

## Coups and the dynamics of media freedom<sup>☆</sup>

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### ABSTRACT

Media freedom is important not only for the quality of life in a country, but also for its investment climate, as a free press is essential for holding politicians accountable. This is the first global study of how coups affect media freedom. We argue that the effect of a coup should depend on whether it is successful, whether the targeted country is democratic and how much of the economy it controls, and on the presence of constitutional rules protecting media freedom. Our empirical analysis shows that all these factors, except constitutional rules, matter for whether media freedom declines after a coup. Reductions are unlikely after failed coups, coups against autocracies or coups against very "small" governments. Activists, policy makers and businesspeople should pay close attention to the media sector after a successful coup against a democracy with a moderate or big size of government.

### 1. Introduction

Between January 2021 and July 2022, the world witnessed eight coups of which six were successful (see [Bjørnskov and Rode, 2020](#)). In January 2021, the military in Myanmar staged a successful coup, transforming the country from a quasi-democratic civilian regime to a military dictatorship. The military silenced the press and restricted the internet, which is a familiar reaction in such events. But not only successful coups lead to a reduction of press freedom. The failed coup d'état in Turkey on July 15, 2016 prompted a strong reaction by the Turkish government. The regime subsequently closed over one hundred newspapers and other media outlets. Journalists have been jailed without justification and sentenced to long prison terms. Interestingly, the same

government used a fabricated coup plot to arrest hundreds of opponents and dozens of journalists between 2007 and 2012 ([Rodrik, 2011](#)). The coup in Zimbabwe in 2017, in contrast, did not affect the freedom of the press at all. Already [Alesina et al. \(1996\)](#) have demonstrated the dramatic costs coups have for the economy. Unlike wars, coups do not undermine growth by destroying large amounts of capital. As Alesina et al. point out, their costliness is due to the political instability created. Especially media freedom is seemingly systematically curtailed after coups. Yet, we have little systematic (quantitative) evidence on this potential causal mechanism.

It is intuitive that a successful coup may undermine press freedom. However, many coups, such as the one in Turkey, are not successful. Still, they seem to offer unique opportunities for getting rid of

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unwelcome journalists and silencing critical media. Democratically elected governments might depend even more on having a coup as a pretext, since they are otherwise constrained in using repression, which is why levels of press freedom are generally higher in democracies. Moreover, governments may react differently to a coup depending on the size of the country's public sector. As larger governments already use substantial resources, their ability to buy off opposition interests is limited, which makes the use of repression as an alternative coup-proofing strategy significantly more likely.

To explore the different (conditional) effects of coups on press freedom, we draw on a dataset covering the period from 1950 to 2020 for 160 countries. We ask whether successful and unsuccessful coups systematically encourage politicians to infringe on the freedom of the press and whether these effects depend on the type of political system against which the coup is directed and the size of government. We find that, although press freedom is quite stable, successful coups lead to a substantial reduction in press freedom. That is, however, only the case when the coup aims at a democratically elected government with sufficiently large government spending. Thus, we contribute not only to the literature on the determinants of press freedom by shedding light on policy reactions to political turmoil, but we also add to the literature on the effects of coups and the economics of conflict in general (Acemoglu and Robinson, 2006; Acemoglu et al., 2010; Meyersson, 2016; Aidt and Leon, 2019).

The remainder of the paper is structured as follows. In Section 2, we summarize the literature. Section 3 introduces our theoretical model. In Section 4, the empirical strategy and data are discussed. Section 5 presents and discusses the regression results, before Section 6 concludes.

## 2. The literature

Our study connects to several strands of literature. Many studies deal with the political aftermath of coups,<sup>1</sup> but VonDoepp and Young (2012) is the only study that directly associates coups with press freedom. They argue, quite intuitively, that media harassment increases when governments face threats to their power. Based on a dataset covering 23 African countries over 15 years, VonDoepp and Young find empirical support for their conjecture: Media harassment increases when coup plots against the government become known. Our study, thus, addresses several research questions on which there is almost no empirical evidence.

Apart from the value attached *per se* to having a free press, limits on press freedom are also associated with other problems. Ample empirical evidence indicates that a freer press is correlated with higher levels of social welfare (e.g., Coyne and Leeson, 2009; García-Sánchez et al., 2016; Whitten-Woodring and Van Belle, 2017). Bjørnskov and Freytag (2016) show that the frequency at which journalists who publicize corruption are killed is co-determined by a country's press freedom and its corruption level. It is essential to understand why governments curtail media freedom in order to enhance societies' social welfare and political stability.

There is also literature discussing the effectiveness of a free press in holding the government accountable. Jha et al. (2022) show that press freedom can increase government accountability, thereby making

internal political conflict less likely. Leeson (2008) shows for 60 countries that press freedom increases interest in politics, political participation, and voter turnout. Djankov et al. (2003) show that state-ownership of media undermines the accountability of governments. This is supported by Besley and Prat (2006) who show that media under government control can be captured by government interests. Snyder and Strömberg (2010) demonstrate that media coverage is essential to holding members of the U.S. Congress accountable. This literature is highly relevant to our theoretical arguments, as the ability of media to hold governments accountable is what makes it important for governments to control the media in times of political turmoil (see also Bjørnskov and Voigt, 2022).

Free media do not only hold the government accountable, but they also help to mitigate principal-agent problems vis-à-vis the bureaucracy. Stapenhurst (2000) was the first to report the corruption reducing effect of press freedom. He distinguishes a direct effect of reports leading to impeachment and imprisonment of corrupt politicians from an indirect (deterrent) effect on decision-makers who fear being exposed. Brunetti and Weder (2003) show that corruption is indeed reduced in countries with a free press (see also Dutta and Roy, 2016). Freille et al. (2007) use an extreme bounds analysis to demonstrate the robustness of this relationship. Moreover, Charron (2009) finds that trade openness reduces corruption only in countries with free media.

Another strand of related literature deals with the political economy of governments' influence on press freedom. Besley and Prat (2006) introduce a political economy model of media capture by the government and Enikolopov et al. (2011) show that consumption of independent television in Russia strengthens the support for opposition parties. These important effects of press freedom raise the question under which conditions the press can be expected to operate free from government interference. Djankov et al. (2003) is the first study to show that government ownership of media is driven by political economy rather than efficiency considerations. Similarly, Gehlbach and Sonin (2014) formulate a model that predicts more government control of the media when the government has an interest in mobilizing citizens to take actions that further some political objective. Qian and Yanagizawa-Drott (2017) show that U.S. news coverage of human rights abuses committed by other members of the UN Security Council during the terms of Reagan and Bush Sr. was conditional on whether countries were U.S. allies.

These studies are especially relevant for understanding the role of free media in democratic systems. However, there is also literature on the political role of free media in nondemocracies. Adena et al. (2015), for example, show that the Nazi regime in Germany used control over the media to increase support for anti-Semitic policies and Yanagizawa-Drott (2014) estimates that ten percent of the participants of the Genocide in Rwanda had been mobilized only by radio. These studies suggest that control over the media is crucial for governments in times of crisis in order to facilitate coordination among supporters and prevent coordination of political opponents. Acemoglu et al. (2018), Enikolopov et al. (2018), and King et al. (2014) all suggest that nowadays this includes the need to control social media, such as Facebook and Twitter. Jha and Kodila-Tedika (2020) demonstrate a positive correlation between democracy and Facebook penetration. Jha and Sarangi (2017) document a negative relationship between Facebook penetration and public-sector corruption. Edmond (2013) models how new information technology affects regime stability via altering the cost of controlling the media for propaganda purposes. Egorov et al. (2009) and Lorentzen (2014) suggest that while control over the media lowers the risk of being overthrown, it also hampers the corruption reducing effect of free media. Given this trade-off, even autocrats should allow for somewhat free media (see also Boleslavsky et al., 2021). Guriev and Treisman (2022) describe how authoritarian politics have, nevertheless, moved in recent decades from violent repression to the manipulation of information as their main instrument to hold on to political power.

Taken together, the extant literature suggests that media freedom

<sup>1</sup> Naturally, the literature about post-coup effects on governance and repression is huge and wide. Since this literature is only loosely related to our research question, we provide three prominent examples. With respect to democratization, Derpanopoulos et al. (2016) discuss the question whether coups facilitate democratization and conclude that coups more often lead to autocratic regimes than to democracies. Marinov and Goemans (2014) distinguish between the periods before and after the end of the Cold War and argue that since 1991 the emergence of post-coup democracy has increased. Curtice and Arnon (2020) show that governments increase political repression after coups, independent of their success.

increases social welfare and serves to hold politicians and bureaucrats accountable. Thus, politicians have an interest in controlling the media to avoid being held accountable and use them to their own political advantage. Uncovered coup plots seem to be used regularly to gain such control over the media, at least in the specific context of two dozen African countries (VonDoepp and Young, 2012) and the recent example from Turkey. The extent to which these findings generalize, the question of whether failed and successful coups have different consequences, and the conditionality of effects on regime types and the size of government have not yet been addressed in the literature.

### 3. Theoretical considerations

We start from the assumption that governments are not benevolent. Government actors maximize their utility, e.g., by extracting rents, which necessitates that they stay in office. Following recent studies, we assume that the government's political survival depends on two factions of society. One is the military and a number of other politically influential interest groups; the other is "the population" (e.g., Acemoglu and Robinson, 2006; Acemoglu et al., 2010). Societies differ across time and space regarding the military's influence and which parts of the population have the most political influence (cf., Casper and Tyson 2014; Gerling, 2017; Aidt and Leon, 2019; Choulis et al., 2022). These organized interests can be chiefs of clans and tribes, feudal lords, industrialists, merchants or simply the entire electorate (in highly competitive democracies). For simplicity, we refer to all of these as the population and abstract from any conflict over intra-group redistribution, which is at the heart of Acemoglu and Robinson (2006).

The government has at its disposal an income tax, the use of which is constrained by the distortionary nature of taxation and the threat of being deposed, for example by a coup, if the tax rate is too high. Taxation *per se* may be unpopular, but the revenue generated from taxing the population can be used for three purposes. The government can redistribute rents to any organized interest, which would otherwise threaten its political survival via organizing or supporting a coup d'état. These interest groups include the military as argued in Leon (2014), but also civilian interests as in Olson's (1982) seminal work. Second, the government can invest in repression, for example by creating a secret police or by censorship and exerting direct control over the media. Finally, the residual government revenue can be spent on government consumption with a variety of purposes not necessarily associated with coup-proofing or related considerations. Relative to autocracies, democracies face a comparative disadvantage in the use of repression and constitutional rules and established conventions that protect press freedom can increase the cost of media repression, independent of the regime type. Despite differences by regime type and constitutional design, our theoretical argument can be applied to all countries.

The government faces not only a budget constraint, but also the threat of a coup. The severity of this threat depends not only on the budget and the use of repression, but also on the inherent and unobservable costliness of staging a coup and the competence of potential coup makers. The government cannot observe or measure this cost, but it can estimate it with a random measurement error. This measurement error explains why coups occur in equilibrium, although they are rare events.<sup>2</sup>

We describe the relationship between the incumbent government and special interests as a game, which is depicted in Figure A1 in the Appendix. Based on the estimated cost of a coup, the government chooses an optimal level of repression and an optimal budget in stage 1, and it consumes as a residual claimant what is left of the budget. The

budget, thus, consists of three components, two of which – subsidies and repression – affect the incumbent's chances of remaining in office. As the marginal effectiveness of subsidies and repression are diminishing, the government's optimal policy bundle consists of a mix of the two instruments, a tax rate, as well as a residual.

In the second stage, special interests choose whether to stage a coup, depending on the costliness of coups and the government's use of repression and subsidies.<sup>3</sup> If there is no coup, the game ends. If there is a coup and it is unsuccessful, the government updates its estimate of the coup risk. Based on this updated estimate, the government chooses a new budget. Easton and Siverson (2018) argue that dictators systematically use purges after failed coups to remain in power, which is reflected here in increased investment in repression. If, instead, some interest group stages a successful coup, the government is replaced and the new government chooses an optimal budget based on its estimate of the costliness of staging a coup. It is plausible to assume that this government also estimates the costs of a coup to be lower and, hence, the risk of a coup to be higher than assumed by the previous government before the coup.

We model the strategic decisions of political leaders facing a potential coup as follows. The government maximizes its objective function  $G$  in (1) where  $\pi$  are the profits of politically relevant special interests in the military and industrial sectors of society,  $y$  is national income,  $\eta$  is the risk of losing an election,  $\mu$  is the probability that a coup attempt will succeed such that the incumbent is deposed, and  $p$  is the risk that it will occur in the first place. As is standard, we assume that the objective function is quasi-concave such that the weights  $\alpha$  and  $\beta$  are restricted to be between 0 and 1. The budget consists of subsidies  $s$ , repression costs  $r$ , and a residual income share  $v$  that can be used for productive public goods, popular non-productive endeavors or luxury consumption by a government elite. As such, the government's objective function  $G$  includes the welfare of the population in the form of after-tax income  $(1-\tau)y$ , the welfare of special interests  $\pi$ , and the discretionary spending component  $vy$ . Subsidies at least partially aid the corporate welfare of special interests, given by  $\pi_s$ , as these interests receive some or all of the subsidy  $s$ , while increased repression is costly in the sense that it reduces economic activity such that  $dy/dr < 0$ . The budget is funded by an income tax  $\tau$  levied on all personal income. The government maximizes the simple objective function in (1) under the constraint in (2), which states that the budget must be balanced.

$$\max[(1-p) + p(1-\mu)](1-\eta)\pi^\alpha[(1-\tau)y]^{1-\alpha}[vy]^\beta \quad (1)$$

$$s.t. \tau = v + s + r \quad (2)$$

We make three additional assumptions. First, we assume that democracies face *de facto* binding constraints on repression such that there is a *de jure* or *de facto* cap on their spending  $\check{r}$ . We also assume that the probability of coup success  $\mu$  is given by (3), that the electoral risk  $\eta$  that any democracy faces is given by (4), and that both probabilities include a large truly random component. As such, we do not assume that autocrats are always purely self-interested in the sense that they ignore

<sup>2</sup> More repression could lead to an increase in the measurement error, as the political regime is suppressing the production and dissemination of information, which it could use to estimate the risk of a coup (Tullock, 1987; Egorov et al., 2009).

<sup>3</sup> Repression can lower the coup risk. Casper and Tyson (2014), e.g., argue that media freedom affects whether protests trigger coups and Hollyer et al. (2015) show more generally that transparency destabilizes autocracies via mass protest. Political unrest is a robust predictor of coups (Gassebner et al., 2016).

citizens' interests and we also do not assume that democratically elected politicians are not affected by special interests.<sup>4</sup>

$$\mu = \mu\{r\} \quad (3)$$

$$\eta = \eta\{(1-\tau)y, r\} \text{ with } \frac{\partial \eta}{\partial \tau} > 0 \text{ and } \frac{\partial \eta}{\partial r} < 0 \quad (4)$$

We assume, as discussed above, that the marginal effect of repression on the success probability of a coup  $\mu_r$  is uncertain and most likely the relationship between  $\mu$  and  $r$  is inversely u-shaped, as there are two opposing effects: First, repression in the form of increased restrictions on the press is likely to increase the coordination costs of potential coup makers; and second, increased restrictions of press freedom also imply that the incumbent government itself gains less access to information than would have appeared in a free press, and thus must invest even more in collecting information through other costly channels, such as intelligence services. Finally, we make the innocuous assumption that special interests prefer higher to lower income and therefore dislike the *direct* effect of taxes – military personnel also pay income taxes and the profits of industrial special interests will be adversely affected by lower disposable income.

Maximizing the government's objective function yields first order conditions that allow us to solve for the optimal level of repression prior to any coup attempt and following a coup attempt, given its outcome. However, in order to provide a full solution, we have to discuss why one or more factions of society might attempt a coup. We assume that the special interests are instrumentally rational and compare their current subsidies with the expected subsidies from a new government, minus the coordination costs  $c$  associated with a coup attempt and any retribution  $f$  from the incumbent if the attempt fails. They are, thus, likely to attempt a coup if (5) holds, where  $\mu$  denotes the component of the success rate that the coup makers cannot control themselves. The expected profits after a successful coup depend on both the preferences and the competence of the new government. The probability function in (6) is a reformulation of (5) and defines the coup risk  $p$ , which we use in (1).

$$\pi|_{\text{incumbent}} < \mu\pi|_{\text{new}} - (1-\mu)f - c \quad (5)$$

$$p = \text{prob}\left\{ \pi|_{\text{new}} > \frac{1}{\mu}(\pi|_{\text{incumbent}} + c) + \frac{1-\mu}{\mu}f \right\} \quad (6)$$

We, hence, assume that potential coup makers will attempt a coup if their expected profits, net of coordination costs and expected punishment in case of failure, are higher than what they presently earn from the support policies defined by the incumbent government. This may be the case if the coup makers have different preferences than the incumbent, i.e., a higher weight on corporate welfare  $\alpha$ , or if a new government is expected to be more competent and thus likely to choose policies or institutional changes that positively affect overall income.<sup>5</sup>

If coup makers have different information about the likely competence or preferences of a potential new government, about the success rate of a coup or about its coordination costs, their assessments of the probability in (6) will differ from that of the incumbent. If so, and if the difference is sufficiently large, a coup will come as a surprise to the

incumbent government because  $p$  turns out to differ from the incumbent government's assessment,  $E_{\text{inc}}\{p\}$ . It is this type of underestimation of the coup risk that we build our theoretical conjectures on, which we aim to test in the following.

Combining the first order conditions of the maximization problem, we can characterize the equilibrium level of repression (of the press) as in (7). The expression is always negative, as we quite naturally assume that  $dy/dr < 0$ , i.e., repression comes with a social (economic) cost, such that a larger negative expression implies a smaller  $r$ . This implies that even if the association between  $r$  and  $\mu$  is u-shaped, the optimum will always be on the downward sloping side of the curve. Similarly, the optimum support to politically relevant groups in society,  $s$ , is characterized by (8).

$$\frac{d\mu}{dr} = \frac{\beta}{p} \left[ \frac{1-\tau-v}{vy} \frac{dy}{dr} - \frac{1}{a} \right] \quad (7)$$

$$\frac{d\pi}{ds} = \frac{1}{\frac{\alpha}{\pi} - \frac{p'}{\mu}} \left[ \frac{\beta}{v} - \frac{1-\alpha+\beta}{y} \frac{dy}{ds} \right] \quad (8)$$

It is immediately visible that if a shock occurs to  $E_{\text{inc}}\{p\}$ , e.g., because the incumbent government is surprised by a coup, optimum repression will change. Similarly, if a new government comes to power through a coup, optimum repression is likely to change as both the assessment of  $p$  and optimum levels of  $\tau$ ,  $\beta$ , and  $v$  may change. However, it should be emphasized that not all coup attempts are unexpected, such that not all events will lead to an update of  $E_{\text{inc}}\{p\}$ . In any case, the expression in (7) suggests that the reaction to new information in  $p$ , whether it is for an incumbent or a new government, depends on these factors.

In particular, the solution implied by (7) suggests that larger initial equilibrium levels of  $\tau$  and  $v$  – i.e., higher levels of government consumption – imply *heavier* repression reactions: As both higher taxes ( $\tau$ ) and larger discretionary government consumption ( $v$ ) lower the *relative marginal* cost of repression, repression becomes more attractive with higher consumption. In other words, as a larger government sector makes further expansion of subsidies and other ways of buying loyalty more costly at the margin, coup-proofing a regime through increased repression becomes more attractive. By extension, (8) suggests a similar reaction for industrial subsidies,  $s$ , which may react stronger to coups when  $v$  is already large. This conjecture is, at least on the margin, in line with Hayek's (1944) argument in The Road to Serfdom that government control of economic decision-making results in tyranny.

Thus, our first testable hypotheses are the following:

- H1. Coups lead to increasing repression.
- H2. The effect in H1 is larger for successful coups than for failed coups.
- H3. Coups in societies with larger government consumption lead to comparatively more repression than coups against small governments.
- H4. The difference in H3 is larger for successful coups than for failed coups.

Additionally, for democracies, we assume that they either use optimal repression at a low level or they end up in a corner solution with  $r = \bar{r}$  in which the incumbent government cannot protect itself optimally because of institutional constraints on the use of repression. The consequences of a successful coup are, therefore, exacerbated when these countries have *de facto* binding constitutional constraints on repression, which prevent them from choosing the optimal level of repression before a coup occurs. Technically, this implies that all derivatives with respect to  $r$  must be zero when the constitutional rule is binding, such that pre-

<sup>4</sup> Thorsen (2018), for example, shows that while most autocrats are hungry for power and wealth, specific examples such as Singapore's Lee Kwan Yew and Tanzania's Julius Nyerere cannot be understood without taking their personal ideological beliefs into account. However, it is impossible to claim that such concerns consistently lead to better outcomes – while Yew's policy choices have contributed to making Singapore one of the richest places in the world, Nyerere's similarly strong personal convictions contributed substantially to the country's disastrous economic development during his regime. The extent to which politicians care about the economic well-being of the population, special interests, and themselves is captured by the parameters  $\alpha$  and  $\beta$  in our model.

<sup>5</sup> In addition, coup makers may not believe that the punishment  $f$  is credible, which would increase the attractiveness of attempting a coup.

coup repression is already set at or below  $\bar{r}$ .<sup>6</sup> If pre-coup repression is below  $\bar{r}$ , repression may still increase as a result of a coup attempt, but much less so than when coming from a situation of binding constraints. Yet, in some situations, an emergency constitution allows  $r > \bar{r}$  for the limited duration of a state of emergency (Bjørnskov and Voigt, 2018). Our final hypotheses are therefore:

**H5.** Coups in countries with constitutions that limit censorship and repression increase repression less than coups in countries without such constitutional rules.

**H6.** Coups against democracies increase repression more than coups against nondemocracies.

#### 4. Empirical strategy and data

We use simple linear regression models, which are based on equation (7), to analyze the change in press freedom after a coup. They can be described by the general estimation equation:

$$Y_{i,t} = \alpha \times Y_{i,t-2} + \beta \times COUPS_{i,t} + \gamma \times X_{i,t-1} + \iota_i + \varsigma_t + \varepsilon_{i,t} \quad (9)$$

Our basic model setup includes region ( $\iota_i$ ), and year fixed effects ( $\varsigma_t$ ), as well as country level random effects with clustered standard errors. However, all results are robust to the inclusion of country fixed effects. Although all models include a lagged dependent variable ( $Y_{i,t-2}$ ), we do not use GMM-based dynamic panel data estimators, as the time period covered is sufficiently long for the Nickel bias to become negligible (see, e.g., Beck and Katz, 2011). A particularity of our model specification is that we include a two-year lagged dependent variable. This serves to make sure that the initial level of press freedom can be treated as exogenous vis-à-vis the lagged treatment indicator for a failed or successful coup. This approach seriously alleviates the potential problems of endogeneity, which readers may be concerned about, because we time our variables such that any effect on press freedom prior to coups is accounted for in our specification. Coups d'état, while not being completely exogenous, are by their nature very difficult to predict and are thus commonly treated as exogenous in the empirical literature. Even more exogenous are the outcomes of coups, i.e., whether they are successful or fail.

Our dependent variables ( $Y$ ) derive from the V-Dem dataset v12 (Coppedge et al., 2016). We explore three separate elements of press freedom: 1) *Bias* captures the degree of bias in media reporting; 2) *Censorship* directly captures the extent to which the government censors media; and 3) *Harassment* picks up if journalists are directly harassed, jailed, beaten or otherwise mistreated for reporting something that the authorities or other interests do not like. Higher values in each of these indicators express more freedom for the media. The three variables can be understood as representing different levels of escalation of government interference in media markets. Bias indicates that there might only be a threat of interference. Harassment instead implies the violation of individual rights of journalists. The indicators from the V-Dem dataset are preferable to other commonly used indicators as they measure media freedom for a significantly larger time period and country sample. Also, most other datasets do not distinguish between different forms of curtailing media freedom. Our control variable ( $X$ ) for the level of judicial independence in a country is also from the V-Dem dataset and constitutes the mean level of judicial independence with respect to lower and higher tier courts. In addition, we include a dummy variable as a control, which we code based on the Comparative Constitutions Project's dataset

<sup>6</sup> This has two additional implications. First, when  $p$  goes towards zero, i.e., a situation without any coup risk,  $d\mu/dr$  approaches infinity such that the optimal investment in repression approaches zero. Second, it also has the consequence that when that happens, (7) implies that  $\beta$  must approach zero too, such that stable democratic politics are not attractive games for individuals with preferences for autocratic luxury.

(Elkins et al., 2009). This variable indicates whether the constitution provides *de jure* protection of the freedom of the press and other media.<sup>7</sup> From the same source, we get information on whether the constitution allows censorship under special circumstances, such as states of emergency, or consistently prohibits censorship and guarantees press freedom.

We use a newly developed database by Bjørnskov and Rode (2020, v4.2) to distinguish democracies from autocracies, to capture whether a coup occurred in a country in a given year (COUPS), and to determine whether that coup succeeded. This allows us to test our basic hypotheses H1 and H2. Democracy is coded as a dummy for whether the country has regular, free, and fair elections that can lead to a change of government and is a continuation of the democracy indicator in Cheibub et al. (2010). Autocracies are, therefore, defined as societies that cancel or illegally postpone elections, exclude parties from elections, rig or otherwise manipulate elections, or in which elections for other reasons cannot lead to regular changes in political leadership. The data by Bjørnskov and Rode provides substantially larger coverage of countries and failed coups than most other data sources (cf. Powell and Thyne, 2011). We include counts of how many coups succeeded and failed in a country over the last five years to account for whether press freedom may be in the process of recovering from previous events.

In all model specifications, except the most basic ones, we include two interaction terms between (lagged) democracy and the two dummy variables for whether a successful or failed coup occurred. This allows for an indirect test of H5. We also provide tests in which we interact coups with the initial size of government to test H3 and H4. With these tests, we add a measure of the full size of government consumption as a share of total consumption, which includes all transfer and subsidy payments and fits well with our theoretical argument that governments can buy support specifically through *subsidies* to specific interests. We use the government size index from Gwartney et al. (2021) that is available from 1970 for an increasing number of countries.<sup>8</sup>

Finally, we provide a set of tests with three-way interactions with our measures of constitutional protection as direct tests of H5. For all estimated conditional effects, we provide marginal effects with corresponding robust standard errors clustered at the country level, as calculated by the delta method (see Brambor et al., 2006). In order not to attribute effects of economic development to institutional features, we always control for the logarithm of GDP per capita and a dummy variable for whether recessions occurred, i.e., whether economic growth was negative in a given year; these data derive from the Penn World Tables 10.0 (Feenstra et al., 2015). Table 1 shows the full descriptive statistics.

#### 5. Findings

The results of our basic estimations are reported in Table 2 for the full sample of 160 countries. All findings are in line with our intuition and the predictions of the theoretical model. However, some aspects may be surprising and details vary across the three dependent variables. We run six regressions with results in the even-numbered columns including two interaction terms between initial democracy and coups (failed and successful respectively) as a direct test of H1 and H2.

First, we offer three general observations throughout the six equations: Press freedom is strongly related to past press freedom, i.e., there is substantial persistence in each of our three dependent variables. We

<sup>7</sup> Note that previous studies have frequently used the more traditional data from Freedom House. V-Dem indicators, however, offer a far superior country- and time-coverage. Moreover, the Freedom House index of press freedom is highly correlated with the V-Dem measures at approximately  $r = 0.8$ .

<sup>8</sup> Before 2000, the index is only available every five years. We use linear interpolation for the years in between, which we argue is a viable strategy, as government consumption is quite stable in the short to medium run.

**Table 1**  
Descriptive statistics.

Variable	Observations	Mean	Std. Dev.	Min	Max
Media Bias	8417	0.392	1.634	-3.354	3.148
Media Censorship	8417	0.341	1.668	-3.094	3.516
Media Harassment	8417	0.381	1.573	-3.179	4.078
Failed Coups	8417	0.027	0.162	0	1
Successful Coups	8417	0.023	0.149	0	1
Democracy (t-1)	8417	0.485	0.500	0	1
Past Failed Coups	8417	0.116	0.321	0	1
Past Successful Coups	8417	0.101	0.301	0	1
Judicial Independence (t-1)	8417	0.353	1.358	-3.176	3.158
Constitutional Press Freedom (t-1)	8417	0.569	0.495	0	1
Log-Income p.c. (t-1)	8417	8.701	1.204	5.500	12.473
Recession (t-1)	8417	0.297	0.457	0	1
Eastern Europe & former USSR	8417	0.103	0.304	0	1
Latin America	8417	0.150	0.357	0	1
MENA	8417	0.102	0.303	0	1
SSA	8417	0.291	0.454	0	1
Western Europe & North America	8417	0.175	0.380	0	1
Pacific	8417	0.006	0.077	0	1
Caribbean	8417	0.031	0.174	0	1
Asia	8417	0.142	0.349	0	1

note that with a two-year lagged dependent variable, the estimates effectively capture determinants of the *change* of press freedom over time. Second, we find no evidence of any additional persistence of the consequences of coups. The third general feature is that democracy and judicial independence are strongly and positively associated with all three measures of press freedom.

Turning to the other variables, we observe that constitutional protection of press freedom is only clearly associated with censorship: A positive relation means that constitutional protection contributes positively to the absence of censorship. We also observe the expected positive relationship between GDP per capita and media freedom, but again only in some specifications. Recessions are not significantly correlated with any of our dependent variables.

Our main interest here are the effects of successful and unsuccessful coups aimed at democracies or autocracies. For the unconditional effect of coups, we find that successful ones are associated with a substantial decline of press freedom in terms of harassment and censorship. With an interaction term, it becomes clear that there is no systematic effect of coups on press freedom in autocracies and generally no effect of failed coups. The general effect of coups is therefore driven entirely by successful coups against democracies, for which we find very substantial effects on all three dependent variables. The size of the decline of press freedom is about 50 percent of a standard deviation.

The main findings are confirmed in Table 3 where we leave out country-years with the lowest levels of two year-lagged freedom of the media. In another robustness check, also shown in Table 3, we drop country-years in which a coup already occurred in the previous year or the year before. We, thus, rule out effects from countercoups and coup cascades, which might be of a different nature and make up more than a quarter of all coup attempts according to Bjørnskov and Rode (2020). Columns 1 to 3 exclude observations with lagged press freedom measured in the lowest decile; columns 4 to 6 exclude observations in which there was a coup in the previous year, and columns 7 to 9 exclude observations in which there was some coup one or two years prior to the observation. We, first, reconfirm that sustained democracy and judicial

independence matter for press freedom. Second, we can also confirm that successful coups are only detrimental to media freedom when they target democracies.

In addition, we provide a direct test of H3 and H4, which we report in full in Table A1 in the Appendix. Here, we plot the marginal effects of failed (light grey) and successful coups (dark grey), conditional on the initial size of the public sector (as measured by Gwartney et al., 2021), together with their 95%-confidence intervals in Figs. 1–3. As is evident on the left side of these figures, we observe no evidence in support of H3 in the case of autocracies, as all confidence intervals enclose zero at any size of government. However, we do find evidence in favor of H4, as the effects of successful coups are larger and statistically significant for countries with larger government sectors, whereas they are insignificant for successful coups in countries with relatively small government sectors. This difference is most pronounced for censorship.

Finally, in Table 4 we show the results we obtain when we allow the effects of coups to vary not only by success vs. failure and democracy vs. non-democracy, but also depending on whether a constitutional rule exists that prohibits or legitimizes intervention in the media sector. We thereby provide a test in line with H5 whether the basic institutions governing regular politics in a country, i.e., the constitution, are able to protect the press from interventions by the government during episodes of substantial political instability in the wake of coups. Regardless of whether the constitution simply guarantees press freedom, directly prohibits censorship at all times, or allows for censorship in special circumstances, we find that a successful coup against a democracy leads to approximately the same reduction of press freedom. Overall, we cannot confirm that *de jure* constitutional protection is generally effective or respected in most societies, as they go through political turmoil. This is in line with the original findings of Feld and Voigt (2003) that *de jure* rules by themselves may often not have any consequences (see also Bjørnskov and Voigt, 2021; Voigt et al. 2015).

A set of further robustness tests (available on request) confirm the stability and robustness of the main findings. After excluding the richest countries (mainly the OECD), in which coups are extremely rare, we find no qualitatively different results. Further tests show that the results are not driven by the country-years in which more than one coup occurred.

## 6. Summary and future research

Press freedom has been under attack in many countries in recent years. A failed coup in Turkey, a country with already harsh restrictions on the press and substantial harassment of journalists, has made things even worse there, and a recent coup in Myanmar was followed by a substantial loss of press freedom. Declining press freedom following coups is, however, more often associated with successful coups, although counterexamples, such as the Zimbabwean coup in 2017, show that even successful coups do not have to threaten press freedom and may hold promise of the opposite. We therefore formulate a model of a utility maximizing government that uses public spending strategically to avoid either coups or defeat in elections, which can explain the effect of a successful coup but provides ambiguous implications regarding the dynamics of press freedom following failed coups.

The model illustrates the complex nature of the relationship between governments and the “fourth estate”, the press. On the one hand, the press is an instrument for governments, which is of course the easier to use, the better the government performs. On the other hand, journalists are a threat and nuisance for most politicians. The latter aspect can be observed frequently in reality, and in particular in democracies where politicians regularly complain to no effect about fake news and

**Table 2**  
Effect of coups on different forms of media freedom or bias, baseline results.

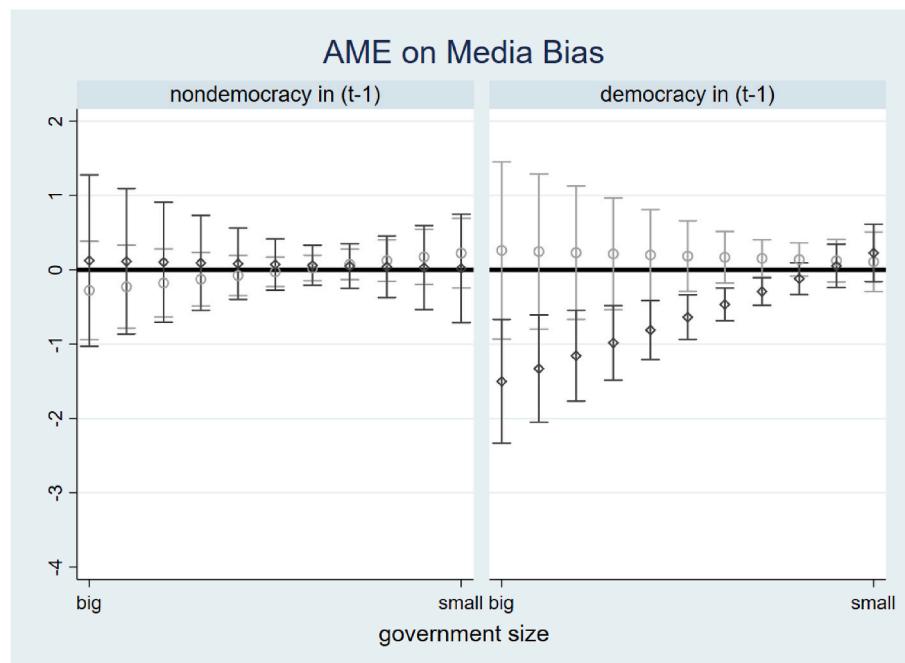
	(1) Bias	(2) Bias	(3) Censorship	(4) Censorship	(5) Harassment	(6) Harassment
LDV(t-2)	0.897*** (0.014)	0.896*** (0.014)	0.849*** (0.015)	0.848*** (0.015)	0.899*** (0.011)	0.898*** (0.011)
FailedCoup	0.015 (0.052)	-0.020 (0.061)	0.005 (0.058)	-0.027 (0.063)	0.031 (0.051)	-0.008 (0.051)
SuccCoup	-0.106 (0.070)	0.052 (0.084)	-0.234** (0.073)	-0.047 (0.080)	-0.173*** (0.050)	-0.046 (0.057)
Democracy(t-1)	0.107*** (0.028)	0.123*** (0.029)	0.152*** (0.031)	0.172*** (0.033)	0.070** (0.023)	0.081*** (0.024)
PastFailed	-0.004 (0.025)	-0.007 (0.025)	0.012 (0.023)	0.010 (0.023)	0.018 (0.022)	0.015 (0.022)
PastSucc	-0.004 (0.031)	-0.007 (0.031)	0.032 (0.029)	0.028 (0.029)	-0.013 (0.026)	-0.015 (0.027)
JI(t-1)	0.032* (0.015)	0.031* (0.014)	0.073*** (0.017)	0.071*** (0.017)	0.034** (0.012)	0.033** (0.012)
ConstPF(t-1)	0.018 (0.014)	0.017 (0.014)	0.034* (0.016)	0.033* (0.016)	0.023 (0.014)	0.022 (0.014)
GDPpc(t-1)	0.001 (0.011)	0.001 (0.012)	0.023* (0.010)	0.022* (0.010)	0.017* (0.009)	0.017 (0.009)
Recession(t-1)	0.019 (0.013)	0.018 (0.013)	0.008 (0.014)	0.007 (0.014)	0.006 (0.011)	0.005 (0.011)
Failed*Democracy(t-1)		0.142 (0.101)		0.135 (0.121)		0.153 (0.091)
Succ*Democracy(t-1)		-0.598*** (0.149)		-0.706*** (0.166)		-0.484*** (0.121)
Constant	-0.107 (0.103)	-0.122 (0.106)	-0.336** (0.122)	-0.354** (0.121)	-0.100 (0.085)	-0.112 (0.085)
Observations	8,417	8,417	8,418	8,418	8,418	8,418
Countries	160	160	160	160	160	160
R <sup>2</sup>	0.83	0.83	0.79	0.79	0.81	0.81
Wald-Chi <sup>2</sup>	126,709	130,612	168,653	170,202	200,606	197,731
AME Failed Coup		0.05		0.04		0.07
AME Successful Coup		-0.24***		-0.39***		-0.28***
AME Failed   Dem(t-1)=0		-0.02		-0.03		-0.01
AME Failed   Dem(t-1)=1		0.12		0.11		0.15
AME Succ   Dem(t-1)=0		0.05		-0.05		-0.05
AME Succ   Dem(t-1)=1		-0.55***		-0.75***		-0.53***

Note: Country-random effects estimates with clustered standard errors in parentheses, continent and year fixed effects omitted. \*: p<0.05, \*\*: p<0.01, \*\*\*: p<0.001.

**Table 3**  
Effect of coups on media freedom, robustness test with reduced samples.

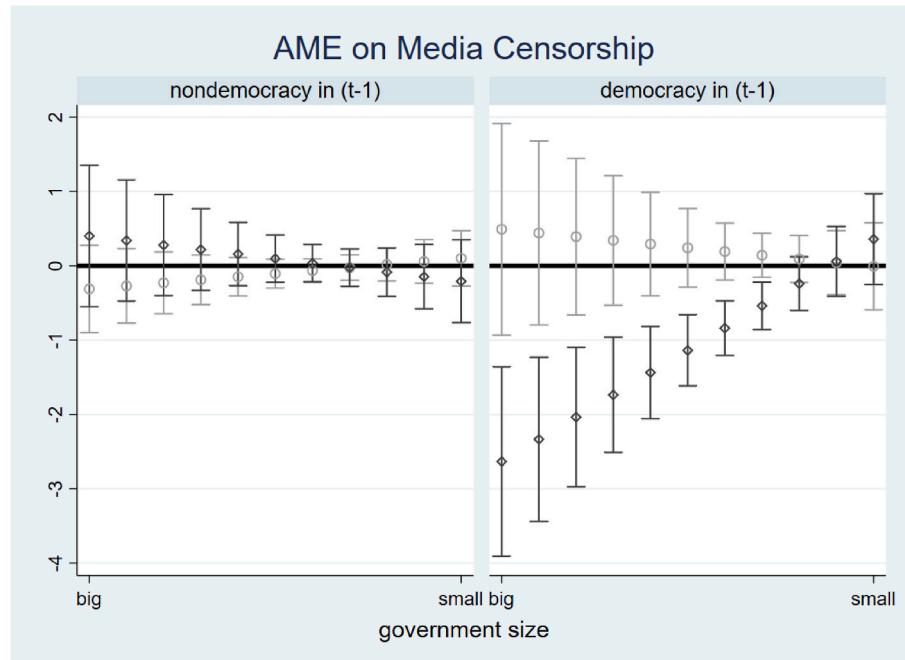
	(1) Bias	(2) Censor.	(3) Harass.	(4) Bias	(5) Censor.	(6) Harass.	(7) Bias	(8) Censor.	(9) Harass.
LDV(t-2)	0.822*** (0.018)	0.785*** (0.021)	0.804*** (0.018)	0.908*** (0.012)	0.865*** (0.014)	0.909*** (0.010)	0.910*** (0.012)	0.870*** (0.014)	0.913*** (0.011)
FailedCoup	-0.001 (0.063)	-0.007 (0.066)	0.065 (0.055)	-0.008 (0.048)	-0.044 (0.048)	0.008 (0.043)	0.020 (0.051)	-0.016 (0.052)	0.049 (0.043)
SuccCoup	0.062 (0.083)	0.000 (0.087)	-0.013 (0.052)	0.071 (0.094)	-0.043 (0.086)	-0.046 (0.066)	0.086 (0.105)	-0.042 (0.100)	-0.039 (0.076)
Democracy(t-1)	0.159*** (0.030)	0.170*** (0.034)	0.106*** (0.026)	0.100*** (0.025)	0.145*** (0.030)	0.067** (0.022)	0.095*** (0.024)	0.137*** (0.029)	0.062** (0.021)
PastFailed	-0.024 (0.027)	0.006 (0.026)	0.026 (0.022)	-0.003 (0.024)	0.030 (0.023)	0.024 (0.022)	-0.003 (0.025)	0.022 (0.023)	0.018 (0.022)
PastSucc	-0.009 (0.030)	0.036 (0.032)	-0.003 (0.028)	-0.002 (0.030)	0.041 (0.027)	0.007 (0.026)	-0.009 (0.031)	0.018 (0.027)	0.005 (0.027)
JI(t-1)	0.041*** (0.012)	0.087*** (0.017)	0.069*** (0.012)	0.029* (0.014)	0.064*** (0.016)	0.031** (0.012)	0.028* (0.014)	0.061*** (0.015)	0.030* (0.012)
ConstPF(t-1)	0.035 (0.019)	0.039 (0.020)	0.019 (0.019)	0.020 (0.013)	0.031* (0.015)	0.023 (0.013)	0.018 (0.014)	0.029* (0.015)	0.021 (0.013)
GDPpc(t-1)	-0.006 (0.012)	0.026* (0.013)	0.021* (0.010)	0.001 (0.010)	0.021* (0.009)	0.015 (0.008)	0.002 (0.010)	0.020* (0.009)	0.015 (0.008)
Recession(t-1)	0.028* (0.013)	0.010 (0.014)	0.023* (0.011)	0.017 (0.012)	0.006 (0.013)	0.002 (0.010)	0.014 (0.013)	0.003 (0.013)	0.001 (0.010)
Failed*Dem.(t-1)	0.098 (0.101)	0.088 (0.122)	0.031 (0.092)	0.127 (0.098)	0.143 (0.122)	0.128 (0.101)	0.080 (0.106)	0.085 (0.129)	0.038 (0.103)
Succ*Dem.(t-1)	-0.571*** (0.127)	-0.682*** (0.167)	-0.443*** (0.122)	-0.602*** (0.158)	-0.700*** (0.173)	-0.471*** (0.126)	-0.613*** (0.166)	-0.694*** (0.181)	-0.474*** (0.130)
Constant	-0.042 (0.114)	-0.362** (0.132)	-0.102 (0.096)	-0.090 (0.095)	-0.365*** (0.110)	-0.115 (0.077)	-0.083 (0.095)	-0.354** (0.109)	-0.104 (0.078)
Observations	7,560	7,569	7,557	8,222	8,223	8,223	8,043	8,044	8,044
Countries	158	160	159	160	160	160	160	160	160
R <sup>2</sup>	0.76	0.70	0.74	0.85	0.81	0.83	0.85	0.81	0.83
Wald-Chi <sup>2</sup>	52,958	64,186	66,522	185,960	196,690	260,103	201,074	196,432	270,206
AME Failed	0.05	0.04	0.08	0.05	0.03	0.07	0.06	0.03	0.07
AME Succ	-0.25***	-0.37***	-0.25***	-0.23***	-0.39***	-0.28***	-0.22**	-0.39***	-0.28***
AME Failed   D=0	0.00	-0.01	0.06	-0.01	-0.04	0.01	0.02	-0.02	0.05
AME Failed   D=1	0.10	0.08	0.10	0.12	0.10	0.14	0.10	0.07	0.09
AME Succ   D=0	0.06	0.00	-0.01	0.07	-0.04	-0.05	0.09	-0.04	-0.04
AME Succ   D=1	-0.51***	-0.68***	-0.46***	-0.53***	-0.74***	-0.52***	-0.53***	-0.74***	-0.51***

Note: Country-random effects estimates with clustered standard errors in parentheses, continent and year fixed effects omitted. Columns (1) to (3) exclude the decile of the observations with the lowest score on the lagged dependent variable from the sample, columns (4) to (6) and (7) to (9), respectively, exclude observations 1 and 2 years after a coup from the sample. \*: p<0.05, \*\*: p<0.01, \*\*\*: p<0.001.



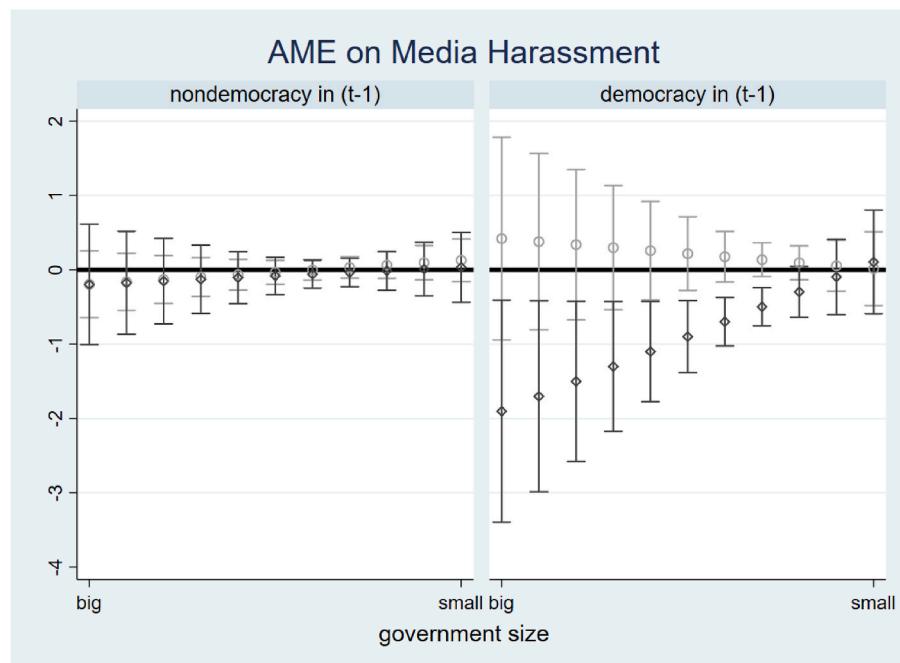
Note: Average marginal effect of successful coups (dark) versus failed coups (light).

**Fig. 1.** Effect of coups on media bias, conditional on size of government.



Note: Average marginal effect of successful coups (dark) versus failed coups (light).

**Fig. 2.** Effect of coups on media censorship, conditional on size of government.



Note: Average marginal effect of successful coups (dark) versus failed coups (light).

**Fig. 3.** Effect of coups on media harassment, conditional on size of government.

irreverent journalists. Our model nevertheless also highlights how repression may be a more attractive instrument when the relative marginal cost of alternative instruments becomes high.

We analyze these associations in a large sample of countries using three measures of press freedom from the V-Dem dataset and information on coups from a recently developed database (Coppedge et al., 2016; Bjørnskov and Rode, 2020). We find that successful coups, on average, do lead to very sizable reductions in press freedom: Governments that come to power through a coup censor and harass the press substantially more than the previous government. However, separating coups against autocracies from those against democratically elected governments, we can show that these findings are entirely driven by coups against democracies. In general, we find no systematic effects of coups against autocracies, but very strong declines of all measures of press freedom following successful coups against democracies.

In this paper, we are merely able to take one step in the direction of understanding mechanisms by demonstrating that the effect of successful coups against democracies is mainly driven by coups against countries with a large public sector. We interpret this finding, consistent with our theoretical considerations, as a consequence of the lower marginal cost of suppressing press freedom *relative* to other ways of buying additional support for the new regime in societies that already have high levels of public spending.

There are, however, more candidates for future studies on the transmission channels between coups and changes in press freedom. VonDoepp and Young (2016), for example, claim "that the rule of law is

associated with more favorable climates for the media. This likely reflects the protection free media receive from independent judiciaries". One likely transmission mechanism may indeed be that new governments, coming to power through a coup, are likely to restrict the independence of the judiciary and implement other policies that allow them to restrict press freedom (see Bjørnskov, 2018). Likewise, Kellam and Stein (2016) argue that a president is more likely to introduce constraints on the media, if political power is concentrated more in the executive. Second, another factor may be influential, namely the existence of emergency constitutions, which may allow governments to react to coups without directly reducing press freedom formally after a coup. If the coup fails, the government makes use of the emergency provision in the constitution for a short while and returns to business-as-usual thereafter. Although several papers have assumed that such provisions may be influential (e.g., Elkins et al., 2009), we nevertheless find no evidence that *de jure* constitutional constraints have *de facto* consequences for the dynamics of press freedom around these events.

#### Declaration of competing interest

We declare there is no conflict of interest.

#### Data availability

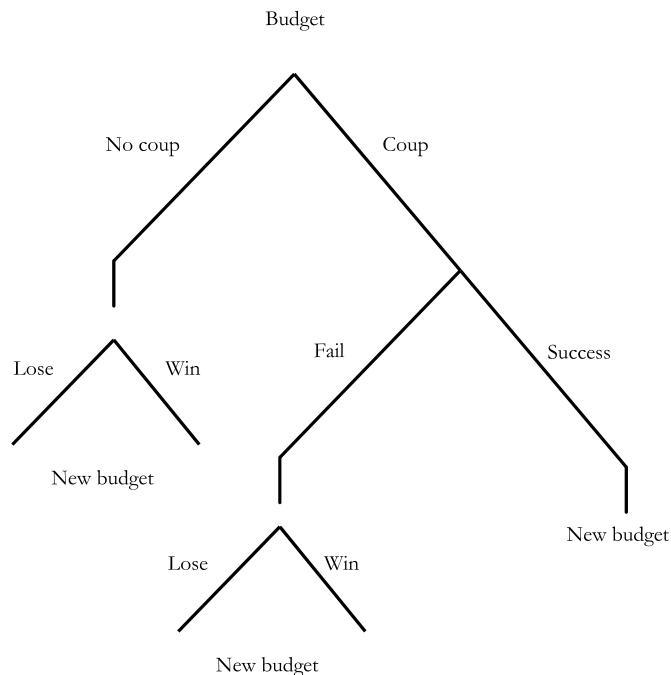
Data will be made available on request.

**Table 4**

Average marginal effects of coups on media freedom, conditional on constitutional rules.

	(1)	(2)	(3)
	Bias	Censorship	Harassment
Constitution guarantees press freedom			
AME Failed   Dem = 0 & Con = 0	0.102	0.002	0.018
AME Failed   Dem = 0 & Con = 1	-0.136*	-0.056	-0.036
<b>Wald test</b>	[0.04]	[0.61]	[0.61]
AME Failed   Dem = 1 & Con = 0	0.201	0.153	0.281
AME Failed   Dem = 1 & Con = 1	0.049	0.060	0.023
<b>Wald test</b>	[0.37]	[0.67]	[0.17]
AME Succ   Dem = 0 & Con = 0	0.131	0.000	0.059
AME Succ   Dem = 0 & Con = 1	-0.027	-0.091	-0.144
<b>Wald test</b>	[0.31]	[0.55]	[0.10]
AME Succ   Dem = 1 & Con = 0	-0.478***	-0.820***	-0.465***
AME Succ   Dem = 1 & Con = 1	-0.602***	-0.709***	-0.586***
<b>Wald test</b>	[0.53]	[0.67]	[0.53]
Constitution prohibits censorship			
AME Failed   Dem = 0 & Con = 0	-0.012	-0.010	0.001
AME Failed   Dem = 0 & Con = 1	-0.101	-0.197	-0.101
<b>Wald test</b>	[0.68]	[0.48]	[0.65]
AME Failed   Dem = 1 & Con = 0	0.164	0.172	0.156
AME Failed   Dem = 1 & Con = 1	0.045	-0.005	0.123
<b>Wald test</b>	[0.53]	[0.45]	[0.87]
AME Succ   Dem = 0 & Con = 0	0.084	-0.034	-0.009
AME Succ   Dem = 0 & Con = 1	-0.212	-0.165	-0.343
<b>Wald test</b>	[0.40]	[0.67]	[0.25]
AME Succ   Dem = 1 & Con = 0	-0.450***	-0.657***	-0.529***
AME Succ   Dem = 1 & Con = 1	-0.955**	-1.157***	-0.539
<b>Wald test</b>	[0.13]	[0.19]	[0.98]
Constitution allows censorship in special circumstances			
AME Failed   Dem = 0 & Con = 0	-0.034	-0.080	-0.003
AME Failed   Dem = 0 & Con = 1	-0.206	0.081	-0.026
<b>Wald test</b>	[0.45]	[0.57]	[0.86]
AME Failed   Dem = 1 & Con = 0	0.052	-0.013	0.054
AME Failed   Dem = 1 & Con = 1	0.075	0.428	0.207
<b>Wald test</b>	[0.88]	[0.13]	[0.67]
AME Succ   Dem = 0 & Con = 0	-0.003	-0.061	-0.081
AME Succ   Dem = 0 & Con = 1	0.037	-0.169	-0.018
<b>Wald test</b>	[0.90]	[0.66]	[0.71]
AME Succ   Dem = 1 & Con = 0	-0.531**	-0.695***	-0.435***
AME Succ   Dem = 1 & Con = 1	-0.761***	-1.092***	-0.901***
<b>Wald test</b>	[0.35]	[0.12]	[0.11]
Constitution guarantees press freedom or prohibits censorship			
AME Failed   Dem = 0 & Con = 0	0.087	-0.026	0.006
AME Failed   Dem = 0 & Con = 1	-0.110	-0.028	-0.023
<b>Wald test</b>	[0.09]	[0.99]	[0.78]
AME Failed   Dem = 1 & Con = 0	0.213	0.139	0.318
AME Failed   Dem = 1 & Con = 1	0.094	0.096	0.099
<b>Wald test</b>	[0.48]	[0.87]	[0.44]
AME Succ   Dem = 0 & Con = 0	0.119	0.001	0.062
AME Succ   Dem = 0 & Con = 1	-0.006	-0.082	-0.130
<b>Wald test</b>	[0.44]	[0.59]	[0.12]
AME Succ   Dem = 1 & Con = 0	-0.355**	-0.708***	-0.600***
AME Succ   Dem = 1 & Con = 1	-0.632***	-0.780***	-0.508***
<b>Wald test</b>	[0.14]	[0.78]	[0.66]

Note: Conditional average marginal effects of failed and successful coups. P-values of Wald tests for equality of coefficients are in brackets. Full regression results available from the authors upon request. \*:  $p < 0.05$ , \*\*:  $p < 0.01$ , \*\*\*:  $p < 0.001$ .

**Appendix****Fig. A1.** Decision tree.

**Table A1**

Effect of coups on media freedom, conditional on size of government.

	(1) Bias	(2) Bias	(3) Censorship	(4) Censorship	(5) Harassment	(6) Harassment
LDV(t-2)	0.861*** (0.018)	0.720*** (0.029)	0.818*** (0.019)	0.688*** (0.029)	0.873*** (0.015)	0.744*** (0.027)
FailedCoup	-0.278 (0.338)	-0.245 (0.317)	-0.312 (0.299)	-0.285 (0.292)	-0.195 (0.229)	-0.086 (0.237)
SuccCoup	0.123 (0.588)	0.299 (0.589)	0.401 (0.485)	0.610 (0.454)	-0.198 (0.414)	0.052 (0.382)
Democracy(t-1)	0.489*** (0.136)	0.832*** (0.199)	0.486*** (0.122)	0.514** (0.171)	0.335** (0.113)	0.520** (0.157)
Government Size(t-1)	0.039** (0.013)	0.040 (0.021)	0.035** (0.011)	0.033 (0.017)	0.020 (0.011)	0.015 (0.019)
PastFailed	-0.027 (0.035)	-0.011 (0.041)	0.001 (0.033)	0.027 (0.038)	0.022 (0.033)	0.048 (0.038)
PastSucc	0.011 (0.045)	-0.005 (0.059)	0.054 (0.042)	0.040 (0.055)	0.021 (0.034)	0.018 (0.040)
JI(t-1)	0.038*** (0.011)	0.102*** (0.025)	0.079*** (0.015)	0.160*** (0.034)	0.044*** (0.010)	0.094*** (0.025)
ConstPF(t-1)	0.023 (0.020)	0.069 (0.068)	0.036 (0.021)	0.089 (0.067)	0.024 (0.020)	0.072 (0.061)
GDPpc(t-1)	-0.006 (0.014)	-0.070 (0.036)	0.020 (0.012)	-0.005 (0.031)	0.021* (0.011)	-0.030 (0.035)
Recession(t-1)	0.028 (0.017)	0.023 (0.018)	0.010 (0.016)	0.009 (0.016)	0.015 (0.013)	0.015 (0.014)
Dem(t-1)*GovSize(t-1)	-0.057** (0.018)	-0.093*** (0.028)	-0.050** (0.017)	-0.043 (0.025)	-0.041** (0.015)	-0.057** (0.021)
Failed*Dem(t-1)	0.538 (0.686)	0.301 (0.640)	0.804 (0.758)	0.646 (0.733)	0.614 (0.676)	0.247 (0.646)
Failed*GovSize(t-1)	0.050 (0.055)	0.049 (0.051)	0.041 (0.046)	0.040 (0.045)	0.032 (0.035)	0.018 (0.037)
Failed*Dem(t-1)*GovSize(t-1)	-0.066 (0.093)	-0.033 (0.086)	-0.091 (0.105)	-0.065 (0.102)	-0.073 (0.092)	-0.014 (0.089)
Succ*Dem(t-1)	-1.625* (0.779)	-1.734* (0.812)	-3.035*** (0.853)	-3.017*** (0.814)	-1.705 (0.947)	-1.869* (0.902)
Succ*GovSize(t-1)	-0.011 (0.092)	-0.034 (0.095)	-0.061 (0.073)	-0.098 (0.067)	0.023 (0.063)	-0.017 (0.058)
Succ*Dem(t-1)*GovSize(t-1)	0.183 (0.116)	0.192 (0.121)	0.360** (0.119)	0.366** (0.111)	0.178 (0.136)	0.206 (0.129)
Constant	-0.262 (0.190)	0.146 (0.329)	-0.468** (0.159)	-0.333 (0.309)	-0.312* (0.145)	0.054 (0.343)
Country-RE and region-FE	YES	NO	YES	NO	YES	NO
Country-FE	NO	YES	NO	YES	NO	YES
Observations	5,791	5,791	5,791	5,791	5,791	5,791
Countries	155	155	155	155	155	155
R <sup>2</sup>	0.79	0.80	0.76	0.76	0.77	0.78
Wald-Chi <sup>2</sup>	56,159		89,662		114,315	

Note: Columns (1), (3) and (5): Country-random effects estimates with clustered standard errors in parentheses, continent and year fixed effects omitted. Columns (2), (4) and (6): Country-fixed effects estimates with clustered standard errors in parentheses, year fixed effects omitted. Average marginal effects conditional on the size of government, corresponding to the estimates in this table, are graphed in Figures 1, 2 and 3. \*: p<0.05, \*\*: p<0.01, \*\*\*: p<0.001.

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