

Effective Government and Evaluations of Democracy

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Abstract

Ineffective governance is known to weaken support for governments and leaders. However, it is less clear whether these effects spill over to the regime and erode support for the democratic system. This paper returns to this classic question, now using time-series, cross-sectional data to test whether the effectiveness of governments in sustaining economic growth, providing quality healthcare, controlling corruption, and tackling violent crime affects popular attitudes to democracy. We find that while specific support – or satisfaction with democracy – is clearly influenced by fluctuations in government performance, diffuse support for democracy remains relatively impervious. Violent crime is, however, the exception, uniquely eroding both democratic satisfaction and democratic support.

Keywords: support for democracy, satisfaction with democracy, performance legitimacy, effective government, violent crime, healthcare access, corruption

Words: 7,958

Introduction

Economic recessions, crime waves, and disease epidemics shine an unforgiving light on the effectiveness of governments. Crises such as these demand a coherent and sustained response, cruelly exposing governments who lack the ability or fail to muster the enthusiasm. Indeed, it now seems clear that ineffective governance substantially reduces government support and executive approval (e.g., Aksoy et al., 2020; Hibbs et al., 1982; Lewis-Beck & Stegmaier, 2013; Romero et al., 2016).

Less clear, however, is whether these effects spill over to the regime itself. In autocratic contexts, the effectiveness of governments does appear to enhance support for the regime (e.g., Zhao, 2009; Roskin, 2009; Yang & Zhao, 2015; Zhu, 2011). Evidence is more ambiguous when it comes to attitudes in democracies: although some scholars have linked evaluations of democracy with effective government (e.g., Armingeon & Guthmann, 2014; Clarke et al., 1993; Córdova & Seligson, 2010; Huhe & Tang, 2017; Kotzian, 2011; Mishler & Rose, 2002; Przeworski, 1991), many others find little to no relationship (e.g., Evans & Whitefield, 1995; Mattes & Bratton, 2007; Huang et al., 2008; Yap, 2013). Is it the case that citizens in democracies “have built up loyalty to their political system because it kept the peace and swelled their pocketbooks” (Mounk, 2018, 131)? Or does the presence of fair elections, which allow citizens to replace governments (Duch & Stevenson, 2008; Schwindt-Bayer & Tavits, 2017), prevent ineffective governance from corroding public attachment to the democratic system?

The answer to these classic questions is unclear, we argue, because of several limitations in existing research. First, the overwhelming majority of studies of effectiveness and democratic attitudes have employed static, cross-sectional research designs, involving samples of individuals or states measured at one point in time. Such designs struggle to control for pre-existing country-specific cultural, institutional or historical factors which might jointly determine both government effectiveness and popular attitudes to democracy. Second, existing studies have used two quite different measures of such attitudes: either citizens’ “satisfaction with the way democracy works” or citizens’ principled support for democracy. They rarely examine the impact of effectiveness on

both dimensions simultaneously, and even less whether and how satisfaction and support might be interrelated. This paper aims to address both these limitations. Our contribution is to use time-series, cross-sectional (TSCS) measures of government effectiveness, democratic support and democratic satisfaction from 91 democracies over the period 1988 to 2018. We consider the impact on support and satisfaction of the effectiveness of governments in fostering economic growth, providing quality healthcare, controlling corruption, and tackling violent crime. Our TSCS data allow us to focus on within-country, over-time variation in effectiveness and democratic evaluations, removing the effects of any country-specific historical, cultural or institutional confounds. Our TSCS data further allow us to model the determinants of support and satisfaction simultaneously using panel structural equation models. In this modeling framework, measures of government effectiveness can exert both direct effects on each form of democratic evaluation, as well as indirect effects.

We find that government effectiveness has multiple direct effects on satisfaction with democracy – it is buoyed by economic growth and eroded by corruption and interpersonal violence (but healthcare quality does not have an impact). In contrast, democratic support seems more impervious to variations in government effectiveness, with no direct effects in evidence. We find, however, an indirect effect of violent crime on democratic support. Between the effects of interpersonal violence on (dis)satisfaction and the effects of satisfaction on support, violent crime ultimately has a negative effect on democratic support.

Democratic evaluations and government effectiveness

The empirical literature on democratic attitudes has focused on two main concepts captured in mass surveys. One is democratic support, the extent to which a public approves of a democratic system and rejects any autocratic alternatives. A large literature examines democratic support, its antecedents, and increasingly, its consequences (e.g., Claassen, 2020a; Dalton, 2004; Linz & Stepan, 1996; Magalhães, 2014; Mattes & Bratton, 2007; Norris, 2011; Rose et al., 1998).

The meaning and interpretation of a second concept – democratic satisfaction, or “satisfac-

tion with democracy” – is less clear. Despite its ambiguous meaning, the measure is employed in numerous survey projects and therefore appears in numerous research articles. Some authors treat it as a measure of democratic support (e.g., Armingeon & Guthmann, 2014). Others use it as an overall measure of system support (e.g., Anderson & Guillory, 1997). But several studies have criticized such interpretations of satisfaction (Canache et al., 2001; Linde & Ekman, 2003). As Linde & Ekman (2003, 400) put it, satisfaction with democracy is not “an adequate indicator of support for the principles or the legitimacy of democracy.” Perhaps the most judicious approach is to treat democratic satisfaction as capturing an instrumental or performance-based appraisal of democracy (e.g., Norris, 2011).

There is no consensus in extant research as to how the effectiveness of governments influences these evaluations of democracy. One strand of the literature suggests that democratic support and democratic satisfaction are empirically two entirely separate dimensions. While the latter tracks support for incumbents and evaluations of the economic situation, the former does not (Montero et al., 1997; Klingemann, 1999; Waldron-Moore, 1999). Satisfaction with democracy is also related with several indicators of economic vitality (Clarke et al., 1993; Wagner et al., 2009; Armingeon & Guthmann, 2014; Quaranta & Martini, 2016), but the same does not appear to be true of support for democracy (Evans & Whitefield, 1995; Bratton et al., 2005; Huang et al., 2008; Yap, 2013). The often-derived implication is that these measures capture two fundamentally different types of support: while satisfaction with democracy is “an instrumental, performance driven-attitude,” support for democracy “is largely a principled affair” (Mattes & Bratton, 2007, 201).

This distinction between instrumental drivers of satisfaction and principled drivers of support is further seen as confirmation of Easton’s classic distinction between specific and diffuse support. While the former represents represent citizens’ level of satisfaction or dissatisfaction that comes from the ability of the political system to satisfy their demands – “a quid pro quo for the fulfillment of demands” (Easton, 1965, 268) – the latter is a “generalized attachment to political objects for their own sake” (Easton, 1975, 444). Diffuse support explains why regimes and com-

munities are able to survive despite periods of crisis or poor governance; as Easton put it, “outputs and beneficial performance may rise and fall while this support, in the form of a generalized attachment, continues” (Easton, 1975, 444).

However, other studies suggest that even diffuse support for democracy may be shaped by the outputs of governance. Democratic support has been linked with several dimensions of effective governance, including the fostering of positive economic perceptions (de Jonge, 2016; Huhe & Tang, 2017; Mishler & Rose, 2002),¹ mitigating economic crises and producing sustained growth (Córdova & Seligson, 2010; Kotzian, 2011), controlling criminal violence (Pérez, 2003; Fernandez & Kuenzi, 2010; Carreras, 2013; Visconti, 2019), and tackling corruption (Mishler & Rose, 2001; Seligson, 2002; Huang et al., 2008; Kotzian, 2011; Linde, 2012; Park, 2017).²

This evidence echoes long-standing arguments about the sources of democratic legitimacy. The notion that government effectiveness may impinge on the fundamental legitimacy of political systems (Levi & Sacks, 2009) was advanced decades ago to explain the collapse of democracies in the inter-war years (Lipset, 1959; Linz, 1978). Even for Easton, specific and diffuse support were less compartmentalized than often thought. He suggested the existence of a “complicated relationship between outputs and diffuse support” Easton (1975, 445), through which a “persistent inability of a government to produce satisfactory outputs for the member of a system may well lead to demands for changing of the regime” Easton (1957, 397). If “little improvement in outputs occur, it will be impossible to prevent the dissatisfaction from shifting toward the regime” Easton

¹In a novel twist, Singer (2018) argues that good government performance may bolster support for democracy as a regime but also for actions by rulers which may undermine specific democratic institutions such as vertical and horizontal accountability.

²In addition, since democratic support helps ensure the survival of democracy (Claassen, 2020a), one could interpret the positive effects of economic growth on democratic survival (e.g., Przeworski & Limongi, 1993; Bernhard et al., 2001; Svobik, 2013) as providing indirect support for a relationship between (economic) performance and democratic support.

(1965, 231). In other words, dissatisfaction with outputs can spill over into a decline in regime support.

In sum, the relationship between government effectiveness and attitudes towards democracy remains unclear. Some studies suggest that such effectiveness is related only to satisfaction with democracy while leaving principled support for democracy undisturbed. Others show that effectiveness may indeed bolster democratic support, either directly or indirectly (i.e., through dissatisfaction).

We believe that the relationship between government effectiveness and democratic attitudes has remained blurred for three interrelated reasons. First, the overwhelming majority of existing studies employ static cross-sectional designs (c.f. Quaranta & Martini, 2016; Wagner et al., 2009), with the consequences that we still know very little about how changes over time in the outputs of governance affect public attitudes to democracy. Second, existing research typically examines democratic support and democratic satisfaction separately (if indeed, both are even examined), which neglects the possibility that they might be interrelated. Third, with few exceptions (Gilley, 2006; Kotzian, 2011), existing studies tend to focus primarily on one particular aspect of government effectiveness.

In this study, we try to address these problems; first, by using measures of democratic attitudes which are longitudinal as well as cross-sectional; second, by examining the interrelationship between democratic support and satisfaction; and third, by using Levi and Sacks' definition of government effectiveness to gather and include a variety of measures of effectiveness. We expand upon these measures and methods in the next section.

Research design

Our time-series, cross-sectional research design offers three major advantages over the cross-sectional designs that predominate in existing research on democratic support and satisfaction. First, with across-time variation in all variables, a TSCS design allows us to control for the possible “reverse” effects of previous levels of support on current realizations of the independent variables.

For example, low levels of democratic support may allow corrupt leaders to emerge and flourish, even while such leaders may subsequently dampen enthusiasm for democracy (Morris & Klesner, 2010).

Second, TSCS designs allow us to remove any between-country variance in measures of democratic evaluations and government effectiveness, e.g., by including country fixed effects. This between-country variance is likely confounded by long-established and static historical, cultural, and institutional factors that are specific to each country. For example, analysts have argued that resilient between-country differences in political culture are a legacy of historically remote political institutions, which in turn condition contemporary institutions and their performance (Acemoglu & Robinson, 2006; Tabellini, 2008). Instead, our TSCS data allow us to focus on the within-country, over-time variation that is less likely to be contaminated by such confounds.

Finally, dynamic data and designs allow us to estimate both the long and short run effects of various factors on democratic support. Although TSCS approaches have been criticized for focusing on the short run (typically yearly) effects of independent variables on dependent variables (Inglehart et al., 2017), dynamic TSCS models in fact allow analysts to calculate how such short run effects accumulate over time (see, e.g., De Boef & Keele, 2008; Williams & Whitten, 2012). We incorporate such analyses in the current paper.

Dependent variables

We update the TSCS estimates of democratic support and democratic satisfaction originally developed by Claassen (2020a; 2020b). We extend his estimates of democratic support and satisfaction to include new survey data released since 2017. The analyses presented in this paper rely on estimates of both forms of democratic attitudes which range from 1988 to 2018.³

³We are prevented from including more recent estimates by the temporal coverage of some of the independent variables. In addition, although democratic satisfaction opinion data are available as far back as 1973 in some cases, we do not include any estimates from 1973 to 1987 because of the lack of democratic support data from these years. This is necessitated by our joint modeling of

Our estimates of democratic support and democratic satisfaction rely on existing cross-national survey data which aim to measure either of these concepts. Democratic support is measured using survey questions that ask respondents to: evaluate the appropriateness or desirability of democracy; compare democracy to some undemocratic alternative; or evaluate one of these undemocratic forms of government. Such items are fielded in 14 cross-national survey projects,⁴ and are widely used to measure principled support for democracy and rejection of autocracy (e.g., Dalton, 2004; Klingemann, 1999; Mattes & Bratton, 2007; Magalhães, 2014; Norris, 2011). The measure of satisfaction with democracy is based on survey questions that ask respondents how satisfied they are “with the way democracy works” in their countries. This item is included, with some minor variations, in 13 cross-national survey projects.⁵

We include support and satisfaction estimates for states which were least somewhat democratic in the period under consideration. We exclude overtly autocratic states because it is unclear how the effects of government performance will influence evaluations of democracy, an alternative regime to that which citizens of autocracies have experience. In contrast, by focusing on minimally-democratic states, we test whether government effectiveness influences citizens’ evaluations of the political regime with which they have experience (see, e.g., Mishler & Rose, 2001).

We select our sample of 91 somewhat-democratic states as follows: (1) include a state support and satisfaction using panel structural equation models.

⁴These projects are: Afrobarometer, ArabBarometer, Asia Barometer, AsianBarometer, Comparative Study of Electoral Systems, EuroBarometer, European Social Survey, European Values Study, Latin American Public Opinion Project, Latinobarometer, New Democracies Barometer, Pew Global Attitudes Survey, South Asia Barometer, and the World Values Survey.

⁵These projects are: Afrobarometer, Asia Barometer, AsianBarometer, Central and Eastern Europe Barometer, Comparative Study of Electoral Systems, EuroBarometer, European Social Survey, European Values Study, Latin American Public Opinion Project, Latinobarometer, Pew Global Attitudes Survey, South Asia Barometer, and the World Values Survey.

starting in the first year in which it was rated as a electoral or liberal democracy using V-Dem’s “Regimes of the World” indicator, and for which we have democratic support and democratic satisfaction estimates; (2) then collect yearly observations for that state until 2018 or until it spent two or more years as a closed autocracy, in which case, stop collecting observations; (3) finally, remove any states with five or fewer consecutive years of coverage.⁶

This is a permissive definition of democracy; it includes cases such as Russia and Belarus which spent short periods as electoral democracies in the 1990s before settling into electoral autocracy status. In the online supplementary materials, we confirm that our results are similar if we use a more stringent sample of 80 democracies, dropping the 11 states which spent more years as electoral autocracies than they did as electoral (or liberal) democracies according to the “Regimes of the World” indicator.⁷

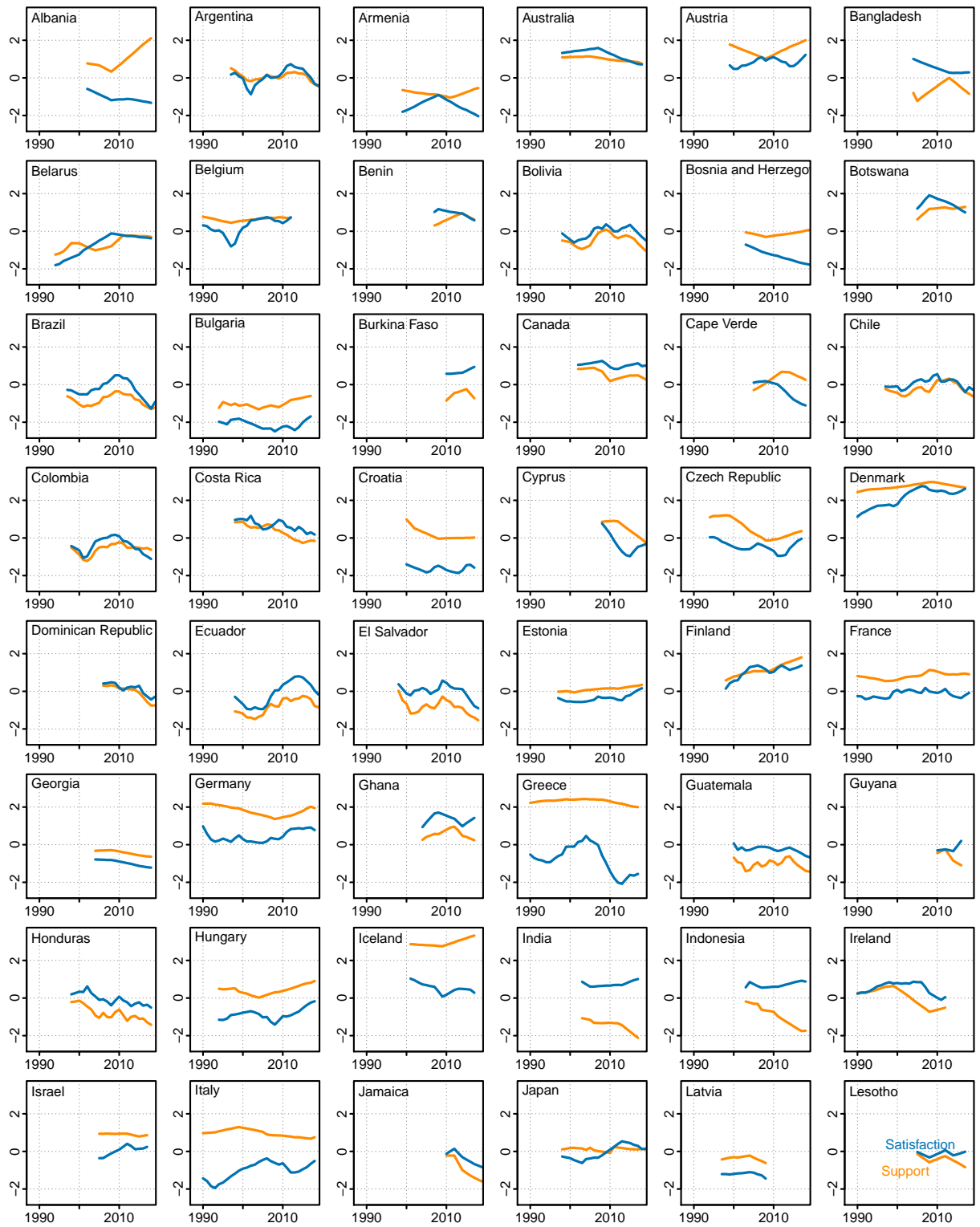
In Figures 1 and 2, we plot the estimates of democratic support and satisfaction for the 91 states we examine in the paper. The trends and patterns vary considerably across space and time. In a few cases (e.g., Indonesia, India, Jamaica, Montenegro, Slovakia, and the United States), democratic support has shown a marked decline. Yet, in others, we see stable (Denmark and Italy) or even rising (Finland and Namibia) levels of support. As Claassen (2020b) concluded after examining similar estimates, democratic support ebbs and flows in different places and at different times.

But so too does satisfaction with democracy. Fairly marked increases are evident in some cases (the Philippines, Russia, Sweden) with pronounced decreases in others (Jamaica, Portugal, Turkey). Indeed, democratic satisfaction generally appears more malleable than democratic

⁶See the supplementary materials for information on which countries and years are included.

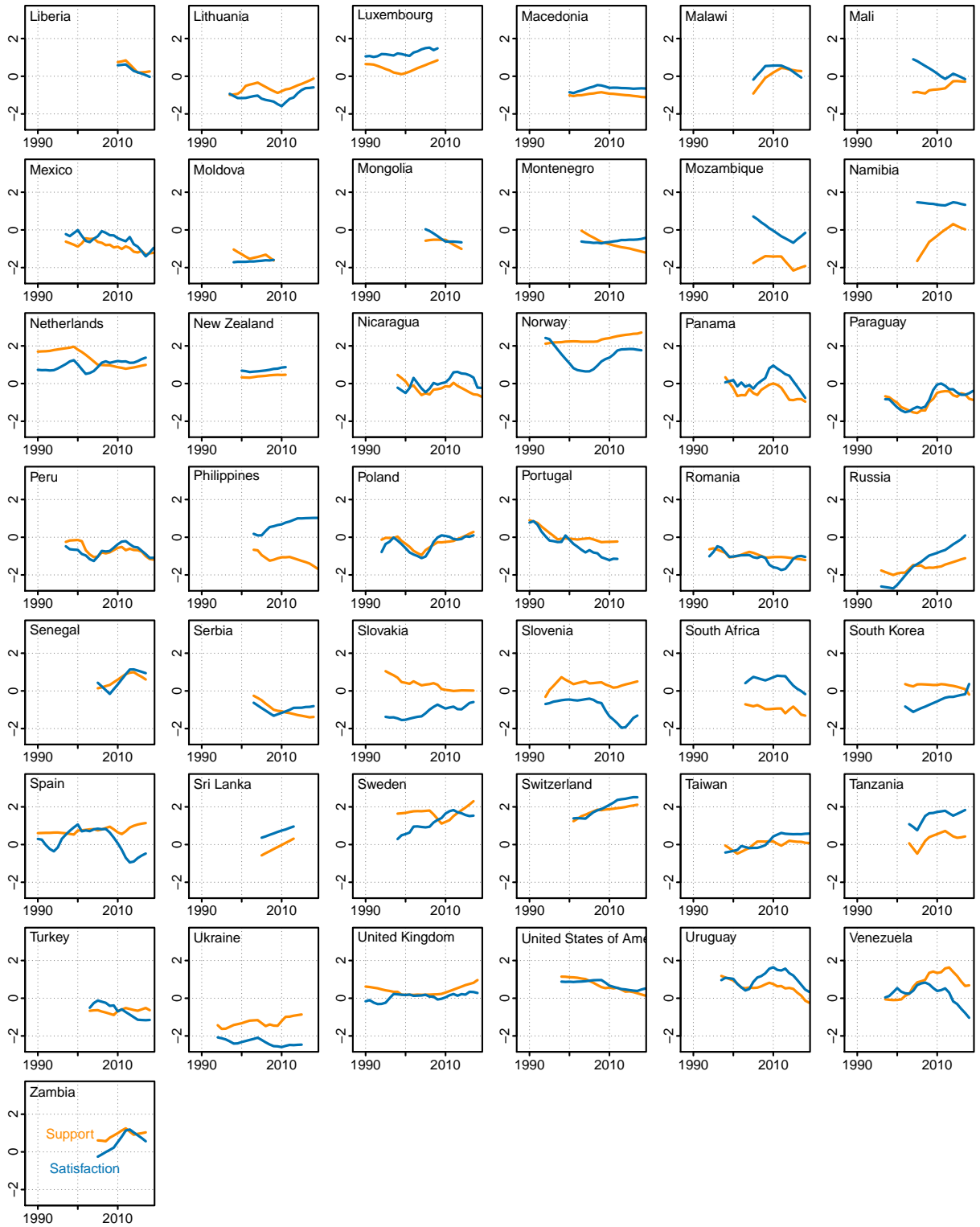
⁷These eleven states are Armenia, Bangladesh, Belarus, Honduras, Montenegro, Mozambique, Nicaragua, Russia, Sri Lanka, Ukraine, and Venezuela. In the supplementary materials we also show that our results remain substantively the same if we use a larger sample of 99 somewhat-democratic states for which we have three or more years of data.

Figure 1. National time-serial estimates of democratic support and satisfaction, I



These plots show the first 48 national time-serial estimates of democratic support (orange) and satisfaction (blue). Both are standardized to have a mean of zero and variance of one.

Figure 2. National time-serial estimates of democratic support and satisfaction, II



These plots show the final 43 national time-serial estimates of democratic support and satisfaction.

support, which is consistent with the former, but not the latter, being driven by variations in government effectiveness. In particular, sharp declines in satisfaction (but not support) are visible in the aftermath of the 2008-2010 recession (e.g., Brazil, Greece, Spain, and Slovenia), indicating a possible role of economic crisis as a driver of (dis)satisfaction.

In a few countries, democratic support and satisfaction have different, even opposing, trajectories (e.g., Albania, Indonesia, the Philippines), which reinforces concerns about treating the latter as an indicator of the former (Linde & Ekman, 2003). Yet in many cases we also see democratic support and satisfaction fluctuating in tandem (e.g., Brazil, Bulgaria, Honduras, Peru, Poland). This strongly suggests that satisfaction shapes support, or vice versa. There appears to be merit in modeling these two sets of opinions jointly – as we do in the current paper – by allowing each to influence the other.

Independent variables

What is “government effectiveness?” At the broadest possible level, it means “the actual performance of a political system, the extent to which it satisfies the basic functions of government as defined by the expectations of most members of a society” (Lipset, 1959, 86). In several works on the relationship between effectiveness and legitimacy, Levi and Sacks have provided a more specific definition. Effectiveness should be thought as including not only the ability to generate economic growth and prosperity, but also the state’s capacity for “protecting the population from violence, ... supplying other public goods that the populace needs and desires” (Levi, 2006, 5), “deliver[ing] infrastructure and services” (Levi & Sacks, 2009, 315), and “ensuring the honesty and competence of its bureaucracy” (Sacks & Levi, 2010, 2325).

Following the work of Levi and Sacks, and making use of available indicators which vary across countries and years, we identify four aspects of government effectiveness which appear likely to affect regime attitudes: (1) economic performance, (2) quality of healthcare, (3) the control of corruption, and (4) the control of violent crime. Our measures of these are as follows. We use annual percent change in GDP per capita as a first measure of *economic performance* (with the

log of GDP per capita used as a control to measure the level of economic development). Data are drawn from the Penn World Tables, and missing values replaced with values from the Maddison and IMF datasets and adjusted using a multilevel linear regression model. Our second measure of economic performance is the *inflation rate*, with data drawn from the IMF and a sign-log transformation applied.⁸

To measure the quality of healthcare provision, we use the “Healthcare Access and Quality Index” from the Institute for Health Metrics and Evaluation’s “Global Burden of Disease” (GBD) 2016 study. This index combines age-standardized and risk-standardized death rates for 32 causes “from which death should not occur in the presence of effective care” (Fullman & many others, 2018, 2236). It is therefore a measure of overall *health system quality*.

Our measure of control of violent crime is the log of deaths due to *interpersonal violence* per 100,000 population, with data extracted from GBD 2017 study, supplemented with pre-1990s data from their 2016 study. This does not include deaths attributed to conflict and terrorism, suicide, or accident. It corresponds to “Indicator 16.1.1” in the United Nations’ Sustainable Development Goals (SDG), the “number of victims of intentional homicide per 100,000 population,” which indicates its suitability as a measure of violent crime.

Finally, TSCS measures of *corruption* are obtained from the Bayesian Corruption Index (Standaert, 2015), which uses a Bayesian measurement model to combine various existing corruption indicators into a single consolidated TSCS index, where higher values represent greater levels of corruption.

We also include, as control variables, measures of the electoral and liberal aspects of democracy. Since opportunities to participate and exercise one’s “voice” have long been thought to be important for legitimacy, we control for the effects of democratic electoral procedures and rights, using V-Dem’s “Electoral Democracy Index,” which measures the extent to which a country’s leaders are appointed via clean elections, where all adult citizens enjoy the freedom to vote, associate with other citizens, and express their political views (V-Dem Institute, 2019). We also

⁸i.e., $sign(x)(\log(|x| + 1))$, where x is the raw inflation rate.

include V-Dem’s measure of the liberal component of democracy, because as Claassen (2020b) shows, democratic support reacts thermostatically to changes in these liberal aspects of democracy (which include equality before the law and judicial oversight of the executive).

Empirical strategy

Our modeling framework includes three notable features. First, we include two lags of each dependent variable, i.e., support and satisfaction. Second, we focus on within-country variation in all variables by demeaning all included variables.⁹ Third, we use a structural equation models to allow support and satisfaction to exert reciprocal effects on each other. We explicate these features below.

The basic model is a dynamic fixed effects model with two lags of the dependent variable. Two lags are optimal as confirmed by AIC test; they also remove serial correlation in both dependent variables (see the supplementary materials for results). The general model of the opinion series, y_{it} , is follows (for i countries, t years, and j covariates)

$$y_{it} = \phi_1 y_{it-1} + \phi_2 y_{it-2} + \sum_{j=1}^J \beta_j X_{ijt-1} + v_i + \epsilon_{it}$$

A more realistic model of democratic support and satisfaction should acknowledge that these democratic attitudes are not independent. We therefore incorporate reciprocal effects of support y_{it}^{sup} on satisfaction y_{it}^{sat} and vice versa using the following set of equations

$$\begin{aligned} y_{it}^{sup} &= \delta^{(1)} y_{it}^{sat} + \phi_1^{(1)} y_{it-1}^{sup} + \phi_2^{(1)} y_{it-1}^{sat} + \sum_{j=1}^J \beta_j^{(1)} X_{ijt-1} + v_i^{(1)} + \epsilon_{it}^{(1)} \\ y_{it}^{sat} &= \delta^{(2)} y_{it}^{sup} + \phi_1^{(2)} y_{it-1}^{sat} + \phi_2^{(2)} y_{it-1}^{sup} + \sum_{j=1}^J \beta_j^{(2)} X_{ijt-1} + v_i^{(2)} + \epsilon_{it}^{(2)} \end{aligned}$$

With support and satisfaction appearing both as dependent and as independent variables,

⁹This is equivalent to including country fixed effects.

this is a non-recursive structural equation model (SEM). Satisfaction is modeled as exerting a contemporaneous effect on support $\delta^{(1)}$ and support modeled as exerting a contemporaneous effect on satisfaction $\delta^{(2)}$. Identification of these two effects is provided by the lags of each respective dependent variable, which are unique to each equation. The matrix of covariates X is identical in both equations. The inclusion of reciprocal effects between the two dependent variables allows these covariates to influence each dependent variable both directly and indirectly, as we will see in the results.

Results

Table 1 shows the results of two panel structural equation models. Each includes democratic support and democratic satisfaction as dependent variables. The first model, Model 1.1, includes only economic measures of effectiveness, for which we have more complete sets of data. The second model, Model 1.2, includes also our measures of healthcare quality, violent crime, and corruption, for which some values are missing.

Turning to the indicators of economic performance, we see that within-country growth in GDP exerts a positive and substantial effect on satisfaction with democracy, but a much smaller – and insignificant – effect on democratic support. The inflation rate does not appear to have much impact on either form of democratic attitude. In models included in the supplementary materials, we find no evidence of an independent effect for a third economic indicator, the unemployment rate.

One of the features of our analysis is the inclusion of additional measures of effectiveness. In addition to economic indicators (or evaluations) we also include measures of corruption, violent crime, and healthcare quality. The first of these, corruption, has been linked in some studies with lower democratic satisfaction and democratic support. Here, examining over-time variation in corruption and democratic attitudes, we find evidence for the former, but not the latter. In particular, corruption shows a significant negative impact on subsequent satisfaction with democracy. The effect of corruption on support is quite different – although not significant, it is positively, not

Table 1. Effectiveness and attitudes to democracy

	Model 1.1		Model 1.2	
	Dependent variable:		Dependent variable:	
	Support	Satisfaction	Support	Satisfaction
Satisfaction	.035*		.037*	
	(.007)		(.007)	
Support		.022*		.023*
		(.011)		(.011)
GDP growth per capita t_{-1}	.027	.181*	.007	.257*
	(.048)	(.061)	(.052)	(.063)
Inflation rate t_{-1}	.000	.003	.003	.007
	(.003)	(.004)	(.003)	(.005)
Health access and quality index t_{-1}			.011	.031
			(.029)	(.039)
Log rate of interpersonal violence t_{-1}			-.033	-.079*
			(.020)	(.024)
Corruption index t_{-1}			.027	-.064*
			(.015)	(.020)
1st lag of dependent variable	1.365*	1.381*	1.349*	1.359*
	(.031)	(.028)	(.033)	(.028)
2nd lag of dependent variable	-.487*	-.501*	-.482*	-.490*
	(.028)	(.026)	(.029)	(.026)
Electoral democracy t_{-1}	.043*	.024	.051*	.000
	(.021)	(.020)	(.023)	(.020)
Rule of law t_{-1}	-.057*	-.040*	-.078*	-.032
	(.021)	(.020)	(.024)	(.022)
GDP per capita t_{-1}	-.016	.007	-.024	-.053*
	(.010)	(.013)	(.020)	(.026)
Residual standard deviation	.008	.014	.008	.014
<i>N</i> observations		1735		1650
<i>N</i> countries		91		91

* $p < .05$. Within-country coefficient estimates from structural equation models with robust standard errors in parentheses. All variables are demeaned to remove between-country variance.

negatively signed.

Healthcare quality, as measured by the healthcare access and quality index, does not appear to affect either variety of democratic attitude. In the supplementary materials, we show that another measure – the infant mortality rate – similarly has little effect.

Our measure of government control of violent crime is the logged rate of interpersonal

violence. This shows negative effects on both satisfaction and support, although only the former is significant. These results pertain only to the direct effects of crime on either support or satisfaction. With a negative (and insignificant) direct effect on support, a negative (and significant) direct effect on satisfaction, and a positive (and significant) direct effect of satisfaction on support, there may be also be substantial indirect effects of crime on support, which we consider below.

Our SEM framework allows us to parse the reciprocal effects of support on satisfaction and vice versa.¹⁰ Although existing research has shown the correlation between democratic support and satisfaction, here we show that each exerts an independent effect on the other.¹¹ The larger of these is the effect of satisfaction on support, which ranges from .036 to .038 in the two models. This indicates that specific regime support helps to build diffuse support, which is the more valuable of the two varieties since it bolsters democratic resilience (Claassen, 2020a). Yet we also find that support for democracy also simultaneously shapes satisfaction with democracy, although the effects we observe (.022 to .023) are somewhat smaller in magnitude.

Our inclusion of reciprocal effects between the two dependent variables further allows covariates in the model of satisfaction to exert indirect effects on support and *vice versa*. These may build upon – or mitigate – the direct effects reported in Table 1 and discussed above. In addition, Table 1 shows only the short run effects of each measure of government effectiveness. With the inclusion of lagged dependent variables, our models allow covariates to exert effects which endure and accumulate over time. To estimate and illustrate the total, long-run effects of each covariate, we turn to dynamic simulations. These allow us to show the effects of a particular change in one independent variable on *both* dependent variables over the long run, including both direct and indirect effects. These simulated effects are shown in Figure 3.¹²

¹⁰We obtain very similar direct effects if we model each dependent variable separately using two dynamic fixed effects models (one for support; the other for satisfaction). See the supplementary materials for these results.

¹¹Our inclusion of lagged dependent variables allows us to identify these independent effects.

¹²These simulated effects include the uncertainty of parameter estimates (as captured by the ro-

Figure 3. Simulated Long-Run Effects of Changes in Government Effectiveness on Democratic Evaluations

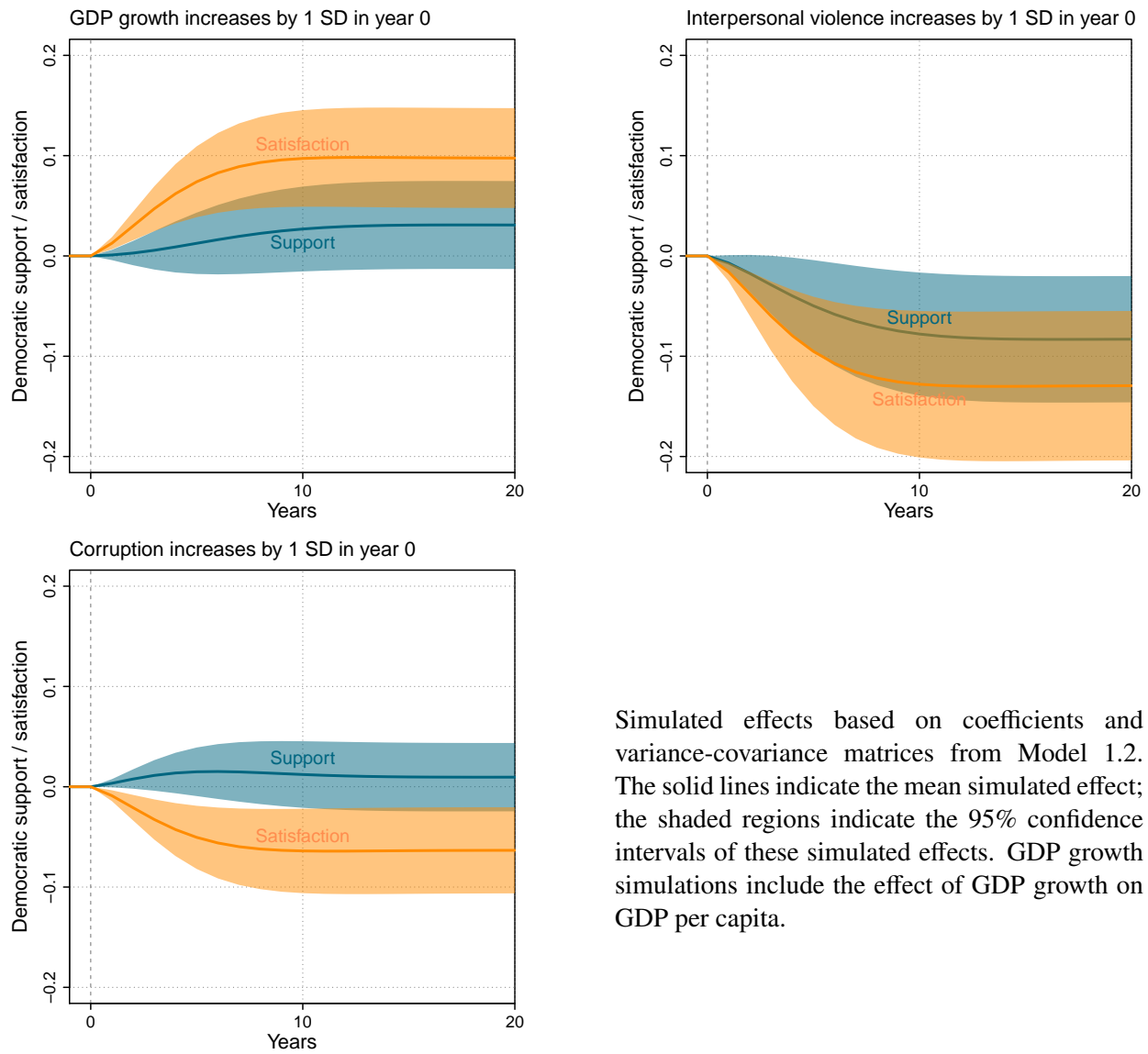


Figure 3 show how a substantial but not unreasonably large increase (one standard deviation) in each of three measures of effective governance impacts democratic support and democratic

bust variance-covariance matrix produced by each SEM). This uncertainty is allowed to propagate across simulated years (via the lagged dependent variables) and across dependent variables (via the reciprocal effects included in the SEMs). See Claassen (2020b) and Williams & Whitten (2012) for similar approaches to simulating long run effects with TSCS research designs.

satisfaction in the long run. The three covariates we include are those which displayed a significant short-run, direct effect in Table 1: economic growth, the rate of interpersonal violence, and corruption. The upper left panel shows the effects of an increase in the economic growth rate from 0 percent (by definition, the country average on the demeaned, within-country scale) to 5 percent (one standard deviation above the country mean). In addition to the long run effects of growth on both dependent variables, we also factor in how growth leads to change in GDP per capita, another covariate included in our models. The beneficial long-run effects of growth on satisfaction are clearly visible in the figure. Yet these are dampened somewhat by a negative (albeit insignificant) effect of GDP per capita. Nevertheless, within a decade after the growth shock to this hypothetical system, satisfaction reaches a new, and significantly higher, equilibrium level, .089 higher than the ex ante level. The beneficial effects of growth do not extend to democratic support, however. Despite both a positive (but insignificant) direct effect and a positive indirect effect via the contemporaneous impact of satisfaction on support, our simulated economic growth shock never manages to significantly raise democratic support.

The situation is quite different when it comes to control of violent crime. Here, our simulations show the effects of an increase in interpersonal violence from 0 (the average) to 1.2 deaths per 10,000 above this average – a modest, one standard deviation increase. An rise in violence of this magnitude has a marked negative effect on satisfaction in the long run: after a little more than a decade, satisfaction is .013 lower than in the baseline condition. This 1 SD increase in interpersonal violence also has a significant, negative, long-run effect on support. Although the short-run direct effect reported in Table 1 is not significant, the total effect, which includes the indirect effect via the pathway from satisfaction to support, is both negative and significant. Violent crime therefore erodes both support for, and satisfaction with democracy.

Finally, we see that a 1 SD increase in corruption from the country average of 0 to a level of 0.14¹³ has a negative and significant effect on satisfaction in the long run, leading to a total

¹³For reference, the index of corruption has a standard deviation of one when both within and between country variance is included.

reduction in satisfaction of .064 after a decade. The short-run direct effect of corruption reported in Table 1 is, somewhat surprisingly, negative (albeit insignificant). This weak positive effect is diminished further once the negative indirect effect via the pathway from satisfaction is factored in. Corruption therefore corrodes satisfaction in the long (and short) run, but not support.

In sum, we find that effective governance clearly leaves citizens of democracies more satisfied with their democracy. We find positive effects of economic growth and negative effects of violent crime and corruption, even when restricting our attention to the within-country, over time variance in these variables. In contrast, these measures of effective governance play only a weak and generally insignificant role in sustaining (or eroding) principled support for democracy, even when allowing the measures of effective governance to exert both direct and indirect effects on support and satisfaction via the structural equation models. The one area of government performance which does seem to impact support (as well as satisfaction) is control of violent crime: increases in a country's rates of interpersonal violence clearly have negative effects on evaluations of, and attachment to, democracy.

Conclusion

Many explanations have been proposed for how regimes retain public support and how they lose it. Perhaps the most fundamental of these is that regimes must meet their citizens' basic needs and expectations, by maintaining order and safety, providing decent healthcare, and improving the populace's standard of living. In the absence of such effective governance, the theory goes, citizens will ultimately lose faith in the regime itself. Indeed, studies of resilient autocracies, such as China, have stressed the importance of "performance legitimation", obtained through the accomplishment of goals such as "economic growth, social stability, strengthening national power, and 'good governance'" (Zhu, 2011). And a similar idea has seeped into political commentary, in reference not only to resilient autocracies (Friedman, 2009), but also to the purported "deconsolidation" of democracies; as Mounk (2018, 131) argues, "popular attachment to liberal democracy may be rather more shallow and more brittle than its most high-minded supporters tend to think."

We examine this theory, i.e., whether citizens' support for, and satisfaction with, the democratic system rests at all on the effectiveness of their governments. Moving beyond the cross-sectional tests of existing research by using longitudinal data, we find that economic growth and the control of corruption and violent crime do seem to affect people's satisfaction with the way democracy works in their countries. This will be unsurprising to many, because satisfaction with democracy has long been argued to be the more instrumental and "specific" variety of democratic attitude (e.g., Linde & Ekman, 2003; Mattes & Bratton, 2007; Norris, 2011). However, we also find that principled support for democracy does not appear to be undermined in the same way by economic recessions or by perceptions of corruption. Indeed, although we show that each variety of democratic attitudes influences the other, the effects of economic growth and corruption never spill over from democratic satisfaction to democratic support.

This finding should be interpreted as positive news for democracies, we believe. There is now evidence that citizens' principled support for democracy makes a difference for democratic survival (Claassen, 2020a). If such support hinged upon government effectiveness, the recent past and the near future might suggest reasons for concern. Just in the first two decades of the twentieth century, the world has experienced two significant recessions and one global health crisis. In addition, the potential for ever increasing prosperity in the industrialized democracies appears to be constrained by demography, low demand, and the limited productivity-enhancing potential of new technologies (Gordon, 2015; Summers, 2014), not to mention the possible long-term negative impacts of climate change (Tol, 2018). Fortunately, our findings suggest that democracies' reservoir of principled support is much less exposed to performance crises than some have worried.

Democracies do have an advantage over autocracies in the face of such challenges: they allow citizens to replace governments, thereby providing an outlet for citizens' dissatisfaction (Duch & Stevenson, 2008; Schwindt-Bayer & Tavits, 2017). To be sure, the presence of elections does not imply that democracies are invulnerable to economic malaise. Indeed, economic downturns may hasten autocratization by, e.g., threatening the interests of powerful elites (Bernhard et al., 2001; Przeworski et al., 2000). But there is no evidence that the effects of such downturns on demo-

cratic survival occur by increasing citizens' disapproval of, or dissatisfaction with, democracy as a regime.

Democratic support is not entirely impervious to government effectiveness however. As our results show, the rate of interpersonal violence harms both democratic satisfaction and principled democratic support. This echoes the findings of a significant body of research on crime and democratic support, which employs cross-sectional samples or micro-level panel studies, mainly from Latin America (e.g., Carreras, 2013; Fernandez & Kuenzi, 2010; Pérez, 2003; Visconti, 2019). Why should crime in general, and violent crime in particular, harm citizens' principled attachments to democracy when economic recession, poor healthcare, and corruption do not? More research on this issue is required. But we submit that the answer may lie in political psychological research on the interplay between authoritarian predispositions and situational threats (Feldman & Stenner, 1997; Feldman, 2003; Stenner, 2005). Uniquely among the varieties of effective government we have considered, interpersonal violence implies that citizens are challenging the normative order of the state – indeed, possibly even challenging the state itself if one adheres to Weberian notions of the state holding a monopoly on the legitimate use of force. As Feldman and Stenner have argued, threats to the normative social order activate latent authoritarian predispositions in citizens. Among other things, this could lead to an increase in support for authoritarian forms of government and a decrease in support for democracy.

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