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Political Institutions and Academic Freedom: Evidence from Across the World

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Abstract

There is scant systematic empirical evidence on what explains variation in academic freedom. Making use of a new indicator and panel data covering 64 countries 1960–2017, we investigate how *de facto* academic freedom is affected by, in particular, political institutions. We find that moving to electoral democracy is positive, as is moving to electoral autocracy from other autocratic systems, suggesting the importance of elections. Communism has a strongly detrimental effect. Legislatures that are bicameral are associated with more academic freedom, while legislatures that become more diverse and more ideologically to the right also seem to stimulate this type of freedom. Presidentialism and coups do not appear to matter much, while more proportional electoral systems strengthen academic freedom. More judicial accountability stimulates academic freedom, and richer countries experience more of it. The results suggest that the political sphere exerts a clear but complex influence on the degree to which scholarly activities are free.

Keywords Academic freedom, Politics, Democracy, Institutions, Ideology

JEL Classification D72, I23, K40

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1 Introduction

Free scholarly inquiry and dissemination has roots far back in time. Antiquity (through several of the great philosophers) contained seeds of academic freedom, but it became more explicitly understood and more widely valued in Europe from the High Middle Ages onwards. A key event was the issuing by Frederick I in the 1150s of the *Privilegium Scholasticum*, which offered certain rights and protections to scholars; and another was the founding of the University of Leiden in 1575, with freedom for its scholars to teach and pursue research with limited external interference. The two major powers to contend with were the State and the Church. Not least Kant (1992 [1798]) argued for intellectual freedom with respect to both those spheres, including a transition from a requirement to adhere to a religious understanding of what constitutes knowledge to a more rationalist and reason-oriented one.¹ That perspective increasingly came to characterize the situation of German universities; for example, article 20 of the Prussian constitution of 1848 read: “Science and its teachings shall be free.”² Throughout the 20th century, academic freedom obtained strong support in many countries, a development reinforced by article 15 of the *International Covenant on Economic, Social and Cultural Rights* of 1966, which is legally binding for 170 countries and which states, in paragraph 3: “The States Parties to the present Covenant undertake to respect the freedom indispensable for scientific research and creative activity.” Nevertheless, it is clear that many authoritarian and otherwise meddling regimes in the past century have constrained intellectual inquiry in many ways.³

Yet, while there is a rich literature on academic freedom as a concept and practice, there is almost no systematic empirical evidence of what explains its variation over time and space. This study is an attempt to fill that lacuna through quantitative analysis spanning recent decades. However, before describing what we do, it should be clarified what “academic freedom” means. We consider the following definition from The Lima Declaration on

¹ Kant himself experienced censorship in Prussia due to his writings on religion (Pomerleau 2020). Another philosopher, David Hume, had views on religion that made it impossible to get a position at a university (Rasmussen 2017).

² One may, in this regard, also refer to Wilhelm von Humboldt’s vision for the university as autonomous and dedicated to the pursuit of knowledge and truth for its own sake (Carr 2009; Östling 2018).

³ For more on the history and concept of academic freedom, see, e.g., Machlup (1955), Fuchs (1963), Brickman (1968), Altbach (2001) and Karran (2009).

Academic Freedom and Autonomy of Institutions of Higher Education (Fernando 1989, p. 50) useful:

“Academic freedom” means the freedom of members of the academic community, individually or collectively, in the pursuit, development and transmission of knowledge, through research, study, discussion, documentation, production, creation, teaching, lecturing and writing.

In this study, we explore to what degree variation in academic freedom, thus understood, can be explained by political factors, most notably political institutions and political ideology. The reason for focusing on political explanatory factors is that the second half of the 20th century until today has been a period of political dynamism, not least with variations in the degree of democratic governance in the world, and that the historically most important power with which scholars have had to contend for their freedom has been the state. This kind of systematic study is now possible because new cross-country data on how free scholars are in practice to pursue their ambitions have recently been made available by Spannagel et al. (2020).

Asking why this is an important topic to study, an answer lies in the ways in which academic freedom has been justified. The most prominent argument is that scholarly freedom is a key prerequisite for finding out what is true about the world. In the words of Dewey (1902, p. 3):

To investigate truth; critically to verify fact; to reach conclusions by means of the best methods at command, untrammelled by external fear or favor, to communicate this truth to the student, to interpret to him its bearing on questions he will have to face in life—that is precisely the aim and object of the university. To aim a blow at one of these operations is to deal a vital wound to the university itself. The university function is the truth-function.

A similar argument has been provided by Polanyi (1958), to the effect that the freedom to do science for its own sake is necessary for new knowledge to emerge. This is sometimes referred to as the epistemological justification for academic freedom and can be related to Mill’s (1859) defense of freedom of speech more generally.⁴

⁴ Some philosophers, who do not embrace a traditional understanding of truth as objective, have still been advocates of academic freedom (see contributions in Menand 1996). Indeed, Dewey, as a leading pragmatist, can in some ways himself be considered such a person. Levinson (1988, pp. 177–178) argues that those whose

There are other arguments as well, such as the argument from autonomy, which focuses on a capacity for development of a certain type of person. As Andreescu (2009, p. 509) puts it: “[I]n order to fulfill the role of cultivating the individual, of edifying him or her intellectually as well as morally, of helping him or her become an autonomous human being, academics need a considerable measure of freedom.” With academic freedom, students and faculty alike will be immersed in an environment of diverse ideas and of independent judgments, which will enable them to mature into and function as autonomous agents.⁵

Yet another argument is that academic freedom enables innovative yet practical and useful knowledge to be produced, to the benefit of industry and politics. Mokyr (2012) provides a historical case regarding how the Industrial Revolution in Great Britain came about while Aghion et al. (2008) give a contemporary argument. The latter propose that academic freedom enables scientists to retain the decision rights over what specific projects to take on and how to do so (unlike in firms, where such decisions are typically dictated by the management), which will be central for innovative early-stage research, the benefits of which is not always obvious at the beginning, to emerge.⁶

Moreover, one can refer to empirical studies on effects of academic freedom as a further reason (in addition to the more general justifications) for studying its determinants. Among such identified effects, we have found that junior faculty in Germany seem more

conversations are considered “interesting, helpful or illuminating” by their peers should be protected, irrespective of whether a belief in “traditional notions of truth” is present.

⁵ Cf. Dworkin (1996), who argues that academic freedom stimulates a wider “culture of independence” by fostering an ideal of “ethical individualism” which is essential for such a culture to flourish. The two aspects of ethical individualism that academic freedom helps bring about are: a responsibility to not profess that which one considers false and a duty to speak up for what one considers true.

⁶ For more on how academic freedom can be justified, see, e.g., Moodie (1996) and Karran (2009). However, this is not to say that there are no arguments for restricting or regulating scholarly activities. Some restrictions may be considered compatible with academic freedom (especially intra-scientific ones), while others can be seen as reducing that kind of freedom, and in a way that many consider inimical. Still, a person may hold that there are other values that can and should be traded-off against academic freedom. In recent times, a range of phenomena (“deplatforming”, “speech codes”, resistance to “microaggressions”, “trigger warnings”, “safe spaces”, etc.), often brought forth from within the academy, have illustrated that many put a high value on protecting what they perceive to be sensitive groups of people from “insensitive academic free speech” (see, e.g., Williams 2016; Lukianoff & Haidt 2018; McGowan 2018). Yet another type of restriction may concern “aprofessional” activities by academics, such as political speech, where Andreescu (2010) contrasts a wide and a more restrictive understanding of academic freedom with respect to such activities.

satisfied with their jobs if the university management supports academic freedom (Höhle & Teichler 2013); stronger *de jure* academic freedom entails better social infrastructure (defined as the institutions and government policies that determine the economic environment within which individuals accumulate skills, and firms accumulate capital and produce output) across countries (Eicher et al., 2018); and, for an African sample, academic freedom (interpreted chiefly as freedom of political expression) is shown to relate positively to clean elections (i.e., free and fair elections without election violence, government intimidation of the opposition, vote buying and other irregularities) (Kratou & Laakso 2020).⁷

To the extent that one regards justifications of the kinds mentioned to be correct, and the identified effects as important, it should be of great interest, in turn, to find out what explains variations in the degree of academic freedom – which is how we try to make a contribution. To that end, we apply new data on *de facto* academic freedom from the Varieties of Democracy (V-Dem) Institute. We use panel data for 64 countries for the time period 1960–2017 and an error correction model (ECM) approach, which enables us to distinguish between short- and long-term effects. The explanatory variables of main interest capture political institutions and ideology, but we also control for a number of other potential determinants of academic freedom.

Summarizing our key results, we find that academic freedom benefits from (i) democratization, in the sense of adopting electoral democracy – and almost as much from a move from non-electoral to electoral autocracy, indicating in both cases the importance of elections for academic freedom⁸; (ii) legislatures that are bicameral (in the long run) and that become more heterogeneous and more right-wing; (iii) a proportional electoral system; (iv) stronger judicial accountability; and (v) higher GDP per capita. It is, on the other hand, strongly reduced, both in the short and in the long term, by communism; while two political

⁷ This study may be taken to imply a causal effect from academic freedom to (a certain aspect of) democracy, at least in Africa, while our study looks at the other causal direction. However, it is conceivable with a bidirectional causal relationship.

⁸ Following Cheibub et al. (2010) and Bjørnskov and Rode (2020), our notion of democracy is a minimalist one, requiring only that political offices are filled through contested elections. It is, as such, different from thick concepts of democracy, such as liberal democracy (Zakaria 1997; Mukand & Rodrik 2020). It might be argued that the latter kind of democracy necessarily implies academic freedom – but that is not the case with our dichotomous democracy indicator. To exemplify, we note that undemocratic Burkina Faso and Togo have had academic freedom scores of .85 and .75, respectively, in recent years, which is equivalent to or substantially higher than democracies such as Ecuador (at .75) and Guinea (.56).

variables do not seem to matter much: presidentialism and coups. However, when performing an interaction analysis between the key political variables and our indicator of electoral democracy, we find that academic freedom in democracies is hampered as the party concentration in the legislatures rise, but that it benefits from coups (that result in democracy) and that it is strongly reinforced in autocracies when there is democratization, when government ideology becomes more right-wing and when power in the legislature becomes less concentrated. In both types of political systems, a move to communism has strongly deleterious effects. In autocracies, there are also some long-term results: academic freedom is positively related to bicameralism and a right-wing ideology and negatively related to not having any elections at all.

To the best of our knowledge, this is the first study that tries to explain variation in academic freedom using a large cross-country sample, thereby making it a novel contribution to the literature.⁹

2 Theoretical framework

Our theoretical framework is presented in Fig. 1. The framework does not yield precise predictions – this is not its purpose – but serves as an analytical guide to the contingent ways in which our explanatory variables can affect our outcome variables. The point is to provide a theoretical structure within which relationships can be analyzed.¹⁰

⁹ The literature on factors influencing academic freedom rather consists of qualitative discussions or limited studies of particular cases or countries. Some results: Industry sponsorship or commercial academic-industry relationships do not seem to reduce academic freedom (Behrens & Gray 2001; Streiffer 2006); government research evaluations appear to have a detrimental effect on academic freedom (Martin-Sardesai et al. 2017); ethics boards have the potential to restrict academic freedom in ways considered undesirable by researchers (Lewis 2008; Hedgecoe 2016); communism has impeded academic freedom in Polish sociology (Kwasniewicz 1994); unionization and collective bargaining does not appear to have affected academic freedom (Rogers et al. 2013); and the authoritarian culture and rule of many Muslim-majority countries has been detrimental for academic freedom (Kraince 2008).

¹⁰ Even though we treat political institutions as exogenous analytically, they have their own determinants; in fact, all factors in the figure are arguably affected by other variables in addition to the ones listed here. We do not wish to deny their existence but focus, in this theoretical exposition, of some key relationships (while trying to take further factor into account as control variables in the empirical analysis).

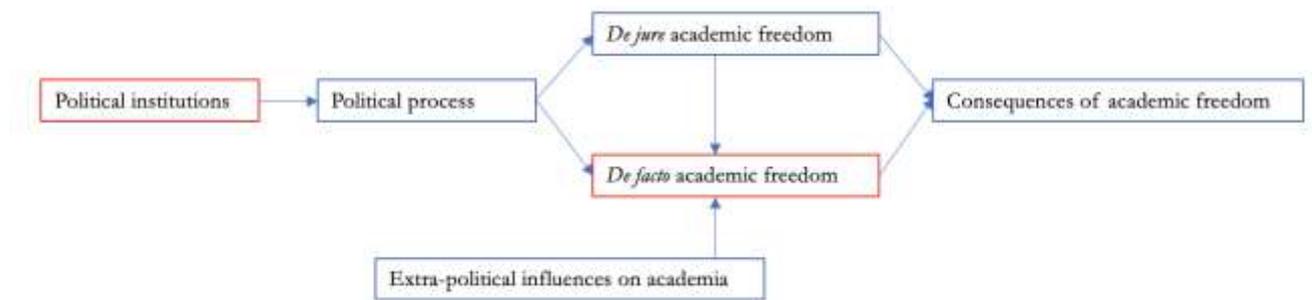


Fig. 1 Political institutions and academic freedom.

First consider the political process. Following Acemoglu et al. (2005), in any political system, there are political decision-makers who exercise *de facto* power on the basis of the *de jure* power afforded them by the political institutions in place. In so doing, they may be motivated by self-interest and ideology – using their power to make their own lives better, or using it to further some ideationally based goals pertaining to what a good society is thought to be, or a combination thereof. Hence, the political process produces political decisions, such as legislation and executive orders, in a great number of areas. Some of these pertain to academic life and affect academic freedom. There can be direct legislation and regulation of universities, which affect *de jure* academic freedom. Our main outcome variable of interest is *de facto* academic freedom, and it, too, can be affected by direct legislation and regulation (other than that shaping *de jure* academic freedom, which itself influences *de facto* academic freedom), as well as by extra-political influences on academia. To construct an example, the political decision-makers can protect academic freedom constitutionally; but since constitutional provisions are often vague and contested, *de facto* academic freedom may still be compromised by regulation requiring researchers to include a certain normative perspective when applying for research grants, as well as by a cultural climate that make certain types of inquiry socially costly.

This reasoning assumes that political decision-makers are interested in academic freedom, an assumption we consider plausible both for those primarily motivated by self-interest and those primarily motivated by ideology. Academics are part of the intellectual elite in society, and as such, they may potentially influence public discourse in many ways – through research, through public debate, through literature, through teaching young and

impressionable students, etc.¹¹ Academics can thus be seen as potential allies and potential threats by those with political power, which can cause them to strengthen academic freedom (if scholars are perceived as allies) or to reduce it (if scholars are perceived as threats). Thus, on the basis of how the decision-makers assess the consequences of academic freedom, they may try to interfere with it.¹²

This is where political institutions *qua* constraints come in. They not only enable the political process but also constrain and, thereby, shape it and the kind of decisions that emerge from it.¹³ Hence, if political decision-makers have certain preferences regarding how much academic freedom there should be – they may for example be interested in avoiding critique of their chosen policies and publicly stated alternatives to those policies – political institutions can affect the degree to which those preferences can result in political decisions that change the degree of this type of freedom.

We will now discuss what can be expected on theoretical grounds regarding how various political institutions, and a few other features of the political process, can influence *de facto* academic freedom.

First, regarding the most basic (sets of) political institutions, those determining *the system of government*, we expect electoral democracies to have more academic freedom than non-democracies. The former are characterized by political offices being filled through contested elections (but need not otherwise have the full range of civil rights of liberal democracies, i.e., academic freedom is not subsumed). As such, political decision-makers in electoral democracies are constrained by free and fair elections, which can make it costly, in

¹¹ Fischer et al. (2017) show that students change their political opinions at university, which is consistent with viewing teaching as influential. Similarly, Leighton and López (2014) show how academics can often affect reform paths by providing alternatives to the prevailing ideas at critical junctures.

¹² This applies to scholars whose work is relevant for politics, in particular those in the social sciences and humanities, and not so much to scholars in the natural sciences. Hence, political decision-makers can champion academic freedom for the latter, valuing the benefits of free scientific inquiry in “non-political” fields, while at the same time wanting to restrict the academic freedom of those that are seen as a threat to their position of power or their ideological goals.

¹³ On political institutions, see Binder et al. (2008). Political institutions have been shown to affect various other outcomes than academic freedom, e.g., economic factors such as wealth, incomes and inequality (Persson & Tabellini 2003; Kurrild-Klitgaard & Berggren 2004), environmental policy (Congleton 1992; Bernauer & Koubi 2009), women’s political representation (Rosen 2013) and corruption (Gerring & Thacker 2004).

terms of votes, to meddle with the freedom of expression, including in academia.¹⁴ Moreover, to the extent that elections occur in non-democracies, this should entail more academic freedom than in non-democracies without elections, as such regimes explicitly accept a diversity of views on policy and institutional choices.

Second, regarding *presidentialism*, we consider its relation to academic freedom theoretically ambiguous (compared to a parliamentary system). While we think that presidents, by (as a rule) being directly elected, tend to take the interests of the whole population into greater consideration than political leaders in parliamentary systems, and while this should speak in favor of greater support for academic freedom, the decision-making aspects of presidentialism vs. parliamentarism makes the outcome unclear. Following Tsebelis (1995), on the one hand, there are more veto players with an elected president, making it harder to implement any political program; on the other hand, there is more power in the hands of one individual, and if that person has a certain preference with regard to academic freedom, it speaks in favor of easier implementation (especially if done through executive orders).

Third, regarding *the structure of the legislature*, bicameralism introduces another veto player into the political system compared to one-party legislatures, with a stronger element, typically, of long-term considerations and a greater difficulty to change the *status quo* (cf. Berggren and Karlson 2003). Hence, we expect this institution to generate stronger academic freedom.

Fourth, regarding *communism*, the political decision-makers in such a system are guided by an ideology that tends to demand intellectual obedience and to accept no or little dissent from the communist ideology. Moreover, the political institutions are designed such that there are very weak real constraints on what the political leaders can decide (Smith 2014). Hence, the effect on academic freedom should be negative.

Fifth, regarding *legal institutions*, we expect academic freedom to be stronger, the more judicial accountability there is. This is an indicator of the degree to which the legal system is effective and fair, in that there are specified procedures for disciplining and removing misbehaving (often corrupt or politically motivated) judges. If the legal system is of high quality in this way, it can block attempts by political decision-makers to meddle with constitutionally guaranteed academic freedom (cf. Voigt 2008).

¹⁴ There is evidence that fair and free elections can discipline political decision-makers when it comes to economic decisions, arguably having them conform more to the public interest (Collier & Hoeffler 2015).

Sixth, regarding *the electoral system*, we consider it likely that proportional systems are more conducive to academic freedom than majoritarian ones. The former are more party- and less candidate-oriented and more often characterized by minority and coalition governments. Being more party-oriented implies more “centralized” relationships with interest groups such as academics, and the tendency for minority and coalition governments implies compromise and pragmatism, suggesting stronger support for academic freedom (cf. Blume et al. 2009).

Seventh, regarding *coups*, i.e., the extra-institutional ousting of political decision-makers, the relationship to academic freedom is theoretically ambiguous. On the one hand, any consequence depends on how the programs of the ousted and new leaders compare. If the coup entails a transition to democracy, it is likely that support for academic freedom will increase. On the other hand, a coup tends to be disruptive and antithetical to the kind of values that academic freedom entails, which could come with reduced support for this kind of freedom; cf. Bennett et al. (2021).

Eighth, regarding *legislative party concentration*, we expect substantial power concentration to be detrimental for academic freedom. If there are many competing parties in a legislature, political power is not concentrated – decisions require coalitions and compromise, which can offer a better protection of academic freedom than a more homogeneous legislature with a more unified political agenda.

Lastly, regarding *government and legislature ideology*: As far as ideology is concerned, it is hard to say, *a priori*, whether the right or the left are more prone to support academic freedom (Crawford & Pilanski 2014). There is a rational-scientific element to many left-wing ideologies, but as indicated by the communist versions, there can be a propensity to curtail freedom for a “higher” party truth. On the right, there is a “bourgeois” tradition of supporting academic freedom, both among liberals and conservatives, but there are, on this side as well, certain reactionary and fascist-oriented forces for whom academic freedom is worth little.

On the basis of this theoretical exposition, we now turn to the empirical part of our study to investigate whether the hypotheses suggested here are supported or not.¹⁵

¹⁵ Effects of (changes in) political institutions can be of a short- and a long-term kind: the former reflecting “immediate” adjustments and the latter incorporating settled equilibrium effects. We do not have particular theoretically based expectations about the temporal or dynamic character of how political institutions influence academic freedom but consider it an important issue to analyze empirically, and we do so below. Moreover,

3 Data and empirical strategy

3.1 Measuring academic freedom

Our measure of *de facto* academic freedom has been developed by Spannagel et al. (2020) and is part of the *Varieties of Democracy* (V-Dem) dataset, which both includes an overall indicator of academic freedom (the Academic Freedom Index) as well as its five components.¹⁶ The components are defined as the “Freedom to Research and Teach”, Freedom of Academic Exchange and Dissemination”, “Institutional Autonomy”, “Campus Integrity” and “Freedom of Academic and Cultural Expression”.¹⁷ As we show in Table A1 in the Appendix, all components correlate very highly with each other; and a principal components analysis (available on request) furthermore shows that all factor loadings are similar in size. We therefore opt for aggregating them into a single index by normalizing all scores on a 0–1 scale and taking a simple average.

These data vary considerably across countries and over time, and they reflect events and political developments. The V-Dem for example rates Turkish *de facto* academic freedom at an index of .64 in the mid-2000s, which has fallen in recent years to .20; this is a status practically identical to that of China. Conversely, the assessment of academic freedom in as diverse countries as the United States and Uruguay is .96. Other democracies such as Denmark and the United Kingdom rate slightly lower at .88, as the much younger democracy of Namibia does, while the more religious Malaysia is rated at .64. As such, the index is sensitive to both major events such as democratization as well as more gradual developments as the re-autocratization of Turkey or the gradual change in Vietnam, where the index has

effects can also differ within democracies and within autocracies, as well as between them, which is why we also provide an interaction analysis between the system of government and a number of political institutions below.

¹⁶ The V-Dem indicators are based on expert assessments. There are other measures of academic freedom, such as the one focusing on legal protection of institutional autonomy and tenure within EU countries (Karran 2007; Karran et al. 2017); survey data about how academics themselves perceive academic freedom at UK universities (Karran & Millinson 2019); and an expert-assessment indicator by Freedom House (2020). Limitations of the latter include a primary focus on political expression (and not only in higher education), and an omission of a measure of the freedom to do research (rather than teaching).

¹⁷ See Spannagel et al. (2020, pp. 7–10) for detailed descriptions of these five indicators. In addition, V-Dem contains data on two other indicators of academic freedom that capture the *de jure* status of academic freedom: “Constitutional Protection of Academic Freedom”, and “International Legal Commitment to Academic Freedom Under ICESCR [International Covenant on Economic, Social and Cultural Rights].” However, we do not include these in our study.

slowly risen by a factor of five from .10 in the early 1980s. For an illustration of the dynamics of the index for three countries, see Fig. 2.



Fig. 2 Academic freedom, three examples.

3.2 Empirical strategy and control variables

Attempting to assess the determinants of academic freedom, we face a number of specific econometric challenges. First, the data reveal that countries tend to have quite stable levels of academic freedom, interspersed with periods of substantial change. The data are thus unlikely to be stationary. Second, some factors may only exert a temporary effect while other factors may reflect longer-run processes, which implies a potential difference between short-run and long-run effects. Finally, cross-sectional dependence may be a problem when countries react to similar international fluctuations and political developments. We therefore estimate a set of error correction models with specification as in (1), a choice that provides us with a flexible solution to these types of problems (cf. De Boef & Keele 2008).

$$\Delta A_t = \alpha_0 + \alpha_1 A_{t-1} + \beta_0 \Delta x_t + \beta_1 x_{t-1} + \beta_2 \Delta y_t + \beta_3 y_{t-1} + \beta_4 \Delta z_t + \beta_5 z_{t-1} + \gamma_t + \epsilon_t \quad (1)$$

where A_t denotes academic freedom at time t , where x , y and z are vectors of control variables capturing institutional, economic and political factors, where γ_t denotes a full set of annual fixed effects and where ϵ_t is the error term. An error correction specification implies that β_0 can be interpreted as the short-run effect of x , while β_1 represents the long-run effect. It also

allows us to calculate the implied long-run multiplier from the auto-regressive parameter α_1 , which can be used to assess the long-run implications of short-run changes.

The set of control variables is conceptually divided into three parts. First, we add a set of formal institutional characteristics including the V-Dem measure of judicial accountability, which we treat as a measure of the overall quality of economic and judicial governance. This set also includes dummies for electoral autocracy and democracy; the baseline category is therefore single-party regimes. This information derives from the dataset in Bjørnskov and Rode (2020), which defines electoral autocracy as the situation in which countries have regular multi-party elections that are nevertheless not fair or free from interference, while democracy is defined as a state of multi-party elections that can *de facto* lead to a change of government.¹⁸ The Bjørnskov-Rode data follow the minimalist approach to defining democracy in Cheibub et al. (2010), which comes with two specific benefits in our present setting. First, this definition ensures that we do not include academic freedom in our concept of democracy by definition (which could be the case if we instead measured liberal democracy). Second, a source of worry would be if expert coders at the V-Dem project expect academic freedom to improve when a country becomes more democratic, which would bias their coding efforts. By using a democracy measure from a completely different source, which furthermore rests on a different and more minimalist conception of democracy than the V-Dem measures, our choice minimizes the risk that coder bias affects our estimates in the following. From the same dataset, we include dummies for communist and unreformed socialist regimes, whether elections occurred in a given year, whether no regular elections occurred, whether the country has a bicameral political system, whether the system is presidential and whether members of parliament are predominantly elected in a proportional voting system. Finally, we also include Bjørnskov and Rode's (2020) indicator for whether a successful coup d'état occurred.

Second, the control variables include a small set of economic indicators. We add the logarithm to GDP per capita, the logarithm to population size, and the total trade volume as percent of GDP; the data are from the Penn World Tables, mark 9.1 (Feenstra et al. 2015).

¹⁸ More specifically, according to Cheibub et al. (2010, p. 69): "A regime is classified as a democracy if it meets the requirements stipulated in all of the following four rules: 1. The chief executive must be chosen by popular election or by a body that was itself popularly elected. 2. The legislature must be popularly elected. 3. There must be more than one party competing in the elections. 4. An alternation in power under electoral rules identical to the ones that brought the incumbent to office must have taken place."

Finally, we include three features of the make-up of legislatures, which we take from an updated version of the data in Berggren & Bjørnskov (2017). These include the degree of concentration among the parties in the legislature (calculated as a Herfindahl-Hirschman index), the ideological position of the incumbent cabinet and the average ideological position of all parties in the legislature. For coalition governments, the average ideological position of government is calculated using the relative seat shares in the legislature of each party as weights. In the case that the political system is bicameral, these data refer to the lower house. Ideology is coded for each party represented in the legislature as follows: a party is given the score -1 if it is communist or unreformed socialist, -.5 if it is unreformed or modern socialist, 0 if it is social democratic or non-programmatic, .5 if it is conservative and 1 if the party identifies ideologically with classical liberalism. All ideological placement is defined as the party position on economic policy and not social issues or traditionalism.¹⁹ In the following, we include either government ideology or legislature ideology (the average position) due to the substantial correlation ($r=.82$) between the two series.

Table 1 Descriptive statistics

| | Mean | Standard deviation | Observations |
|---------------------------------|-------|--------------------|--------------|
| Academic freedom | .740 | .231 | 2741 |
| Judicial accountability | .839 | 1.352 | 3683 |
| Electoral autocracy | .128 | .334 | 3936 |
| Democracy | .731 | .444 | 3936 |
| Election year | .258 | .438 | 3690 |
| Communist regime | .114 | .318 | 3936 |
| Bicameral system | .517 | .499 | 3936 |
| Presidential system | .474 | .499 | 3936 |
| Proportional voting | .564 | .499 | 3936 |
| No elections | .112 | .316 | 3936 |
| Successful coup | .013 | .122 | 3936 |
| Log GDP per capita | 9.475 | .838 | 3588 |
| Log population size | 2.213 | 1.679 | 3588 |
| Trade volume | .593 | .525 | 3588 |
| Legislature party concentration | .434 | .246 | 3552 |
| Government ideology | .126 | .527 | 3540 |
| Legislature ideology | .096 | .386 | 3540 |

These variables form a large panel dataset covering 64 countries; descriptive statistics are provided in Table 1. The sample is limited by two factors: the availability of measures of

¹⁹ As noted in previous research using the ideology data, this implies that we often code some parties defining themselves as “right-wing” at a different position than their official status. Examples include the French *Rassemblement National*, which we code as reformed socialist based on its economic policy preferences, and the *Danish People’s Party*, which we code as social democratic.

academic freedom in the V-Dem and the availability of data on government ideology. The latter is the more restricting factor, as the data are only available for countries with a Western-style party system and constitutional democracy. As such, countries need not have *de facto* democracy, but must be constitutionally defined as such, and cannot have a party system that is predominantly based on ethnicity, religion or regional affiliation.

4 The results

4.1 The development of academic freedom according to the system of government

We start by illustrating the general development of academic freedom over time. Fig. 3 shows that average level of *de facto* academic freedom for three groups – single-party regimes and countries with no elections, electoral autocracies and democracies – in the full period 1960–2017. The figure first depicts how academic freedom has, on average, stayed stable across democracies, while increasing in most electoral autocracies from the late 1980s and exhibiting a slight dip in the most recent years. Academic freedom in single-party regimes also appears very stable except for a temporary increase in the early 1990s, as many formerly communist countries gradually transitioned away from being single-party states. Hence, the figure indicates substantial and relatively stable differences across political institutions.

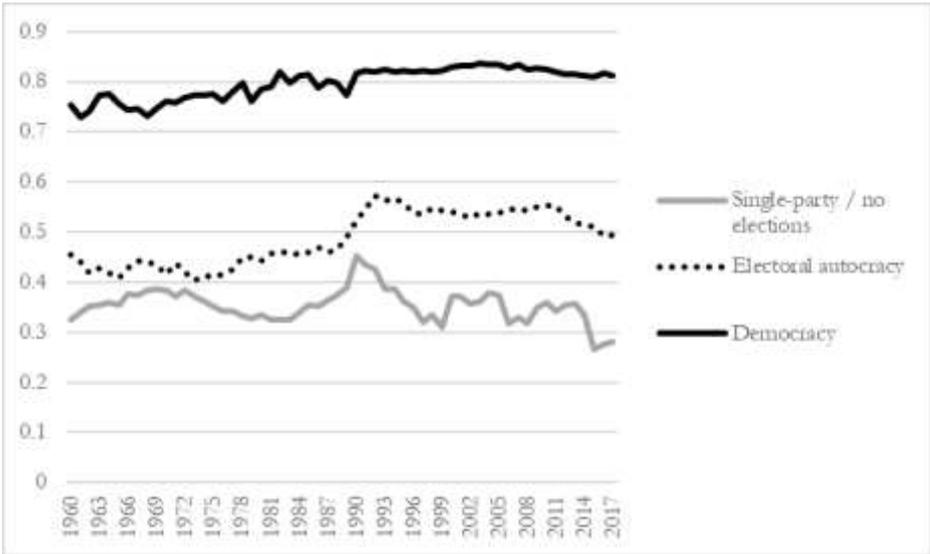


Fig. 3 Academic freedom over time.

For a deepened understanding of these developments, we next present findings from our regression analysis: first the baseline results and then results based on interactions with democracy that allow us to infer whether some factors are more important in democracy or autocracy.

4.2 Baseline empirical results

Starting with basic political institutions, Table 2 provides evidence that a democratization strongly affects *de facto* academic freedom, while a change from a single-party autocracy to an electoral autocracy also does so. Moving from no elections or single-party elections to an electoral autocracy increases the index by about .13 points, or slightly more than half a standard deviation, although the long-run estimate indicates a slight subsequent decrease over time. A further move from electoral autocracy to full democracy is associated with a rapid increase of about .11 points, such that a full transition to democracy entails an increase of about one standard deviation. Conversely, we find that communist dictatorships exhibit even less actual academic freedom than other single-party regimes and that this difference is increasing in the long run. We also find a significant but quite small effect when countries postpone or cancel elections.

With respect to the particular details of political institutions, we find clear evidence of long-run effects of moving to a bicameral system with the additional veto players it entails. As hypothesized, we also find evidence suggesting that systems with proportional voting have slightly higher levels of academic freedom. Conversely, the effects potential political changes in the form of coups and election years are positive but imprecisely estimated. Finally, we find that judicial accountability is positively and strongly significantly associated with academic freedom, such that a one-standard deviation improvement is associated with an increase in freedom of approximately a sixth of a standard deviation.²⁰

²⁰ One might see the question as one of political intervention in academia and therefore prefer a measure of judicial *independence*, which is conceptually distinct from that of judicial accountability. In additional tests (available on request), we nevertheless find very similar patterns when using the V-Dem measures of judicial independence. This is not surprising, given the high positive correlation between these measures. We take both to indicate the integrity of the legal system.

Table 2 Error correction results

| | | Δ Academic freedom 1 | Δ Academic freedom 2 |
|---------------------------------|----------|--------------------------------|--------------------------------|
| Academic freedom | t-1 | -.056*** (.007) | -.055*** (.008) |
| Judicial accountability | Δ | .026*** (.004) | .026*** (.004) |
| | t-1 | -.000 (.001) | -.000 (.001) |
| Electoral autocracy | Δ | .133*** (.008) | .132*** (.008) |
| | t-1 | -.016*** (.005) | -.017*** (.006) |
| Democracy | Δ | .227*** (.007) | .226*** (.007) |
| | t-1 | -.003 (.006) | -.004 (.007) |
| Election year | t-1 | .002* (.001) | .002* (.001) |
| Communist regime | Δ | -.122*** (.016) | -.122*** (.016) |
| | t-1 | -.027*** (.005) | -.026*** (.005) |
| Bicameral system | Δ | .009 (.007) | .008 (.007) |
| | t-1 | .005*** (.002) | .005*** (.002) |
| Presidential system | Δ | -.020 (.014) | -.019 (.014) |
| | t-1 | .001 (.001) | .001 (.001) |
| Proportional voting | Δ | .022*** (.008) | .020*** (.008) |
| | t-1 | .001 (.001) | .001 (.001) |
| No elections | t-1 | -.007** (.003) | -.007** (.003) |
| Successful coup | t-1 | .015 (.009) | .014 (.009) |
| Log GDP per capita | Δ | -.019 (.019) | -.017 (.019) |
| | t-1 | .005*** (.002) | .005*** (.001) |
| Log population size | Δ | -.063 (.082) | -.056 (.084) |
| | t-1 | -.002* (.001) | -.002* (.001) |
| Trade volume | Δ | -.001 (.006) | -.001 (.006) |
| | t-1 | -.001 (.002) | -.001 (.002) |
| Legislature party concentration | Δ | -.044*** (.008) | -.044*** (.007) |
| | t-1 | .002 (.004) | .002 (.004) |
| Government ideology | Δ | .004* (.002) | |
| | t-1 | -.000 (.002) | |
| Legislature ideology | Δ | | .012*** |

| | t-1 | (.004) |
|------------------|------|--------|
| | | .002 |
| | | (.003) |
| Annual FE | Yes | Yes |
| Observations | 2385 | 2788 |
| Countries | 64 | 64 |
| Within R squared | .478 | .436 |
| Wald Chi squared | - | - |

Panel-corrected standard errors. * = 10% significance level. ** = 5% significance level. *** = 1% significance level.

Turning to the political variables, we find evidence that more party concentration in the legislature is associated with less academic freedom, as is a shift in the legislature to a more right-wing ideological average. We also find a significant long-run effect of becoming richer, although the consequences of wealth appear somewhat smaller than those of changes of political institutions.²¹

4.3 Interaction results

However, these general results could well hide substantial structural differences between democracies and autocracies. We therefore continue our empirical analysis with results based on interactions between a set of political institutions and democracy in Table 3, which allows us to assess whether some determinants are stronger in one than the other group of countries, and if some are irrelevant to either autocracy or democracy.

²¹ We have tried including education, measured as either the average years of schooling or the share of the population with at least a secondary education, as well in these regressions, but the coefficient is always virtually zero and statistically insignificant. Similarly, we have experimented with separating non-democracies in civilian and military types instead of single- and multi-party autocracies, but we find no clear differences between the two.

Table 3 Error correction results, interactions with democracy

| | | Δ Academic freedom 1 | Δ Academic freedom 2 |
|---------------------------------|----------|--------------------------------|--------------------------------|
| Academic freedom | t-1 | -.050*** (.007) | -.050*** (.008) |
| Election year | t-1 | -.003 (.002) | -.003 (.002) |
| Communist regime | Δ | -.095*** (.017) | -.106*** (.017) |
| | t-1 | -.029*** (.011) | -.028*** (.011) |
| Bicameral system | Δ | .012* (.007) | .006 (.007) |
| | t-1 | .010*** (.003) | .011*** (.003) |
| Presidential system | Δ | -.021*** (.008) | -.004 (.008) |
| | t-1 | .012*** (.004) | .012*** (.004) |
| Proportional voting | Δ | .103*** (.009) | .102*** (.009) |
| | t-1 | .002 (.003) | .000 (.003) |
| No elections | t-1 | -.035*** (.012) | -.040*** (.013) |
| Successful coup | t-1 | .019** (.009) | .013 (.009) |
| Legislature party concentration | Δ | -.086*** (.011) | -.088*** (.011) |
| | t-1 | -.008 (.006) | -.009 (.006) |
| Government ideology | Δ | .052* (.005) | |
| | t-1 | -.008*** (.003) | |
| Legislature ideology | Δ | | .049*** (.007) |
| | t-1 | | .015*** (.004) |
| <hr/> | | | |
| Election year | t-1 | .006** (.002) | .006** (.002) |
| Communist regime | Δ | -.009 (.036) | .004 (.036) |
| | t-1 | .008 (.012) | .006 (.011) |
| Bicameral system | Δ | -.001 (.001) | .005 (.012) |
| | t-1 | -.007* (.004) | -.009** (.004) |
| Presidential system | Δ | -.013 (.041) | -.029 (.041) |
| | t-1 | -.009 (.036) | -.012*** (.004) |
| Proportional voting | Δ | -.115*** (.014) | -.115*** (.014) |
| | t-1 | -.002 (.003) | -.001 (.003) |
| No elections | t-1 | .029** (.014) | .034** (.014) |

| | | | |
|---------------------------------|-----|----------|----------|
| Successful coup | t-1 | .043* | .049* |
| | | (.026) | (.027) |
| Legislature party concentration | Δ | .048*** | .050*** |
| | | (.016) | (.016) |
| | t-1 | .013* | .015* |
| | | (.008) | (.008) |
| Government ideology | Δ | -.056*** | |
| | | (.006) | |
| | t-1 | -.010*** | |
| | | (.003) | |
| Legislature ideology | Δ | | -.061*** |
| | | | (.008) |
| | t-1 | | -.019*** |
| | | | (.005) |
| Annual FE | | Yes | Yes |
| Observations | | 2385 | 2788 |
| Countries | | 64 | 64 |
| Within R squared | | .508 | .505 |
| Wald Chi squared | | - | - |

Panel-corrected standard errors. The estimates below the dotted line are interactions with democracy and thus can be interpreted as the *additional* effect within democracies. * = 10% significance level. ** = 5% significance level. *** = 1% significance level.

However, Table 3 shows relatively similar results for *de facto* academic freedom for autocracies and democracies. For clarity, we illustrate these effects in two figures, where Fig. 4a depicts the short-run effects for democracies and autocracies and Fig. 4b depicts the long-run estimates.

In general, even though most results are fairly similar, the additional interactions reveal that while bicameralism and presidentialism remain long-run determinants of higher levels of freedom in autocracies, they are irrelevant in democratic regimes. Changes in government ideology are also only significant in autocracies, and while legislature party concentration is a strong determinant for both types of regimes, it is substantially more important in autocracies. As such, we find a stronger influence from the political sphere in autocracies, consistent with their weaker checks and balances and veto institutions. Conversely, coups are significant and appear more important in democracies than autocracies. However, one must keep in mind that the coups that we observe in countries that were democratic the year prior to the coup are all events in which the military reinstalls democracy.²²

²² In an additional test, we also separate effects of judicial accountability in autocracies and democracies. However, although the difference is statistically significant and judicial accountability is more important in democracies, the difference is quite small.

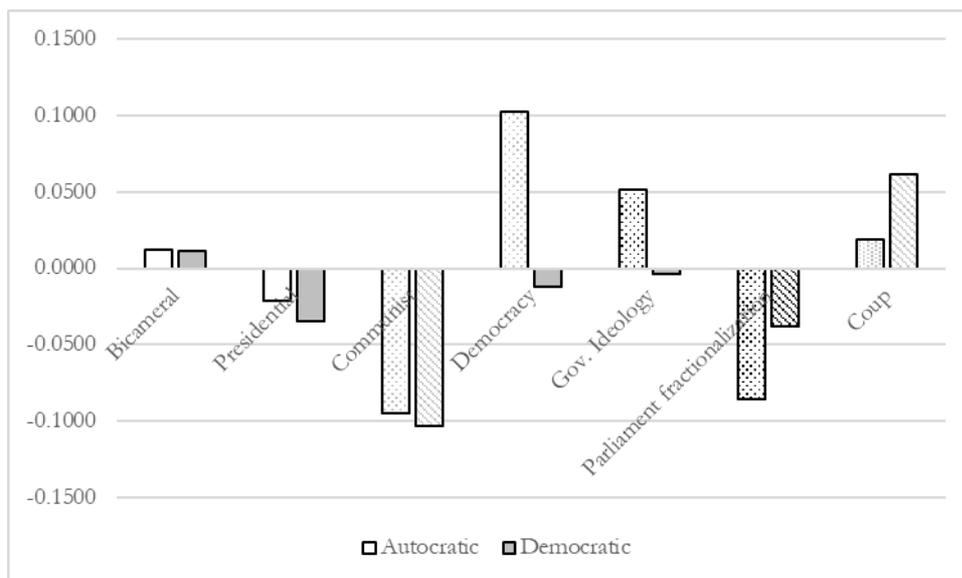


Fig. 4a Overview of short-run estimates.

Dots indicate statistical significance at 5% or lower.

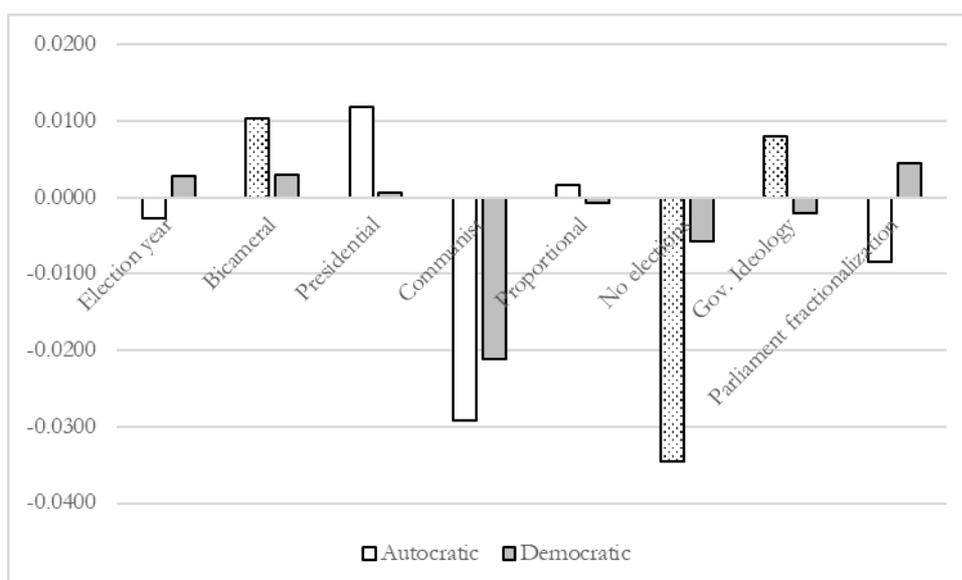


Fig. 4b Overview of long-run estimates.

Dots indicate statistical significance at 5% or lower.

In summary, we find that the level of freedom that academics actually experience is substantially defined by the political institutions they are immersed in. However, we also find that the quality of the judicial institutions, as captured by judicial accountability, and the degree of political competition are important determinants. Finally, we document the importance of not only communism, but also more general ideological differences, although these factors appear more important for non-democracies. We proceed to discussing the wider interpretation of these findings.

5 Concluding discussion

Academic freedom has been and is valued primarily because it is seen as the best guarantor of generating new and true knowledge about the world. Without it, scholars risk being constrained by actual or potential interference by powers, such as political and religious rulers, that care about other matters. However, we now know there is variation in academic freedom across time and space, as shown by recently published data from the Varieties of Democracy project, which raises the important question what the determinants of academic freedom are. This study is a first exploratory attempt to provide some answers.

We do so through an empirical analysis of 64 countries across the world during the past half-century, focusing on the potential *political* underpinnings of *de facto* academic freedom. The starting point is that academic freedom is at least partly defined through formal institutions decided upon by political decision-makers and through the political culture they sustain.

The key result is indeed that democratization is positive for academic freedom. Yet, there is also a positive effect of moving to electoral autocracy from other autocratic systems, while communism is strongly detrimental for academic freedom, both in the short and the long run. Legislatures that are bicameral are associated with more academic freedom, while legislatures that become more diverse and more ideologically to the right also seem to stimulate this type of freedom. Presidentialism and coups do not appear to matter much, while more proportional electoral systems strengthen academic freedom. More judicial accountability also stimulates academic freedom, and richer countries experience more of it as well.

Finally, we observe that both political party concentration and ideology are substantially more important in autocracies than democracies. We thus note that the stronger checks and balances and veto institutions in democracies partially counteract the direct political influence on academic freedom. Overall, we take our results to suggest that the rules and practices of the political process constitute an important explanation of variations in academic freedom, hence indicating that people who care about it should not neglect its institutional and ideological underpinnings.

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Appendix

Table A1 Correlation matrix

| Indicator | 1 | 2 | 3 | 4 | 5 |
|--|-----|-----|-----|-----|-----|
| 1. Research and Teach | 1 | .95 | .85 | .86 | .84 |
| 2. Academic Exchange and Dissemination | | 1 | .85 | .88 | .87 |
| 3. Institutional Autonomy | | | 1 | .85 | .78 |
| 4. Campus Integrity | | | | 1 | .82 |
| 5. Academic and Cultural Expression | | | | | 1 |
| Academic freedom | .96 | .97 | .92 | .94 | .92 |

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