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## Coups, Regime Transition, and the Dynamics of Press Freedom

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# Coups, Regime Transition, and the Dynamics of Press Free- dom

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# Coups, Regime Transition, and the Dynamics of Press Freedom

## Abstract

This paper explores the dynamics of press freedom around events that threaten or oust the incumbent regime of a country. While democracies on average grant the press more freedom, our theoretical starting point is that democracies and autocracies may have similar incentives to protect the power of the governing regime. *A priori* it is, nevertheless, not clear whether democracies or autocracies react more harshly – by silencing or controlling the media – to an attempt to overthrow the government. We estimate the dynamics of press freedom around both failed and successful coups and find that although press freedom is quite stable, successful coups lead to a substantial reduction in press freedom. This is, however, only the case when the coup is directed against a democratically elected government.

JEL-Codes: D740, H120, L510, L820.

Keywords: coup, political instability, press freedom.

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## 1. Introduction

The failed coup d'état in Turkey on July 15, 2016 prompted a strong reaction by the Turkish government. It not only jailed thousands of “suspects” and fired tens of thousands of civil servants and scientists, but it also closed over one hundred newspapers and other media outlets. Journalists have been jailed without justification and sentenced to long prison terms – since summer 2016 it seems to be sufficient to criticize the President who even sued foreign journalists and comedians for libel in front of foreign courts. Interestingly, the same government used a fabricated coup plot to arrest hundreds of opponents and dozens of journalists between 2007 and 2012 (Rodrik 2011). This is but one example of an ever increasing hostility towards the media. In many countries, also in the West, it has reached a new dimension, with two reporters being killed in Malta and Slovakia respectively in a period of four months between 2017 and 2018. According to Reporters Without Borders (2017) the situation of the press deteriorated in almost two thirds of all countries, relative to the year before.

There are many reasons to think that governments are increasingly likely to disrespect the media and limit press freedom: decreasing privacy due to digitalization, increasing discontent with distributional problems in a globalized economy, rising populism, and the like. The Turkish example illustrates another, more specific reason for deteriorating press freedom in individual countries, namely the occurrence of a coup d'état.

It is intuitive that a successful coup may lead to less press freedom. However, many coups, such as the Turkish one, are not successful, but they still seem to offer unique opportunities to get rid of unwelcome journalists and silence critical media. Democratically elected governments might depend even more on having such a pretext, as they are otherwise more constrained in taking such measures, leading to generally higher levels of press freedom in democracies.

To explore these different conditional effects of coups on press freedom, we draw here on a dataset covering the period from 1950 to 2014 for 153 countries. More specifically, 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. 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 (Meyersson 2016; Aidt and Leon 2017).

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. Conclusions round off the paper.

## 2. The literature

VonDoepp and Young (2012) is the only study thus far 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 this conjecture. Media harassment increases when coup plots against the government come to light.

Apart from the value attached to having a free press *per se*, limitations of 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. in terms of higher GDP per capita and literacy rates (already Nixon 1960, 1965), development and urbanization (Weaver et al. 1985), and better crisis management (Besley and Burgess 2011). Bjørnskov and Freytag (2016) show that killings of journalists who publicize corruption are highest in countries characterized by a medium level of press freedom in combination with a high corruption level, which is in line with the more general evidence that countries in transition to democracy and a market economy may experience a lot of violence.

There is also literature discussing the effectiveness of a free press in holding the government accountable. Although Graber (1986) is pessimistic with respect to the functioning of the US press to express a diversity of opinions, generate information, give the public a voice, and express minority

views, she gives credit to the press for controlling the government. This judgement is supported by Leeson (2008) who gives credit to the press for controlling the government and shows for 60 countries that press freedom increases interest in politics, political participation, and voter turnout. In line with Graber (1986), Djankov et al. (2003) show that state-ownership of media undermines the accountability of governments. This view 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.

Free media do not only serve to hold the government accountable, but they may also help to mitigate principal-agent problems vis-à-vis the bureaucracy and help to mitigate corruption and rent-seeking in the public sector. Stapenhurst (2000) was the first to report the positive effect of press freedom on the fight against corruption. He distinguishes a tangible, direct effect of reports leading to impeachment and imprisonment of corrupt politicians from an intangible, indirect effect of a free press on behavior of decision makers. Brunetti and Weder (2003) show in a cross-country setting that corruption is indeed reduced by a free press. Their result is shown to be robust by Freille et al. (2007), who submit it to extreme bounds analysis. Moreover, Charron (2009) finds that trade openness reduces corruption only in countries with free media.

Another strand of related literature deals with the influence of governments on press freedom. Besley and Prat (2006) introduce a political economy model of media capture by the government. 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 considerations rather than efficiency concerns. 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 even 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 the degree of political alliance between these countries and the United States.

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 outside of the democratic process. 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 for governments control over the media is crucial in times of crisis 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. 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 may allow for somewhat free media.

Taken together, the extant literature suggests that free media increase social welfare and serve to hold politicians and bureaucrats accountable. Thus, politicians have an interest in controlling the media and to use them to their own political advantage. Uncovered coup plots seem to be used to gain such control over the media, at least in the specific context of two dozen African countries. The extent to which these findings generalize, the question of whether failed and successful coups have different consequences, and the conditionality of effects on political regime types have not yet been addressed.

### 3. Theoretical considerations

To answer these questions, we start from the assumption that governments are not benevolent dictators. They maximize their utility, e.g. by extracting rents from their office, which necessitates that they stay in office by not losing elections or being ousted. There are two factions of society on whom the government's political survival depends. One consists of the military and a number of other politically influential interest groups; the other is "the population". Societies differ across time and space regarding which parts of the population have the most political influence. These can be chiefs of clans and tribes, feudal landlords, 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 rate at which income can be taxed is constrained by the distortionary nature of taxation and the threat of being deposed, if the tax rate is too high. This threat comes in the form of a coup (or revolution) in autocracies and to a lesser extent also in democracies, or an election loss in competitive democracies. Taxation per se may be unpopular, but the revenue generated from taxing the population can be used for three purposes. At least two of these purposes reflect strategic actions by government.

The government can, first, 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, for example, the military as argued in Leon (2014), but also civilian interests as in seminal work by Olson (1982). Moreover, the government can invest in repression, for example by creating some form of secret police or paramilitary force, 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. Relative to autocracies, democracies face a comparative disadvantage in the use of repression and, independent of the political regime type, constitutional rules that protect press freedom can also

make repression of the media politically costly. 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 extent to which repression is used, 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>1</sup>

We treat 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 in stage 1 chooses an optimal level of repression and an optimal budget, and consumes what is left of the budget as a residual claimant. As the marginal effectiveness of subsidies and repression are diminishing, the government's optimal policy bundle will consist of a mix of the two instruments and a tax rate.

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>2</sup> If there is no coup, the game ends while, 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 here will be reflected in increased investments in repression. If some interest group stages a coup and it is

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<sup>1</sup> According to Tullock (1987), 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.

<sup>2</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.

successful, 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 also this government estimates the costs of a coup to be lower and, hence, the risk of a coup to be higher than assumed by the previous, ousted government.

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 residual income share  $v$  that can be used on productive public goods, popular non-productive endeavors or luxury consumption for 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 has to 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 iure* or *de facto* cap on their spending  $r$ . 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 citizens' interests and we also do not assume that democratically elected politicians are not affected by special interests.<sup>3</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 that 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 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 incomes.

Maximizing the objective function of the government yields a set of 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 as

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<sup>3</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 defined in our model by the parameters  $\alpha$  and  $\beta$ .

instrumentally rational as other political actors are 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 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 of the new government as well as its competence. The probability function in (6) is a reformulation of (5) and defines the coup risk  $p$ .

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

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

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  $a$  (a higher weight on corporate welfare), or if a new government is expected to be more competent and thus likely to introduce policies or institutional changes that positively affect overall income.<sup>4</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 is going to come as a surprise to the incumbent government because  $p$  turns out to differ from the incumbent government's assessment,  $E_{inc}\{p\}$ . It is this type of underestimation of the coup risk that we build our theoretical conjectures on that we aim to test in the following.

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<sup>4</sup> In addition, coup makers may not believe that the punishment  $f$  is credible, which would also increase the attractiveness of attempting a coup.

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 assume that  $dy/dr < 0$ , i.e. repression comes with an actual 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 left side of the curve. Similarly, the optimum support to politically relevant groups in society,  $s$ , is characterized by (8).

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

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

As such, it is immediately visible that if a shock occurs to  $E\{p\}$ , 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, optimal repression is likely to change as both the assessment of  $p$  and optimum levels of  $\tau$ ,  $\beta$ , and  $\nu$  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  $E\{p\}$ . 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, it suggests that larger initial equilibrium levels of  $\tau$  and  $\nu$  imply *larger* repression reactions, as the relative marginal cost of repressing is lower with what is essentially larger government consumption. By extension, (8) suggests a similar reaction for industrial subsidies,  $s$ , which may react stronger to coups when  $\nu$  is already large.

Thus, our first testable hypotheses are:

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 little repression or they end up in a corner solution with  $r = \check{r}$  in which the government cannot protect itself optimally because of institutional constraints. The coup consequences are therefore exacerbated if these countries have *de facto* binding constitutional constraints on repression, which prevents them from choosing the optimal level of repression.<sup>5</sup> This technically implies that all derivatives with respect to  $r$  must be zero when the constitutional limit is binding, such that pre-coup repression is already set at or below  $\check{r}$ .<sup>6</sup> If the pre-coup repression is below  $\check{r}$ , repression may still increase as a result of a coup attempt but much less so than without constraints. Yet, in some situations, the emergency constitution allows  $r > \check{r}$  for the duration of an emergency (Bjørnskov and Voigt 2018). Our final testable hypothesis concerns these countries.

H5: Coups in countries with emergency constitutions that allow censorship and repression during emergencies increase repression more than coups in countries without such constitutional rules.

This particular implication of the model may be complemented by the assumption that the use of repression becomes cheaper after a coup, if the population becomes more accepting of restrictions on freedoms and the government has popular legitimacy in invoking an emergency constitution to weaken constitutional constraints temporarily. However, we do not formally model this option, as popular reactions to the repression of specific groups in society may be strongly dependent on the specific political context (Wintrobe 2018).

In total, the model predicts that, in equilibrium, both successful and unsuccessful coups will lead to an increase in repression, in the sense of censorship and restrictions on the freedom of the press, to

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<sup>5</sup> See Gutmann (2018) for a theoretical explanation why governments introduce such constraints on their capacity to repress.

<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.

the extent that governments correct their estimate of the coup risk upward. This effect is enhanced by the extent to which the government initially buys support from citizens and special interests in other ways (i.e. the size of public consumption), and by the government's ability to invoke an effective emergency constitution. As such, changes in press freedom may be different in democracies and autocracies because, on the one hand, the degree of press freedom is probably already much lower in autocracies than in democracies and, on the other hand, democratic governments may use this window of opportunity to reduce press freedom strongly. We test these general predictions in the following.

#### 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. Our basic model setup includes region and year fixed effects, as well as country level random effects with clustered standard errors. However, the results are robust to the inclusion of country fixed effects. Although all models include a lagged dependent variable, 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 one-year 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.

Our dependent variables derive from the V-Dem dataset 8.0 (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. Our control variable 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 (Elkins, Ginsburg and Melton, 2009). This variable measures 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 (2018) to distinguish democracies from autocracies, to capture whether a coup occurred in a country in a given year, 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). In addition, we use the data by Bjørnskov and Rode to 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

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<sup>7</sup> We note that most previous studies have used data from Freedom House (2017). We prefer the V-Dem measures, as they provide coverage of more countries that also extends much further back in time. However, the Freedom House index of press freedom is highly correlated with the V-Dem measures at approximately  $r=0.8$ . Both measures nonetheless correlate only weakly with the index of constitutional protection ( $r\approx0.2$ ).

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. (2017) 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 9.0 (Feenstra, Inklaar and Timmer, 2015). Table 1 shows the full descriptive statistics.

<< Table 1 about here >>

## 5. Findings

The results of our basic estimations are reported in Table 2 for the full sample of 153 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.

<< Table 2 about here >>

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<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.

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 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 here means that constitutional protection contributes positively to the absence of censorship. We also observe the expected positive sign of GDP per capita, which would indicate that richer countries have higher press freedom, although this short-run effect is never statistically significant. Recessions are only significantly correlated with media bias, which surprisingly declines in years of negative economic growth.

Our main interest is nevertheless the role of democracy versus autocracy in combination with the effects of successful and unsuccessful coups. For the unconditional effect of coups, we find that successful ones are associated with a substantial decline of press freedom due to harassment and censorship. Yet, 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 effect of coups is therefore driven entirely by successful coups against democracies, for which we find very substantial effects. The size of the decline of press freedom is about 50 percent of a standard deviation, and approximately 80 percent of a standard deviation for democracies.

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, which might be of a different nature. 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 significantly associated with reduced press freedom in former democracies, and very substantially so.

<< Table 3 about here >>

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 (in blue) and successful coups (in red), conditional on the initial size of the public sector (as measured by Gwartney et al. 2017), together with their 95%-confidence intervals in Figures 1 to 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 smaller government sectors. This difference is most pronounced for censorship and media harassment, i.e. for what one would a priori expect to be the costliest ways of violating press freedom.

<< Figure 1 about here >>

<< Figure 2 about here >>

<< Figure 3 about here >>

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. nondemocracy, 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. We do observe some evidence that failed coups against democracies without such constitutional safeguards may lead to less media bias, but no evidence across the other two indicators. 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.

<< Table 4 about here >>

A set of further robustness tests (not shown here) confirm the stability and robustness of the main findings. We, for example, excluded the richest countries (mainly the OECD) in which coups are extremely rare, and found only very small quantitative and no qualitative differences. Similarly, further tests show that the results are not driven by the 29 country-years in which more than one coup occurred. With these final indications of robustness and generalizability of the findings, we proceed to discuss and conclude.

## 6. Conclusion

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. 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 build a model of a utility maximizing government that uses public spending strategically to avoid either coups or defeats 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 power”, 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 irreverent journalists.

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, 2018). 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.

Our paper in some sense asks more questions than it answers, and in particular we leave the specific mechanisms at work to future research. 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 driven by coups against countries with a large public sector. There are, however, a number of 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 favourable climates for the media. This likely reflects the protection free media receive from independent judiciaries”. One of several likely transmission mechanisms 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 more political power is concentrated 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. Ginsburg 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.

These arguments and our contradictory evidence show the need for further analysis. Nevertheless, the present study sheds further light on the complicated relationship between governments – regardless of the nature of the regime – and the free press. Exactly how these complications work and which specific policies governments use in order to defend themselves against electoral losses and violent attacks must be left to future research.

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## References

Acemoglu, Daron and James A. Robinson. 2006. *Economic origins of dictatorship and democracy*. Cambridge: Cambridge University Press.

Acemoglu, Daron, Tarek A. Hassan and Ahmed Tahoun. 2018. The power of the street: Evidence from Egypt's Arab Spring. *Review of Financial Studies* 31(1), 1-42.

Adena, Maja, Ruben Enikolopov, Maria Petrova, Veronica Santarosa and Ekaterina Zhuravskaya. 2015. Radio and the rise of the Nazis in prewar Germany. *Quarterly Journal of Economics*, 130, 1885-1939.

Aidt, Toke and Gabriel Leon. 2017. The coup: Competition for office in authoritarian regimes. Forthcoming in: Roger D. Congleton, Bernard N. Grofman and Stefan Voigt (eds.), *Oxford Handbook of Public Choice*. Oxford: Oxford University Press.

Babatunde Jose, Alhaji. 1975. Press freedom in Africa. *African Affairs*, 74, 255-262.

Beck, Nathaniel and Jonathan N. Katz. 2011. Modeling dynamics in time-series–cross-section political economy data. *Annual Review of Political Science*, 14, 331-352.

Besley, Timothy and Andrea Prat. 2006. Handcuffs for the grabbing hand? Media capture and government accountability. *American Economic Review*, 96, 720-736.

Besley, Timothy, and Robin Burgess. Political agency, government responsiveness and the role of the media. *European Economic Review*, 45, 629–640.

Bjørnskov, Christian. 2018. The Hayek-Friedman hypothesis on the press: Is there an association between economic freedom and press freedom? *Journal of Institutional Economics*, 14, 617-638.

Bjørnskov, Christian and Freytag, Andreas. 2016. An offer you can't refuse: Murdering journalists as an enforcement mechanism of corrupt deals. *Public Choice*, 167, 221-243.

Bjørnskov, Christian and Martin Rode. 2018. *Regimes and regime transitions: A new dataset*. Working Paper, Aarhus University.

Bjørnskov, Christian and Stefan Voigt. 2018. The architecture of emergency constitutions. *International Journal of Constitutional Law*, 16, 101-127.

Brambor, Thomas, William Clark and Matt Golder. 2006. Understanding interaction models: Improving empirical analyses. *Political Analysis*, 14, 63–82.

Brennan, Timothy J. 1992. Rational ignorance: The strategic economics of military censorship. *Southern Economic Journal*, 58, 966-974.

Brunetti, Aymo and Beatrice Weder. 2003. A free press is bad news for corruption. *Journal of Public Economics*, 87, 1801-1824.

Casper, Brett A. and Scott A. Tyson. 2014. Popular protest and elite coordination in a coup d'état. *Journal of Politics*, 76, 548-564.

Charron, Nicholas. 2009. The impact of socio-political integration and press freedom on corruption. *Journal of Development Studies*, 45, 1472-1493.

Cheibub, José Antonio, Jennifer Gandhi, and James R. Vreeland. 2010. Democracy and dictatorship revisited. *Public Choice*, 143, 67-101.

Coppedge, Michael, Staffan Lindberg, Svend-Erik Skaaning and Jan Teorell. 2016. Measuring high level democratic principles using the V-Dem data. *International Political Science Review*, 37, 580-593.

Djankov, Simeon, Caralee McLiesh, Tatjana Nenova, and Andrei Shleifer. 2003. Who owns the media? *Journal of Law and Economics*, 46, 341-381.

Dreher, Axel. 2006. Does globalization affect growth? Evidence from a new index of globalization. *Applied Economics*, 38, 1091-1110. Data available at: <http://globalization.kof.ethz.ch>.

Easton, Malcolm R. and Randolph M. Siverson. 2018. Leader survival and purges after a failed coup d'état. Forthcoming in: *Journal of Peace Research*, DOI: 10.1177/0022343318763713.

Edmond, Chris. 2013. Information manipulation, coordination, and regime change. *Review of Economic Studies*, 80, 1422-1458.

Egorov Georgy, Sergei Guriev and Konstantin Sonin. 2009. Why resource-poor dictators allow freer media: A theory and evidence from panel data. *American Political Science Review*, 103, 645-668.

Enikolopov, Ruben, Maria Petrova and Ekaterina Zhuravskaya. 2011. Media and political persuasion: Evidence from Russia. *American Economic Review*, 101, 3253-3285.

Enikolopov, Ruben, Maria Petrova and Konstantin Sonin. 2018. Social media and corruption. *American Economic Journal: Applied Economics*, 10, 150-174.

Feld, Lars P. and Stefan Voigt. 2003. Economic growth and judicial independence: Cross-country evidence using a new set of indicators. *European Journal of Political Economy*, 19, 497-527.

Feenstra, Robert C., Robert Inklaar and Marcel P. Timmer. 2015. The next generation of the Penn World Table. *American Economic Review*, 105, 3150-3182.

Freedom House. 2017. *Freedom of the Press 2017*. Washington DC: Freedom House.

Freille, Sebastian, M. Emranul Haque, and Richard Kneller. 2007. A contribution to the empirics of press freedom and corruption. *European Journal of Political Economy*, 23, 838-862.

Gehlbach, Scott and Konstantin Sonin. 2014. Government control of the media. *Journal of Public Economics*, 118, 163-171.

Gwartney, James, Robert A. Lawson, and Joshua Hall. 2017. *Economic freedom of the world: 2017 report*. Vancouver: Fraser Institute.

Elkins, Zachary, Tom Ginsburg, and James Melton. 2009. *The endurance of national constitutions*. Cambridge: Cambridge University Press.

Gutmann, Jerg. 2018. *Endogenous constraints on repression*. Working Paper, University of Hamburg.

Hollyer, James R., Peter Rosendorff and James R. Vreeland. 2015. Transparency, protest, and autocratic instability. *American Political Science Review*, 109, 764-784.

Kellam, Marisa and Elisabeth A. Stein. 2016. Silencing critics: Why and how presidents restrict media freedom in democracies. *Comparative Political Studies*, 49, 36-77.

King, Gary, Jennifer Pan and Margaret E. Roberts. 2014. Reverse-engineering censorship in China: Randomized experimentation and participant observation. *Science*, 345, 6199. DOI: 10.1126/science.1251722.

Leeson, Peter T. 2008. Media freedom, political knowledge, and participation. *Journal of Economic Perspectives*, 22, 155-169.

Lorentzen, Peter. 2014. China's strategic censorship. *American Journal of Political Science*, 58, 402-414.

Meyersson, Erik. 2016. *Political man on horseback: Coups and development*. Working Paper, Stockholm Institute of Transition Economics.

Nixon, Raymond B. 1960. Factors related to freedom in national press systems. *Journalism Quarterly*, 37, 13-28.

Nixon, Raymond B. 1965. Freedom in the world's press: A fresh appraisal with new data. *Journalism Quarterly*, 42, 9-14.

Ogbondah, Chris. 1994. Press freedom and political development in Africa. *Africa Media Review*, 8, 1-39.

Olson, Mancur. 1982. *The rise and decline of nations: Economic growth, stagflation and social rigidities*. Yale, CT: Yale University Press.

Omú, Fred I.A. 1968. The dilemma of press freedom in colonial Africa: The West African example. *Journal of African History*, 9, 279-298.

Qian, Nancy and David Yanagizawa-Drott. 2017. Government distortion in independently owned media: Evidence from U.S. news coverage of human rights. *Journal of the European Economic Association*, 15, 463-499.

Reporters Without Borders. 2017. 2017 Press Freedom Index – ever darker world map. <https://rsf.org/en/2017-press-freedom-index-ever-darker-world-map>, accessed August 29, 2017.

Rodrik, Dani. 2011. Ergenekon and Sledgehammer: Building or Undermining the Rule of Law? *Turkish Policy Quarterly*, 10, 99-109.

Snyder, James M. and David Strömberg. 2010. Press coverage and political accountability. *Journal of Political Economy*, 118, 355-408.

Stapenhurst, Rick. 2000. *The media's role in curbing corruption*. Washington DC: The World Bank Institute.

Van Belle, Douglas. 1997. Press freedom and democratic peace. *Journal of Peace Research*, 34, 405-414.

Thorsen, Matilde. 2018. *Policymaking in autocracies: when dictators are ideologically motivated*. Paper presented at the second international conference on the Political Economy of Democracy and Dictatorship, Münster, March 15-17.

VonDoepp, Peter and Daniel J. Young. 2012. Assaults on the fourth estate: Explaining media harassment in Africa. *Journal of Politics*, 75, 36-51.

VonDoepp, Peter and Daniel J. Young. 2016. Holding the state at bay: Understanding media freedoms in Africa. *Democratization*, 23, 1101-1121.

Weaver, David H., Judith M. Buddenbaum, and Jo Ellen Fair. 1985. Press freedom, media, and development, 1950-1979: A study of 134 nations. *Journal of Communication*, 35, 104-117.

Wintrobe, Ronald. 2018. An economic theory of a hybrid (competitive authoritarian or illiberal) regime. Paper presented at the annual meetings of the European Public Choice Society (Rome), April 11-14.

Yanagizawa-Drott, David. 2014. Propaganda and conflict: Evidence from the Rwandan genocide. *Quarterly Journal of Economics*, 129, 1947-1994.

## Appendix 1:

Figure A1: Decision tree

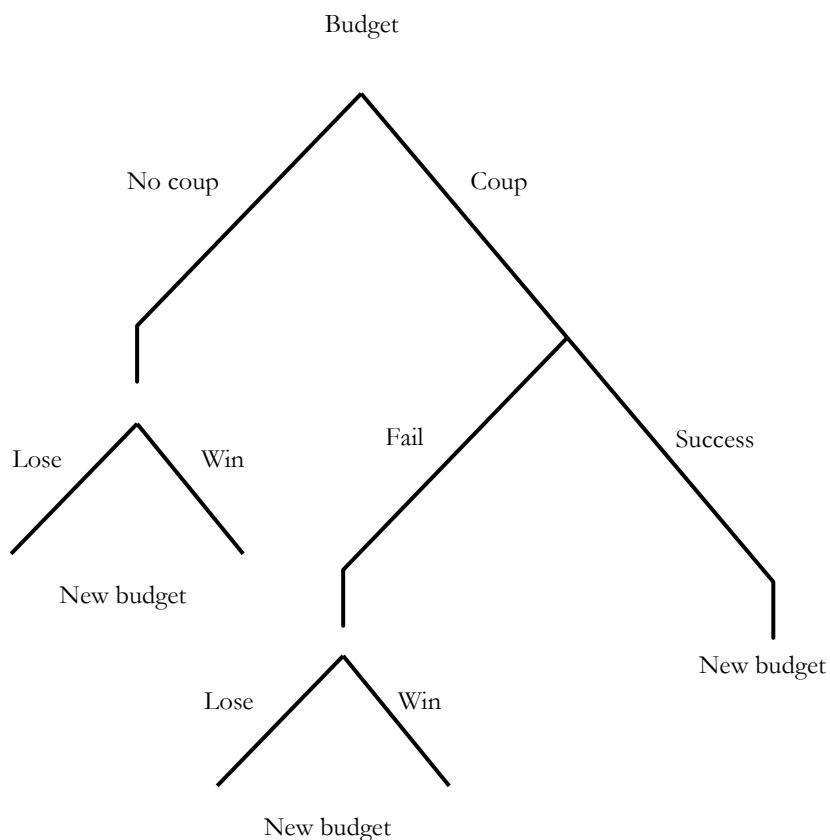
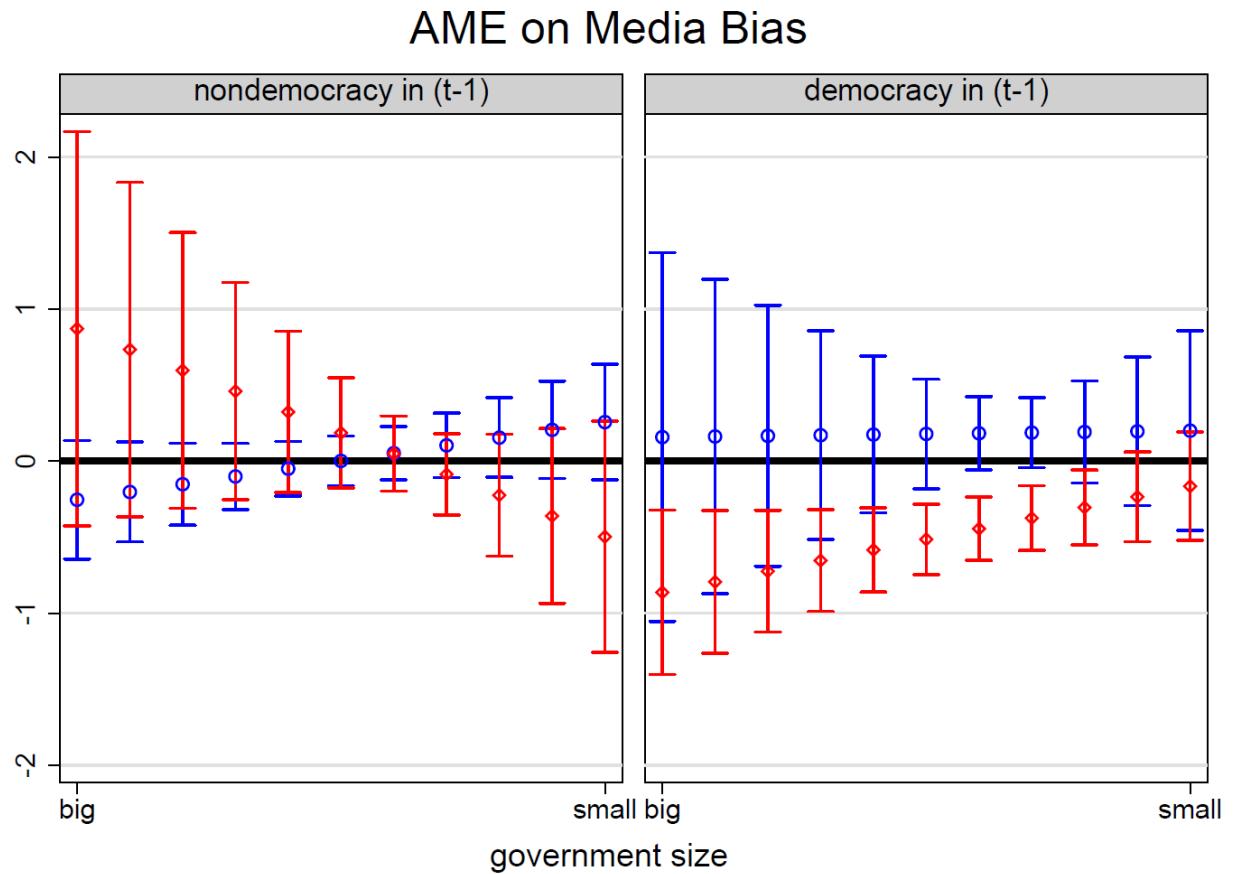


Table A1: Results, conditional on size of government

	(1) Bias	(2) Bias	(3) Censorship	(4) Censorship	(5) Harassment	(6) Harassment
LDV(t-2)	0.856*** (0.020)	0.707*** (0.037)	0.823*** (0.021)	0.682*** (0.034)	0.823*** (0.020)	0.721*** (0.028)
FailedCoup	-0.254 (0.199)	-0.175 (0.194)	-0.291 (0.274)	-0.264 (0.271)	-0.219 (0.143)	-0.173 (0.142)
SuccCoup	0.870 (0.661)	1.008 (0.620)	0.469 (0.685)	0.603 (0.665)	0.155 (0.492)	0.230 (0.490)
Democracy(t-1)	0.328** (0.105)	0.703*** (0.157)	0.316*** (0.095)	0.466** (0.143)	0.328*** (0.093)	0.502*** (0.127)
Government Size(t-1)	0.012 (0.012)	0.025 (0.017)	0.007 (0.009)	0.004 (0.014)	0.005 (0.010)	0.006 (0.013)
PastFailed	0.002 (0.036)	0.007 (0.042)	-0.006 (0.035)	0.019 (0.041)	0.017 (0.031)	0.037 (0.036)
PastSucc	0.030 (0.047)	0.010 (0.062)	0.062 (0.045)	0.044 (0.058)	0.038 (0.037)	0.045 (0.042)
JI(t-1)	0.031* (0.012)	0.083* (0.038)	0.063*** (0.016)	0.143*** (0.042)	0.043** (0.014)	0.080** (0.029)
ConstPF(t-1)	0.023 (0.021)	0.058 (0.072)	0.030 (0.022)	0.071 (0.069)	0.014 (0.026)	0.061 (0.061)
GDPpc(t-1)	-0.009 (0.015)	-0.116** (0.042)	0.004 (0.013)	-0.041 (0.036)	0.015 (0.012)	-0.067 (0.036)
Recession(t-1)	0.054** (0.018)	0.045* (0.018)	0.012 (0.017)	0.012 (0.017)	-0.006 (0.016)	-0.005 (0.016)
Dem(t-1)*GovSize(t-1)	-0.030* (0.014)	-0.074*** (0.021)	-0.021 (0.013)	-0.026 (0.021)	-0.031* (0.013)	-0.047** (0.016)
Failed*Dem(t-1)	0.412 (0.666)	0.099 (0.646)	0.163 (0.700)	0.097 (0.669)	-0.025 (0.529)	-0.154 (0.512)
Failed*GovSize(t-1)	0.051 (0.036)	0.041 (0.035)	0.044 (0.045)	0.044 (0.045)	0.037 (0.023)	0.034 (0.023)
Failed*Dem(t-1)*GovSize(t-1)	-0.047 (0.100)	-0.000 (0.096)	0.002 (0.103)	0.011 (0.098)	0.019 (0.080)	0.039 (0.076)
Succ*Dem(t-1)	-1.733* (0.759)	-1.858* (0.737)	-2.149* (0.865)	-2.087* (0.827)	-1.557* (0.719)	-1.557* (0.698)
Succ*GovSize(t-1)	-0.137 (0.102)	-0.157 (0.096)	-0.082 (0.107)	-0.107 (0.105)	-0.026 (0.077)	-0.036 (0.078)
Succ*Dem(t-1)*GovSize(t-1)	0.207 (0.115)	0.219* (0.110)	0.239 (0.130)	0.231 (0.123)	0.155 (0.109)	0.155 (0.106)
Constant	-0.103 (0.180)	0.589 (0.347)	-0.136 (0.141)	0.135 (0.325)	-0.204 (0.140)	0.350 (0.330)
Country-RE and region-FE	YES	NO	YES	NO	YES	NO
Country-FE	NO	YES	NO	YES	NO	YES
Observations	5,006	5,006	5,006	5,006	5,006	5,006
Countries	149	149	149	149	149	149
R <sup>2</sup>	0.80	0.80	0.77	0.78	0.79	0.79
Wald-Chi <sup>2</sup>	58,505.23		71,161.14		184,045.32	

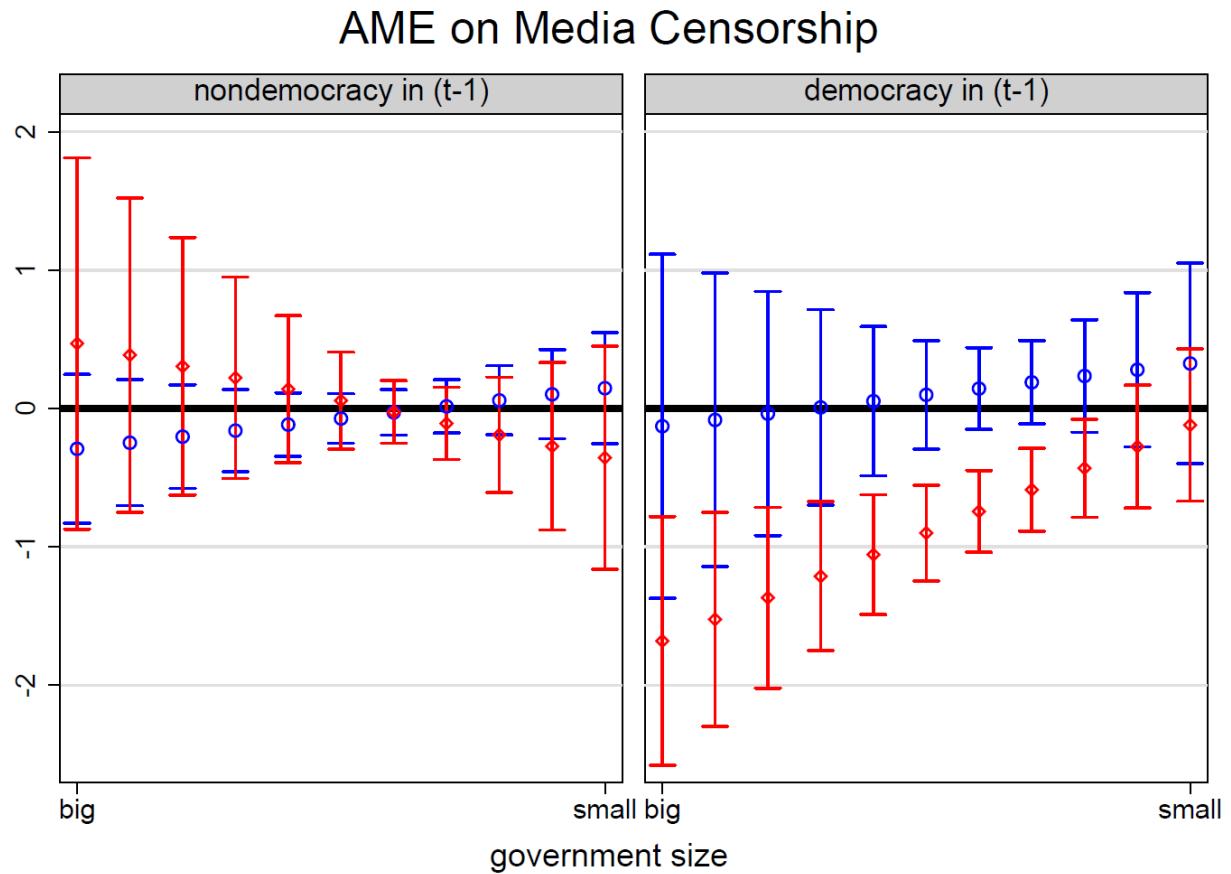
Note: Columns (1), (3) and (5): Country-random effects estimates with clustered standard errors in parentheses, continent and year fixed effects omitted. Columns (2), (4) and (6): Country-fixed effects estimates with clustered standard errors in parentheses, year fixed effects omitted. Average marginal 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.

Figure 1: Effect of coups on media bias, conditional on size of government



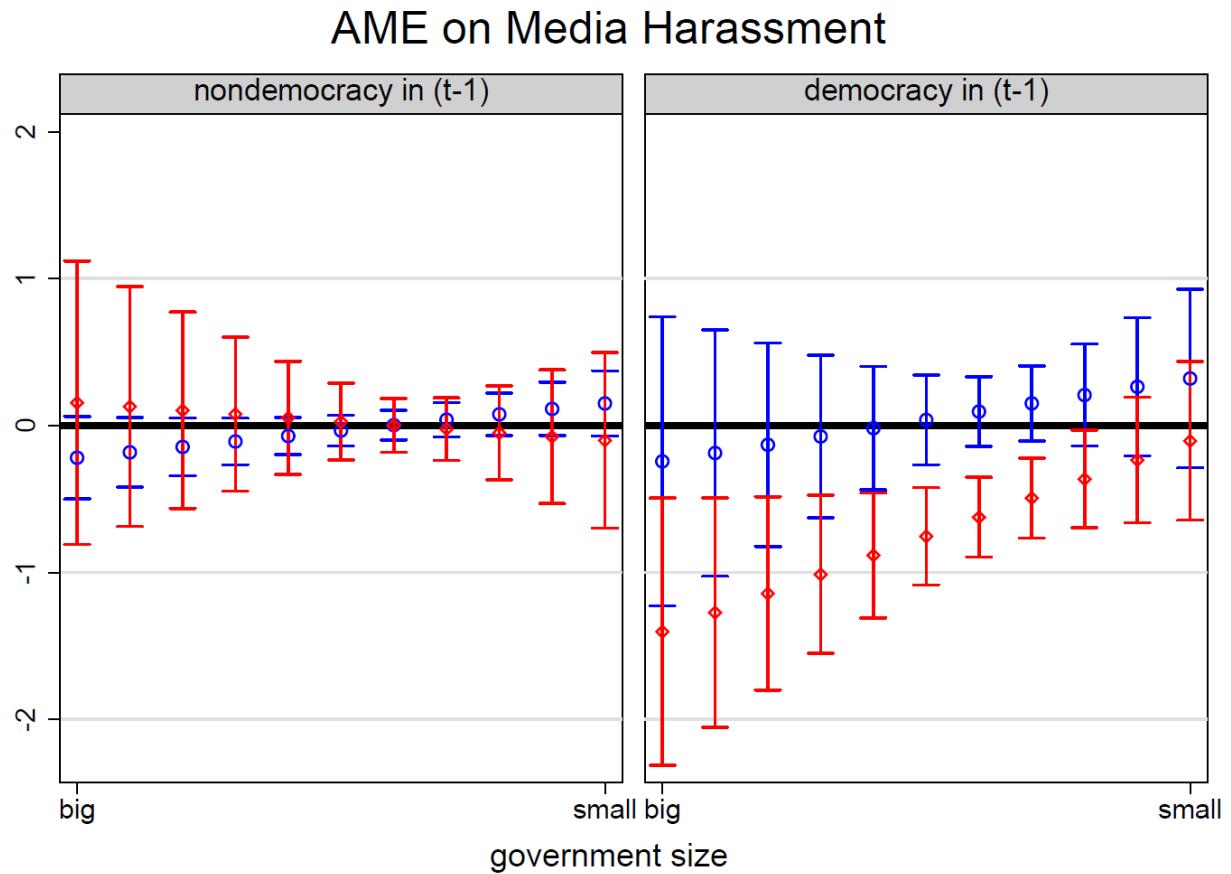
Note: Average marginal effect of successful coups (red) versus failed coups (blue).

Figure 2: Effect of coups on media censorship, conditional on size of government



Note: Average marginal effect of successful coups (red) versus failed coups (blue).

Figure 3: Effect of coups on media harassment, conditional on size of government



Note: Average marginal effect of successful coups (red) versus failed coups (blue).

Table 1: Descriptive statistics

Variable	Observations	Mean	Std. Dev.	Min	Max
Media Bias	7,783	0.327	1.647	-3.483	3.734
Media Censorship	7,783	0.341	1.641	-3.103	3.608
Media Harassment	7,783	0.359	1.589	-3.044	3.841
Failed Coups	7,783	0.029	0.168	0	1
Successful Coups	7,783	0.025	0.155	0	1
Democracy (t-1)	7,783	0.476	0.499	0	1
Past Failed Coups	7,783	0.124	0.329	0	1
Past Successful Coups	7,783	0.110	0.312	0	1
Judicial Independence (t-1)	7,783	0.278	1.416	-3.261	3.340
Constitutional Press Freedom (t-1)	7,783	0.559	0.497	0	1
Log-Income p.c. (t-1)	7,783	8.536	1.213	4.959	12.336
Recession (t-1)	7,783	0.293	0.455	0	1
Eastern Europe & former USSR	7,783	0.093	0.290	0	1
Latin America	7,783	0.154	0.361	0	1
MENA	7,783	0.109	0.311	0	1
SSA	7,783	0.293	0.455	0	1
Western Europe & North America	7,783	0.178	0.383	0	1
Pacific	7,783	0.006	0.076	0	1
Caribbean	7,783	0.025	0.156	0	1
Asia	7,783	0.142	0.349	0	1

Table 2: 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)	0.853*** (0.016)	0.851*** (0.016)	0.890*** (0.012)	0.889*** (0.012)
FailedCoup	0.026 (0.045)	-0.012 (0.050)	0.015 (0.054)	-0.018 (0.059)	0.001 (0.044)	-0.033 (0.042)
SuccCoup	-0.126 (0.068)	0.055 (0.080)	-0.266*** (0.071)	-0.068 (0.078)	-0.169*** (0.050)	-0.028 (0.058)
Democracy(t-1)	0.129*** (0.031)	0.149*** (0.033)	0.171*** (0.031)	0.193*** (0.034)	0.100*** (0.025)	0.114*** (0.026)
PastFailed	0.000 (0.025)	-0.002 (0.025)	0.002 (0.023)	0.000 (0.023)	0.005 (0.020)	0.003 (0.020)
PastSucc	0.005 (0.030)	0.002 (0.030)	0.025 (0.029)	0.021 (0.029)	-0.004 (0.026)	-0.006 (0.026)
JI(t-1)	0.027* (0.014)	0.026 (0.014)	0.061*** (0.016)	0.059*** (0.016)	0.031** (0.012)	0.030* (0.012)
ConstPF(t-1)	0.029 (0.015)	0.028 (0.015)	0.038* (0.017)	0.037* (0.017)	0.020 (0.014)	0.020 (0.014)
GDPpc(t-1)	0.001 (0.011)	0.001 (0.012)	0.015 (0.010)	0.014 (0.010)	0.016 (0.008)	0.015 (0.008)
Recession(t-1)	0.035** (0.013)	0.035** (0.013)	0.012 (0.014)	0.012 (0.014)	-0.011 (0.012)	-0.011 (0.012)
Failed*Democracy(t-1)		0.158 (0.095)		0.142 (0.129)		0.140 (0.094)
Succ*Democracy(t-1)		-0.655*** (0.146)		-0.715*** (0.161)		-0.514*** (0.121)
Constant	-0.127 (0.103)	-0.145 (0.106)	-0.273* (0.128)	-0.292* (0.127)	-0.096 (0.081)	-0.109 (0.081)
Observations	7,783	7,783	7,783	7,783	7,783	7,783
Countries	159	159	159	159	159	159
R <sup>2</sup>	0.83	0.83	0.79	0.80	0.81	0.81
Wald-Chi <sup>2</sup>	121,764.87	121,990.84	121,867.13	137,926.16	386,937.52	388,472.01
AME Failed Coup		0.06		0.05		0.03
AME Successful Coup		-0.26***		-0.41***		-0.27***
AME Failed   Dem(t-1)=0		-0.01		-0.02		-0.03
AME Failed   Dem(t-1)=1		0.14		0.12		0.11
AME Succ   Dem(t-1)=0		0.06		-0.07		-0.03
AME Succ   Dem(t-1)=1		-0.60***		-0.78***		-0.54***

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: Robustness check – reduced sample

	(1) Bias	(2) Censor.	(3) Harass.	(4) Bias	(5) Censor.	(6) Harass.	(7) Bias	(8) Censor.	(9) Harass.
LDV(t-2)	0.821*** (0.019)	0.781*** (0.023)	0.823*** (0.017)	0.898*** (0.013)	0.869*** (0.014)	0.892*** (0.012)	0.899*** (0.013)	0.874*** (0.014)	0.896*** (0.012)
FailedCoup	0.004 (0.052)	-0.007 (0.060)	0.043 (0.047)	0.039 (0.050)	0.006 (0.048)	0.017 (0.036)	0.061 (0.054)	0.025 (0.052)	0.045 (0.040)
SuccCoup	0.071 (0.080)	-0.045 (0.079)	0.017 (0.051)	0.067 (0.088)	-0.065 (0.083)	-0.021 (0.066)	0.081 (0.098)	-0.072 (0.096)	-0.017 (0.076)
Democracy(t-1)	0.195*** (0.037)	0.186*** (0.036)	0.137*** (0.027)	0.128*** (0.030)	0.165*** (0.029)	0.101*** (0.024)	0.119*** (0.029)	0.150*** (0.028)	0.090*** (0.023)
PastFailed	-0.007 (0.027)	-0.006 (0.023)	0.014 (0.022)	0.001 (0.023)	0.017 (0.022)	0.015 (0.020)	0.001 (0.024)	0.013 (0.022)	0.013 (0.020)
PastSucc	0.003 (0.030)	0.017 (0.032)	-0.014 (0.028)	0.004 (0.029)	0.033 (0.026)	0.016 (0.025)	-0.006 (0.029)	0.011 (0.026)	0.016 (0.025)
JI(t-1)	0.034** (0.011)	0.076*** (0.017)	0.048*** (0.012)	0.029* (0.014)	0.054*** (0.015)	0.031** (0.012)	0.028* (0.014)	0.051*** (0.014)	0.031** (0.012)
ConstPF(t-1)	0.040* (0.020)	0.054** (0.020)	0.017 (0.018)	0.031* (0.015)	0.032* (0.015)	0.020 (0.015)	0.028 (0.015)	0.031* (0.015)	0.018 (0.015)
GDPpc(t-1)	-0.001 (0.013)	0.014 (0.013)	0.012 (0.010)	-0.001 (0.011)	0.013 (0.009)	0.013 (0.008)	-0.001 (0.011)	0.014 (0.009)	0.013 (0.008)
Recession(t-1)	0.042** (0.013)	0.021 (0.015)	-0.004 (0.013)	0.032* (0.013)	0.008 (0.013)	-0.014 (0.012)	0.031* (0.013)	0.005 (0.013)	-0.016 (0.012)
Failed*Dem.(t-1)	0.110 (0.094)	0.077 (0.127)	0.024 (0.097)	0.108 (0.096)	0.114 (0.127)	0.084 (0.097)	0.072 (0.105)	0.065 (0.136)	0.010 (0.104)
Succ*Dem.(t-1)	-0.633*** (0.124)	-0.642*** (0.161)	-0.520*** (0.115)	-0.649*** (0.154)	-0.706*** (0.166)	-0.502*** (0.124)	-0.659*** (0.161)	-0.687*** (0.174)	-0.500*** (0.128)
Constant	-0.112 (0.119)	-0.256 (0.138)	-0.041 (0.091)	-0.110 (0.099)	-0.308* (0.120)	-0.109 (0.076)	-0.101 (0.099)	-0.297* (0.118)	-0.092 (0.077)
Observations	6,999	7,001	7,002	7,586	7,586	7,586	7,406	7,406	7,406
Countries	157	159	158	159	159	159	159	159	159
R <sup>2</sup>	0.77	0.71	0.75	0.85	0.81	0.83	0.85	0.82	0.83
Wald-Chi <sup>2</sup>	54,064	55,800	123,240	171,088	168,454	489,860	171,718	165,303	465,375
AME Failed	0.06	0.03	0.06	0.09	0.06	0.06	0.09	0.06	0.05
AME Succ	-0.26***	-0.38***	-0.26***	-0.25***	-0.41***	-0.27***	-0.24***	-0.41***	-0.26***
AME Failed   D=0	0.00	-0.01	0.04	0.04	0.01	0.02	0.06	0.03	0.04
AME Failed   D=1	0.11	0.07	0.07	0.15	0.12	0.10	0.13	0.09	0.05
AME Succ   D=0	0.07	-0.04	0.02	0.07	-0.06	-0.02	0.08	-0.07	-0.02
AME Succ   D=1	-0.56***	-0.69***	-0.50***	-0.58***	-0.77***	-0.52***	-0.58***	-0.76***	-0.52***

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.

Table 4: Average marginal effects, conditional on constitutional rules

	(1)	(2)	(3)
	Bias	Censorship	Harassment
Constitution guarantees press freedom			
AME Failed   Dem=0 & Con=0	0.053	-0.064	-0.068
AME Failed   Dem=0 & Con=1	-0.074	0.027	0.001
<b>Wald test</b>	<b>[0.20]</b>	<b>[0.38]</b>	<b>[0.39]</b>
AME Failed   Dem=1 & Con=0	0.233*	0.182	0.253
AME Failed   Dem=1 & Con=1	0.047	0.067	-0.048
<b>Wald test</b>	<b>[0.27]</b>	<b>[0.62]</b>	<b>[0.11]</b>
AME Succ   Dem=0 & Con=0	0.099	-0.018	0.025
AME Succ   Dem=0 & Con=1	0.021	-0.109	-0.070
<b>Wald test</b>	<b>[0.60]</b>	<b>[0.55]</b>	<b>[0.46]</b>
AME Succ   Dem=1 & Con=0	-0.458***	-0.826***	-0.504***
AME Succ   Dem=1 & Con=1	-0.707***	-0.760***	-0.583***
<b>Wald test</b>	<b>[0.21]</b>	<b>[0.81]</b>	<b>[0.68]</b>
Constitution prohibits censorship			
AME Failed   Dem=0 & Con=0	-0.006	-0.011	-0.028
AME Failed   Dem=0 & Con=1	-0.060	-0.100	-0.084
<b>Wald test</b>	<b>[0.84]</b>	<b>[0.78]</b>	<b>[0.83]</b>
AME Failed   Dem=1 & Con=0	0.171	0.207	0.087
AME Failed   Dem=1 & Con=1	0.090	-0.024	0.130
<b>Wald test</b>	<b>[0.67]</b>	<b>[0.35]</b>	<b>[0.83]</b>
AME Succ   Dem=0 & Con=0	0.079	-0.058	-0.006
AME Succ   Dem=0 & Con=1	-0.146	-0.160	-0.220
<b>Wald test</b>	<b>[0.54]</b>	<b>[0.80]</b>	<b>[0.47]</b>
AME Succ   Dem=1 & Con=0	-0.487***	-0.675***	-0.512***
AME Succ   Dem=1 & Con=1	-1.001***	-1.167***	-0.641*
<b>Wald test</b>	<b>[0.12]</b>	<b>[0.16]</b>	<b>[0.69]</b>
Constitution allows censorship in special circumstances			
AME Failed   Dem=0 & Con=0	0.019	-0.047	-0.037
AME Failed   Dem=0 & Con=1	-0.167	0.150	0.033
<b>Wald test</b>	<b>[0.45]</b>	<b>[0.50]</b>	<b>[0.66]</b>
AME Failed   Dem=1 & Con=0	0.140	0.023	0.053
AME Failed   Dem=1 & Con=1	0.091	0.519	0.194
<b>Wald test</b>	<b>[0.74]</b>	<b>[0.12]</b>	<b>[0.63]</b>
AME Succ   Dem=0 & Con=0	0.021	-0.087	-0.038
AME Succ   Dem=0 & Con=1	0.055	-0.111	0.123
<b>Wald test</b>	<b>[0.90]</b>	<b>[0.91]</b>	<b>[0.31]</b>
AME Succ   Dem=1 & Con=0	-0.565***	-0.667***	-0.393***
AME Succ   Dem=1 & Con=1	-0.831***	-1.165***	-0.930***
<b>Wald test</b>	<b>[0.27]</b>	<b>[0.08]</b>	<b>[0.06]</b>
Constitution guarantees press freedom or prohibits censorship			
AME Failed   Dem=0 & Con=0	0.040	-0.090	-0.078
AME Failed   Dem=0 & Con=1	-0.056	0.044	0.005
<b>Wald test</b>	<b>[0.35]</b>	<b>[0.20]</b>	<b>[0.29]</b>
AME Failed   Dem=1 & Con=0	0.234*	0.167	0.254
AME Failed   Dem=1 & Con=1	0.107	0.104	0.065
<b>Wald test</b>	<b>[0.42]</b>	<b>[0.80]</b>	<b>[0.47]</b>
AME Succ   Dem=0 & Con=0	0.085	-0.018	0.038
AME Succ   Dem=0 & Con=1	0.034	-0.102	-0.075
<b>Wald test</b>	<b>[0.74]</b>	<b>[0.59]</b>	<b>[0.39]</b>
AME Succ   Dem=1 & Con=0	-0.361*	-0.689***	-0.654***
AME Succ   Dem=1 & Con=1	-0.701***	-0.825***	-0.511***
<b>Wald test</b>	<b>[0.09]</b>	<b>[0.61]</b>	<b>[0.52]</b>

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.