government primarily based on its economic performance. We analyse how citizens' perceptions of the legitimacy of a democracy are related to the age of their democracy, and how this in turn affects the degree of retrospective economic voting. Only cross-sectional data is available for a single time point (varying by country between 2005 and 2009) and a limited sample of 23 countries. A performance-based view for democracy is operationalised as country averaged responses to a World Values Survey question inquiring about the importance of a prospering economy for democracy. We match this with elections around the period where we have data (i.e., 2004 to 2010). Our analysis shows that in this period, the type of legitimacy was closely associated with democratic experience. Most of the countries in the subsample count more than 15 years of democratic experience; the lowest have seven years. Hence, the available data is not appropriate for assessing the period in the left part of the U-curve in Figure 4.

First, we measure the impact of democratic experience on perceptions of democratic legitimacy in order to assess the plausibility of the claim that democratic experience works through the type of legitimacy that citizens have. We regress our measure of democratic legitimacy on variables related to the regime duration and political legacies. Our results show that the type of legitimacy is indeed closely associated with the duration of democratic experience. The binary correlation shown in Figure 7 is high (–0.54) and remains stable after including variables controlling for communist legacies. The effect also remains significant if we run hierarchical models to control for the social structure of a country with variables for individuals' social class and education (see Table B2 in Online Appendix B7).

Second, we return to our main model of retrospective economic voting, but substitute the contextual variable 'Democratic experience' with our measure of citizens' perception of the legitimacy of democracy (see Table 2). Thus, we test for the theoretical explanation which we believe is driving the effect of democratic experience. To facilitate the interpretation of the second-order interactions, we turn to graphical illustrations of the average marginal effect of economic growth when performance legitimacy changes (see Figure 8).

Figure 8 shows a pronounced effect of economic growth on the electoral result of incumbents, especially in countries where democratic legitimacy is closely tied to economic performance. We predict that governments can gain roughly 3 per cent of votes as the economy grows by 1 per cent. When the performance-based view of democracy is weaker, the effect declines and becomes insignificant (*H5*).[27]

The perception of democracy is certainly endogenous in the model as the type of political support or legitimacy itself is related to the macroeconomic situation, corruption (Rose et al. 1998), or might vary between supporters of the government and the opposition. However, experience under democracy, a close correlate of the type of democratic legitimacy, is exogenous, and results are consistent in models operating with democratic experience (Figure 4). The number of countries for which we can measure the perception of democratic legitimacy is too small to treat performance legitimacy as an endogenous variable, and to estimate it with a two-stage least square regression (instrumental variable approach).

Conclusions

Voters in new democracies often appear as unreliable, and their electoral choices as unstable (Roberts 2008), with negative consequences for the accountability of governments: if the incumbents expect to lose office in subsequent elections due to a hyper-volatile electorate, they do not have any incentives for good performance. This article challenges this view of hyper-instability with an economic model of voting. Retrospective economic voting has been documented for new democracies on different continents (Pacek 1994; Lewis-Beck & Stegmaier 2008), although earlier findings vary widely. This study introduces democratic experience as a contextual factor affecting retrospective economic voting. As opposed to earlier studies, we do not observe a particularly strong anti-incumbency effect in new democracies. Instead, voters react more strongly to economic underperformance in new democracies. The contextual effect of the age of democracy on retrospective economic voting is curvilinear.

In the very early stage of competitive elections after the political transition, new democracies experience the formation of new political divides. While some of these divides are economic in nature – for instance, between transition winners and losers (Pacek 1994; Tucker 2006) – macroeconomic success seems not to directly translate into voting behaviour.

In a second stage, the conditions are particularly conducive for economic voting: citizens in new democracies tend to evaluate their regime and its actors primarily through economic lenses. This puts governments in new democracies in 'legitimacy straightjackets' (Easton 1965; Gilley 2009: 58): if citizens perceive economic prosperity as the ultimate goal of democracy, they withdraw their support from the government if democracy cannot satisfy their economic expectations. Accordingly, the incumbency vote is closely tied to economic performance.

The third stage characterises the consolidation of a procedural view of democracies, and is related to established democracies. Many citizens still consider the economic performance when casting their vote, but thanks to a reservoir of legitimacy for both the regime and the government, economic downturns no longer undermine its support among citizens. The effect of the economy on the re-election of incumbent governments becomes less pronounced.

Our analysis innovates in comparison to earlier studies in that it not only tests for linear effects of the age of democracy (related to different results in previous studies), but also for a curvilinear pattern, and this over a longer period than previous work. Our results are robust to multiple robustness checks. We have tested different operationalisations of economic growth and democratic experience, and employed different operationalisations of government coalitions. Furthermore, we have analysed several alternative explanations closely linked to political transitions and the age of democracy. We see that the transition from the second to the third stage is linked to performance or procedural orientation. Finally, the higher degree of retrospective economic voting also partly explains why voting behaviours in new democracies appear more unstable.

The theoretical argument allows for empirical tests both at the micro and the macro levels. While for the measure of the prevalent view of regime legitimacy by country the article relies on survey data, it investigates the anti-incumbent vote and its determinants based on aggregated election results and macroeconomic outcomes. As Dassonneville and Lewis-Beck (2014) argue, this level of analysis is suitable to understand the macro-level implications of retrospective voting. At present, the availability of micro-level data is limited to questions related to the study of retrospective economic voting or regime legitimacy, and usually limited to a smaller set of countries and one or few time points. Future research might profit from new survey data across old and new democracies in order to assess the underlying mechanisms at the individual level.

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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:

Appendix A: Party coding
Appendix B: Regression models

Notes

1. Powell and Tucker (2014) come to more nuanced findings when excluding new party entries from the volatility measures.
2. Large-N cross-national studies, although with a smaller number of cases, include Powell and Whitten (1993); Whitten and Palmer (1999), Dassonneville and Lewis-Beck (2014), and for a single election period include Wilkin et al. (1997).
3. On Latin America, see Remmer (1991); on Central and Eastern Europe, see Mishler and Willerton (2003), Duch (2001), Lewis-Beck and Stegmaier (2008); on the financial crisis of 2008, see Bartels (2014), Magalhães (2014).
4. For a more complete review of this literature, see Anderson (2007), Lewis-Beck and Stegmaier (2007), Healy and Malhotra (2013).
5. We distinguish between democracies shortly after transition to democracies (i.e., during the period when stable political parties form) and when citizens get familiar with representative democracy and young democracies after this initial phase. We use continuous measures in our dataset and do not, therefore, define a cut-off point.
6. Tavits (2005: 290) shows that party system volatility increases during the first elections due to a crowded political arena that makes it difficult for voters to distinguish between parties. Stability increases as democracy matures and voters learn not to waste theirs votes.
7. This can also culminate into distrust towards the political regime (Mishler & Rose 1996; Mattes & Bratton 2007: 202). However, empirical analyses show that citizens in young democracies with performance-oriented views primarily make particular institutions, such as governments or parties, responsible for bad performance (Mishler & Rose 2001); thus they distinguish 'between the poor performance of governments and the system of governance' (Graham & Sukhtankar 2004: 370; see also Waldron-Moore 1999: 52–54).
8. Tavits (2005) tests for an interaction between inflation and democratic experience on party system volatility, but analyses one very specific indicator of economic performance whose importance declines over time because the level of inflation decreases. By contrast, we argue that the *importance* of the economy for *incumbent support* is curvilinearly related to the age of democracy. The effect is not due to changing economic performance, but due to changing attitudes in the population.
9. Albania, Argentina, Australia, Austria, Belgium, Bolivia, Bosnia-Herzegovina, Brazil, Bulgaria, Canada, Chile, Colombia, Costa Rica, Croatia, Cyprus, Czech Republic, Denmark, Dominican Republic, Ecuador, El Salvador, Estonia, Finland, France, Germany, Greece, Guatemala, Honduras, Hungary, Ireland, Italy, Japan, Latvia, Lithuania, Luxembourg, Macedonia, Mexico, Netherlands, New Zealand, Nicaragua, Norway, Panama, Paraguay, Peru, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, South Korea, Spain, Sweden, Switzerland, United Kingdom, United States, Uruguay, Venezuela. We only include democratic elections (i.e., Polity IV ≥ 6 at election t). Peru is excluded because throughout our period of investigation parties run in changing alliances, making it impossible to measure electoral shifts.
10. Powell and Tucker (2014) distinguish volatility caused by party exit and entry from electoral volatility caused by existing parties. For the present study, which is focused on the (anti-)incumbent vote, this distinction is less relevant. Dissatisfied voters will switch from governmental parties either to established opposition parties, or to new parties.
11. Furthermore, when we consider parties that were in the coalition at the end of the period, or 120 days prior to the elections, results remain robust (see Online Appendix B6).
12. Data on government entry and exit dates is obtained from the Wissenschaftszentrum Berlin (WZB).
13. The recent literature shows that changes in the rate of unemployment, compared to the previous year (Stanig 2013; Hernández & Kriesi 2016), are more important than annual unemployment rates. Dynamic measures also fit best with the individual perception of the economy (Nadeau et al. 2013). Studies of economic voting at the individual level tend to ask about economic *improvements* or *comparisons over time* (Healy & Malhotra 2013). We also run our models with inflation as a measure of economic performance (Online Appendix B3). Earlier findings report a significant effect of inflation on retrospective voting for a limited set of democratic countries in Latin America (Remmer 1991), whereas

Przeworski (1996) finds an opposite effect for Poland, and Tavits (2005) a decreasing effect for older democracies.

14. In particular, we have tested whether the (negative) effect of the economic crisis on incumbent votes is more prevalent than the (positive) effect of economic growth, with various cut-off points, and nonlinear transformations of the variable. Results are robust to multiple operationalisations.
15. Tavits (2005) tests for a curvilinear effect of the age of democracy using a subsample of newly democratised Eastern European states, although without considering the (curvilinear) age of democracy as a moderating variable of the economic vote.
16. Transitions to democracy after 1974, following Portugal's transition.
17. We only have data for a subset of OECD countries.
18. Benton's (2005) model, considering long-term and non-incumbency effects, shows even larger effects.
19. This follows a respectable body of research from Latin America and developing countries showing that retrospective economic voting is present in young democracies (Benton 2005; Lewis-Beck & Stegmaier 2008; Hellwig & Samuels 2007a). Roberts (2008) shows for postcommunist democracies that citizens tend not to reward incumbents for success, but punish them for economic crises.
20. In a comparison of a large number of democracies, Wilkin et al. (1997: 308) find a similarly strong effect for the largest party in office.
21. Tavits (2005) shows that the effect of inflation on electoral volatility (though not incumbent volatility) decreases as democracies mature.
22. Some of our models report a negative effect of inflation on incumbent volatility in old democracies (Online Appendix B3). However, this effect is not robust to the exclusion of Latin American cases or presidential regime. As discussed above, findings on the (conditional) effect of inflation of earlier studies show rather ambiguous results.
23. In the models explaining the coalitions' cumulative vote share as dependent variable (e.g., model 4), the lagged dependent variable has a strong explanatory power, shifting the R^2 to 0.61.
24. In some of the models, the confidence intervals become larger as the number of cases included is lower due to the limited availability of control variables (welfare state and party membership). The same change occurs if we proceed with list-wise deletion, restricting the model (without control variables) to the smaller sample of cases.
25. Results are robust to the exclusion of presidential regimes, where the responsibility for the economy might be shared between the president and the parliament, or where candidacy effects seem to affect the degree of economic voting (De Ferrari 2015).
26. For countries in the 20–25 year range of democratic experience, we do not see a clear trend associated with the age of their democracy.
27. The negative effects in the left part of the graph rely on very few cases with a very low performance-orientation (values below 6). If we exclude Norway (where the government parties lost in 2013 despite economic growth) from the analysis, the negative effect of growth on incumbent volatility in this segment of the function disappears.

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