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Academic Freedom and the Quality of Democracy in Africa¹

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Abstract

This paper analyzes the relationship between academic freedom and democracy, more precisely the impact of past experience of politically active scholars on subsequent quality of elections and the accountability of the executive. The empirical analysis covers Africa in the period 1980-2018. As a politically heterogeneous and changing continent, Africa provides adequate variety to investigate the role of scholars in democratic consolidation after democratic transitions in the early 1990s. Using the Varieties of Democracy (V-Dem) database and the Generalized method of moments (GMM system) technique to estimate a dynamic panel model, our study finds a positive impact of academic freedom on democracy for a sample of 52 countries. We look in more detail at deviant cases with a counterintuitive relationship. The key finding is that this result is robust when we check the reversal causality and country-specific effects such as the initial level of democracy or the dependence on oil exportation. The study highlights the significance of scholars as a channel through which high levels of education supports democratic consolidation.

Keywords: academic freedom, democracy, elections

Introduction

Academic freedom is an essential ingredient of democracy. Accountability in decision-making requires freedom of expression, public access to knowledge and freedom to generate evidence-based knowledge. Indeed, indicators measuring freedom of expression, including that of academics, are standard components of democracy indexes and rankings. The relationship between education and democracy is also well recognised: high educational standards are one of the basic conditions for sustaining a democracy (Lipset, 1959). Less attention has been paid to the causal relationship between academic freedom and democratic transition and consolidation. Yet, the introduction and implementation of legislation allowing political competition and popular participation requires expertise beyond common knowledge, and expertise that covers local conditions. Democratic reforms cannot be realized over-night. They need to be monitored, assessed and adjusted, while skills, advice and criticism based only on the experiences of other societies is hardly enough.

Our assumption is that the ability of scholars to participate in political discussions in their home countries contributes not only to the competence of democratic decision-making but also to the quality and resilience of democratic institutions. Freedom to develop and disseminate knowledge through research and education on the functioning, form and content of democracy sustains its institutions and prevents major setbacks. Furthermore, as research work itself, not to mention research training and higher education, takes time, our theory is that the higher the level of academic freedom before and at the time of transitions from authoritarian one-party, non-party or military rule to parliamentary multi-party rule, the better the prospects of its consolidation. We test the influence of the level of academic freedom preceding democratic transitions on the subsequent conduct of elections and accountability of the executive, which we take as essential features of democratic rule, and which according to the existing literature seem to be the most critical ones in the African context.

Africa is a particularly suitable region to investigate the relationship between academic freedom and the quality of democratic institutions. This is firstly because virtually the whole continent was affected by democratic transitions simultaneously within a relatively short period, secondly because the transitions were inclusive affecting both state-controlled and market-oriented economies, and thirdly because of the political volatility and heterogeneity that has followed. Although electoral political competition has long roots in Africa, the end of the Cold War brought the rules and rationale of liberal democracy to the center of public debates in Africa like in no other continent. This is not to deny the importance of the same issues elsewhere and the global challenges posed by autocratization (Daly, 2019). Quite the contrary, we do not think that democracy and its conditions in Africa are exceptional. Rather we think that Africa is exemplary and the dynamics of democratic consolidation that can be observed there have general relevance.

What is exceptional is the African experience: before 1990, only a few African countries implemented multiparty systems, but by 1995 de jure one-party or non-party systems had become exceptions. As the transitions occurred rapidly and in very different political and socio-economic conditions, the outcomes also varied. By 2020, the level of democracy was still low in Africa, and its democratization had stagnated although not as dramatically reversed as in other continents (see V-Dem). Electoral violence (Laakso, 2019) and “constitutional coups” extending the tenure and powers of the executive (Reyntjens, 2020) appeared as typical setbacks to democracy in Africa. These are also examples of setbacks where academics with their knowledge could have a say.

A large part of the literature analyzing constraints of democracy and authoritarian rule in Africa builds on comprehensive “grand theories” of African otherness. The focus has been on factors and contexts distinguishing Africa from the rest of the world and the West in particular: neopatrimonialism, weak state institutions and political economy of dependency. Research, however, has also noted simple causal effects of historical events or features. Wantchékon and García-Ponce (2013), for instance, argue that countries that experienced high levels of urban protests during anti-colonial movements have developed more democratic institutions than those that faced rural insurgencies. Coulibaly and Omgba (2019) show that democratic consolidation has been most likely in countries with large diasporas at the time of the democratic transitions.

This study, too, looks at the impact of past experiences on the level of democracy. We refer to the above-mentioned relationship between education and democracy by looking at politically active scholars as a channel through which high levels of education supports democracy. We provide evidence of this channel through empirical tests. In a sample of 52 African countries, our empirical analysis shows that the level of academic freedom over the period 1980-2008 had a positive and significant relationship with the level of democracy for the period 1990-2018.

The remainder of this article is structured as follows. Section 2 presents a brief overview of the literature of democratization in Africa, and section 3 discusses approaches to academic freedom. Sections 4 and 5 describe our econometric model and data, and section 6, 7 and 8 present and discuss the results as well as the robustness checks and deviant cases. Finally, section 9 concludes and raises new research questions.

Democracy and its Limits in Africa

Bratton and van de Walle (1997) presented the first systematic attempt to understand the democratic transitions in Africa between 1989 and 1994 (using Freedom House data), when 23 formerly one-party states held their first multi-party elections. The authors focused on neopatrimonialism and clientelistic relations in the use of state resources for political support as a constraint for political rights, but also noted the positive impact of experiences of political competition prior to 1990. Their overall view of

democratic consolidation in Africa, however, was pessimistic. And indeed, their research question, why some countries seem to succeed in democratization while others fail, has remained pertinent. International comparative databases, such as Freedom House, V-Dem and the Polity project, for instance, as well as Afrobarometer surveys of public opinion on the level of democracy, show prevailing heterogeneity in the African experience. Ghana with its experience of military rule has succeeded in its democratic transition, while Zimbabwe has remained authoritarian in spite of its longstanding multiparty system, and democracy is threatened in Senegal, one of its strongholds in Africa, just to give a few examples.

In their comprehensive overview of the first two decades of democratization in Africa, Lych and Crawford distinguish several areas of simultaneous progress and setbacks: increasingly illegitimate, but still ongoing military rule; regular elections and democratic institutionalization, but personal rule and corruption; political parties with policy programs, but identity based mobilisation; vibrant civil societies, but high levels of violence; economic growth, but poverty; and donor community promoting democracy, but supporting authoritarian regimes (Lych & Crawford, 2011: 276). Explaining such variety has no doubt been difficult.

In 2006, Bratton with Chang investigated this heterogeneity with the considerable differences in state capacity and rule of law which they measured by using Afrobarometer survey data and the World Bank Institute's governance indicators. Not surprisingly, the correlation between levels of democracy and these two was high, but instead of one-way causality, the authors acknowledged the constant interaction of state structures and democratic procedures (Bratton & Chang, 2006). A weak state, rather than being a factor explaining a low level of democracy, appears to be a phenomenon related to it. Similarly, van Cranenburgh observed a link between concentration of powers in the executive presidency, the "Big Man" rule, and democratic breakdowns (Cranenburgh, 2008).

Researchers have also critically pointed to the importance of economic development, most importantly income inequality and dependency on aid from the West as major hindrance for the democratic empowerment of African people (Ake, 2000, Mkandawire, 2010). Peiffer and Englebert (2012) measured the different mixture of the external relations and economic dependency of the African countries and showed how "extraversion vulnerability" was associated with democratic transitions and consolidations between 1995 and 2011. A political economy approach includes discussion of the so called "resource curse" as a negative correlation between natural resources and democracy (Jensen & Wantchékon, 2004). Resource-poor countries, like Mozambique and Benin, have succeeded better in democratic transformations than resource-rich ones like Angola or Gabon. On the other hand, Botswana, whose economy is heavily dependent on the earnings generated from diamond mining, is one of the most

stable democracies in Africa. Dependency on oil wealth appears particularly to correlate with autocratic regimes (Arezki & Gylfason, 2013, Anyanwu & Erhijakpor, 2013).

What is clear, however, is that the wave of democratization in the 1990s opened up the possibility for institutional change in the form of political competition in Africa (e.g. Acemoglu & Robinson, 2001, Bruckner & Ciccone, 2001, Aidt & Leon, 2015). In order to understand the nature of this change, it is useful to look at two challenges it involves, which are also highlighted in the literature.

The first one concerns the limitations of elections to promote democracy (Cheeseman, 2015). While electoral violence, for instance, is not rare in political competition undergoing major transformations, one would assume that repeated rounds of multiparty elections would make them increasingly peaceful. This has not been the case in Africa although variation between African countries, within countries and even from one election to another, is high. According to Burchard, in the early 1990s 86% of African elections witnessed violence. Since then the percentage has been around 50%, while the international figure is below 20% (see Burchard, 2015: 11). Pre-election violence usually relates to the strategies of the government and its supporters to manipulate the process, while post-election riots typically follow as spontaneous reactions of the disappointed losing opposition (Linke et. al. 2015, Ojoka & Acolb, 2017, Soederberg Kovacs & Bjarnesen, 2018). Electoral violence, thus, manifests the intensity of political competition and the ongoing struggle for democracy.

The second challenge relates to the great powers of the executive and the lack of separation between the legislative and executive branch of government, which is exacerbated by dominant party systems (Cranenburgh, 2009). A recurrent phenomenon in this regard has been constitutional change prolonging the rule of political leaders (Reyntjens, 2020). Examples include Cameroon, Djibouti, the Republic of Congo, Burundi, Rwanda and Uganda. Nothing better manifests a setback in the accountability of the executive than the removal of term limits for the head of state by the incumbent regime. Although a change of constitution as such follows democratic law as the regime is using its electoral mandate, it violates the democratic principle, if this is done to extend the powers or prolong the term of the incumbent. The African Charter on Democracy, Elections and Governance (in force since 2012, but not signed and ratified by all member states of the African Union) in fact stipulates that if you change the constitution, it should be for your successor, not for yourself.

What becomes interesting then is neither the intensity of the political competition nor all the legal and illegal strategies the competing parties, groups or 'big men' and their supporters might have, but how this competition is understood, monitored and controlled in the society at large. Our aim below is not to contribute to the vast literature on democratic consolidation and decay in Africa by showing yet other root causes for the observed trends. Instead, we want to analyse human agency in the political developments as the capacity of societies to respond to concrete challenges of democratic rule in Africa.

Why Academic Freedom?

In the introduction of this article, we referred to Lipset (1959), for whom the relationship between education and democracy was part of wider socioeconomic development. Our aim, however, is not to go deeper into the framework of modernization and its critics, but only to acknowledge first that education is important for democratization, and secondly that Africans are increasingly educated. The causality is not clear however. Acemoglu et al. (2005) argue that the cross-sectional relationship between education and democracy is driven by omitted factors influencing both education and democracy. When controlled by country-specific effects, the positive correlation disappears. Castelló-Climent, in turn, has found that an increase in the education of the majority of the population is more significant for democratic consolidation than the average years of schooling, suggesting that “the implementation and sustainability of democracies need the support of the majority of the society” (Castelló-Climent, 2008: 189).

However, the mere statement that citizens with high levels of education are effective at sustaining democratic institutions, does not explain how this happens. Educated citizens might be likely to obey democratic rules, but they can also be skilled at creating new ones; they might be eager to participate in decision-making, but they can also trust those who have been elected to make decisions. Our starting point is that of the critical school: an essential element in democracy is that decision-making can be criticised, problems can be discussed and corrections, when needed, can be suggested and implemented. In this we follow the argument presented by Higgins for the defence of the humanities and social sciences in South Africa as these “constitute the very ground of educational possibility, the substance of both efficient and reflexive communication, as well as a significant element in critical and creative thinking” (Higgins, 2014: 80). Education of the majority is a necessary but not sufficient precondition for such democratic capacity. Also important is the responsibility of intellectuals “to speak the truth to power” (Said, 1994: 97). That, in turn, requires academic freedom: teachers, students and researchers need to have the right to learn, to produce and to disseminate knowledge related to all sectors of public decision-making. What is decisive for sustaining competence in “mature democracies” like the United States (Post, 2012), can be assumed to be even more so in societies in the process of democratization.

Studies of threats to academic freedom in the West have shown that freedom of expression related to political issues is essential for a researcher to have impact. Bryden and Mittenzwei, for instance, analysed cases where policymakers had interfered in the publication of research results, and concluded that freedom of speech for researchers is the best protection for the public interest. “This seems to be the case whatever position one takes on the logic of the policy process, and the role of the researcher, in a democracy” (Bryden & Mittenzwei, 2013: 327). Similarly, Cole suggests a broad perspective on academic freedom, not only as freedom to choose research topics and methods: “Its existence will allow

us to measure whether democratic ideals and adherence to principles of individual liberty and free expression really exist within a society” (Cole, 2017: 862). Interestingly Cole, however, notes that this should not be understood as a causal relationship (Cole, 2017: 867).

The experiences of African scholars, as described in the literature, have been mixed. After independence universities and higher education were “widely viewed as a route to national liberation” (Mama, 2006: 5). Research on democracy and political participation, however, was regarded by African governments as “irrelevant” and “unfair” (Oyugi ed., 1989). The end of the 1980s brought a change. Mobilization against economic adjustment policies and authoritarianism witnessed the emergence of new civil society coalitions also involving intellectuals (Mkandawire, 2005). In 1990, the Council for the Development of Social Science Research in Africa (CODESRIA) and Africa Watch arranged a conference in Kampala, which resulted in the *Kampala Declaration on Intellectual Freedom and Social Responsibility*. It stipulated for example that “[t]he intellectual community has the responsibility to struggle for and participate in the struggle of the popular forces for their rights and emancipation.” In the conference proceedings, Diouf noted that the political transitions in Africa had highlighted the importance of academic freedom (Diouf, 1994: 335).

A survey by Appiagyei-Atua, Beiter and Karran of the legal and statutory protection of academic freedom in African universities shows great variety across countries not least in terms of the availability of data. The authors ranked 44 countries for which they were able to collect information on at least three out of their five indicators. The lowest scores were given to countries like Eritrea, Gabon and Zambia, which are also low in democracy measurements, while South Africa, Cape Verde and Ghana, which perform well in democracy measurements, were highest (Appiagyei-Atua, Beiter & Karran, 2016: 19-20). The legal and formal setting, however, is only one dimension of academic freedom. Grimm and Saliba discuss at length the multiplicity of different emphases of academic freedom in the literature and argue that difficulties defining it unambiguously as well as measuring it have hindered its recognition “as a normative value and right on its own” (Grimm & Saliba, 2017: 48). Freedom House and V-Dem, however, provide longitudinal worldwide data based on expert views and surveys. This is also the case with the new V-Dem index, introduced in 2020, which, however, consists of a wider range of indicators than the previous measurements (Spannagel et al., 2020). In assessing the impact of intellectuals on the transition and consolidation of democracy, it is the ability and space of scholars to take part in political discussion that matters.

The Econometric Model

Our study differs from earlier studies on the consolidation of democracy, including studies which have looked at the impact of education in general. By contrast, we are looking at the delayed effects of

academic freedom. We propose that education supports democratic transition through the channel of intellectuals and academic freedom. Our study, thus, differs also from earlier studies on academic freedom. We are not looking at the content of academic freedom or threats to it. Neither is our aim to show the role that democracies play to sustain academic freedom. Furthermore, unlike micro studies related to academic freedom, such as Higgins (2014) on South Africa, our study is covering a whole continent, and as an explanatory variable, we will focus on academic freedom during the years preceding the democratic transition, and the early years of democratization, not on the contemporary levels. We will approach the level of democracy in terms of the quality of elections and the accountability of the executive. In other words, we suggest that scholars' ability and efforts in raising the awareness and capacity of future electors and governance lead towards fair and free elections and checks and balances to the use of government power.

We refer to Acemoglu et al. (2001) and Castelló-Climent (2008) that focused on the relationship between education and democracy by estimating a similar dynamic model, as follows:

$$Qual. ELECTION_{i,t} = \alpha_i + \beta_1 Qual. Election_{i,t-1} + \beta_2 Academic. Freedom_{i,t-10} + \delta School. Enrolment_{i,t} + \alpha_i + \varepsilon_{i,t} \quad (1)$$

The variable *Quality of elections* is lagged for one period in order to capture the characteristic of persistency in quality of elections. β_2 is the coefficient of interest and consists in capturing if the indicator of *Academic Freedom_i and cultural expression* lagged by ten years contributes to better quality of elections. *School. Enrollment* is the ratio of total enrolment corresponding to the level of education in tertiary. $\varepsilon_{i,t}$ is included to control for country-specific effects, i is the country, t is the period from 1990-2018. The higher the indicator of academic freedom in the past, the better the current quality of elections. Thus, we expect a positive and statistically significant coefficient of β_2 .

The main advantage of estimating a panel model is that it makes it possible to control for unobservable variables that are country-specific, and whose omission may trigger biased estimated coefficients in a pure cross-sectional regression. The first difference Generalized Method of Moments (GMM) technique suggested by Arellano and Bond (1991) is the most suitable approach used to estimate a dynamic panel data model. While the GMM-difference technique is able to deal with issues of unobservable heterogeneity, it may not be necessarily an efficient method to estimate Eq. (1) due to the persistency effect of the variable of interest in the equation. Although the variables vary significantly between or across countries, they remain unchanged and quite stable within country for consecutive years, not the entire period. For instance, all the countries in our sample display the same value of quality of elections and of academic freedom for many consecutive years within the period under scrutiny, which

implies that the variation in the quality of elections and the electoral law during this period is low for our sample. Thus, by applying the GMM in first difference most of the variation in the data across countries disappears. This may surge the measurement error bias by mounting its variance relative to the variance of the true signal (Griliches & Hausman, 1986). Furthermore, it is well known that when the explanatory variables hold persistency such as in our model, the lagged levels of these variables are weak instruments for the differences (Blundell & Bond, 1998). They reveal that in a small-size sample, the deficiency of weak instruments turns into a large finite sample bias.

Consequently, it is preferable to explore an econometric technique that captures the bulk of variation in the data and improves the quality of the estimated coefficients. For this end, we explore the System GMM estimator, which does not only estimate the equations in first differences, but also estimates equations in levels that are instrumented with lagged first differences of the corresponding explanatory variables. In order to explore these additional instruments, there is a need to identify an assumption that the first differences of the explanatory variables are not correlated with the unobserved specific effect. Although the specific effect may be correlated to the explanatory variables, the correlation is supposed to be invariant over time. Thus, the additional moment condition for the equation in level is:

$$E[\Delta y_{i,t-1}(\alpha_i + \varepsilon_{i,t})] = 0$$

Where $y = [Quality\ of\ Election]$

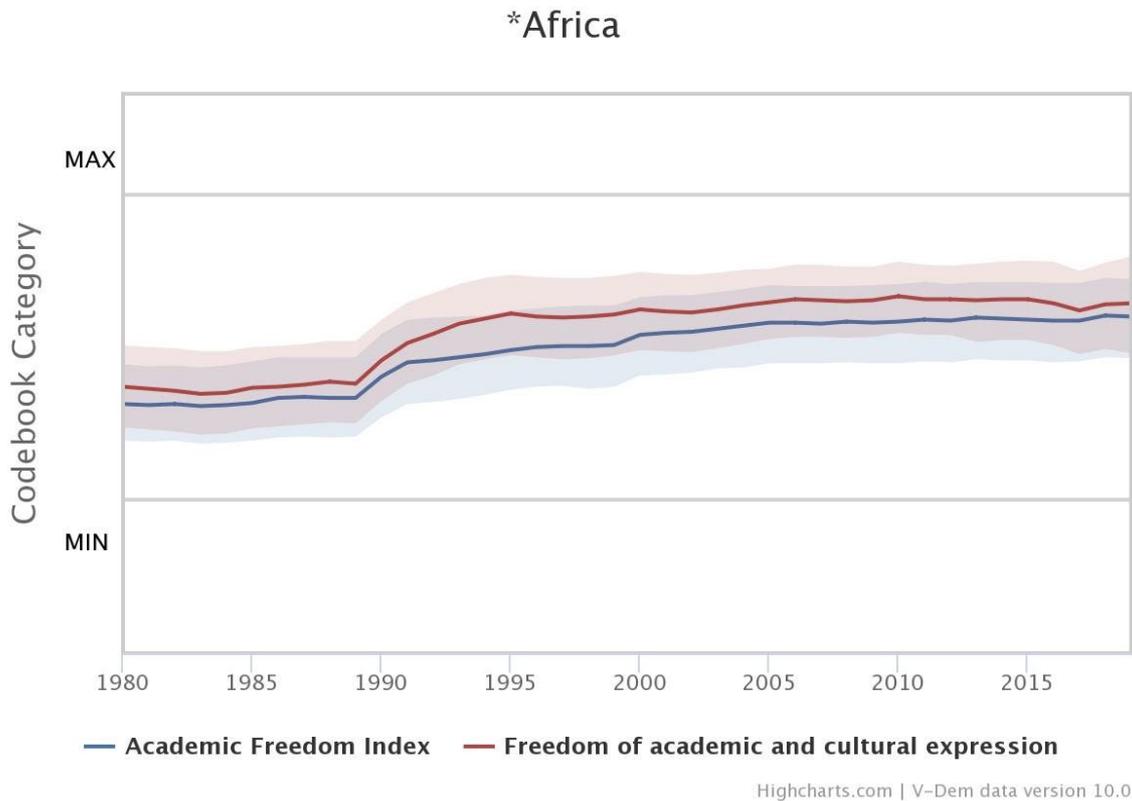
The Monte Carlo simulations show that the System-GMM estimator is better than the first-differences GMM, as long as the additional moment conditions are valid. We check the validity of the moment conditions by referring to the well-known test of over-identifying restrictions of Sargan–Hansen and by testing the null hypothesis of which the error term is not serially correlated (Sargan, 1958). Moreover, we check the validity of the additional moment conditions related with the level equation exploiting the Sargan–Hansen test.

The Data

The measures of academic freedom and level of democracy used in this paper are taken from the Varieties of Democracy (V-Dem) database, which provides a multidimensional collection of indicators of democracy. For academic freedom, we are using the index *Academic freedom and freedom of cultural expression related to political issues*. It provides better coverage of all African states than the *Academic freedom index* released in March 2020, which in addition to freedom of expression also includes institutional aspects (see Spannagel et al., 2020). Figure 1 shows the correlation between the two variables and the overall trend after 1980. The average level of academic freedom in Africa increased sharply at the time of

democratic transition, but has remained relatively stable since then. However, as already mentioned, disparities across countries are high.

Figure 1. Academic freedom trend in Africa



The *Academic freedom and freedom of cultural expression related to political issues* index ranges between 0 and 4. A low level indicates restrictions by the government, a high-level full respect of the freedom (see Appendix). As already noted, for our analysis the variable is lagged by ten years.

The *Clean elections index* ranges an interval from low to high (0-1) indicating free and fair elections, absence of election violence, government intimidation of the opposition, vote buying and other irregularities. *Judicial constraints on executive* (0-1) measures respect of the constitution, compliance with court rulings, and independence of the judiciary. *Range of consultation* (0-5), in turn, reflects the range of consultation with experts and stakeholders. *Executive respect constitution* (0-4), measures respect of the constitution by the head of state and ministers (see Appendix for a more detailed description).

As can be seen in Table 1, all the democracy indicators increased during the post-Cold War period. Most significantly, in 1990 the average *Clean elections* index in Africa was 0.216 with a standard deviation of 0.223, while in 1995 the average value was 0.318. The variance of all the indicators reveal divergent developments in different countries: some countries shifted successfully from autocratic systems to democracy, while others failed.

Table 1. Democracy transition in Africa

Index	year	Mean	Std.dev	Minimum	Maximum
Clean elections index	In 1990	0.2164	0.2236	0.0000	0.9138
	In 1995	0.3185	0.2737	0.0000	0.9062
Judicial constraints on executive	In 1990	0.4209	0.2444	0.000	0.9167
	In 1995	0.4735	0.2593	0.2789	0.9257
Executive respect constitution	In 1990	0.8595	0.4040	0.2477	1.6453
	In 1995	0.9082	0.4309	0.0547	1.6594
Range of consultation	In 1990	1.0865	0.7274	0.0769	2.7941
	In 1995	1.2383	0.6877	0.1886	2.7941

Finally, *School enrolment* in our model refers to the ratio of total enrolment of the age group that corresponds to the tertiary level of education. The tertiary level requires completion of secondary level education. The variable is provided by World Development Indicators (WDI, 2019). As shown in Figure 2 the ratio has grown rapidly from a low level. It is noteworthy, however, that in 2018, Africa, with the level of 17%, still lags behind the world average of 38% (WDI, 2019). Figure 3 shows that the level of school enrolment does not have a clear linear relationship with the clean elections index.

Figure 2. School enrollment in tertiary level in Africa 1980-2018

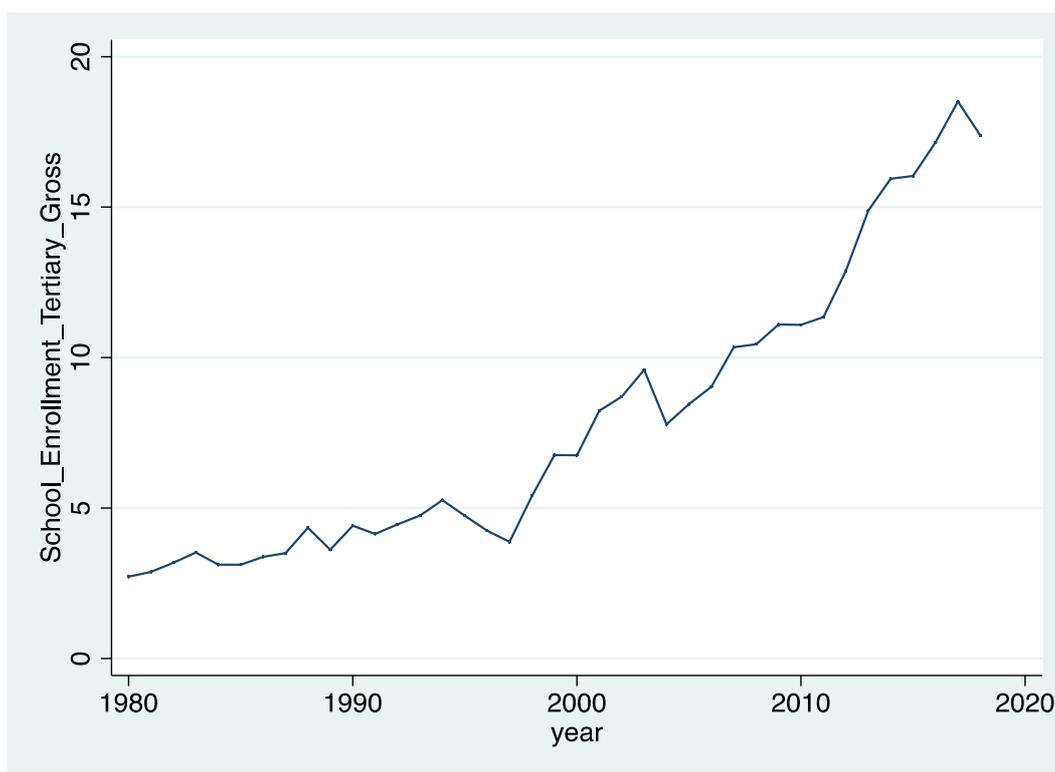
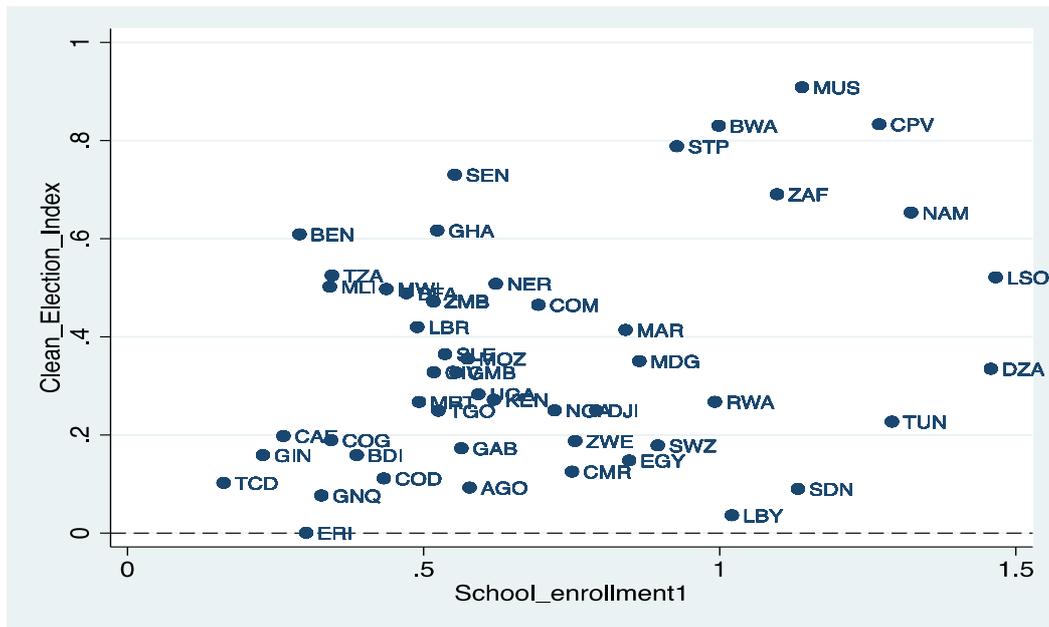


Figure 3. School enrolment and clean elections



Results

As initial evidence, Figures 4-7 below reveal the correlation between the variables of interest, the democracy indicators averaged over the period 1990-2018 and academic freedom averaged for the preceding period 1980-2008. Broadly, the figures show positive correlations, with all indicators: clean elections, range of consultations, executive respecting constitution and with the judicial constraints on the executive.

Figure 4. Clean elections and preceding academic freedom

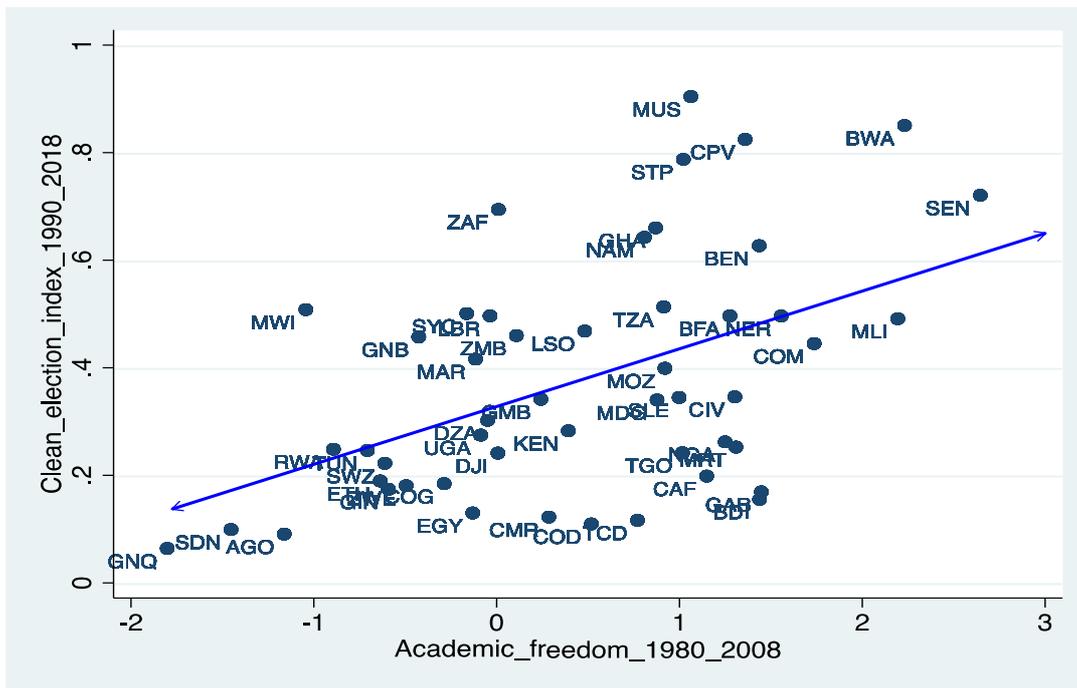


Figure 5. Executive respect constitution and preceding academic freedom

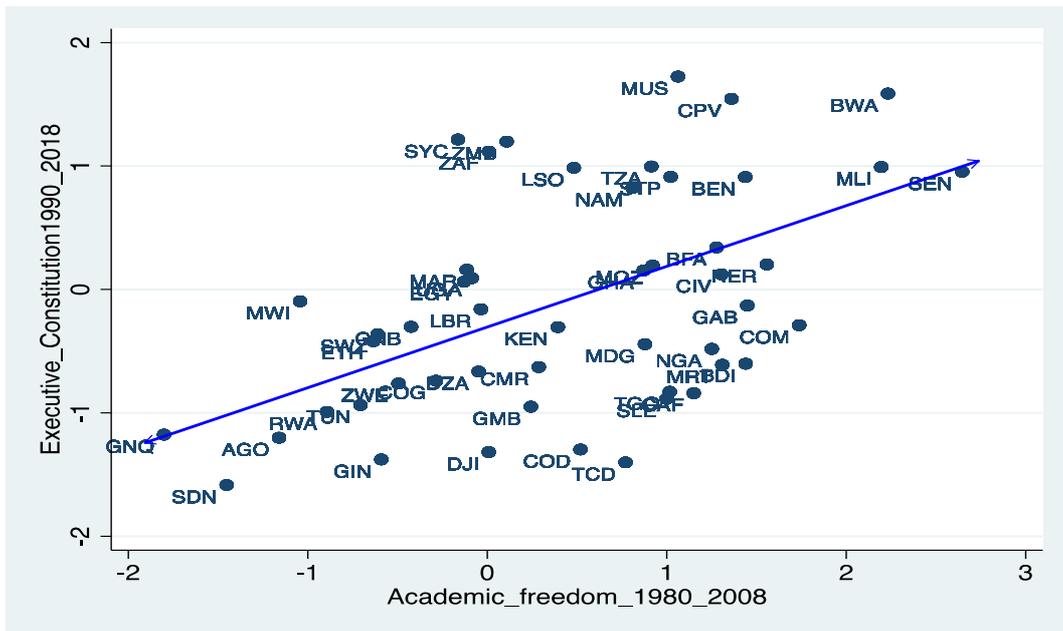


Figure 6. Range of consultation and preceding academic freedom

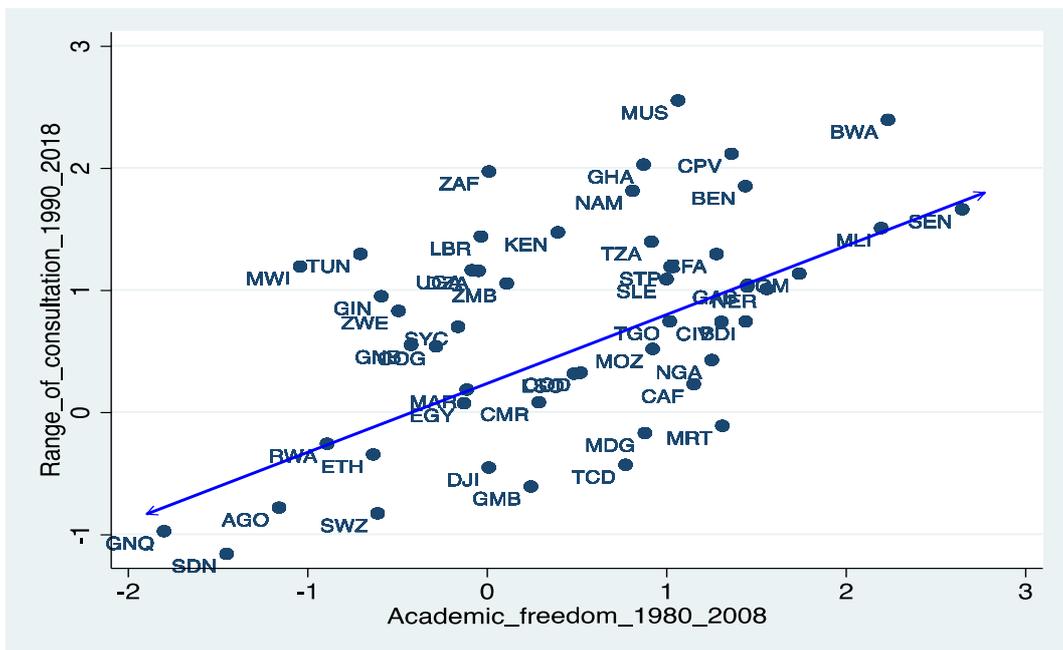


Figure 7. Judicial constraints on the executive index and preceding academic freedom

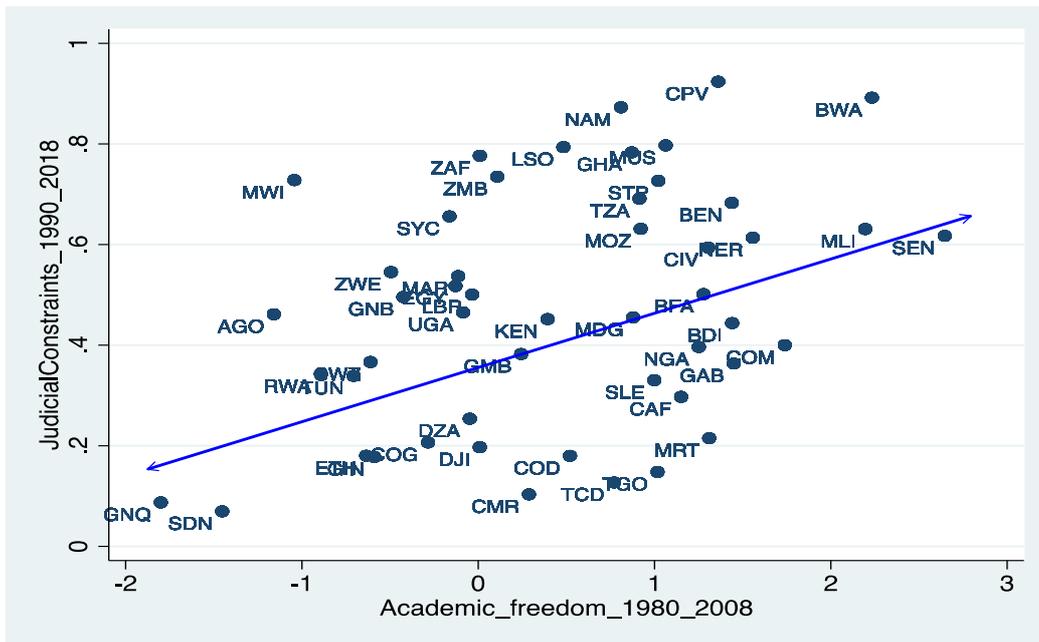


Table 2 shows the results from estimating Eq. (1) under different specifications and assumptions regarding the error term. Column (1) presents results of the Pooled OLS (without controlling for country-specific effects). Thus, the estimated equation assumes that $\alpha_i = 0$. In line with our expectation, the results reveal that the correlation between the clean elections index and academic freedom and cultural expression related to political issues is positive even though it has low statistical significance. This suggests that the higher the level of academic freedom, the better the quality of elections after democratic transition. This result holds if we control for school enrolment at the tertiary level (column 2).

The results, however, change when controlling for the country-specific effects using the fixed-effect and the first-difference GMM estimators. When we apply the fixed-effect estimator, we lose observations and the magnitude and significance of the coefficient of academic freedom decreases substantially. The lagged value of the clean elections index remains comparable to the other specifications (column 2). We obtain the same results with the difference GMM estimator (column 3). This implies that the relationship between academic freedom and the quality of elections can be driven by country specific effects. In an analysis that focused on a similar, although not identical relationship, between education and democracy, Acemoglu et al. (2005: 183) argue that “this strongly suggests that the cross-sectional relationship between education and democracy is driven by omitted factors influencing both education and democracy rather than a causal relationship”. An alternative interpretation, however, is that when the variable of interest shows persistency, i.e. the variable remains stable for consecutive years, and can be measured with errors, the fixed effect is not an appropriate estimator. It may trigger the measurement error bias by exploring the within country variation in the data. Furthermore, the first-difference GMM

estimator may raise an issue of weak instruments. Furthermore, the first-difference GMM estimator is not a suitable technique to tackle bias issues and problems of weak instruments. Hauk and Wacziarg (2006), for instance, argue that human capital accumulation reveals a sizeable negative biased effect on growth in Monte Carlo simulations due to weak instruments. When the model includes persistent variables within which the variation is very low, the gains from reducing omitted variable under fixed-effects are more than offset by an increase in the exacerbation of the measurement error bias, which makes using the fixed effect estimator in this context unadvisable (Castello-Climent, 2008).

We explore the system-GMM estimator, which is more appropriate to control for country-specific effects. In addition, when considering cross-country variation in the data, the results are similar to our expectations and do not reject our null hypothesis. The results confirm the positive impact of academic freedom and cultural expression on the quality of elections. As shown for both specifications in column (4), the coefficient of academic freedom is positive, more sizeable and strongly significant at the level of 1% compared to the previous specifications. The result is robust when we control for the level of school enrolment.

Table 2. Clean elections and preceding academic freedom

Variables Dependent variable: Clean elections index	Pooled OLS		Fixed Effect	GMM diff	GMM system		Different samples GMM system			
	1	2			3	4	(5) Authoritarian	(6) Non-oil	(7) MI (LMI & UMI)	(8) LI
Clean elections index _{t-1}	.817*** (0.014)	.898*** (0.023)	.721*** (0.028)	.694*** (0.056)	.875*** (0.021)	.866*** (0.045)	.668*** (0.086)	.745*** (0.065)	.517** (0.198)	.865*** (0.079)
Freedom of academic and cultural expression t-10	.007* (0.002)	.007* (0.004)	.002 (0.006)	.014 (0.032)	.038*** (0.009)	.022*** (0.008)	.058*** (0.024)	.011*** (0.027)	.071** (0.028)	.062** (0.029)
School enrolment		.005 (0.009)	.015 (0.010)	.028 (0.022)		.014 (0.012)	.005*** (0.001)	.018 (0.020)	.148** (0.061)	.009 (0.023)
Constant	.035*** (0.005)	.042*** (0.009)	.105 (0.012)							
R ²	0.87	0.86	0.86							
Countries	53	49	49	47	53	49	41	42	28	25
Observations	1431	646	646	487	1404	646	559	587	320	302
AR(1)				0.002	0.000	0.000	0.000	0.000	0.016	0.000
AR (2)				0.475	0.326	0.392	0.640	0.497	0.451	0.423
Sargan-Hansen test				0.128	0.463	0.168	0.317	0.181	0.177	0.549
Difference in Sargan-Hansen					0.316	0.098	0.160	0.723	0.847	0.333

Robust standard errors in parenthesis, ***, ** and * are 1, 5 and 10% significance level respectively. Results from column 1 to 4 use different econometric tools. MI: middle-income includes low-middle income and upper middle-income countries. LI: low income

In sum, this preliminary result highlights the role of scholars in fostering democratic values. Even when controlling for fixed omitted variables, respect of academic freedom supports free and fair elections.

Robustness

To examine the robustness of the results, we first exclude countries that were classified as democracies with free and fair elections already at the beginning of the period to detect reverse causation. Then, we address whether a respect of academic freedom and cultural expression related to political issues has had a positive and significant effect on the quality of elections in countries that introduced multi-party-political systems during the period. Thus, in column (5) we include only the countries that enter the sample as autocracies in accordance to the classification of Bratton and van de Walle (1997, List of countries see Appendix). The coefficient of academic freedom is positive and significant at the level of 1%. Its magnitude increases dramatically in comparison to the previous specifications. Even though the actual relationship between academic freedom and democracy is interactive, the level of academic freedom in those countries cannot be interpreted as a result of their democracy.

Next, we exclude oil-exporting countries from the sample (as was done also by Castelló-Climent, 2008). Although the number of countries where oil revenues account for more than 35% of their exports is only six (see Appendix) removing them from the sample may change the results. As is shown in the literature, over-reliance on oil revenue supports authoritarian rule, but can also make the countries politically unstable (Ross, 2001, Bjorvatn & Farzanegan, 2015). This means that possible improvement in the quality of elections in these countries may be due to other factors than respect of academic freedom and cultural expression. As displaced in column (6), the estimated coefficient of academic freedom and cultural expression remains positive and significant at the level of one percent. This suggests that our main finding has not been affected by the specific features of these economies.

Finally, in the last two columns we examine whether the relationship between academic freedom and quality of elections depends on the level of income (World Bank classification), which we consider as a proxy for the level of the country's economic development. The results show that the positive relationship between academic freedom and quality of elections holds (column 7 and 8). The level of income, however, plays a role. The coefficient is slightly stronger in upper and lower middle income countries with an estimated coefficient of 0.071 compared to 0.062 in low income countries.

Our other robustness checks relate to the aforementioned V-Dem indicators measuring accountability of the executive: judicial constraints, respect of constitution and range of consultation. Table 3 shows that the coefficient of academic freedom for these specifications is positive and highly significant, corroborating the above assumption.

Table 3. Robustness checks-using different alternatives of democracy-GMM system

	Judicial constraints	Executive respect constitution	Range of consultation
Dependent variable $t-1$	0.973*** (0.015)	0.321*** (0.0081)	0.603*** (0.091)
Freedom of academic and cultural expression $t-10$	0.012*** (0.004)	0.424*** (0.045)	0.188** (0.073)
School enrolment	-0.005 (0.004)	0.044 (0.057)	0.105*** (0.031)
All variables	All variables	All variables	All variables
AR (1)	0.000	0.007	0.000
AR (2)	0.946	0.454	0.845
Sargan-Hansen test	0.700	0.100	0.100
Difference in Sargan-Hansen	0.410	0.121	0.891

Robust standard errors in parenthesis, ***, ** and * are 1, 5 and 10% significance level respectively. Results from column 1 to 4 are robust using alternative measure of the dependent variable.

Deviant Cases

Our results also identify some deviant cases with a counterintuitive relationship between academic freedom and democracy. Figure 4 of the correlation between the variables shows that the clean elections index of countries such as Nigeria, Gabon, Algeria, Chad, Cameroon, Democratic Republic of the Congo, Central African Republic (CAR), Mauritania and Burundi was lower than the African average with the same level of preceding academic freedom. The first five are all oil-exporting countries, although only the two first ones are dependent to the extent that they were included in our robustness check above. However, intense political competition in all these countries can explain electoral irregularities in spite of academic freedom. Central African Republic and Mauritania share the experience of military rule and coup d'états following the democratic transition of the early 1990s: CAR in 2003 and 2013, Mauritania in 2005 and 2008, making them exceptionally unstable. As a country of renowned culture of Islamic scholarship, Mauritania also experienced the Arab spring popular uprisings of 2011. The regime, strongly influenced by the military, responded to the largely urban unrest by strengthening its rural support and co-optation of youth leaders (Buehler, 2015). CAR, in turn, has been affected by decades long regional conflicts (Ahmadou & Handy, 2010). Rampant insecurity has paralyzed its civil administration including the sector of higher education to the extent that assessment of academic freedom there is probably not fully comparable to most of the other African countries.

Cape Verde, Malawi, Mauritius, Sao Tome and Principe, Namibia, South Africa and Ghana, in turn, hold higher levels of clean elections index than would have been expected by the average preceding academic freedom index. The relatively high quality of elections in the first four is likely to stem from the fact that these countries were liberal multi-party systems already before the democratization period under investigation (Bratton & Van de Walle, 1997). South-African as well as Namibian transition processes are unique, as these do not relate to party-systems or electoral competition as such, but to a

more fundamental issue of abandoning the racist apartheid legislation and introduction of universal suffrage, which was preceded by long national and international struggles. Thus, also democratic consolidation in these countries shows different dynamics.

In order to look at the two most puzzling cases, Ghana with an exceptionally high level of democracy and Burundi from the other end of the spectrum, in more detail, figures below show the relationship between the current values of academic freedom and the clean elections index in these countries over the whole period under our investigation, 1980-2018.

Figure 8. Clean elections and academic freedom trends in Ghana

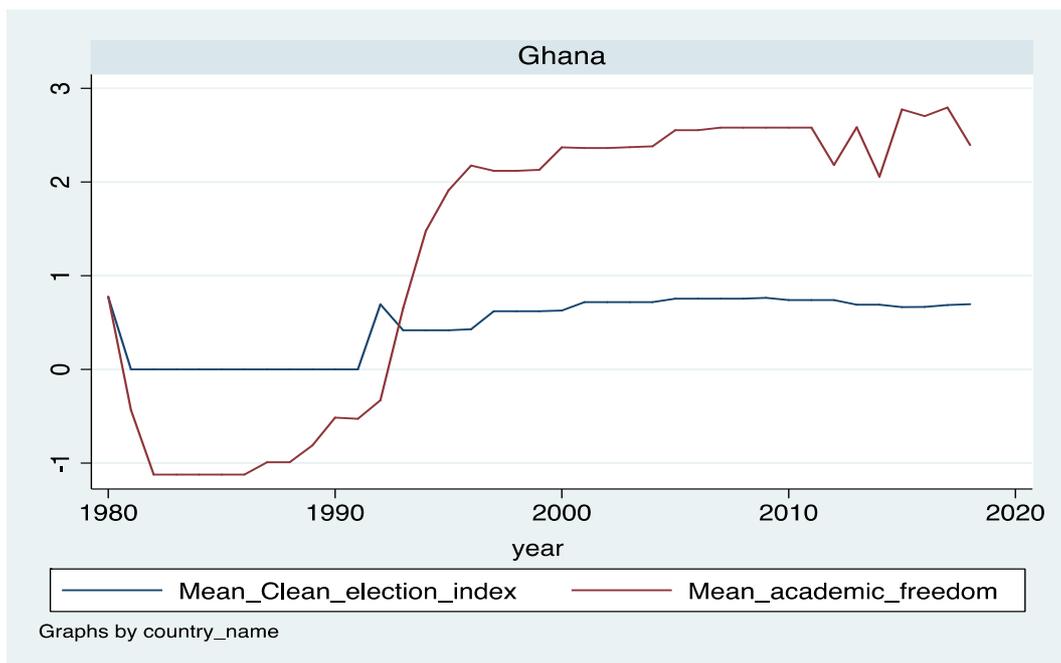
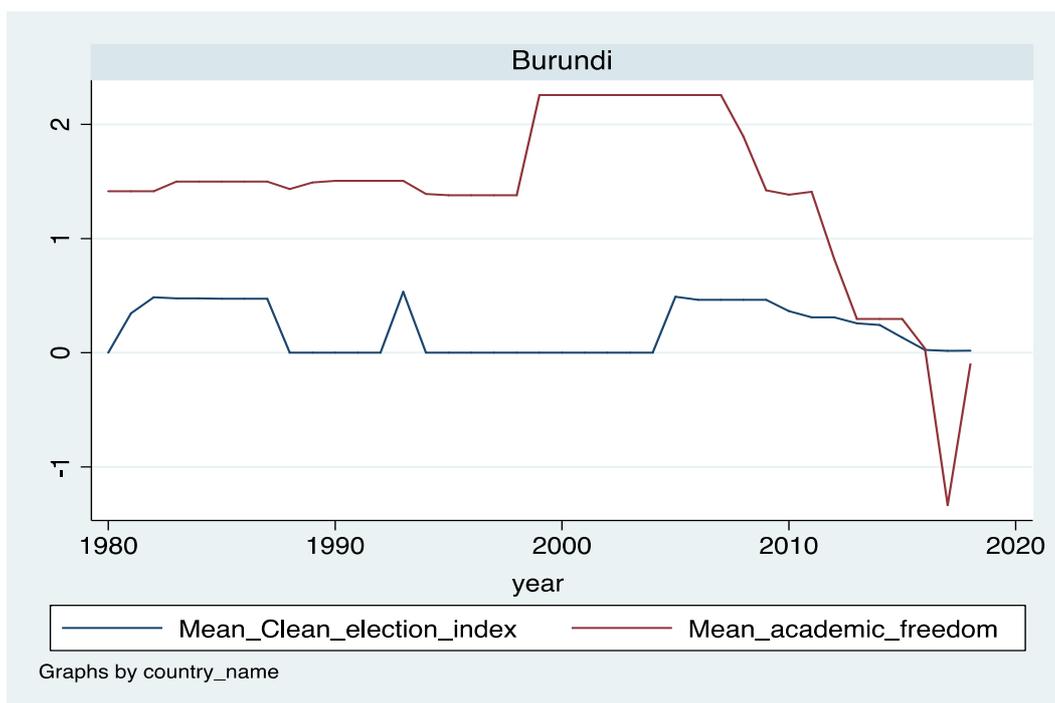


Figure 9. Clean elections and academic freedom trends in Burundi



Ghana’s democratic consolidation is one of the most successful ones in Africa, reflected by the fact that after the transition to multi-party system in 1992, the country has experienced democratic transfers of power. Its anomaly in our investigation can be explained by the drop and an exceptionally low level of academic freedom during the 1980s military rule (Figure 8). Our time period for the variable, therefore, does not grasp the actual capacity of Ghanaian academics to support democracy after the transition. Ghana, in fact, has become an important intellectual centre for the whole continent, hosting the Association of African Universities and Afrobarometer’s headquarters, among others. Democratic transition in 1992 restored and improved academic freedom in Ghana bringing it even to the constitution. This, however, does not mean that there was no room for improvement. For instance, the University of Ghana Act empowers the university authorities to prevent students from joining protest marches and demonstrations (Appiagyei-Atua, 2019, 164).

Burundi’s democratic transition, in turn, coincided with civil war between 1993 and 2005. The peace process that followed has been fragile including an attempted coup d’état in 2015, amendment of the constitution in 2017 enabling the incumbent to remain in power, suspension of international NGOs in 2018, and controversial elections in 2020. Such developments explain the observed “imbalance” between the levels of academic freedom and democracy. Alfieri (2016), for instance, argued that the political crisis in 2015 was not only a failure of the institutions of democracy, but “also a consequence of bottom-up mobilisation to affirm the political pluralism, civil and political rights in a country characterised by authoritarianism and a long tradition of violence” (Alfieri, 2016, 250). As is shown in

Figure 9, since then the response of the regime has been to narrow the space for such mobilization by restricting academic freedom and cultural expression in quite a drastic manner.

Conclusions

Academic freedom is a fundamental norm in democracies. Its significance and benefits are not limited to faculty and students only, but concern the whole society. That is why a strong consensus is required in its defence, as has been argued by Karran (2009), for instance. That is also why much empirical research has focused on the question of how democracy provides the most suitable soil for academic freedom to flourish, and, vice versa, how erosion of democracy is reflected in violations of academic freedoms. And indeed, Scholars at Risk's reports show alarming rates of attacks and threats against university teachers, researchers and students (SAR, 2019), at the same time as autocratization surges (Lührmann et. al., 2020). Our research focus has been different. Instead of the role of democracy in academic freedom, we have looked at the impact of academic freedom on democracy. To the best of our knowledge, this is the first attempt to investigate empirically the hypothesis that long-standing academic freedom and cultural expression have a positive effect on democratic consolidation. Specifically, our proposal is that respect of academic freedom in the past contributes to the capacity of scholars to disseminate knowledge both directly and through higher education on the form and content of functioning democracy. Furthermore, public awareness, enhanced by scholars taking part in public discussions, is critical to accountability in decision making. The emergence and ability of intellectuals to criticise and advise governments, political parties and the general public alike, would strengthen the democratic competence of the society.

We tested the hypothesis in a sample of African countries. Our results demonstrate a positive and statistically significant relationship between academic freedom during 1980-2008 and the levels of democracy for the following period 1990-2018. The likelihood of a government to implement and sustain democracy is higher the stronger its respect of academic freedom and cultural expression has been.

We tackled the issues of the short time frame and highly persistent variables by using the GMM-system econometric tool. Even when controlling for country-specific effects, results with the GMM-system show that the null hypothesis holds. Results are also robust by checking alternative measures of democracy such as the executive respect constitution, among others, as well as by checking reverse causality in the sample. Our results reveal that the vitality of academic freedom as a channel to improve the quality of elections is not subject to country-specific effect, such as the dependence on oil, the income level and the initial level of democracy.

Our findings that intellectuals are important catalysers for democratic consolidation contribute to the literature addressing the role of education and past developments in the implementation of peaceful

political competition. This corroborates Lipset's (1959: 80) notion: "If we cannot say that a 'high' level of education is a sufficient condition for democracy, the available evidence does suggest that it comes close to being a necessary condition in the modern world". Overall, the robust impact of academic freedom on democracy found in this paper suggests that future research has to test other channels through which education influences political systems. The scarcity of theoretical background and the unavailability of accurate data are impediments for further work.

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Appendix

Correlation matrix between Academic freedom and alternative index of democracy					
	Clean elections index	Freedom of academic and cultural expression	Judicial constraints on executive	Executive respect constitution	Range of consultation
Clean elections index	1.0000				
Freedom of academic and cultural expression	0.4049*	1.0000			
Horizon accountability index	0.2044*	0.6253*			
Judicial constraints on executive	0.3198*	0.7347*	1.0000		
Executive respect constitution	0.3720*	0.7529*	0.8238*	1.0000	
Range of consultation	0.4159*	0.6864*	0.6317*	0.6503*	1.0000

List of countries

Study's sample	Oil-exporting countries (more than 35% of total exported merchandise is fuel, WDI, 2020)	Not authoritarian countries in the beginning of the study period according to Bratton & Van de Walle (1997) classification
All the countries in Africa except Eriteria, Libya, Somalia, South Sudan	Angola, Algeria, Gabon, Nigeria, Egypt, Republic of the Congo	Benin, Botswana, Cape Verde, Malawi, Mali, Mauritius, Sao Tome and Principe

V-Dem Index (Coppedge et. al, 2020)

Freedom of academic and cultural expression (v2clacfree), coded by country experts with deep knowledge of a country and of a particular political institution.

Question: Is there academic freedom and freedom of cultural expression related to political issues?

Responses:

0: Not respected by public authorities. Censorship and intimidation are frequent. Academic activities and cultural expressions are severely restricted or controlled by the government.

1: Weakly respected by public authorities. Academic freedom and freedom of cultural expression are practiced occasionally, but direct criticism of the government is mostly met with repression.

2: Somewhat respected by public authorities. Academic freedom and freedom of cultural expression are practiced routinely, but strong criticism of the government is sometimes met with repression.

3: Mostly respected by public authorities. There are few limitations on academic freedom and freedom of cultural expression, and resulting sanctions tend to be infrequent and soft.

4: Fully respected by public authorities. There are no restrictions on academic freedom or cultural expression.

Scale: Ordinal, converted to interval by the measurement model.

Clean elections index (v2xel_frefair), composed variable, including data based on extant sources and factual in nature

Question: To what extent are elections free and fair?

Clarification: Free and fair connotes an absence of registration fraud, systematic irregularities, government intimidation of the opposition, vote buying, and election violence.

Scale: Interval, from low to high (0-1).

Judicial constraints on executive (v2x_jucon), composed variable, including data based on extant sources and factual in nature

Question: To what extent does the executive respect the constitution and comply with court rulings, and to what extent is the judiciary able to act in an independent fashion?
Scale: Interval, 0 -1.

Executive respect constitution (v2exrescon), coded by country experts

Question: Do members of the executive (the head of state, the head of government, and cabinet ministers) respect the constitution?

Responses:

- 0: Members of the executive violate the constitution whenever they want to, without legal consequences.
- 1: Members of the executive violate most provisions of the constitution without legal consequences, but still must respect certain provisions.
- 2: Somewhere in between (1) and (3). Members of the executive would face legal consequences for violating most provisions of the constitution, but can disregard some provisions without any legal consequences.
- 3: Members of the executive rarely violate the constitution, and when it happens, they face legal charges.
- 4: Members of the executive never violate the constitution.

Scale: Ordinal, converted to interval by the measurement model.

Range of consultation (v2dlconst), coded by country experts

Question: When important policy changes are being considered, how wide is the range of consultation at elite levels?

Clarification: Because practices vary greatly from policy to policy, base your answer on the style that is most typical of policymaking.

Responses:

- 0: No consultation. The leader or a very small group (e.g. military council) makes authoritative decisions on their own.
- 1: Very little and narrow. Consultation with only a narrow circle of loyal party/ruling elites.
- 2: Consultation includes the former plus a larger group that is loyal to the government, such as the ruling party's or parties' local executives and/or women, youth and other branches.
- 3: Consultation includes the former plus leaders of other parties.
- 4: Consultation includes the former plus a select range of society/labor/business representatives.
- 5: Consultation engages elites from essentially all parts of the political spectrum and all politically relevant sectors of society and business.

Scale: Ordinal, converted to interval by the measurement model.