



Autocracies and Human Development

Andrea Cassani

June 2019

Users Working Paper

SERIES 2019:22

THE VARIETIES OF DEMOCRACY INSTITUTE



UNIVERSITY OF GOTHENBURG
DEPT OF POLITICAL SCIENCE

Varieties of Democracy (V-Dem) is a new approach to conceptualization and measurement of democracy. The headquarters – the V-Dem Institute – is based at the University of Gothenburg with 17 staff. The project includes a worldwide team with six Principal Investigators, 14 Project Managers, 30 Regional Managers, 170 Country Coordinators, Research Assistants, and 3,000 Country Experts. The V-Dem project is one of the largest ever social science research-oriented data collection programs.

Please address comments and/or queries for information to:

V-Dem Institute
Department of Political Science
University of Gothenburg
Sprängkullsgatan 19, PO Box 711
SE 40530 Gothenburg
Sweden
E-mail: contact@v-dem.net

V-Dem Users Working Papers are available in electronic format at www.v-dem.net.

Copyright © 2019 by authors. All rights reserved.

Disclaimer: V-Dem does not do quality control and therefore does not endorse the content of the papers, which is the responsibility of the authors only.

Autocracies and Human Development*

Andrea Cassani

Università degli Studi di Milano

Department of Social and Political Sciences

Email: andrea.cassani@unimi.it

* This is a draft chapter. The final version will be available in Handbook on Democracy and Development edited by Gordon Crawford and Abdul-Gafaru Abdulai, forthcoming 2019, Edward Elgar Publishing Ltd. The material cannot be used for any other purpose without further permission of the publisher, and is for private use only.

Abstract

The idea of a connection between a country's political institutions and its human development record is not new, but attention has mostly focused on comparing democratic and non-democratic regimes. The possible implications of the institutional differences characterizing the non-democratic universe have remained largely disregarded. Accordingly, this paper examines how different institutional environments could shape the importance that autocrats attach to improving citizens' living conditions. The discussion suggests that so-called competitive autocracies, which hold elections and allow for some degree of contestation, face stronger pressures to improve citizen living conditions. Based on an updated version of the V-Dem Regimes of the World index that distinguishes competitive from hegemonic-party electoral autocracies and different forms of closed autocracy, and using data on school enrolment and child mortality for the 1971-2015 period, autocracy's comparative human development performance is analysed. The main finding is that competitive autocracies outperform other non-democratic regimes, with the exception of hereditary regimes.

Introduction

The possible connection between a country's political institutions and its development record has been at the centre of a lively debate at least since decolonization (Huntington 1968; O'Donnell 1973). Since then, attention has gradually shifted from a notion of development narrowly confined to the economic domain to a broader conception that also encompasses its "human" dimension, that is, the creation of "an enabling environment for people to enjoy long, healthy and creative lives" (UNDP 1990, p.9). The so-called "third wave of democratization" (Huntington 1991) has refuelled the discussion. Following a dramatic series of democratic transitions occurred during the last part of the twentieth century all over the developing world, hopes ran high that citizen political empowerment would have cast stronger pressures to political leaders to abandon predatory politics and to respond more readily to people's needs. Accordingly, scholars have started investigating whether and how the institutions that regulate politics in a country influence the material living conditions of citizens, especially concerning healthcare and education. For the most part, however, scholars' attention has focused on the comparison between democratic and non-democratic regimes. The possible human development implications of the institutional differences characterizing the non-democratic universe have remained largely disregarded.

Accordingly, this paper examines how different institutional environments could shape the importance that autocrats attach to improving citizens' living conditions. More specifically, following a review of the literature on the political regime-human development nexus, the paper traces the diffusion of authoritarian regimes throughout the recent history. This analysis is based on an updating of the V-Dem Regimes of the World index that distinguishes competitive from hegemonic-party electoral autocracies and different forms of closed autocracy, notably, one-party, military and hereditary regimes. The next section discusses the incentives that different institutional environments generate for an autocrat to improve citizens' living conditions, as part of his/her political survival strategy. The discussion suggests that so-called competitive autocracies, which hold elections and allow for some degree of contestation, face stronger pressures to improve citizen living conditions, with the possible exception of hereditary regimes. Hence, using data on school enrolment and child mortality for the period 1971-2015, a time-series cross-sectional analysis is performed, which confirms the hypothesis and highlights several specifications regarding autocracies' comparative human development performance. The final section discusses these findings in light of the recent diffusion of competitive authoritarianism in the developing world.

I. The political regime-human development nexus: an overview of the debate

The relationship between a country's political regime and its human development performance is at the centre of a lively debate that new empirical evidence periodically reopens, challenging previous assumptions and conclusions. Much of the research in this field has focused on the comparison between democratic and non-democratic regimes (Brown 1999; Lake and Baum 2001; Zweifel and Navia 2001; Mulligan et al. 2004; Ross 2006; Gerring et al. 2012).

Essentially, the hypothesized “democracy advantage” (Halperin et al. 2005) – that is, the idea that democratically elected governments respond more readily to people's needs – is explained by two fundamental features of democratic politics, namely, competition and participation (Dahl 1971). Electoral competition induces governments to adjust the agenda to the preferences of middle-lower income groups (Meltzer and Richard 1981). As a channel of political participation, in turn, periodic universal suffrage elections reduce the cost borne by a single individual to sanction rulers' poor social performance and to voice demands for better living conditions (Lake and Baum 2001).

On the contrary, the second term of the comparison – that is, autocracy – has been devoted relatively scarce attention. More or less implicitly, authoritarian rule has been equated with cleptocracy, which is an oversimplification of the reality, if we consider that even Machiavelli highlighted the importance for a prince to keep the people satisfied, and that many early examples of welfare schemes were adopted by non-democratic governments (Mares and Carnes 2009). Most importantly, autocracies “differ from each other as much as they differ from democracy” (Geddes 2003, p.48). As part of a recently inaugurated comparative authoritarianism agenda, research on the political, economic and social performance of non-democratic regimes has made some progress. The institutional variations that characterize the authoritarian universe have been found to contribute to explain regime survival (Geddes 2003), economic growth (Wright 2008) and quality of government (Charron and Lapuente 2011), for instance.

Concerning human development, evidence is mixed, though. Miller argues that non-democratic regimes holding elections obtain better results in education and healthcare than closed autocracies (2015a; 2015b). With a more specific focus on semi-competitive autocracies and sub-Saharan Africa, Cassani and Carbone similarly find that these regimes lie in-between democracies and non-competitive autocracies, as far as human development is concerned (2016). Other scholars challenge these conclusions and argue that autocratic multiparty elections have no effect on infant mortality (Kim and Kroeger 2018). Instead, they find democratization to have a

threshold effect on health outcomes that becomes positive only when electoral competition is of a relatively good quality (Wang et al. 2018). Taken together, these studies highlight that further investigation is necessary. Most importantly, we need to be more specific concerning the various forms that autocracy can take and the possible human development implications of these institutional variations.

II. Varieties of autocracy and their diffusion

Authoritarian regimes, or autocracies, are often defined by what they are not, that is, in contraposition with democracy. At a minimum, democracy is a political regime in which the power to govern (both legislative and executive) is assigned by means of periodic, inclusive and multiparty elections that are conducted in conditions of freedom and fairness. Essentially, elections are free and fair when citizens can go the polls and vote for their preferred candidate without fearing for their own safety and when parties can compete with each other on a more or less equal plan. Moreover, Dahl (1971) highlights other institutional guarantees that include the freedom of expression, association and information, which are key to make elections a meaningful instrument by means of which citizens can influence politics and control their political leaders. On the contrary, autocracy simply is a regime in which rulers “achieved power through *undemocratic* means” (Geddes et al. 2014: 317, emphasis added).

Obviously, this definition conceals a great deal of variation within the authoritarian universe. The comparative analysis of authoritarian politics and of its different forms has origin in Linz (2000 [1975]) and has recently gained new impetus, following the end of the third wave of democratization and the somewhat unexpected resilience and transformative capacity of authoritarianism in several regions (Carothers 2002). The in-depth analysis of the functioning of contemporary autocracies (Svolik 2012, among several others) has been accompanied by the development of new typologies of non-democratic regimes (Cheibub et al. 2010; Wahman et al. 2013; Geddes et al. 2014).

With a focus on how political power is assigned, a first separation can be made between closed and electoral autocracies. Under closed autocracy, the executive is not subject to electoral competition.¹ Depending on the source of executive power, that is, the control over leadership appointment and dismissal (Teorell and Lindberg 2019), closed autocracies can be further classified in hereditary, military and one-party regimes. In these regimes, the primary (but not

¹ Hence, closed autocracies also include regimes holding legislative multiparty elections that do not affect who the actual chief executive is and non-competitive executive elections.

necessarily the only) base of executive power is, respectively, lineage, the actual or threatened use of military force, and the ruling party.

In hereditary regimes, executive power is handed down within the royal family according to an accepted practice, even if succession does not always follow the principle of primogeniture and could be decided by a royal council (Herb 1999).² Military regimes are led either directly by a single strongman or a junta (Geddes et al. 2014b), typically following a coup d'état, or indirectly, that is, behind the scenes of a formally civilian (sometimes elected) government. In both cases, the military represents the predominant actor in the political arena. In one-party regimes, in turn, only one ruling party exists. Occasionally other state-sponsored not-autonomous “satellites” parties are allowed, but opposition is not permitted (Sartori 1976). The appointment and dismissal of the executive is mainly determined by the ruling party, either directly by its cadres and rank-and-file, through one-party elections or through a controlled legislative assembly.

In electoral autocracies, both the executive and the legislative offices are filled by means of periodic elections in which “opposition is allowed, multiple parties are legal, and more than one candidate is allowed on the ballot” (Hyde and Marinov 2011, p.195). However, these regimes do not meet democratic standards, due to a systematic disjuncture between formal rules and actual practices, which often include limitations to citizens and opposition parties’ political and civil rights and the manipulation of the electoral process.

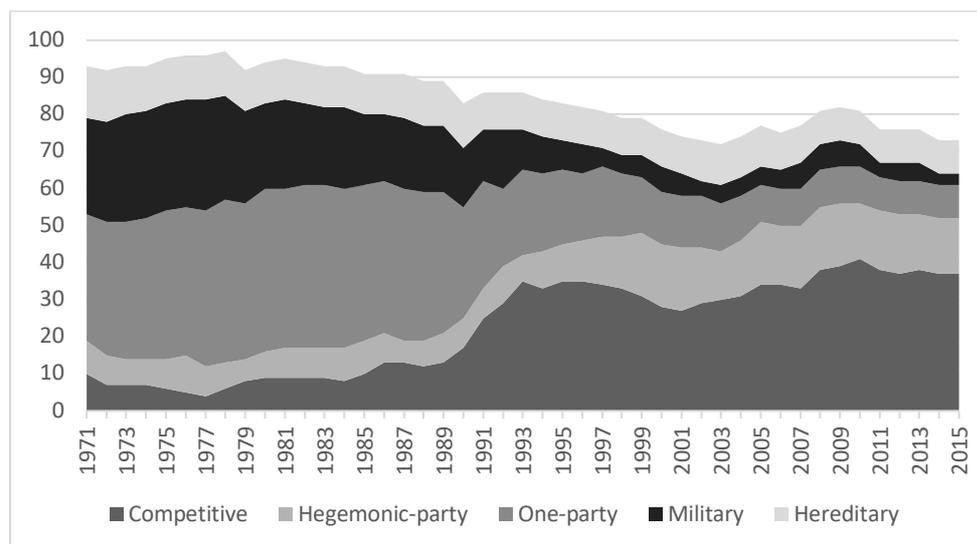
Based on the degree of liberalization of the political arena, in turn, electoral autocracies can be further classified in hegemonic-party and competitive systems. Hegemonic-party regimes hold multiparty elections that are largely façade (Schedler 2002). Contestation for power is formally allowed but is not meaningful. A ruling party monopolizes the political arena and elections are so marred by repression, candidate restrictions and fraud that there is virtually no uncertainty about their outcome. Even in competitive autocracies competition is unfair, as a consequence of an electoral playing field that remains “heavily skewed in favour of incumbents” (Levitsky and Way 2010, p.5), especially due to an uneven access to state resources, media and law. However, opposition parties are able to campaign, there is no massive electoral fraud and independent media exist, which make elections an important channel through which the opposition could seek power or at least challenge the incumbents.

² Countries in which a royal family and a monarch exist but only have limited (i.e. largely ceremonial) political power are not hereditary regimes. Likewise, cases of hereditary successions in which bloodline is not invoked explicitly (cf. Brownlee 2007) and cases of self-proclaimed monarchs do not represent hereditary regimes.

We can thus identify five distinct varieties of non-democratic rule,³ whose diffusion has significantly changed through the recent history, as Figure 1 illustrates. First, the overall number of non-democratic countries has decreased significantly during the last part of the twentieth century – from more than 90 at the beginning of the 1970s to about 70 in the early 2000s. Most importantly, an evolution has occurred in the prevailing forms of authoritarian rule. Especially after the end of the Cold War, we observe a reduction of the share of non-democratic countries ruled by military and one-party regimes and the spread of electoral authoritarianism, in the form of both competitive and hegemonic-party systems. The share of hereditary autocracies has not varied significantly, on the contrary.

Figure 1 also clarifies that holding semi- or pseudo-democratic elections is not a new phenomenon. Several past regimes “have paid lip service to democracy while frequently violating its basic tenets” (Ottaway 2003, p.4). However, the proliferation of electoral autocracies is “very much a product of the contemporary world” (Diamond 2002, p.24). Since the early 1990s, competitive authoritarianism represents the most common form of non-democratic government, in particular. Its diffusion has mainly concerned non-Western countries, sub-Saharan Africa having the lion’s share, followed by Asia, the post-communist bloc and Latin America. On the other hand, only few competitive autocracies can be found in the Middle-East North Africa region, to which the vast majority of existing hereditary autocracies belong.

Figure 1. Non-democratic regimes, 1971-2015.



³ However, various “mixed” cases exist and it is not always easy to establish what the main source of power actually is and the level of political liberalization, given that formal and informal governance practices often coexist in non-democratic countries.

Source: Author's own measurement based on data from version 9 of the V-Dem dataset.

Note: Electoral autocracies and closed autocracies have been identified using the "Regimes of the World" (RoW) indicator (variable *v2x_regime*; Luehrmann et al. 2018). Concerning electoral autocracies, competitive autocracies are distinguished from hegemonic-party autocracies based on a country's scores in the V-Dem indexes measuring the freedom of association, the freedom of expression and information and the integrity of the electoral process (variables *v2x_freexp_altinf*, *v2x_frassoc_thick*, *v2xel_frefair*). Closed autocracies, in turn, are classified as either one-party, military or hereditary based on the prevailing sources of executive power (variables *v2x_ex_confidence*, *v2x_ex_direlect*, *v2x_ex_hereditary*, *v2x_ex_military*, *v2x_ex_party*; Teorell and Lindberg 2019). A more detailed description of the coding procedure is available in the Appendix.

III. Why and which autocrats should care about human development

Research on the political regime-human development nexus has mostly focused on the comparison between democratic and non-democratic regimes. Scholars have advanced several possible explanations to account for the better performance that democratic governments tend to achieve (Brown 1999; Lake and Baum 2001; Zweifel and Navia 2001; Bueno de Mesquita et al. 2003; Gerring et al. 2012; but see Mulligan et al. 2004 and Ross 2006). Most of these explanations highlight the incentives that democratic institutions generate for political leaders seeking office or confirmation in office to be responsive to citizens' needs and to improve their living conditions. In essence, the governments of countries in which citizens are free to express their preferences, in which opposition parties exist and represent credible alternatives for voters, and in which elections are fair should be responsive to social needs.

Obviously, we can hardly expect these specific institutional incentives to shape authoritarian politics and the policy choices of rulers whose political survival does not depend on people vote. However, political survival is an issue for autocrats too and even autocrats should be concerned about the masses, if they want to hold on to power (Svolik 2012). Hence, when we compare the human development performance of different forms of autocracy, we should consider whether and how different institutional arrangements influence the political survival strategy of an autocrat, the way he/she copes with the possible threats coming from society and, relatedly, the attention he/she pays (or has to pay) to citizens' living conditions.

To secure regime stability and deal with society, autocrats rely on three main instruments, namely, co-optation, repression and legitimation (Gerschewski 2013). Co-optation is effective as long as it is targeted to selected political and social groups, typically through the distribution of private or club goods that can easily make the recipients better off than the rest of the society (Bueno de Mesquita et al. 2003), thus investing them with a stake in the regime's survival. Repression is an ever-present feature of authoritarian politics, but its systematic and massive use can be costly both in terms of international reputation and for the risk of a domestic conflict

(Svolik 2012). In turn, legitimation, which is “the process of gaining support (...) within the population” (Gerschewski 2013, p.13), can be sought in different ways, drawing on ideology, nationalism, tradition and performance, for instance (von Soest and Grauvogel 2017).

Co-optation, repression and legitimation should not be thought of as mutually exclusive options for autocrats, whose political survival likely rests on various combinations of these instruments. Hence, to analyse the relationship between autocracy and human development we should examine whether and how different forms of authoritarian rule influence the relative weight these factors have in a ruler’s strategy of political survival. In particular, we should highlight which autocrats most need to derive legitimacy from “the satisfactions that [citizens] (...) obtain from the perceived output and performance of the political authorities” (Easton 1975, p.437), that is, from claiming to act in the interest of the community. The more an autocrat needs performance-based legitimation, the greater attention he/she should pay to citizens’ living conditions, the better the human development performance of the regime will be. Based on this premise, we examine the various forms of autocracy previously identified from a comparative perspective.

Given their institutional structure, closed autocracies, which do not hold multiparty elections for the executive, appear relatively impermeable to the pressures coming from society, less concerned about eliciting mass support by improving citizen living conditions and more prone to use repression. However, the different bases of executive power on which these regimes rest help draw a more nuanced picture. Often, military regimes originate from a coup d’état aimed to restore political order or to overthrow corrupt and/or incompetent governments. Hence, military juntas typically conceive themselves as temporary solutions (Brooker 2014) and for this reason they do not face strong incentives to seek popular support. Not surprisingly, military dictators resort to repression against citizens more frequently than any other non-democratic ruler (Geddes et al. 2014b).

Contrary to military regimes, hereditary autocracies are unique for the length of the time horizon that rulers face (Bank et al. 2014), which increases the importance of the relationship with their subjects. In this regard, royal families have historically counted on tradition to legitimize their power, which remains a rather strong unifying factor for the populations of these countries (Kailitz and Stockemer 2015). On the other hand, according to Olson’s stationary bandit theory, “dynastic succession can be socially desirable” (1993, p.572). The longer time horizon gives monarchs more concern for the economic productivity of their societies, and investment in healthcare and education represents a vehicle to enhance it.

Similarly to hereditary regimes, many twentieth century one-party autocracies have counted on a relatively strong legitimising factor, such as ideology, even though several of these regimes increasingly draw on nationalism in their claims to legitimacy (Dukalskis and Gerschewski 2018). However, the fact that several of these regimes hold one-party elections should not be misinterpreted as a signal of the ruling elite dependence on people support. These elections largely serve as a mechanism for the management of intra-elite relationship (Blaydes 2011) and as an instrument of mass mobilisation. The party institutions, moreover, can be used to infiltrate the society, which helps identify opponents and operate selective repression.

Electoral autocracies differ from closed autocracies since they hold elections for both the executive and legislative in which citizens are formally entitled to vote for different parties. In principle, this institutional structure should establish a tighter relationship between rulers and the ruled and make the former more concerned about what the latter think of them, which in turn should decrease the weight of repression as part of an autocrat's strategy of political survival and increase the importance of legitimation. Even in this case, however, we should consider the variance subsumed by the electoral authoritarian category and the possible implications of the differences in terms of political liberalization.

When the political arena remains *de facto* monopolised by the ruling party, multiparty elections can become outright tools of authoritarian consolidation that autocrats can use to co-opt opposition parties and social groups in a selective way (Gandhi and Lust-Okar 2009). Based on a *divide et impera* strategy, the ruling parties try to fragment opposition front by forming coalitions with moderate parties in exchange for government positions, access to state resources and influence over policy-making (Gandhi and Przeworski 2006). In a similar way, they may offer policy concessions to specific sectors of the society, such as pension programmes (Knutson and Rasmussen 2018).

By allowing more space to opposition parties and operating more subtle stratagems to disadvantage them, the rulers of competitive autocracies dream “to reap the fruits of electoral legitimacy without running the risk of democratic uncertainty” (Schedler 2002, p.37). However, this is a risky legitimation strategy. When the political arena is partially liberalized, opposition parties are less inclined to be co-opted, as they have (few but) real chances to win (Miller 2015a). Not only do semi-competitive elections periodically open a window of opportunity for political change, their reiteration can also progressively improve the performance of opposition parties, which can learn how to challenge the ruling party (Lindberg 2009).

If elections in competitive autocracies are “dangerous game[s]” (Dukalskis and Gerschewski 2017, p.257) that can be lost, incumbents must take them seriously and try to gain

support within the population. Improving citizens' living conditions represent a relatively effective way to elicit what Easton defines "specific support" (1975). Delivering public goods, such as healthcare and education, is a convenient strategy to buy off the loyalty of large constituencies (Bueno de Mesquita et al. 2003). Healthcare and education have immediate and visible results, which can readily translate in support for the incumbent, especially among the less well-off, typically representing a large share of a country's population (Kjær and Therkildsen 2013; Travagianti 2016).

Hence, authoritarian institutions can shape rulers' political survival strategies, their relationship with citizens, and thus the comparative human development performance of these regimes. More specifically, a major divide seems to exist between competitive autocracies and the extant non-democratic regimes, which can more easily resort to repression, co-optation and/or identity-based claims to legitimacy, such as ideology and tradition (von Soest and Grauvogel 2017). The higher level of electoral uncertainty that rulers of competitive autocracies face increases the importance that incumbents should attach to improving citizen living conditions to gain popular support and hold on to power. Hereditary regimes are a possible exception, given the longer time-horizon that monarchs face and its implications for the attention they pay to healthcare and education investment as a means to enhance the productivity of their human capital.

IV. Varieties of autocracy and human development: a comparative analysis, 1971-2015

To test if different forms of autocracy lead to different human development records, regression analysis is performed. The dependent variable is human development, which is a composite notion that has in healthcare and education two key dimensions (UNDP 1990). Accordingly, measures of child mortality rate (‰) and of primary school enrolment (%) are used, both retrieved from the World Bank's World Development Indicators.

The main independent variable is regime type, which is measured using data from the Varieties of Democracy V-Dem Dataset (version 9), as illustrated in the Notes to Figure 1 and in the Appendix. The five autocratic types correspond to as many binary and mutually exclusive variables – namely, competitive, hegemonic-party, one-party, military and hereditary autocracy. Differently from other recent studies on the human development performance of non-democratic regimes (Miller 2015b; Cassani 2017), this analysis unpacks both the closed

authoritarian and the electoral authoritarian categories to draw a more nuanced picture of the autocracy-human development nexus.

Several economic, demographic and political factors may influence the relationship under examination. The regression analysis includes the following control variables, in particular: gross domestic product (GDP, logarithmic transformation), economic growth (annual rate); oil rents (as a share of GDP); share of urban population; domestic violence; state duration; and communist government. Unless differently stated, data are from the World Bank's World Development Indicators. Both economic growth and economic prosperity affect a government's ability to deliver healthcare and education. Moreover, governments of countries rich in natural resources tend to be more generous with social services, according to the rentier state theory (Luciani 1987), although other scholars argue the opposite (Hong 2017). Even urbanization can have ambivalent effects. On one hand, it should be relatively easier to provide healthcare and education in urban areas than in rural communities. On the other hand, urbanization could lead to the proliferation of slums, highly populated but poor in infrastructures (Ghobarah et al. 2004).

Domestic violence, measured using data from the Major Episodes of Political Violence dataset, can obstruct the delivery of public services. Finally, as a proxy of administrative capacity (admittedly a raw proxy), an indicator of state duration is included in the regression model that records the age (in years) of a state since its international recognition, based on information from the Correlates of War Project. Finally, an indicator of the presence of a communist-led executive is included in the regression model (Cheibub et al. 2010), because the communist welfare state was comparatively generous (Orenstein 2008).

The regression analysis is performed estimating time-series cross-sectional models with heteroscedasticity-robust standard errors on a sample of 160 countries observed from 1971 (i.e. the year starting from which many of the data that have been used are available) to 2015. As a first step, competitive autocracies are contrasted with all the remaining non-competitive autocracies – namely, hereditary, military, one-party and hegemonic-party regimes – taken together as a single reference category omitted from the regression model. Hence, the coefficients of the variable “competitive autocracy” in the regression models presented in Table 1 refer to the estimated difference in the human development performance of competitive autocracies vis-à-vis other non-democratic regimes. The models in Table 1 also include a residual “Other regimes” category, which encompasses democracies and other countries that cannot be easily classified, such as failed states and periods of foreign occupation.

Table 1. Regression analysis of the effect of competitive authoritarianism on human development, 1971-2015

	School enrolment			Child mortality		
	(1)	(2)	(3)	(4)	(5)	(6)
Competitive autocracy	6.266*** (0.941)	0.895*** (0.304)	0.812*** (0.307)	-15.03*** (1.772)	-1.402*** (0.411)	-1.285*** (0.400)
Other regimes	5.614*** (0.720)	0.549* (0.292)	0.464 (0.290)	-13.81*** (1.479)	-0.995*** (0.315)	-0.861*** (0.298)
GDP pc (log)	0.806*** (0.250)	-0.324 (0.209)	-0.232 (0.238)	-22.44*** (0.591)	-0.042 (0.194)	0.114 (0.206)
GDP growth	0.212*** (0.055)	0.059*** (0.012)	0.054*** (0.012)	-0.284** (0.116)	-0.022*** (0.006)	-0.013* (0.007)
Urban population	0.208*** (0.018)	-0.033** (0.016)	-0.033** (0.016)	-0.516*** (0.035)	0.042 (0.036)	0.031 (0.035)
Oil rents	0.101*** (0.035)	0.003 (0.015)	-0.007 (0.018)	0.532*** (0.063)	-0.019 (0.014)	-0.022* (0.013)
Communist government	16.06*** (1.023)	-0.026 (0.371)	0.275 (0.456)	-49.29*** (2.720)	-0.674** (0.331)	-1.315*** (0.397)
Domestic violence	-0.104 (0.176)	-0.120 (0.083)	-0.101 (0.084)	-0.261 (0.383)	-0.097 (0.111)	-0.156 (0.113)
State duration	0.006** (0.003)	0.027** (0.013)	-0.002 (0.031)	-0.013** (0.005)	-0.009 (0.02)	0.018 (0.026)
Lagged Dep. Var.		0.943*** (0.008)	0.942*** (0.008)		0.973*** (0.011)	0.973*** (0.011)
Country FE		Yes	Yes		Yes	Yes
Year FE			Yes			Yes
Constant	74.85*** (1.664)	7.104*** (0.803)	9.451*** (3.243)	273.7*** (3.782)	-0.419 (3.058)	-4.083 (3.474)
Observations	5,105	4,864	4,864	5,192	5,190	5,190
R-squared	0.161	0.916	0.917	0.634	0.984	0.984
No of countries		158	158		160	160

*** p<0.01, ** p<0.05, * p<0.1. Robust standard errors in parentheses. All the independent and control variables are 1-year lagged. Concerning regime variables, the reference category omitted from the model is "non-competitive autocracy". Please note that the high R-squared in models 2, 3, 5 and 6 are inflated by the inclusion of a lagged dependent variable.

Concerning Models 1-3 in Table 1, the dependent variable is primary school enrolment, whereas child mortality is the dependent variable in Models 4-6. In all the models, independent

and control variables are lagged one year with respect to the dependent variable, which breaks the symmetry of the regression model and (partly) addresses possible problems of endogeneity between independent and dependent variables. To address temporal correlation and to control for omitted variables and country-specific unobservable factors, Models 2 and 5 also include a one-year lagged dependent variable and country-fixed effects. Moreover, year-dummies are added in Models 3 and 6 to control for global human development trends and other contingent factors.

The results of the regression analysis confirm that, among non-democratic countries, competitive autocracies display higher levels of human development. More specifically, competitive autocracies have higher rates of school enrolment and lower rates of child mortality. Moreover, competitive authoritarianism emerges as one of the most statistically significant predictors of a country's level of human development, among the factors that have been considered in the analysis. These findings are robust across the alternative models presented in Table 1, that is, even after considering the past values of the human development indicators examined, unobserved country-specific characteristics and temporal trends, which usually absorb much of the explanatory power of a model specification in regression analysis.

Concerning control variables, per capita national income, economic growth, state capacity and the presence of a communist government are positively associated with improvements in both education and healthcare, when the coefficients are statistically significant. The analysis also confirms the ambiguous effects of urbanization and oil rents. The sign of the estimated coefficients are not fully consistent across the various analyses performed.

As a further check of the robustness of these results, the analysis has been replicated on smaller regional sub-samples. This test helps consider the possible patterns of geographical diffusion in terms education and healthcare policies and other region-specific contextual factors, including the legacies of the past, which other studies on the regime-development nexus have found to matter (Krieckhaus 2006). In particular, the replication analysis has focused on four different regions – namely, Latin America, sub-Saharan Africa, Asia, and the post-communist bloc – representing the geopolitical areas in which competitive authoritarianism has spread the most. For each region, a smaller sample of countries has been extracted from the cross-regional dataset used in the main analysis, whereas the historical coverage remains the 1971-2015 period. Given the structure of the resulting regional datasets, in which time-periods (T) outnumber the observed units (N), panel-corrected standard error regression models have been estimated, following Beck and Katz (1995).

Table 2. Regression analysis of the effect of competitive authoritarianism on human development in different regions, 1971-2015

	School enrolment				Child mortality			
	Latin America	Post-communist bloc	sub-Saharan Africa	Asia	Latin America	Post-communist bloc	sub-Saharan Africa	Asia
Competitive autocracy	1.786* (0.940)	-0.833 (1.191)	2.097** (0.825)	0.947 (0.780)	-5.993** (2.556)	-7.483*** (2.072)	-1.780** (0.897)	-2.235 (1.460)
Other regimes	1.323 (0.862)	-1.726 (1.331)	0.288 (1.143)	0.909 (1.012)	-2.664 (1.827)	-9.426*** (2.162)	-3.891*** (1.478)	-3.191* (1.796)
GDP pc (log)	0.772 (0.731)	0.013 (0.686)	4.208*** (0.969)	2.459*** (0.846)	-8.587*** (1.379)	-6.475*** (0.895)	-8.187*** (1.837)	-9.559*** (1.659)
GDP growth	0.044 (0.028)	0.020 (0.037)	-0.017 (0.027)	-0.046 (0.039)	0.126** (0.062)	-0.094** (0.042)	0.021 (0.031)	0.011 (0.059)
Urban population	0.298*** (0.066)	0.146** (0.073)	0.361*** (0.105)	-0.042 (0.072)	-0.955*** (0.227)	-0.457*** (0.075)	-1.561*** (0.194)	-0.812*** (0.132)
Oil rents	-0.064 (0.041)	-0.013 (0.095)	0.044 (0.053)	0.045 (0.076)	0.018 (0.059)	0.282* (0.160)	0.108** (0.054)	-0.316* (0.176)
Communist government	-4.244 (2.995)	1.539 (1.620)		4.965** (1.956)	-19.50*** (3.865)	-4.146* (2.117)		-7.135* (4.157)
Domestic violence	-0.775** (0.360)	-0.019 (0.312)	-1.081*** (0.297)	0.103 (0.185)	-0.307 (0.432)	0.251 (0.409)	0.307 (0.437)	0.250 (0.333)
State duration	-0.022 (0.020)	-0.020 (0.015)	0.035 (0.025)	0.032*** (0.009)	0.092* (0.055)	-0.052*** (0.016)	-0.289*** (0.051)	-0.079*** (0.009)
Constant	84.78*** (5.544)	93.47*** (3.689)	49.44*** (6.757)	79.04*** (4.451)	158.1*** (11.12)	105.0*** (7.839)	238.9*** (12.33)	167.6*** (9.293)
Observations	893	593	1,398	641	936	541	1,461	680
R-squared	0.864	0.872	0.648	0.828	0.389	0.638	0.658	0.637
No. of countries	24	27	46	20	24	28	44	20

*** p<0.01, ** p<0.05, * p<0.1. All regressors are 1-year lagged. Models are estimated using Prais-Winsten regression, computing panel-corrected standard errors (in parentheses), and assuming a AR(1) process for the error component. Concerning regime variables, the reference category omitted from the model is "non-competitive autocracy". The communist government dummy variable does not appear in the analysis concerning sub-Saharan Africa, given the lack of communist regimes in this region.

The estimated regional human development performance of competitive authoritarianism is summarized in Table 2. The results are mixed. For instance, Latin American and post-communist competitive autocracies have lower child mortality rates than their regional non-competitive neighbours, whereas the differences in terms of school enrolment are less pronounced. More interesting patterns emerge from the comparison between sub-Saharan Africa and Asia. On one hand, sub-Saharan Africa is the only region in which competitive autocracies significantly outperform other non-democratic regimes in both the examined human development dimensions. On the other hand, the analysis has failed to detect any statistically significant difference in the human development performance of Asian competitive and non-competitive autocracies.

A possible explanation has to do with the quite diverging governance models that have spread in these regions after decolonisation. In both cases, independence has favoured the installation of new non-democratic governments (Huntington 1991). However, in post-colonial sub-Saharan Africa, authoritarianism has often become synonymous of predatory politics and neopatrimonialism (Bach 2011), wherein the public sphere is de facto “an extension of the big man’s household” (Bratton and van de Walle 1997, p.61). In post-colonial Asia, on the contrary, authoritarian rule has sometimes proved compatible and even conducive to development. The so-called “developmental state” (Evans 1989) has in human capital investment one of its pillars, leading to relatively inclusive healthcare and education programmes (Page 1994). Hence, the relatively recent spread of competitive authoritarianism in these regions, and the corresponding stronger dependence of rulers on popular support, could have made more difference south of the Sahara than in Asia.

Having established that competitive autocracies tend to have a better human development performance than other non-democratic regimes, we should deepen the analysis of the possible human development variations across the non-democratic universe and consider more specific sub-types of non-competitive autocracy. Accordingly, for each dependent variable, five new regression models have been estimated that rotate competitive autocracy, hegemonic-party autocracy, one-party autocracy, military autocracy and hereditary autocracy as reference category.

Table 3. Regression analysis of the effect of different forms of autocracy on human development (school enrolment), 1971-2015

	Reference category				
	Competitive autocracy	Hegemonic-party autocracy	One-party autocracy	Military autocracy	Hereditary autocracy
Competitive autocracy		0.598** (0.279)	0.697** (0.273)	1.173*** (0.272)	-0.343 (0.737)
Hegemonic-party autocracy	-0.598** (0.279)		0.099 (0.304)	0.575* (0.323)	-0.941 (0.748)
One-party autocracy	-0.697** (0.273)	-0.099 (0.304)		0.476 (0.305)	-1.04 (0.738)
Military autocracy	-1.173*** (0.272)	-0.575* (0.323)	-0.476 (0.305)		-1.516** (0.749)
Hereditary autocracy	0.343 (0.737)	0.941 (0.748)	1.040 (0.738)	1.516** (0.749)	
Other regimes	-0.381* (0.210)	0.217 (0.286)	0.316 (0.287)	0.792*** (0.265)	-0.724 (0.740)
GDP pc (log)	-0.220 (0.162)	-0.220 (0.162)	-0.220 (0.162)	-0.220 (0.162)	-0.220 (0.162)
GDP growth	0.053*** (0.011)	0.053*** (0.011)	0.053*** (0.011)	0.053*** (0.011)	0.053*** (0.011)
Urban population	-0.031** (0.014)	-0.031** (0.014)	-0.031** (0.014)	-0.031** (0.014)	-0.031** (0.014)
Oil rents	-0.009 (0.013)	-0.009 (0.013)	-0.009 (0.013)	-0.009 (0.013)	-0.009 (0.013)
Communist government	0.169 (0.769)	0.169 (0.769)	0.169 (0.769)	0.169 (0.769)	0.169 (0.769)
Domestic violence	-0.095* (0.051)	-0.095* (0.051)	-0.095* (0.051)	-0.095* (0.051)	-0.095* (0.051)
State duration	-0.006 (0.032)	-0.006 (0.032)	-0.006 (0.032)	-0.006 (0.032)	-0.006 (0.032)
Lagged Dep. Var.	0.942*** (0.005)	0.942*** (0.005)	0.942*** (0.005)	0.942*** (0.005)	0.942*** (0.005)
Country FE	yes	yes	yes	yes	yes
Year FE	yes	yes	yes	yes	yes
Constant	36.01 (52.48)	9.767*** (3.558)	9.667*** (3.555)	9.191*** (3.548)	10.71*** (3.604)
Observations	4,864	4,864	4,864	4,864	4,864
R-squared	0.917	0.917	0.917	0.917	0.917
No. of countries	158	158	158	158	158

*** p<0.01, ** p<0.05, * p<0.1. Robust standard errors in parentheses. All the independent and control variables are 1-year lagged.

Table 4. Regression analysis of the effect of different forms of autocracy on human development (child mortality), 1971-2015

	Reference category				
	Competitive autocracy	Hegemonic-party autocracy	One-party autocracy	Military autocracy	Hereditary autocracy
Competitive autocracy		-0.773** (0.362)	-1.935*** (0.544)	-1.242*** (0.462)	0.011 (0.899)
Hegemonic-party autocracy	0.773** (0.362)		-1.162 (0.879)	-0.469 (0.389)	0.784 (0.830)
One-party autocracy	1.935*** (0.544)	1.162 (0.879)		0.693 (0.472)	1.947** (0.790)
Military autocracy	1.242*** (0.462)	0.469 (0.389)	-0.693 (0.472)		1.253 (0.772)
Hereditary autocracy	-0.011 (0.899)	-0.784 (0.830)	-1.947** (0.790)	-1.253 (0.772)	
Other regimes	0.383 (0.498)	-0.391 (0.407)	-1.553*** (0.477)	-0.859*** (0.292)	0.394 (0.812)
GDP pc (log)	0.096 (0.198)	0.096 (0.198)	0.096 (0.198)	0.096 (0.198)	0.096 (0.198)
GDP growth	-0.011* (0.007)	-0.011* (0.007)	-0.011* (0.007)	-0.011* (0.007)	-0.011* (0.007)
Urban population	0.033 (0.035)	0.033 (0.035)	0.033 (0.035)	0.033 (0.035)	0.033 (0.035)
Oil rents	-0.018 (0.011)	-0.018 (0.011)	-0.018 (0.011)	-0.018 (0.011)	-0.018 (0.011)
Communist government	-1.896*** (0.487)	-1.896*** (0.487)	-1.896*** (0.487)	-1.896*** (0.487)	-1.896*** (0.487)
Domestic violence	-0.155 (0.112)	-0.155 (0.112)	-0.155 (0.112)	-0.155 (0.112)	-0.155 (0.112)
State duration	0.0154 (0.026)	0.0154 (0.026)	0.0154 (0.026)	0.0154 (0.026)	0.0154 (0.026)
Lagged Dep. Var.	0.972*** (0.011)	0.972*** (0.011)	0.972*** (0.011)	0.972*** (0.011)	0.972*** (0.011)
Country FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Constant	-7.775 (5.728)	-4.110 (3.397)	-2.948 (3.500)	-3.641 (3.559)	-4.894 (3.806)
Observations	5,190	5,190	5,190	5,190	5,190
R-squared	0.984	0.984	0.984	0.984	0.984
No. of countries	160	160	160	160	160

*** p<0.01, ** p<0.05, * p<0.1. Robust standard errors in parentheses. All the independent and control variables are 1-year lagged.

The estimated human development performance of different forms of autocracy is summarized in Table 3 (dependent variable: school enrolment) and Table 4 (dependent variable: child mortality). The analysis corroborates the finding that competitive autocracies outperform other forms of autocracy. More specifically, competitive autocracies display both significantly higher ratios of school enrolment and significantly lower rates of child mortality than military, one-party and hegemonic-party regimes. Interestingly, however, the comparison between competitive and hereditary autocracies has not produced statistically significant results, suggesting that these regimes have a similar human development performance. Moreover, hereditary autocracies achieve higher school enrolment ratios than military regimes, and they score lower child mortality rates than one-party regimes. These results seem to confirm the exceptional nature of hereditary rule, especially among politically closed forms of autocracy. On the other hand, military, one-party and hegemonic-party autocracies do not significantly differ from each other in their human development performance. To be sure, the comparison between hegemonic-party and military regimes highlights a difference in terms of school enrolment, but the estimates are only significant at the 90 percent level.

Conclusion

Politics influences countries' levels of human development. While this is probably no path-breaking conclusion for most readers, it is perhaps worth adding that even non-democratic politics can influence human development. With a focus on healthcare and education, this chapter has compared the human development performance of different types of authoritarian rule, in particular.

Overall, this research confirms the importance of going beyond the democracy-autocracy dichotomy in the analysis of the regime-human development nexus, and of paying attention to the institutional variations that characterize the non-democratic universe. The main conclusion is that competitive autocracies have a better human development performance than other non-democratic regimes. The more liberalized political arena that distinguishes so-called competitive autocracies from other non-democratic regimes makes the governments of these countries more dependent on popular support and thus more attentive to the living conditions that citizens enjoy.

Moreover, the analysis highlights that even the commonly acknowledged electoral-closed autocracy division does not exhaust the relevant variations. On one hand, hereditary regimes

display levels of human development similar (i.e. non-statistically different) to competitive autocracies and superior to other closed forms of autocracy. Such performance could be ascribed to the longer time-horizon that monarchs typically face and the consequent greater attention they pay to the productivity of their societies, which prompts investment in healthcare and education. In turn, the fact that competitive autocracies achieve better levels of human development than hegemonic-party autocracies clarifies that elections alone cannot make a difference if the political arena remains de facto monopolized by the ruling party, even when multipartyism is formally allowed.

These findings can lead to a partial revision in how we evaluate the recent diffusion of competitive authoritarianism in so-called developing countries. Does competitive authoritarianism represent just a new dress for old settings? In many respect, it surely does. For the citizens of these countries, political freedom remains a chimera, for instance. However, this research offers new and admittedly thought-provoking evidence. The institutional transformations that many political politically closed regimes have undergone during the past few decades and the partial liberalization of their political arenas have resulted in significant improvements for citizens' material living conditions. Political change, even when it stops short of full democratization, may nonetheless have positive social returns (cf. Wang et al. 2018; Kim and Kroeger 2018). The implications of these considerations remain uncertain, though. Better living conditions can strengthen an autocrat's tenure, leading to the consolidation of these non-democratic regimes. With the blessing of modernization theorists, however, human development may also stimulate new pressures from below for further political liberalization and democracy.

References

- Bach, D. (2011). 'Patrimonialism and neopatrimonialism: Comparative trajectories and readings', *Commonwealth & Comparative Politics*, 49 (3), 275-94.
- Bank, A., T. Richter and A. Sunik (2014). 'Durable, yet different: Monarchies in the Arab Spring', *Journal of Arabian Studies*, 4 (2), 163-179.
- Beck, N. and J. Katz (1995). 'What to do (and not to do), with time-series-cross-section data in comparative politics', *American Political Science Review*, 89 (3), 634-647.
- Blaydes, L. (2011). *Elections and Distributive Politics in Mubarak's Egypt*, New York: Cambridge University Press.
- Bratton, M. and N. van de Walle (1997). *Democratic Experiments in Africa. Regime Transitions in Comparative Perspective*, Cambridge: Cambridge University Press.
- Brooker, P. (2014). *Non-democratic Regimes*, New York: Palgrave Macmillan.
- Brown, D. (1999). 'Reading, writing, and regime type: Democracy's impact on primary school enrolment' *Political Research Quarterly*, 52 (4): 681-707.
- Brownlee, J. (2007). 'Hereditary succession in modern autocracies', *World Politics*, 59 (4): 595-628.
- Bueno de Mesquita, B., J. Morrow, R. Siverson and A. Smith (2003). *The Logic of Political Survival*, Cambridge: MIT Press.
- Carothers, T. (2002). 'The end of the transition paradigm', *Journal of Democracy*, 13 (1): 5-21.
- Cassani A. and G. Carbone (2016). 'Citizen wellbeing in African competitive authoritarian regimes', in Bogaards M. and S. Elischer (eds) *Democratization and Competitive Authoritarianism in Africa*, Zeitschrift für Vergleichende Politikwissenschaft – Sonderhefte. Springer VS, Wiesbaden.
- Cassani, A. (2017). 'Social services to claim legitimacy: Comparing autocracies' performance', *Contemporary Politics*, 23 (3), 348-68.
- Charron, N. and V. Lapuente (2011). 'Which dictators produce quality of government?' *Studies in Comparative International Development*, 46, 397-423.
- Cheibub, J.A., J. Gandhi and J. Vreeland. (2010). 'Democracy and dictatorship revisited', *Public Choice*, 143 (1-2), 67-101.
- Coppedge, Michael, John Gerring, Carl Henrik Knutsen, Staffan I. Lindberg, Jan Teorell, David Altman, Michael Bernhard, M. Steven Fish, Adam Glynn, Allen Hicken, Anna Lührmann, Kyle L. Marquardt,

Kelly McMann, Pamela Paxton, Daniel Pemstein, Brigitte Seim, Rachel Sigman, Svend-Erik Skaaning, Jeffrey Staton, Steven Wilson, Agnes Cornell, Lisa Gastaldi, Haakon Gjerløw, Nina Ilchenko, Joshua Krusell, Laura Maxwell, Valeriya Mechkova, Juraj Medzihorsky, Josefine Pernes, Johannes von Römer, Natalia Stepanova, Aksel Sundström, Eitan Tzelgov, Yi-ting Wang, Tore Wig, and Daniel Ziblatt. 2019. "*V-Dem [Country-Year/Country-Date] Dataset v9*", Varieties of Democracy (V-Dem) Project. <https://doi.org/10.23696/vdemcy19>

Dahl, R. (1971). *Polyarchy: Participation and Opposition*, New Haven: Yale University Press.

Diamond, L. (2002). 'Thinking about hybrid regimes', *Journal of Democracy*, 13 (2), 21-35.

Diamond, L., J. Linz and S.M. Lipset (1995). *Politics in Developing Countries: Comparing Experiences With Democracy*, Boulder: Lynne Rienner.

Dukalskis, A. and J. Gerschewski (2017). 'What autocracies say (and what citizens hear): proposing four mechanisms of autocratic legitimation', *Contemporary Politics*, 23 (3), 251-268.

Dukalskis, A. and J. Gerschewski (2018). 'Adapting or freezing? Ideological reactions of communist regimes to a post-communist world', *Government and Opposition* (online first).

Easton, D. (1975). 'A re-assessment of the concept of political support', *British Journal of Political Science*, 5, 435-457.

Evans, P. (1989). 'Predatory, developmental, and other apparatuses: A comparative political economy perspective on the Third World state', *Sociological Forum*, 4, 561-87.

Gandhi, J. and A. Przeworski (2007). 'Authoritarian institutions and the survival of autocrats', *Comparative Political Studies*, 40 (11), 1279-301.

Gandhi, J. and E. Lust-Okar (2009). 'Elections under authoritarianism', *Annual Review of Political Science*, 12: 403-22.

Geddes, B. (2003). *Paradigm and Sand Castles: Theory Building and Research Design in Comparative Politics*, Ann Arbor: University of Michigan Press.

Geddes, B., J. Wright and E. Frantz (2014a). 'Autocratic breakdown and regime transitions: A new data set', *Perspectives on Politics*, 12, 313-331.

Geddes, B., E. Frantz and J. Wright (2014b). 'Military rule', *Annual Review of Political Science*, 17, 147-162.

Gerring, J., S. Thacker and R. Alfaro (2012). 'Democracy and human development', *Journal of Politics*, 74, 1-17.

- Gerschewski, J. (2013). 'The three pillars of stability: legitimation, repression, and co-optation in autocratic regimes', *Democratization*, 20, 13-38.
- Ghobarah, H., P. Huth and B. Russett (2004). 'Comparative public health: The political economy of human misery and well-being', *International Studies Quarterly* 48 (1), 73-94.
- Halperin, M., J. Siegle and M. Weinstein (2005). *The Democracy Advantage: How Democracies Promote Prosperity and Peace*, New York and Oxford: Routledge.
- Herb, M. (2004). 'Princes and parliaments in the Arab world', *Middle East Journal*, 58, 367-384.
- Hong, J.Y. (2017). 'Does oil hinder social spending? Evidence from dictatorships, 1972–2008', *Studies in Comparative International Development*, 52 (4), 457–482.
- Huntington, S. (1968). *Political Order in Changing Societies*, New Haven: Yale University Press.
- Huntington, S. (1991). *The Third Wave: Democratization in the Late Twentieth Century*, Norman: University of Oklahoma Press.
- Hyde, S. and N. Marinov (2011). 'Which elections can be lost?', *Political Analysis*, 20 (2), 191-210.
- Kailitz, S. and D. Stockemer (2015). 'Regime legitimation, elite cohesion and the durability of autocratic regime types', *International Political Science Review*, 38 (3), 332–348.
- Kjær, A.M. and O. Therkildsen (2012). 'Elections and landmark policies in Tanzania and Uganda', *Democratization*, 20 (4), 592-614.
- Kim, Nam Kyu and Alex Kroeger (2018), 'Do multiparty elections improve human development in autocracies?', *Democratization*, 25 (2), 251-272.
- Knutsen, C.H. and M. Rasmussen (2018). 'The autocratic welfare state: Old-age pensions, credible commitments, and regime survival', *Comparative Political Studies*, 51 (5), 659–695.
- Kriekhaus, J. (2006). 'Democracy and economic growth: How regional context influences regime effects', *British Journal of Political Science*, 36 (2), 317-40.
- Lake, D. and M. Baum (2001). 'The invisible hand of democracy: Political control and the provision of public services', *Comparative Political Studies*, 34 (6), 587-621.
- Levitsky, S. and L. Way (2010). *Competitive Authoritarianism: Hybrid Regimes After the Cold War*, Cambridge: Cambridge University Press.
- Lindberg S. (ed) (2009). *Democratization By Elections: A New Mode of Transition*, Baltimore: Johns Hopkins University Press.

- Linz, J. (2000). *Totalitarian and Authoritarian Regimes*, Boulder: Lynne Rienner.
- Luciani, G. (1987). 'Allocation vs. production states: A theoretical framework', in Hazem Beblawi and Giacomo Luciani (eds.), *The Rentier State*, London: Croom Helm [and] Istituto Affari Internazionali, pp. 63-82.
- Luehrmann A., M. Tannenbergh and S. Lindberg (2018), 'Regimes of the world. Opening new avenues for the comparative study of political regimes', *Politics and Governance.* , 6 (1), 60–77.
- Mares, I. and M. Carnes (2009). 'Social policy in developing countries', *Annual Review of Political Science*, 12, 93–113.
- Meltzer, A. and S. Richard (1981). 'A rational theory of the size of government', *Journal of Political Economy*, 89 (5), 914-27.
- Miller, M. (2015a). 'Elections, information, and policy responsiveness in autocratic regimes', *Comparative Political Studies*, 48 (6), 691-727.
- Miller, M. (2015b). 'Electoral authoritarianism and human development', *Comparative Political Studies*, 48 (12), 1526-1562.
- Mulligan, C., R. Gil and X. Sala-i-Martin (2004). 'Do democracies have different public policies than nondemocracies?', *Journal of Economic Perspectives*, 18 (1), 51-74.
- O'Donnell, G. (1973). *Modernization and Bureaucratic-Authoritarianism*, Berkeley: Institute for International Studies.
- Olson, M. (1993). 'Dictatorship, democracy and development', *American Political Science Review*, 87 (3), 567-76.
- Orenstein, M. (2008). 'Postcommunist welfare states', *Journal of Democracy*, 19 (4), 80-94.
- Ottaway, M. (2003). *Democracy Challenged. The Rise of Semi-authoritarianism*, Washington: Carnegie Endowment for International Peace.
- Page, J. (1994). 'The East Asian miracle: Four lessons for development policy', in Stanley Fischer and Julio Rotemberg (eds), *NBER Macroeconomics Annual Vol. 9*, MIT Press.
- Pemstein, Daniel, Kyle L. Marquardt, Eitan Tzelgov, Yi-ting Wang, Juraj Medzihorsky, Joshua Krusell, Farhad Miri, and Johannes von Römer. 2019. "The V-Dem Measurement Model: Latent Variable Analysis for Cross-National and Cross-Temporal Expert-Coded Data", V-Dem Working Paper No. 21. 4th edition. University of Gothenburg: Varieties of Democracy Institute.
- Ross, M. (2006). 'Is democracy good for the poor?', *American Journal of Political Science*, 50 (4), 860-74.

- Sartori, G. (1976). *Parties and Party Systems: A Framework for Analysis*, Cambridge: Cambridge University Press.
- Schedler, A. (2002). 'The menu of manipulation', *Journal of Democracy*, 13 (2), 36-50.
- Svolik, M. (2012). *The politics of authoritarian rule*, New York: Cambridge University Press.
- Teorell, J. and S. Lindberg (2019). 'Beyond democracy-dictatorship measures: A new framework capturing executive bases of power, 1789–2016', *Perspectives on Politics*, 17 (1), 66-84.
- Travaglini, M. (2017). 'How abolishing school fees increased support for the incumbent in Burundi', *African Affairs*, 116 (462), 101–124.
- UNDP (1990). *Human Development Report 1990*, New York: Oxford University Press.
- von Soest, C. and J. Grauvogel (2017). 'Identity, procedures and performance: How authoritarian regimes legitimize their rule', *Contemporary Politics*, 23 (3), 287-305.
- Wahman, M., J. Teorell and A. Hadenius (2013). 'Authoritarian regime types revisited. Updated data in comparative perspective', *Contemporary Politics*, 19 (1), 19-34.
- Wang, Y.-T., V. Mechkova and F. Andersson (2018). 'Does democracy enhance health? New empirical evidence 1900–2012', *Political Research Quarterly* (online first).
- Wintrobe, R. (2007). 'Dictatorship: Analytical approaches', in Carles Boix and Susan Stokes (eds.) *The Oxford handbook of comparative politics*, Oxford: Oxford University Press.
- Wright, J. (2008). 'Do authoritarian institutions constrain? How legislatures affect economic growth and investment', *American Journal of Political Science*, 52 (2), 322-43.
- Zweifel, T. and P. Navia (2000). 'Democracy, dictatorship, and infant mortality', *Journal of Democracy*, 11 (2), 99-114.

Appendix

Classifying autocracies using V-Dem data, 1971-2015

The research presented in this paper rests on a five-fold classification of non-democratic regimes that first separates electoral and closed autocracies from each other and subsequently distinguishes the different forms these regimes can take, as described in the scheme below.

Autocracy	Closed	Hereditary
		Military
		One-party
	Electoral	Hegemonic-party
		Competitive

The coding relies on the V-Dem dataset (Version 9) and proceeds through five main steps:

1. Identify non-democratic regimes
2. Separate electoral and closed autocracies from each other
3. Classify electoral autocracies as either competitive or hegemonic-party
4. Classify closed autocracies as either hereditary, military or one-party
5. Check and revise the classification

Please refer to the V-Dem Codebook v9 for details on the indicators that have been used.

Coppedge, Michael, John Gerring, Carl Henrik Knutsen, Staffan I. Lindberg, Jan Teorell, David Altman, Michael Bernhard, M. Steven Fish, Adam Glynn, Allen Hicken, Anna Lührmann, Kyle L. Marquardt, Kelly McMann, Pamela Paxton, Daniel Pemstein, Brigitte Seim, Rachel Sigman, Svend-Erik Skaaning, Jeffrey Staton, Agnes Cornell, Lisa Gastaldi, Haakon Gjerløw, Valeriya Mechkova, Johannes von Römer, Aksel Sundtröm, Eitan Tzelgov, Luca Uberti, Yi-ting Wang, Tore Wig, and Daniel Ziblatt. 2019. "V-Dem Codebook v9" Varieties of Democracy (V-Dem) Project.

Identify non-democratic regimes

Autocracies are separated from democracies using the “Regimes of the world” (RoW) indicator (variable *v2x_regime*). RoW identifies as autocracies all the regimes that do not fulfil the requirements of electoral democracy: $v2x_polyarchy > 0.5$ & $v2elmulpar_osp > 2$ & $v2elfrfair_osp > 2$. RoW signals ambiguous or borderline cases, too. These cases have been re-examined and classified based on the *_ord version of the variables *v2elmulpar_ord_ex*, *v2elmulpar_ord_leg*, *v2elfrfair_ord_ex*, *v2elfrfair_ord_leg*, *v2psparban_ord*, *v2psoppaut_ord*. The *_ord version of these variables is preferred to the *_osp version, since the former allows for a more clear-cut treatment of the ambiguous cases. Ambiguous cases are classified as democratic if they score 2 or more in each of these indicators, otherwise they are classified as non-democratic.

Separate electoral and closed autocracies from each other

Electoral and closed autocracies are separated from each other using the RoW indicator. RoW identifies as electoral autocracies the non-democratic regimes that hold elections for both the executive and the legislative that at least one opposition party is allowed to contest ($v2elmulpar_osp_ex$ AND $v2elmulpar_osp_leg > 1$). Closed autocracies are non-democratic regimes that do not fulfil these requirements. Also in this case, RoW signals ambiguous cases. These cases have re-examined and classified based on the *_ord version of the variables *v2elmulpar_ord_ex*, *v2elmulpar_ord_leg*. The *_ord version of these variables is preferred to the *_osp version, since the former allows for a more clear-cut treatment of the ambiguous cases. Ambiguous cases are classified as electoral autocracy if they score 1 or more in each of these indicators, otherwise they are classified as closed autocracy.

Classify electoral autocracies: competitive vs hegemonic-party

Electoral autocracies are classified as competitive if:

- $v2elmulpar_ord_ex$ AND $v2elmulpar_ord_leg > 2$, meaning that elections are multiparty, but either one main opposition party is prevented (de jure or de facto) from contesting, or conditions such as civil unrest prevent competition in a portion of the territory;
- at least two out of three of the following requirements are fulfilled:
 - $v2x_freexp_altinf > 0.5$ (Freedom of expression and information)
 - $v2x_frassoc_thick > 0.5$ (Freedom of association)
 - $v2xel_frefair > 0.3$ (Clean elections)

These thresholds have been established after having considered the mean and median of each variable within the electoral autocracy category. Electoral autocracies that do not fulfil these requirements are classified as hegemonic-party. Borderline cases that scores close to the above thresholds have been identified, checked and reclassified.

Classify closed autocracies: hereditary vs military vs one-party

Closed autocracies are classified as either hereditary, military or one-party based on the prevailing sources of executive power (variables *v2x_ex_confidence*, *v2x_ex_direlect*, *v2x_ex_hereditary*, *v2x_ex_military* and *v2x_ex_party*).

More specifically, closed autocracies are classified as:

- Hereditary regimes if a country scores in *v2x_ex_hereditary* higher or equal than in the other executive base of power indexes;
- Military regimes if a country scores in *v2x_ex_military* higher than in the other executive base of power indexes;
- One-party regimes if a country score in either *v2x_ex_confidence*, *v2x_ex_direlect* or *v2x_ex_party* higher than in the other executive base of power indexes.

Ambiguous cases have been signalled based on the following criteria: hereditary regimes that score <.4 in *v2x_ex_hereditary*; military regimes that score <.4 in *v2x_ex_military*; one-party regimes that score <.4 in both *v2x_ex_confidence*, *v2x_ex_direlect*, and *v2x_ex_party*. The ambiguous cases have been re-examined and reclassified.

Check and revise the classification

The resulting regime classification has undergone a final assessment, paying special attention to the following issues:

- Identify, re-examine and re-classify regime cases that last only one year and “transitional” periods in which a country experiences multiple regime changes over short spans of years;
- Identify and re-classify in a residual category cases of protracted regime instability, failed states and cases that poorly fit the regime typology;
- Identify, re-examine and re-classify potentially misclassified cases, identified based on a comparison with data from Wahman et al. 2013.

Political regimes, 1971-2015

Competitive autocracies

Afghanistan 2014-2015; Albania 1991-2005; Algeria 2003-2015; Algeria 1995-1998; Armenia 1995-2015; Azerbaijan 1991-1993; Bangladesh 1986-1990; Bangladesh 1978-1981; Bangladesh 2009-2015; Bangladesh 1973-1974; Belarus 1997-1999; Bhutan 2008-2013; Brazil 1985-1986; Burkina Faso 1991-2005; Burundi 2005-2012; Cambodia 1993-2015; Cameroon 1993-2015; Central African Republic 2005-2010; Central African Republic 1993-2002; Chad 1997-2011; Colombia 1971-1990; Colombia 1996-2010; Comoros 1990-1998; Comoros 2002-2005; Congo Dem Rep 2006-2015; Congo Rep 1992-1996; Cote d'Ivoire 1990-2001; Cote d'Ivoire 2011-2015; Croatia 1991-1999; Dominican Republic 1990-1995; Ecuador 1971-1971; El Salvador 1993-1998; Fiji 2014-2015; Gabon 1990-2015; Gambia 1978-1984; Gambia 2002-2006; Gambia 1990-1993; Georgia 1991-2011; Ghana 1993-1996; Ghana 1971-1971; Ghana 1979-1980; Guatemala 2002-2005; Guatemala 1986-1995; Guinea 2003-2007; Guinea 2010-2015; Guinea-Bissau 1994-2015; Guyana 1987-1997; Guyana 1971-1975; Haiti 1995-2003; Haiti 2006-2009; Honduras 1982-1989; Honduras 2009-2015; India 1975-1976; Iraq 2010-2015; Jamaica 1981-1983; Kenya 1992-2015; Kosovo 2008-2013; Kyrgyzstan 2010-2015; Lebanon 2005-2010; Lebanon 1971-1974; Lesotho 1993-1994; Liberia 1997-2002; Macedonia 2012-2015; Macedonia 1991-2001; Madagascar 2014-2015; Madagascar 2001-2008; Malawi 1999-2011; Malaysia 2008-2015; Malaysia 1971-1981; Mauritania 2000-2004; Mauritania 2009-2015; Mexico 1980-1996; Moldova 1991-1993; Moldova 2004-2009; Montenegro 2006-2015; Mozambique 1994-2015; Myanmar 2013-2015; Nepal 2008-2013; Nicaragua 1985-1989; Nicaragua 2008-2015; Niger 1989-1999; Nigeria 1979-1982; Nigeria 1999-2015; Pakistan 2002-2015; Pakistan 1988-1998; Papua New Guinea 1992-2015; Paraguay 1990-1992; Peru 1995-2000; Philippines 2004-2008; Philippines 1971-1971; Russia 1996-2003; Senegal 1971-1992; Serbia 2014-2015; Serbia 1992-2000; Singapore 1971-2015; Slovakia 1993-1994; Solomon Islands 2004-2010; Solomon Islands 1989-1999; South Africa 1991-1994; South Korea 1986-1987; Sri Lanka 2005-2015; Sudan 1985-1988; Tajikistan 1991-1992; Tanzania 1995-2015; Thailand 1982-1990; Thailand 1993-1997; Thailand 2008-2013; Togo 2003-2015; Turkey 1971-1972; Turkey 1983-1987; Turkey 2013-2015; Uganda 2006-2015; Ukraine 2012-2015; Ukraine 1991-1993; Ukraine 1998-2005; Venezuela 2006-2015; Yemen 2010-2013; Yemen 1993-1996; Zambia 1991-2015

Hegemonic-party autocracies

Algeria 1999-2002; Angola 2008-2015; Azerbaijan 1994-2015; Belarus 2000-2015; Burundi 2013-2015; Cameroon 1988-1992; Central African Republic 1990-1992; Central African Republic 2011-2012; Chad 2012-2015; Congo Rep 2003-2015; Djibouti 1992-2015; Dominican Republic 1971-1978; Egypt 1976-1986; Egypt 2005-2010; El Salvador 1984-1992; Equatorial Guinea 1996-2015; Ethiopia 1995-2015; Gambia 1997-2001; Gambia 2007-2015; Guinea 1994-2002; Guyana 1976-1986; Indonesia 1998-1999; Kazakhstan 1994-2015; Kyrgyzstan 2000-2009; Liberia 1985-1989; Madagascar 1971-1971; Madagascar 1990-1992; Malawi 1992-1994; Malaysia 1982-2007; Mauritania 1993-1999; Mexico 1971-1979; Myanmar 2011-2012; Nepal 1991-2001; Paraguay 1971-1989; Philippines 1981-1986; Russia 2004-2015; Sierra Leone 1971-1976; South Africa 1971-1990; South Korea 1971-1985; Sudan 2005-2015; Tajikistan 1999-2015; Thailand 1975-1976; Thailand 1980-1981; Togo 1994-2002; Tunisia 1989-1993; Tunisia 1999-2011; Uganda 1980-1984; Uganda 2004-2005; Yemen 1997-2009; Zambia 1971-1972; Zimbabwe 1971-1977; Zimbabwe 1987-2015

Single-party autocracies

Albania 1971-1990; Algeria 1976-1991; Angola 1980-1990; Bulgaria 1971-1989; Burundi 1984-1986; Cambodia 1971-1978; Cameroon 1971-1987; Cape Verde 1975-1990; Central African Republic 1987-1989; Chad 1971-1974; China 1971-2015; Comoros 1979-1989; Congo Dem Rep 1971-1991; Congo Rep 1974-1991; Cote d'Ivoire 1971-1989; Cuba 1971-2015; Djibout 1977-1991; Egypt 1971-1975; Egypt 1987-2004; El Salvador 1971-1978; El Salvador 1982-1983; Equatorial Guinea 1971-1978; Equatorial Guinea 1982-1995; Gabon 1971-1989; Guatemala 1971-1981; Guinea 1971-1983; Guinea-Bissau 1974-1979; Haiti 1971-1985; Haiti 1993-1994; Hungary 1971-1989; Indonesia 1971-1997; Iran 1988-2015; Iraq 1979-2002; Kazakhstan 1991-1993; Kenya 1971-1991; Kyrgyzstan 1991-1999; Laos 1975-2015; Lesotho 1995-1997; Liberia 1971-1979; Madagascar 1975-1989; Malawi 1971-1991; Mali 1980-1991; Mauritania 1971-1977; Mongolia 1971-1989; Mozambique 1977-1993; Myanmar 1975-1987; Nicaragua 1971-1978; Niger 1971-1973; North Korea 1971-2015; Pakistan 1973-1976; Philippines 1978-1980; Poland 1971-1988; Portugal 1971-1974; Romania 1971-1989; Rwanda 1971-1972; Rwanda 1978-2015; Sierra Leone 1977-1991; Somalia 1980-1990; Sudan 1972-1984; Sudan 1997-2004; Syria 1972-2010; Taiwan 1971-1995; Tajikistan 1993-1998; Tanzania 1971-1994; Togo 1980-1993; Tunisia 1971-1988; Tunisia 1994-1998; Turkmenistan 1991-2015; Uganda 1990-2003; Uzbekistan 1991-2015; Vietnam 1971-2015; Zambia 1973-1990; Zimbabwe 1978-1986

Military autocracies

Afghanistan 1973-1977; Algeria 1971-1975; Algeria 1992-1994; Argentina 1971-1972; Argentina 1976-1982; Bangladesh 1975-1977; Bangladesh 1982-1985; Bangladesh 2007-2008; Benin 1971-1990; Bolivia 1971-1981; Brazil 1971-1984; Burkina Faso 1971-1990; Burundi 1971-1983; Burundi 1987-1992; Burundi 1996-2000; Central African Republic 1971-1986; Central African Republic 2003-2004; Chad 1975-1978; Chad 1984-1996; Chile 1973-1989; Comoros 1975-1978; Comoros 1999-2001; Congo Dem Rep 2003-2005; Congo Rep 1971-1973; Congo Rep 2002-2002; Ecuador 1972-1978; Egypt 2011-2015; El Salvador 1979-1981; Equatorial Guinea 1979-1981; Eritrea 1993-2015; Ethiopia 1974-1990; Fiji 1987-1991; Fiji 2000-2001; Fiji 2007-2013; Gambia 1994-1996; Ghana 1972-1978; Ghana 1981-1992; Greece 1971-1973; Guatemala 1982-1985; Guinea 1984-1993; Guinea 2008-2009; Guinea-Bissau 1980-1993; Haiti 1986-1992; Honduras 1971-1981; Iraq 1971-1978; Lesotho 1991-1992; Liberia 1980-1984; Libya 1971-2010; Madagascar 1972-1974; Madagascar 2009-2013; Mali 1971-1979; Mali 2012-2013; Mauritania 1978-1992; Mauritania 2005-2008; Myanmar 1971-1974; Myanmar 1988-2010; Nicaragua 1979-1984; Niger 1974-1988; Niger 2009-2010; Nigeria 1971-1978; Nigeria 1983-1998; Pakistan 1971-1972; Pakistan 1977-1987; Pakistan 1999-2001; Panama 1971-1990; Peru 1971-1979; Peru 1992-1994; Rwanda 1973-1977; Sierra Leone 1992-1995; Somalia 1971-1979; Spain 1971-1976; Sudan 1971-1971; Sudan 1989-1996; Suriname 1980-1987; Syria 1971-1971; Thailand 1971-1974; Thailand 1977-1979; Thailand 1991-1992; Thailand 2006-2007; Thailand 2014-2015; Togo 1971-1979; Turkey 1980-1982; Uganda 1971-1979; Uganda 1985-1989; Uruguay 1973-1984

Hereditary autocracies

Afghanistan 1971-1972; Bahrain 1971-2015; Bhutan 1971-2007; Ethiopia 1971-1973; Iran 1971-1978; Jordan 1971-2015; Kuwait 1971-2015; Lesotho 1987-1990; Morocco 1971-2015; Nepal 1971-1990; Nepal 2002-2005; Oman 1971-2015; Qatar 1971-2015; Saudi Arabia 1971-2015; Swaziland 1971-2015; United Arab Emirates 1971-2015