

# Deliberation Across the World

A Cross-National Examination of the Link Between Deliberation and Regime Legitimacy

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A core assumption of deliberative theory is that deliberation helps generate legitimate decisions in the political sphere and beyond. In this context, this paper seeks to investigate whether deliberation increases citizens perception of regime legitimacy, which is conceptualized and measured as regime support.

To this end, deliberation and its relationship with regime support are examined across the world by combining multiple cross-national survey projects (World Values Survey, Asian Barometer, Afrobarometer, Latinobarómetro, AmericasBarometer and European Social Survey) covering 119 countries and over 316,938 individual respondents. As this paper is the first known to the authors that examines the effects of deliberation on regime support in a cross-country design, the used deliberation measurement, the Deliberative Component Index from the "Varieties of Democracy"-Project, is thoroughly examined and analyses are conducted for its components as well. Given that self-reported regime support is expected to be biased in countries where freedom of discussion is inhibited, a weight is applied to account for possible distortions in the survey data.

The results of the multilevel regression analysis indicate that deliberation fulfills its legitimacy claim by increasing regime support first and foremost in democracies. The evidence for non-democracies and the complete sample is ambiguous and less robust although it points in the same direction. A possible limitation of the study is the high correlation between the used deliberation measurements and democracy indices which might indicate that the measurement does not accurately reflect the grade of deliberation in each country. Nevertheless, some interesting deviations in these correlations could be found between the subsamples, as well as in regard to the index and its components. In order to arrive at robust results, more sensible ways to measure deliberation on the country level seem necessary. It is further suggested that following studies and survey projects in the field should find methods to remedy possible bias in self-reported regime support, especially in countries with more authoritarian regimes.

The findings of this paper can hopefully be used as a starting point for more detailed investigation of the relationship between deliberation and regime legitimacy in the future.

Note: Rosa Seitz and Fabio Votta are currently enrolled as graduate students of *Empirical Political- and Social Research* at the University of Stuttgart. This paper is not published or accepted for publication at this time, although it will be presented at the 2018 ECPR General Conference in Hamburg (August 22-25).

Online Appendix can be accessed here: [https://favstats.github.io/delib\\_mod\\_database](https://favstats.github.io/delib_mod_database)

In the interest of Open Science, the entire code that was used to generate the content of this paper can be found in the following GitHub Repository: [https://github.com/favstats/paper\\_delib](https://github.com/favstats/paper_delib)

# 1 Introduction

Since political theory took its “deliberative turn” (Dryzek, 2000) in the 1990s, political science has increasingly turned towards empirically examining deliberation. There have been numerous studies about its requirements and consequences. This paper is concerned with the latter. Deliberative theory along with empirical science has developed manifold assumptions about the effects of deliberation, including transformation of preferences, epistemic quality, consensus and accommodation, as well as side-effects on civic virtues like political trust (cf. Bächtiger & Wyss, 2013, pp. 164–165). Given the current decline of confidence in governments and political institutions in many democracies across the world (cf. Foa & Mounk, 2016), deliberation could be seen as a process to arrive at legitimate decisions in societies of increasing complexity (see for example Habermas, 1994, pp. 7–8; Warren & Gastil, 2015, p. 562). In order to examine this legitimacy claim, this paper seeks to investigate whether deliberation increases citizens perception of regime legitimacy, which is conceptualized and operationalized as regime support. This study differs from previous ones in the following terms: it is the first to examine the effects of deliberation on regime support in a cross-national framework across a large dataset of 316,938 respondents from 119 countries across all continents. Moreover, the analysis is not restricted to democratic regimes, but also includes non-democracies.<sup>1</sup> In order to account for the variety of regime types, we draw from the literature on so called *authoritarian deliberation*, a recent theoretical development that conceptualizes deliberation outside of democratic contexts (see He, 2014; He & Thøgersen, 2010; He & Warren, 2011).

The main research question of this thesis states as follows: *What role does Deliberation play for regime legitimacy across the world?* The following section reviews relevant literature on deliberation and derives assumptions to be tested empirically (Section 2). The next section presents the research design of this study and discusses issues critical to the analysis - especially the validity of the Deliberative Component Index as well as a possible bias in self-reported regime support. Following this, bivariate relationships are examined and the results of the estimated multilevel models are presented and interpreted in regard to their implications for the theoretical assumptions (Section 3). In the end, the findings of the analysis will be summarized and the conclusion gives an answer to the research question along with a discussion of implications for further research (Section 4).

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<sup>1</sup>For the purposes of this paper we consequently refer to political systems as non-democratic in accordance with the Polity IV project classification of autocracies and anocracies.

## 2 Deliberative Theory

For over twenty years, deliberation has been a topic of great interest to political theory and empirical political science. One of the main contributors to deliberative theory is the German philosopher Jürgen Habermas. His classical model of deliberation is characterized by the logic of communicative action, by which the action orientations of participants are coordinated through acts of common understanding, rather than strategic calculations regarding their own success (cf. Habermas, 1982, p. 385). The ideal deliberative procedure, as described by Cohen, needs to meet the following criteria (Cohen, 2003, pp. 346–347): First, ideal deliberation is *free* in that “[...] the participants regard themselves as bound only by results of their deliberation [...]”. The second criterion is that proposals must be justified with *reasons*, with the assumption that these reasons will determine whether the proposals are accepted. The next criterion is that participants are formally and substantively *equal*, meaning that the rules of the process and the distribution of power and resources do not discriminate against individuals. Lastly, deliberation’s ideal goal is to arrive at a rational *consensus*. More generally speaking, this type of deliberation contains the process of rational consideration of arguments, in which the participants provide elaborate reasons that relate to the common good to justify their positions, respect other opinions and are truthful as well as willing to yield to better arguments (cf. Bächtiger, Niemeyer, Neblo, Steenbergen, & Steiner, 2010, pp. 35–37).

The discussed type of ideal deliberation is quite demanding and therefore invited criticism from different directions. Bächtiger et al. (2010, pp. 42–48) discern between the Habermasian *type I* deliberative theory and *type II* deliberation, under which they subsume criticisms and further developments. This type of deliberation contains a range of theoretical adaptations and does not resemble a unified theory. Generally, the focus changed from the deliberative process to deliberative institutions and outcomes and some of the strict requirements of the classical model are loosened or dropped completely. For example, scholars pointed out that not all citizens are equally able to convey their point of view in a way that fulfills ideal deliberative criteria, which can be dependent on factors like socio-economic background, gender or ethnicity (cf. Sanders, 1997, p. 349). Thus, one branch of type II theory introduced the admissibility of other forms of speech besides rational argumentation, as for example rhetoric, emotion, humor or storytelling (cf. Dryzek, 2000, p. 48). Moreover, Mansbridge et al. argue that self-interest can sometimes be legitimate, because it doesn’t necessarily violate deliberative ideals (cf. Mansbridge et al., 2010, pp. 72–73). Other adaptations define the ideal results of deliberation in more detail and lower the threshold of admissible outcomes by focusing on meta-consensus and inter-subjective

rationality instead of rationally motivated consensus (cf. Niemeyer & Dryzek, 2007, p. 522). Moreover, in type II deliberation the truthfulness criterion is relaxed or abandoned entirely, as it doesn't capture the possibility of multiple and complex intentions and is not necessary for argument accessibility or the willingness to cooperate and to change one's opinion (Bächtiger et al., 2010, p. 44; cf. Markovits, 2006, pp. 257–258).

Since this paper aims to examine the consequences of deliberation across different regime types, democracies and non-democracies alike, the relationship between democracy and deliberation needs to be examined. In the literature, deliberation is often discussed exclusively in democratic contexts, especially regarding models of deliberative democracy (Cohen, 2003; Habermas, 1994). In such conceptualizations, deliberation and democracy are closely linked to each other. On the other hand, critics assume an inconsistency between deliberative procedures of participation and democratic principles like equality (Lafont, 2017; cf. Sanders, 1997, pp. 347–350). For the purposes of this paper, deliberation and democracy are considered to be distinct phenomena. As Dryzek puts it: “Deliberative capacity does not have to be sought in any particular set of institutions (such as elections), but it can be manifested in different ways, in different systems” (Dryzek, 2009, p. 1380). We follow the conceptual approach proposed by He and Warren: democracy concerns the inclusion of individuals in matters that affect them, whereas deliberation can be conceptualized as a “communication mode in which participants in a political process offer and respond to the substance of claims, reasons, and perspectives in ways that generate persuasion-based influence” (cf. He & Warren, 2011, p. 271). Especially in the context of non-democracies it seems appropriate to apply a type II concept of deliberation, as He and Warren do. But even then, the requirements of deliberation are more likely to be met in democracies. Moreover, the concepts do overlap in theory, as they share underlying principles like equality and a minimum guarantee of freedom of speech. Nevertheless, deliberative procedures have not only been implemented in democracies. A prominent example is China, a rather autocratic country, where deliberative practices like opinion polls or village councils have gained popularity over the last 20 years (Fishkin, He, Luskin, & Siu, 2010; He, 2014; He & Thøgersen, 2010; He & Warren, 2011).<sup>2</sup>

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<sup>2</sup>An illustrative example is the case of deliberative polling in Zeguo Township in Wenling City, a local public consultation that attempted to affect policy choices over the funding of infrastructure projects (cf. Fishkin et al., 2010, pp. 437–439). The town leadership made the decisions of the deliberations effectively binding by committing to fund the highest rated projects, and response and participation rates were rather high. Fishkin et al. conclude, that the deliberative poll was highly representative (despite a gender bias through wrong sampling at the household stage) and met the criteria of being “scientific, democratic and legal” very well (cf. Fishkin et al., 2010, p. 446). Moreover, and somewhat counter-intuitively, the authoritarian context proved to have some advantages: it was easier than in the usual democratic context to recruit the sample and the promise of the implementation of agreed upon results was easier to grant by the authorities (cf. Fishkin et al., 2010, p. 446).

## Deliberation and Legitimacy

In the literature about deliberation, the claim exists that deliberation is necessary to arrive at legitimate decisions in societies of increasing complexity (Habermas, 1994, pp. 7–8; Warren & Gastil, 2015, p. 562). Before discussing the reasons for such claims, the concept of legitimacy needs to be defined for the purposes of this paper. So, what are legitimate decisions or outcomes? One possibility would be to determine that every decision or outcome, arrived at through deliberative processes meeting certain quality standards, is legitimate. But when doing so, one adopts a definition which makes empirical examination redundant. So, this conceptualization of legitimacy is not of analytical interest, even though it might be most related to deliberative theory. Another approach would be to determine criteria relevant for input, throughput and output legitimacy of a political system (cf. Schmidt, 2013). As we aim to explain legitimacy across a large set of nations, we chose a subjective conceptualization, focussing on legitimacy as it is perceived by the people, which makes empirical examination by cross-national survey data possible. According to this conceptualization, a state is more legitimate the more its citizens perceive it to be rightfully holding and exercising power (cf. Gilley, 2006, p. 500). This definition has the drawback of not entirely capturing the scope of legitimacy as it is conceptualized in many deliberative theories, but it is nonetheless useful as it enables the possibility to empirically examine legitimacy across a large set of cases, which is one of the central aims of this paper.

As this specification suits our approach, we chose the political support framework to further specify (and later operationalize) subjective legitimacy, which we derive from Easton (1965, 1975). The underlying logic is that, if people believe their regime to be legitimate, they should have positive attitudes towards it. Easton defines political support in the following way: “We can say that A supports B either when A acts on behalf of B or when he orients himself favorably toward B; it may be a goal, idea, or institution” (Easton, 1965, p. 159). Political support thereby relates to supportive attitudes of citizen towards the political system. Easton differentiates between three types of support objects, the *political community*, *political regime* and *political authorities* (cf. Easton, 1965, pp. 171–225):

1. The *political community* comprises the members of a political system and the basic values represented by it. The basis of such a community is an individual’s sense of belonging and the feeling of mutual solidarity between the members of this community.
2. The *political regime* consists of the network of institutions that uphold a political system, i.e. the legislative, judicative or executive institutions.

3. Lastly, *political authorities* consist of the actual personalities that occupy the institutions (for example parliamentarians, heads of state).

Where does support for the mentioned political objects come from? According to Easton, two types of support sources, *diffuse* and *specific*, can be distinguished (cf. Easton, 1975, pp. 436–439). Specific support is sourced in the performance and outputs of a political system and its institutions. It is therefore targeted at and often dependent on the personal assessment of the current administration. On the other hand, according to Easton, diffuse support is a commitment to specific political values and norms, as well as to the concrete political structures responsible for the implementation of that political and social order. Diffuse support is therefore more robust and a more long-term source of legitimacy than specific support. For the purposes of this paper, a focus will be set on diffuse support, especially trust in the political regime, as it relates to the level on which the deliberative qualities are of analytical interest.

Next we seek to answer the question why decisions arrived at through deliberation, or more generally speaking, political systems embodying deliberative criteria, should be more legitimate. As discussed before, the aim of deliberation is to arrive at rational consensus or at least some form of meta-consensus. This involves the transformation of preferences, which at first refers to the attitudes towards the alternative policies proposed through deliberation, ideally shifting preferences and outcomes in a direction of more publicly-spirited orientations (cf. Fishkin, 2009, p. 134). Moreover, the epistemic quality of decisions is assumed to increase when they are deliberated (cf. Bächtiger & Wyss, 2013, p. 164). According to Cohen, participants of deliberative processes “[...] suppose that they can act from the results, taking the fact that a certain decision is arrived at through their deliberation as a sufficient reason for complying with it” (Cohen, 2003, pp. 346–347). For these reasons, the outcomes of deliberative processes should be accepted and viewed as legitimate at least by the people who took part in the deliberation. For example, Habermas argues that democratic legitimacy does not arise from public deliberation alone, and emphasizes the importance communication and participation of the ones potentially affected by the decision (cf. Habermas, 2007, p. 431). However, in regard to public-spiritedness and epistemic quality of decisions, the effects could be even broader, reaching beyond the participants of such processes. Such assumptions are not shared by classical deliberative theory, nevertheless we argue that even if deliberation is restricted to the elite level, such effects could reasonably be expected. Deliberative qualities like reasoned argumentation, respect for counter arguments or common good orientation, even solely between political actors, could produce well-reasoned decisions more broadly accepted, and viewed as more legitimate by the citizenry, as they would be in the absence of such qualities. Since we chose a cross-national analysis

framework, the central assumption derived for empirical examination is that the deliberative quality of a political system increases its legitimacy (perceived by the citizens), which should manifest itself in higher levels of regime support.

At this point it has to be discussed that (like deliberation) legitimacy is mostly discussed within democratic contexts. What about deliberation in autocracies? Generally speaking, autocratic rulers (and one could argue democratic rulers too) have three means at their hands to maintain their power: repression, co-optation and legitimation (cf. Gerschewski, 2013, p. 18). Repression is not always possible or successful and it might only create superficial support amongst the citizenry. Co-optation is only applicable on a certain scale, as one can't co-opt the whole citizenry, even though deliberation could be seen as an attempt to co-opt people by giving them a voice option (cf. He & Warren, 2011, p. 281). Legitimation, however, is rooted in the people's conviction that the system is in fact legitimate (cf. Gerschewski, 2013, p. 18). As discussed before, deliberation is said to be a way to generate legitimacy and therefore, deliberative practices could legitimate the political regime without adopting electoral democratic structures. An important notion in this context is that deliberation doesn't need to be about sensitive topics, but can be used to deliberate about issues that aren't threatening the autocratic rule, for example new community infrastructures. When decisions are made through deliberative practices, the participants might have the impression that the rulers are asking for and listening to their opinion and in turn they might perceive the regime to be more legitimate. In some cases, citizen deliberation could inform the regime about policy preferences otherwise not knowable in highly autocratic contexts and therefore enable the regime to be more responsive to the citizenry. Truex (2017) finds such effects when conducting an online survey experiment of Chinese Netizens who were exposed to the National People's Congress' online participation portals. He summarizes his findings as follows: "[...] even such limited reforms may shift attitudes toward the regime in the positive direction. [...] exposure to images [...] increases satisfaction with the regime, feelings of government responsiveness, and expressed willingness to comply with regulations, but only for citizens with low political access and low expectations for government performance" (Truex, 2017, p. 352). The results offer some evidence for the proposed relationship, even if the examined online portals aren't exactly deliberative by definition but rather participatory or consultative and Truex only studied short-time effects. The general argument that deliberative qualities should increase the support of a political regime, even beyond individual participants of the decision making process, can be applied to non-democracies as well. Deliberation between elites that result in reasoned justification of decisions with common good orientation might generate more legitimacy and support than a regime without these criteria would enjoy.

It should be noted that the strengthening of autocratic rule is just one possible long-term outcome of the introduction of deliberative practices and quality criteria in a political system. Deliberation might as well lead to the democratization of a regime, as frequent deliberation could increase the democratic capacity of citizens over the long run (cf. He & Warren, 2011, pp. 183–184; Truex, 2017, p. 352). Side-effects of deliberation, like increased knowledge or efficacy, could influence the people’s perception of their political regime and at the same time increase their preference for democracy. Following this line of thought, deliberation could lead to a *loss of legitimacy* for non-democratic regimes, especially in light of Truex’ findings that positive effects of consultative online portals only applied to individuals with low political access. Therefore, the theoretical predictions for the effects of deliberation in non-democracies are contradicting, suggesting either *higher* legitimacy through deliberative qualities, or *lower* legitimacy due to an increase of democratic capacities of the citizens. For democracies specifically, we expect higher levels of political support for systems with more deliberative qualities.

### 3 Empirical Section

The following section will first introduce the data and its sources along with the data-merging approach. Next, the operationalization of regime legitimacy as well as deliberation is discussed, and subsequently the used control variables are shortly introduced (Section 3.1). In the following subsection we take into account potential bias with the measurement of regime support and discuss possible adaptations (Section 3.2). Following this, a short examination of descriptive statistics takes place (Section 3.3). Lastly, the results of estimated multilevel regression models are reported and examined for their implications regarding the research question (Section 3.4).

#### 3.1 Data Merging and Operationalization

In order to put the assumptions of the previous section to the test, a number of datasets will be combined. The analysis includes micro-level data from six cross-national survey projects spanning a time range from 2010 to 2015. The final dataset combines the Afrobarometer Survey Round 5 and Round 6 (data from 2011–2015), the Asian Barometer Survey Wave 3 and Wave 4 (2010–2015), the AmericasBarometer (2010–2014), the European Social Survey Round 6 (2012), the Latinobarómetro (2015) and the World Values Survey (2010–2014). The final dataset accumulates the responses of 316,938 citizen in 119 countries across all continents and covers individual data from 61% of all independent countries that represent 87% of the world



population.<sup>3</sup> Before the variables from different surveys are merged, they are normalized range from 0 to 1.

#### **Dependent Variable: Regime Support**

In line with the theoretical definition of regime support discussed previously, the dependent variable will be constructed from self-reported trust/confidence in the following regime institutions: political leadership, police, courts and parliament (Questions and wordings can be found in the online appendix). A range of studies focused on institutional trust and political support have operationalized regime support in a very similar way (Chen, 2017; Mauk, 2017; Yang & Tang, 2010). We chose this specific operationalization because of two reasons: first, because it covers the three types of traditional political branches, executive (political leadership), judicial and legal system (courts and police) and legislation (parliament) and second, common availability in all used survey projects. Given that the analysis in this paper doesn't seek to predict regime support of citizens in a specific year, but is more generally interested in the average regime support in a given country, surveys done in the same country in different years are collapsed into a single case, leaving us with a more general estimation of regime support.<sup>4</sup> With the help of a factor analysis, regime support is modeled as a compository index. The results show high consistency and a Cronbach's  $\alpha$  of 0.81 hints at good unidimensionality between the four indicators (for a report on the factor analysis, see online appendix).

#### **Independent Variable: Deliberation**

Now that the dependent variable has been introduced, a discussion of the operationalization of the independent variables follows. The question how to measure deliberation is a major challenge to empirical research. On the process level, a notable instrument is the Deliberative Quality Index (DQI) (Steiner, Bächtiger, Spörndli, & Steenbergen, 2004, pp. 53–60), which has shown to be a reliable, considerably valid and widely used measure of deliberative quality (cf. Bächtiger & Wyss, 2013, p. 165). The index is only applicable for assessing and comparing the quality of deliberation in actual speech acts/debates and not across whole political systems. The only available measurement of deliberation on the structural level known to the authors that serves the purpose of quantitative cross-national comparison is the Deliberative Democracy Index or

<sup>3</sup>The following countries had to be excluded because of some form of political instability that made the reference point of the regime unclear: Egypt 2013 (imminent military coup), Libya in 2014 (post-revolutionary, transitional state), Mali in both 2012 and 2014 (civil war), Palestine in 2012 and 2013 (government split between Hamas in Gaza and Fatah in Westbank), as well as Yemen in 2014 (civil war) (cf. Mauk, 2017, p. 14).

<sup>4</sup>This is judged to be appropriate, because the time distances between surveys do not exceed five years. Surveys done in the same country and in the same year from different research projects are also collapsed into the same case.

Table 1: DCI and Subcomponents

<i>Indicator</i>	<i>Question</i>
<b>Reasoned Justification</b>	<i>When important policy changes are being considered, i.e. before a decision has been made, to what extent do political elites give public and reasoned justifications for their positions?</i>
<b>Common Good</b>	<i>When important policy changes are being considered, to what extent do political elites justify their positions in terms of the common good?</i>
<b>Respect counterarguments</b>	<i>When important policy changes are being considered, to what extent do political elites acknowledge and respect counterarguments?</i>
<b>Range of consultation</b>	<i>When important policy changes are being considered, how wide is the range of consultation at elite levels?</i>
<b>Engaged society</b>	<i>When important policy changes are being considered, how wide and how independent are public deliberations?</i>

See Coppedge et al. 2017: 202–7.

rather the Deliberative Component Index (DCI) of the “Varieties of Democracy(V-Dem)”-Project (Coppedge et al., 2017b). The focus of the DCI is on “the degree of deliberativeness that can be discerned across all powerful institutions in a polity (not just those explicitly designed to serve a deliberative function) and among the citizenry” (Coppedge et al., 2011, p. 254). The DCI is constructed with a Bayesian factor analysis “attempting to measure the extent to which political elites offer public justifications for their positions on matters of public policy, justify their positions in terms of the public good, acknowledge and respect counter-arguments; and how wide the range of consultation is at elite levels [...]” (Coppedge et al., 2017c; Coppedge, Lindberg, Skaaning, & Teorell, 2016, p. 583). The DCI is composed of five indicators , summarized in Table 1. Especially the first three indicators – Reasoned Justification, Common Good and Respect for Counter-Arguments – resemble some of the criteria of ideal deliberation and are also found in the DQI, though not all of the quality standards are captured. Beyond that, the measure includes a indicator for respect towards counter-arguments. To assess the scope of deliberation, the DCI contains two indicators: Range of Consultation and Engaged Society. However, it should be noted that the DCI concentrates mainly on deliberation on elite levels, as only the Engaged Society indicator asks for public instead of elite deliberation. Since this paper is the first known to the authors that examines the effects of deliberation on regime support on a macro-scale, the analyses are conducted for the DCI as well as its components respectively, to gain as much information as possible. The analysis in this paper should therefore be seen as exploratory in nature that is meant to inspire future research.

For the empirical analyses, the mean values over 11 years (2000-2010) are estimated for the DCI and its components, as it is assumed that diffuse regime support arises not (only) on a daily basis but over a period of time, and the lagging of the variable is meant to simulate the temporal

Table 2: DCI and Subcomponents: Correlation with Polity/FH

	DCI	RJ	CG	CA	RoC	ES	Polity/FH
<b>Complete Data (n=119)</b>	<i>0.80</i>	<i>0.67</i>	<b><i>0.35</i></b>	<i>0.79</i>	<i>0.70</i>	<i>0.78</i>	<i>1.00</i>
<b>Democracies (n=64)</b>	<i>0.61</i>	<i>0.68</i>	<b><i>0.39</i></b>	<i>0.54</i>	<i>0.59</i>	<b><i>0.46</i></b>	<i>1.00</i>
<b>Non-Democracies (n=55)</b>	<i>0.64</i>	<b><i>0.28</i></b>	<b><i>0.08</i></b>	<i>0.65</i>	<b><i>0.47</i></b>	<i>0.72</i>	<i>1.00</i>

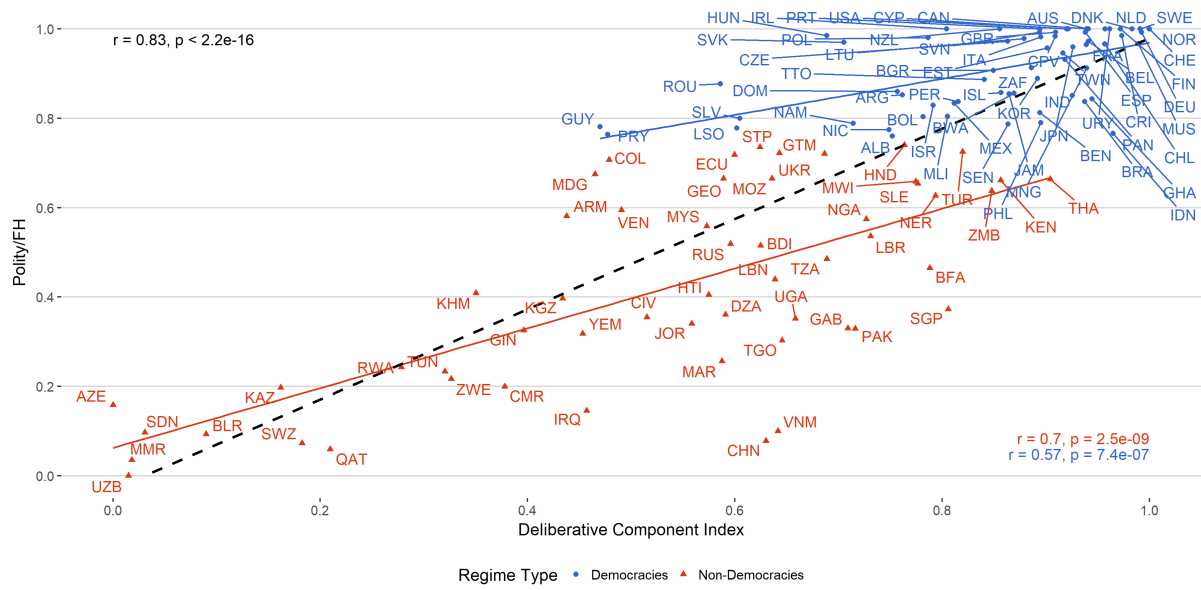
Table shows Pearson's r. Bold numbers indicate correlations below  $r = 0.5$ . Own calculations.

order of causality. The same treatment applies to other independent macro-variables that vary over time. Given that we theoretically distinguish between democracy and deliberation, we only use the DCI in the analysis and not the entire Deliberative Democracy Index. Nevertheless, our sample shows that the deliberation indicators are highly correlated with democracy (see Table 2), measured by an index that averages Freedom House and Polity2 values, which we name Polity/FH.<sup>5</sup>

This is not due to the choice of the democracy measurement, as the correlation persists with similar popular democracy measures. Table 2 depicts the correlations of the DCI and its components with the previously introduced Polity/FH variable. With an  $r$  value of 0.80, the DCI itself correlates the strongest with Polity/FH, the components Reasoned Justification, Counter-Arguments, Range of Consultation and Engaged Society show almost as strong correlations, with  $r$  varying from 0.67 to 0.79. Only the Common Good component seems less related to democracy ( $r = 0.35$ ). A high correlation of democracy and deliberation measures isn't surprising, as they share underlying principles. Nonetheless, a correlation as high as 0.80 brings up challenges for the analysis. For instance, one could call into question the validity of the DCI. More specifically, the index might capture merely a general perception of the minimal deliberative quality that naturally comes along with any democracy, instead of actual differences in the quality of deliberation. Another challenge is that the strong empirical correlation contradicts the theoretical assumption that deliberation and democracy should be considered distinct phenomena. If this assumption is to be maintained, the effect deliberation has on regime support must be controlled for the level of democracy, which would lead to issues of collinearity / multicollinearity in a multivariate model. Within the subsample of democracies ( $\text{Polity/FH} \geq 6$ ), the correlation between the DCI and Polity/FH drops to 0.61, similar patterns can be observed for the component indicators that

<sup>5</sup>The index is taken from the V-Dem Dataset and originally stems from Freedom House (2017). The index constructors imputed missing polity values by regressing Polity2 on the average Freedom House measure. The Variable is scaled from 0 – 10. As with the deliberation indicators, the mean values from 2000-2010 are estimated for the analysis. To apply the Polity2-classification of democracies, anocracies and autocracies, the variable was rescaled to range from -10 to +10. Polity set their cut-off values at 6 and -6 (-10 – -6 = Autocracy; -5 – 5 = Anocracy; 6 – 10 = Democracy). However, in the process of rescaling the variable and calculating the ten year average, values have been produced that lie between the cut-off values. Numbers were rounded to integers and the usual cut-off values of Polity2 were used to classify the countries into the three categories.

Figure 1: Scatterplot between Polity/FH and the DCI



Data weighted to same sample size (=1000). Own calculations.

previously showed high correlations in the whole sample. For the subsample of non-democracies ( $\text{Polity}/\text{FH} < 6$ ), the correlations are also less strong. Almost all deliberation indicators shows smaller correlations within the respective subsamples than in the complete sample. For both subsamples, we can therefore assume problems of collinearity to be less severe. Nevertheless, such problems are especially expected for the deliberation indicators strongly correlated with Polity/FH. Within democracies, besides the DCI, three of the components show correlations with  $r$  above 0.5: Reasoned Justification ( $r = 0.68$ ), Range of Consultation ( $r = 0.59$ ) and Counter-Arguments ( $r = 0.54$ ). Within non-democracies three indicators fulfill this criterion: the DCI ( $r = 0.64$ ), Counter-Arguments ( $r = 0.65$ ), and Engaged Society ( $r = 0.72$ ). Accordingly, for the indicators Common Good and Engaged Society in democracies, and Reasoned Justification, Common Good and Range of Consultation in non-democracies, we expect less critical levels of collinearity.

Even though deliberation and democracy are empirically strongly connected, a closer look at the deviations seems worthwhile. Figure 1 depicts a scatterplot of the Polity/FH and DCI variables. The blue colour resembles the democracy sample, non-democracies are coloured red. Interestingly, the previous example of deliberation in non-democracies, China, appears as one of the countries which score relatively high on the DCI, especially in comparison with the level of democracy. This also applies to Vietnam and less clearly to Singapore, both countries identified by research as non-democracies with consultative institutions (cf. Jayasuriya & Rodan, 2007, p. 779). As China specifically was already theorized to be a case of a non-democracy with

deliberative institutions, the empirical results indicate that there is some accuracy in the V-Dem measurement of deliberation – despite the strong relation to democracy. There are not many deviating cases, much less cases that deviate strongly, but if there are differences, the results imply that they could be meaningful. Therefore, we decide to use the DCI and its subcomponents in the analysis, with the assumption that the diverging patterns are indeed representative of two empirically distinct phenomena.

### Control Variables

Lastly, a range of control variables were added, both on the individual and the country level, which will be described shortly (a table with all control variables, their sources and other notes can be found in the online appendix). On the individual level the following controls are included: sex, age financial security (measured in terms of whether there is enough financial resources to support the household), education (years of schooling and education levels) and employment status. Other presumably important variables like satisfaction with economy could not be included, as they are not available across all survey projects. The macro control variables are taken from either V-Dem, or the “Quality of Government”-Dataset (D. Teorell Jan, Holmberg, Rothstein, Khomenko, & Svensson, 2017). For all independent macro variables that vary over time, the average value of the years 2000 to 2010 is calculated. First, the already introduced Polity/FH measure serves as a control for democracy. Furthermore, real GDP per capita in constant dollars of the year 2000 is included (the variable is log-transformed because of severe skewness). The third macro control variable is the population size (natural logarithm). Further variables are the urban population ratio and average life expectancy. Lastly, all models include design dummies that account for the different surveys and are coded as 1 for all respondents that were part of a specific survey project and 0 if they were not part of it. This allows to control for possible bias between the different survey projects. <sup>6</sup>

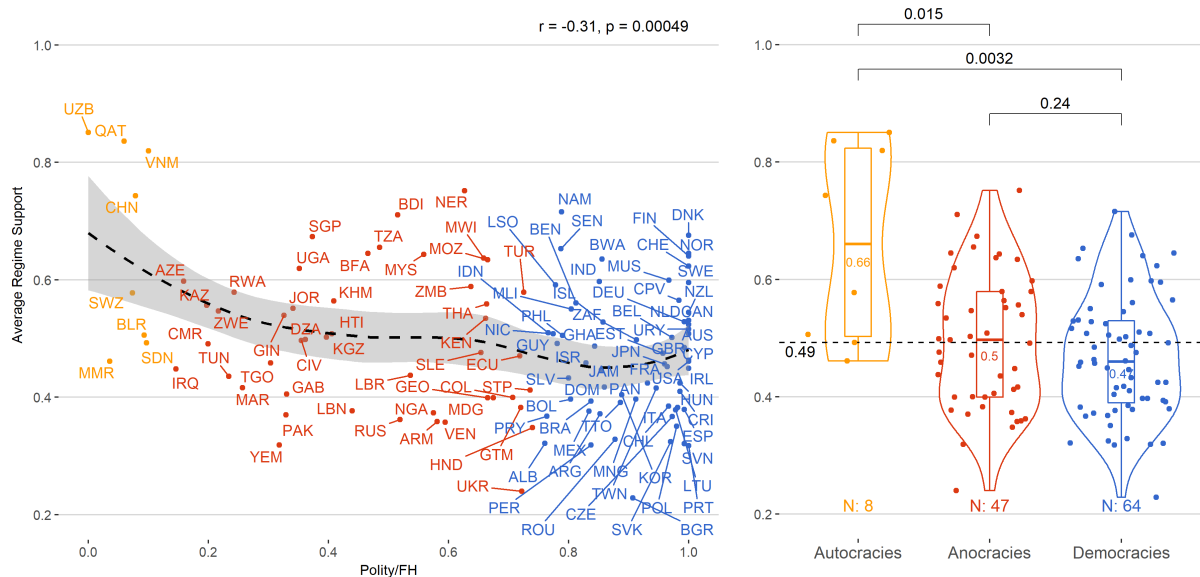
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<sup>6</sup>As it is common in cross-national studies, the analysis originally included regional dummies as controls, though the results vary strongly when including them. The varying effects within different geographical regions might need to be studied separately. As it would go beyond the scope of this study, the results including regional dummies are not reported. However, it can be said that the dataset dummies already function as regional dummies to some degree, as most of them are specific to a certain region. With that, we feel confident in reporting the results without regional dummies. Another adaptation considered, but not implemented due to the scope of the analysis, is the exclusion of specific groups of cases that could bias the results, like for example OECD or EU countries and strongly repressive regimes.

### 3.2 Possible Bias and Correction

Given that the main variable of interest *regime support* consists of self-reported attitudes in different societies and political systems across the world, a critical examination of the data is appropriate. A very widespread problem within survey research is the so-called *social desirability bias*, which especially applies to sensible survey items that concern very personal topics associated with a social stigma (cf. Krumpal, 2013). Some respondents might give responses they know to be untruthful because they either want to comply with some strong social norms or they fear repercussions by their social environment. Especially the fear of government repression seems to be relevant in autocratic regimes, where expressing the wrong opinions might lead to physical harm. That is why in such repressive environments, respondents in surveys tend to practice *preference falsification*, where they will express uncontroversial regime-friendly opinions in public and conceal their real convictions (cf. Kuran, 1997). Tannenberg analyzed such sensible survey items relating to trust in political institutions in the context of 36 African countries and was able to show that there is considerable bias when respondents believe that the survey is administered by a government agency, which is especially prevalent in more autocratic regimes (cf. Tannenberg, 2017, p. 21).

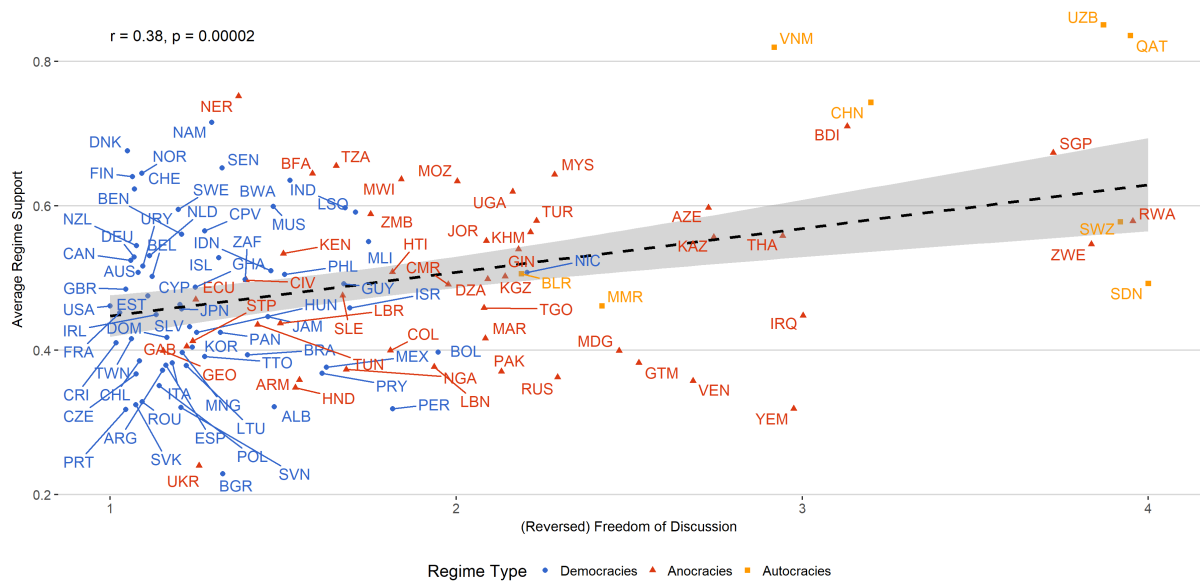
Figure 2: Regime Support by Polity/FH



Number inside the boxplot shows the arithmetic mean. Data weighted to same sample size (=1000). Own calculations.

There is therefore strong grounds on which it can be assumed that the data is affected by social desirability bias, since we analyze sensible survey items relating to regime support in environments of varying repressiveness. In order to reveal such bias, we investigate the relationship between our democracy measurement (Polity/FH) and regime support, as well as a comparison of means between democracies, anocracies and autocracies, shown in Figure 2. Judging from the bivariate relationship, one can notice that there seems to be a nonlinear, rather quadratic relationship of democracy and regime support. Very autocratic regimes score high on regime support, while countries that are semi-democratic and democracies score noticeably lower, although there is an uprising turn at the end of the curve. A t-test between autocratic regimes in regards to anocratic and democratic regimes reveals that the average regime support is significantly higher in an autocratic context ( $p = 0.015$  and  $p = 0.003$ , respectively), though it doesn't significantly differ between anocracies and democracies ( $p = 0.24$ ).

Figure 3: Regime Support by Freedom of Discussion



Data weighted to same sample size (=1000). Own calculations.

In order to investigate whether high regime support in autocracies is due to some form of bias, a measurement of Freedom of Discussion is introduced (cf. Coppedge et al., 2017a, pp. 228–229). Freedom of Discussion measures “the extent to which citizens are able to engage in private discussions, particularly on political issues, in private homes and public spaces [...] without fear of harassment by other members of the polity or the public authorities”, which has the great advantage of not just focusing on repression of freedom of speech on behalf of the government, but also takes into account the degree to which other citizen impose speech prohibitions on each other. Freedom of Discussion and regime support are positively related (see Figure 3),

Table 3: Weighting of Regime Support

Country	Regime Support <i>No Bias</i>	Regime Support <i>Low Bias (10 - 15%)</i>	Regime Support <i>High Bias (20 - 25%)</i>	Freedom of Discussion <i>(FoD)</i>
Qatar	85.68	72.83	64.26	<i>Weakly Respected</i>
Uzbekistan	82.97	70.53	62.23	<i>Weakly Respected</i>
Singapore	68.06	57.85	51.04	<i>Weakly Respected</i>
Kuwait	66.50	56.52	49.87	<i>Weakly Respected</i>
Swaziland	59.07	50.21	44.30	<i>Weakly Respected</i>
Rwanda	57.38	48.77	43.03	<i>Weakly Respected</i>
Zimbabwe	55.08	46.82	41.31	<i>Weakly Respected</i>
Vietnam	79.98	71.98	63.99	<i>Somewhat Respected</i>
China	71.28	64.15	57.02	<i>Somewhat Respected</i>
Burundi	68.80	61.92	55.04	<i>Somewhat Respected</i>
Thailand	58.17	52.36	46.54	<i>Somewhat Respected</i>
Azerbaijan	56.78	51.10	45.43	<i>Somewhat Respected</i>
Kazakhstan	52.24	47.02	41.79	<i>Somewhat Respected</i>
Iraq	49.90	44.91	39.92	<i>Somewhat Respected</i>
Guatemala	38.52	34.66	30.81	<i>Somewhat Respected</i>
Madagascar	36.67	33.00	29.34	<i>Somewhat Respected</i>
Venezuela	34.76	31.29	27.81	<i>Somewhat Respected</i>
<i>Correlation - FoD</i>	<i>0.38</i>	<i>0.20</i>	<i>0.04</i>	-

Pearson's r reported. Data weighted to same sample size (=1000). Own calculations.

suggesting that regime support is higher when discussion about political issues is less free. This might imply that revealing low support of the regime is socially undesirable and politically inconvenient in such societies and therefore citizens tend to falsify their preferences and express higher levels of regime support to avoid negative repercussions.

This possible bias in the data poses a serious problem for the analysis. What is to be done to remedy the revealed problematic? Two such approaches might be suitable: 1.) exclude the countries that are most likely to be biased or 2.) design a weight that accounts for the possible bias. The first approach may limit the validity of the results because it is associated with a loss of information, and also systematically leaves out a certain group of countries. A designed weight seems the more appropriate adaptation, as Tannenbergs recommends: “one avenue forward would be to construct reliability weights to enable the researcher to account for the biases in the analysis” (Tannenbergs, 2017, p. 21). Unfortunately, variables indicating whether respondents believed the surveyors to be government representatives or other possible weighting variables are not available for all surveys used in this analysis, therefore a weight on the country-level might be an alternative. We therefore use the Freedom of Discussion measurement to weigh regime support, which is already proven to be positively associated. Given that the proposed weight is highly experimental in nature, two bias boundaries will be introduced: a lower and a higher bound, whereby regime support in societies with somewhat and weakly respected Freedom of Discussion will be penalized with 10% and 15% (low bias) or 20% and 25% (high bias), respectively. Table 3 shows a summary for all weighted country cases.



One caveat comes with this approach: as it stands, Freedom of Discussion is positively associated with democracy ( $r = 0.78$  for the whole sample, and  $r = 0.59$  within non-democracies) and also associated with increased deliberative levels ( $r = 0.65$  with DCI for the complete sample, and  $r = 0.43$  for the non-democracy subsample). Thereby, weighting regime support with Freedom of Discussion inherently makes the dependent variable more similar to the independent variables. However, the usage of the weight can be well justified on theoretical grounds and it is thereby assumed that this adaptation improves the validity of measured regime support. Nevertheless, this step has to be critically evaluated, as we might over- or underestimate the bias severely. Therefore, models with unweighted regime support are always reported as well. Note that the weighting does not apply to democracies, as the Freedom of Discussion measure indicated no apparent restrictions on political discourse in such countries.

### 3.3 Descriptives

This section will examine some of the descriptive statistics and bivariate correlations, focusing on the relationship between deliberation and regime support, but also including levels of democracy to account for the necessity to separate democracy and deliberation. As a first overview, the left-hand side of Figure 4 depicts a map with levels of regime support across the world. Grey coloring indicates that data for the country wasn't available. First, it comes to attention that there is no clear regional pattern of regime support in our sample, although some general trends can be observed. Firstly, Northern Europe stands out with higher levels of support, with much of Western and especially Southern and Eastern Europe having lower support. Then, available cases in Southern and Eastern Africa score mostly high, whereas Western Africa shows a rather mixed pattern. Turning the attention to Asia, the relatively high average regime support, especially in parts of Eastern and South Eastern Asia stand out. Across Central and South America, there is no country with above medium levels of support, indicating rather low aggregate levels of regime support within the broader region. The right-hand side of Figure 4 shows a world map indicating the DCI score (normalized to range from 0 to 1) across the countries of our sample. Notably, the distribution of the DCI is rather skewed, which leaves us with few cases having low scores. The regional patterns for the DCI differ from the ones of regime support. First, Northern as well as Western and Southern Europe are all placed within the higher quintiles. Concerning the Americas, a mix of medium to high levels of deliberation can be found. The pattern for African countries is also mixed, with more countries scoring lower on the DCI. In Asia, the pattern is rather ambiguous as well, though especially South Eastern Asia stands out with comparably higher scores on the DCI.

Figure 4: Regime Support &amp; Deliberation Across the World

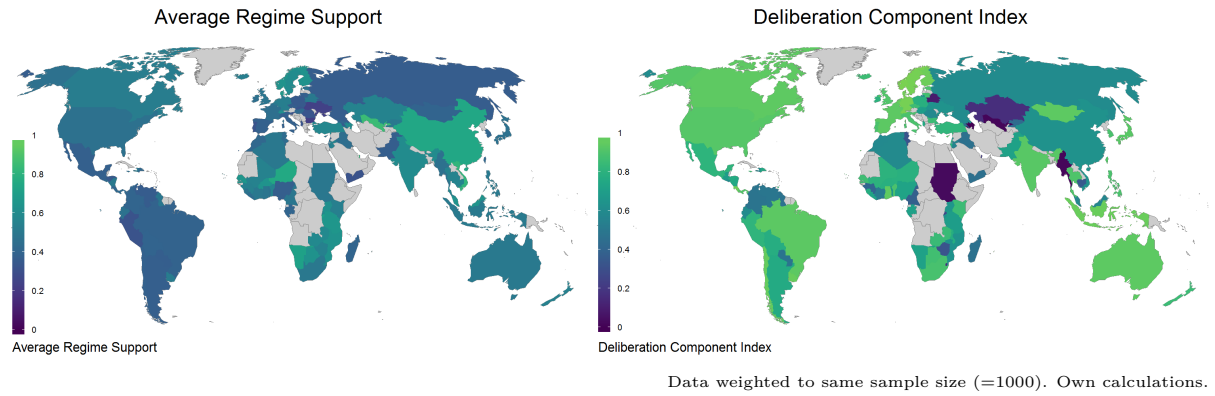
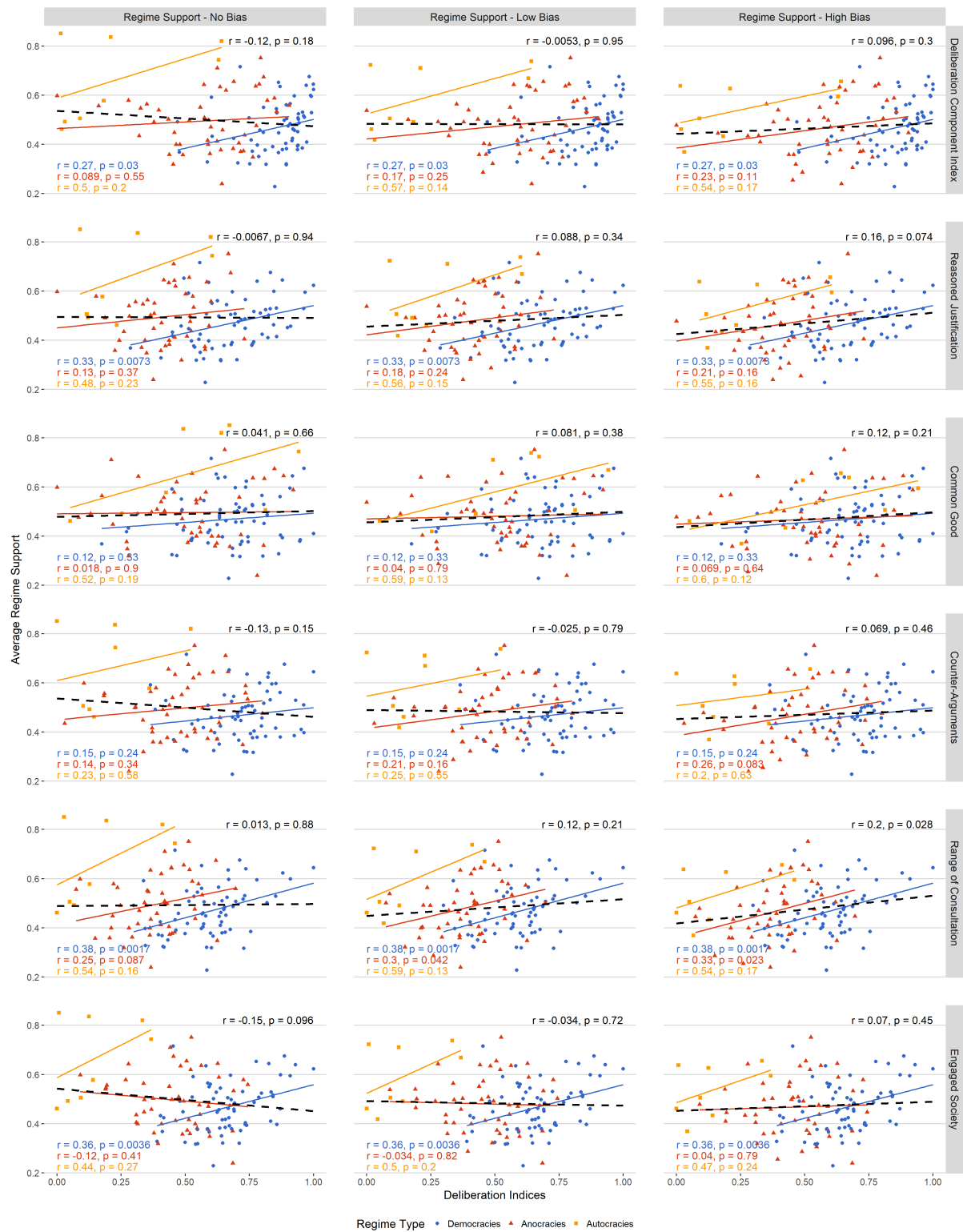


Figure 5 shows scatterplots that visualize the distribution of average regime support (all three variants) per country over levels of deliberation (the DCI and its components, respectively). The dashed line shows the overall correlation. The coloring of the cases is orange for autocracies, red for anocracies and blue for democracies. In the first column, the correlations are shown for the unweighted regime support, the second and third column depict the results for the low bias and high bias variables, respectively (the correlations within democracies don't change, as they aren't affected by the weighting). Focusing on overall correlations, it comes to attention that all deliberation indicators have almost no observable effect sizes, with a stronger tendency to a negative relationship for the unweighted regime support. Regarding the weighted support variables, especially the high boundary one, the correlations become weakly positive, although the effect sizes are rather small. Interestingly, when grouped into regime type categories, there is a consistent pattern that shows mostly stronger or sometimes equal positive correlations within the groups compared to the overall relationship. This counts not as much for anocracies, for which correlations are sometimes less strong and generally more in line with the overall sample. In contrast to the relatively small bivariate correlation within the full dataset, the deliberation indicators seem to be consistently positively related to regime support within groups of similar levels of democracy. In sum, the findings of the bivariate correlations indicate that deliberation and regime support are related first and foremost in democracies, and also in autocratic states, although the number of cases for this group is relatively small. For anocracies, the results are not as clear, although they mostly point into the same direction. As the results discussed here are not controlled for other variables, this should be seen as a first indication rather than an explicit finding.

Figure 5: Bivariate Relationships between Deliberation Indicators and Regime Support



Persons's r is reported. Own calculations. Data weighted to same sample size (=1000). Own calculations.

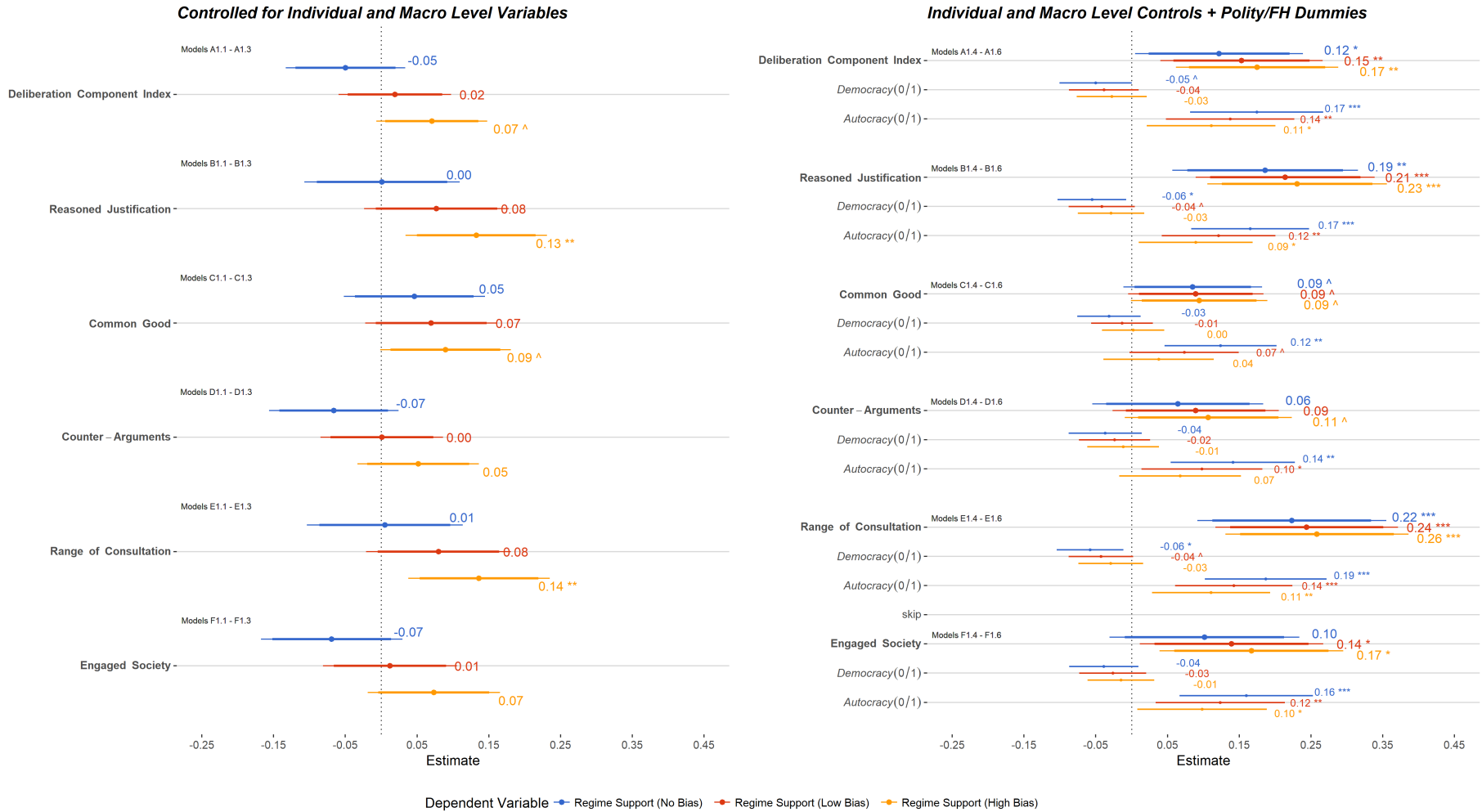
### 3.4 Multilevel Regression Analysis

A range of multilevel models are estimated in order to test the assumptions derived in the theoretical part.<sup>7</sup> First, in order to assess whether multilevel modeling is warranted, a null model for each dependent variable is estimated (weighted and unweighted) with a random-intercept and no predictors (cf. Hox, 2010, p. 300). The intraclass correlations (ICCs) for the null models show that indeed 44.97% (unweighted), 41.70% (low boundary weight) and 40.97% (high boundary weight) of the variance of regime support is bound on the country-level. The results strongly indicate that a multilevel analysis is appropriate. Given the expected high levels of multicollinearity, the influence of DCI and its subcomponents on regime support is tested separately for the Polity/FH variable, in order to control for possible distortions caused by the strong overlap between the two variables. In the interest of accounting for the slight quadratic effect in the relationship between democracy and regime support in the complete sample, the Polity/FH variable will be split into three dummies, Autocracy, Anocracy and Democracy, as recommended by Tabachnick, Fidell, & Osterlind (2013, pp. 43–44). Moreover, in order to avoid issues of multicollinearity, the sample is further divided into democracies ( $\text{Polity/FH} \geq 6$ ) and non-democracies ( $\text{Polity/FH} < 6$ ). In these subsamples, the continuous Polity/FH variable can be used again, because the quadratic relationship only appears in the full sample. These divisions of the sample, in addition to estimating all models for three separate dependent regime support variables (no bias, low bias, high bias), six separate independent deliberation variables, as well as with and without Polity/FH, leaves us with 84 multilevel models to be estimated. In addition, we estimate seven models with Polity/FH only and none of the deliberation indicators, for the purpose of comparison, which adds up to a total of 91 estimated models. Given the exploratory nature of the analysis and the many problems with expected multicollinearity and quadratic effects, the estimation of so many models seems justified as this allows us to test for robustness of the findings. To facilitate an intuitive communication of the results, we will only visualize the relevant effects in the main text and report the detailed results in the online appendix.<sup>8</sup>

<sup>7</sup>Given that the dataset in this paper combines individual level data with country level data, a multilevel analysis is needed to account for hierarchical data structure, which will model a unique intercept for each country (cf. Gelman & Hill, 2006, p. 237). This becomes necessary, because standard linear regression only produces accurate estimations of standard errors if the data points are independent of each other, which is not the case in our dataset. Furthermore, since the main independent variable is located on the country-level, it allows us to control its influence for individual-level control variables.

<sup>8</sup>Since multicollinearity was expected for many of the estimated models, it should be noted right at the beginning that none of the 91 estimated regression models in the analysis showed problematic VIF-values for any of the included variables ( $\text{VIF} < 5$  in all estimated models). Furthermore, regression diagnostics for one of the full models involving the DCI and all control variables has been conducted and no major violation of statistical assumption are revealed.

Figure 6: Complete Sample: Models A1.1 to F1.6



\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$ , ^ $p < 0.1$ . Unstandardized regression coefficients. 90% and 95% confidence intervals are shown as thin and thick lines, respectively. Reference category for Polity/FH dummies is Anocracy. All variables normalized to range from 0 to 1. Data weighted to same sample size (=1000). Own calculations.

Figure 6 summarizes the unstandardized regression coefficients, the bold lines indicate a 95% and the thin lines a 90% confidence interval for the effects of DCI and its components (estimated separately, not included in one model) on three different dependent variables: regime support with no weighting (colored in blue), weightings applied with low (red) and high boundaries (orange), respectively (for the full report of all 36 estimated models see the online appendix). The graph on the left side of the Figure depicts the effects are controlled for variables on the individual level (Age, Sex, Education, Financial Security, Employment) along with country level variables (logged GDP, logged Population, Life Expectancy, Urban Population Ratio). When investigating the results for the unweighted dependent variable, the findings are mixed: three indicators have weak negative effects on regime support, two positive and one has no effect at all. A continuous pattern catches one's attention: the weighting of the dependent variable causes the coefficients for all deliberation indicators to shift towards positive effects. For the high boundary weighting, none of the coefficients is negative anymore, with effect sizes varying from 0.05 to 0.14.<sup>9</sup> It has to be noted that the models reported here do not separate the effects of democracy and deliberation, which suggests that the effects might be strongly interwoven, given the high correlation between both measures.

The second column of Figure 6 depicts the results for models that include individual- and country-level variables including dummies for Polity/FH (Autocracies and Democracies, with Anocracies as reference category). As discussed before, we refrain from using a continuous variable because the specification of a quadratic term for Polity/FH, to capture the nonlinear effect more adequately, would increase already existing problems of multicollinearity. For the interpretation of the results, it has to be noted that the effect of democracy is only controlled for in a restricted manner. Including the Polity/FH dummies has a striking impact on the coefficients of all six deliberation indicators. For all of the independent variables, the effects shift towards (more) positive effects of the respective deliberation indicators, although the effect sizes stay rather weak. In general, the coefficients of the Polity/FH dummies show that regime support is higher in autocracies than in anocracies and in turn lower in democracies than in anocracies. It has to be noted, that this applies for the high boundary dependent variable as well. This could mean that our weighting is not accurate or strong enough. On the other hand, the possibility that autocracies and to a lesser degree anocracies actually do enjoy more or at least equal support from their citizens than democracies has to be considered. For example, citizens in established democracies could become more "assertive" than "allegiant" (cf. Welzel &

<sup>9</sup>The shift towards more positive effects is (maybe just partly) an inherent consequence of the weighting, as discussed before. Of course, the unweighted results have the problem of assumably being (more) biased, and therefore estimates should be interpreted with caution.

Dalton, 2015). In light of the current “disconnect” many democracies are said to experience (cf. Foa & Mounk, 2016), the implication that regime support is lower in democracies does not seem completely far-fetched. It has to be noted, though, that the effects of both dummies are notably weaker when only the dummies and control variables, but none of the deliberation indicators are included (Models P.1.1 to P1.3, see online appendix).

Lastly, we compare the estimated models reported on the left and right side of Figure 6, with the help of likelihood ratio tests. The models are compared with the respective Polity/FH only models. The purpose of this comparison is to evaluate whether the deliberation indicators contribute to a better model fit, especially in comparison with models including only the Polity/FH dummies (see online appendix). The models A2.4 to F2.6 (with Polity/FH dummies and the deliberation indicators included) fit consistently better than the models A1.1 to F1.3 (including only the deliberation indicators), with some minor exceptions. In comparison to the models including only the dummy variables (P1.1 to P1.3), the models also including the DCI, Reasoned Justification, Common Good and Range of Consultation fit consistently better than their respective counterparts. For Counter-Arguments and Engaged society, a better fit can only be observed for the High and Low Bias dependent variables.

In conclusion, for the assumption that deliberation has a positive effect on regime support, the findings are mixed. In models not controlling for Polity/FH dummies and using unweighted regime support, there is no evidence for the proposed relationship. Then again, when assuming that the data is biased and that the weightings are an adequate remedy, one could conclude that deliberation actually has positive effects when including dummies for democracy and autocracy. As the assumption of the accuracy of the applied weighting isn’t tested, and the effects when including the Polity/FH dummies is suspicious due to expected multicollinearity (though it should not be as severe when including only three categories), there is no clear conclusion to the question if and in which way deliberation is related to regime support.

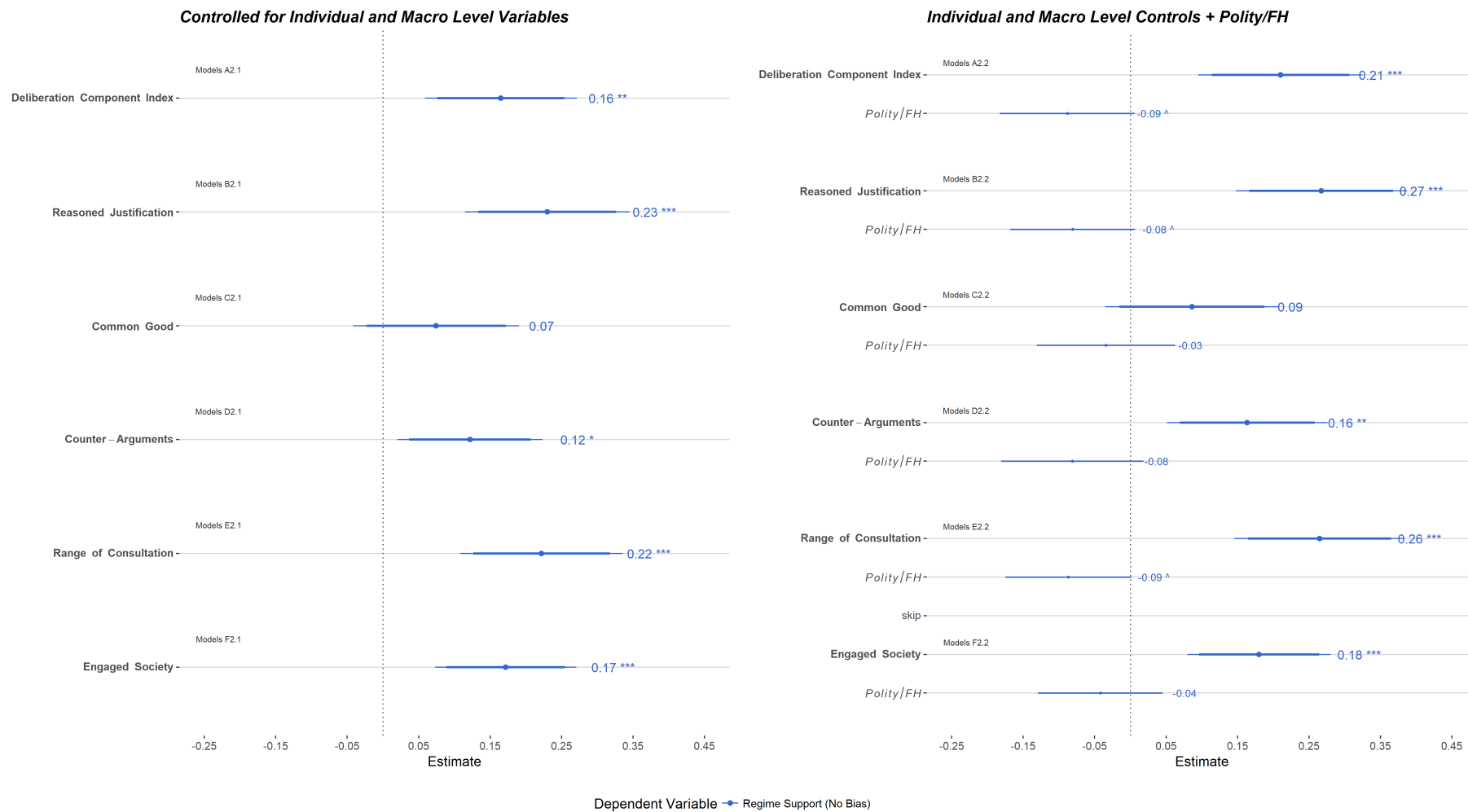
Figures 7 and 8 depict the same models shown in Figure 6, with the samples restricted to democracies ( $\text{Polity/FH} \geq 6$ ) and non-democracies, respectively (the full report of the 48 estimated models can be found in the online appendix). Instead of dummy variables, as before, the continuous Polity/FH variable is included in the models reported in the right column, since the relationship between Polity/FH and regime support is no longer as nonlinear within these subgroups. Moreover, multicollinearity is not as severe as for the complete sample (with the DCI it’s 0.61 and 0.64 for democracies and non-democracies, respectively, see Table 2 in Section 3.1). Nevertheless, we do expect problems of multicollinearity, especially for the indicators strongly

correlated with Polity/FH. For the democracy sample, no systematic bias of regime support is assumed, as Freedom of Discussion is respected in all cases and our weighting doesn't apply.

As already suggested by the bivariate correlations in Section 3.3, the multilevel models show a positive effect on regime support for all deliberation indicators (see Figure 7, left column). The strongest, though in absolute terms still rather weak effects, are the ones for Reasoned Justification ( $b = 0.23$ ), Range of Consultation ( $b = 0.22$ ) and Engaged Society ( $b = 0.17$ ). A rather weak effect can be observed for the Common Good indicator ( $b = 0.07$ ). When including Polity/FH (see Figure 7, right column), the coefficients for the respective deliberation indicators change in a direction towards slightly stronger positive effects. A rather puzzling finding are the negative effects of Polity/FH, as the bivariate correlation indicated a somewhat positive relationship within democracies. Models that do not include any deliberation indicator, but include only Polity/FH show an effect that is negative as well ( $b = -0.02$ ; Model P2.1, see online appendix). As discussed before, multicollinearity should not be as much of an issue for the components Common Good and Engaged Society compared to the the remaining indicators. For the more unproblematic models, Polity/FH has a rather small negative effect ( $b = -0.08$  in Model D2.2;  $b = -0.03$  in Model C2.2) on regime support. For the assumably more problematic indicators, the negative coefficients are slightly higher. In reverse, the positive effect sizes are greater for the presumably problematic deliberation indicators, while the Common Good indicator has a rather small effect ( $b = 0.09$ ). Nevertheless, the Engaged Society indicator has an effect size more similar to the other indicators ( $b = 0.18$ ). This pattern could indicate that there actually are problems of multicollinearity that affect the results, even though the VIF values are within non-problematic boundaries. Then again, the differences between the presumably unproblematic Engaged Society model and the more problematic ones is not as severe as they could be, which indicates a certain robustness of the results. Conducting likelihood ratio tests between the nested models (reported in the online appendix), it becomes visible that the models including Polity/FH as well as the respective deliberation indicators fit better than their counterparts including only the deliberation indicators (except for models including Engaged Society and Common Good indicators). With the exception of the Common Good model, this also applies when compared to the models including only Polity/FH. Overall, this could indicate that including Polity/FH dummies into the model causes the respective deliberation indicator to fully unfold its effect on regime support, thereby increasing model fit, a so-called suppressor effect. However, given the high overlap between Polity/FH dummies and most of the deliberation indicators, it might as well be that a statistical artefact has been produced.



Figure 7: Democracy Sample: Models A2.1 to F2.2



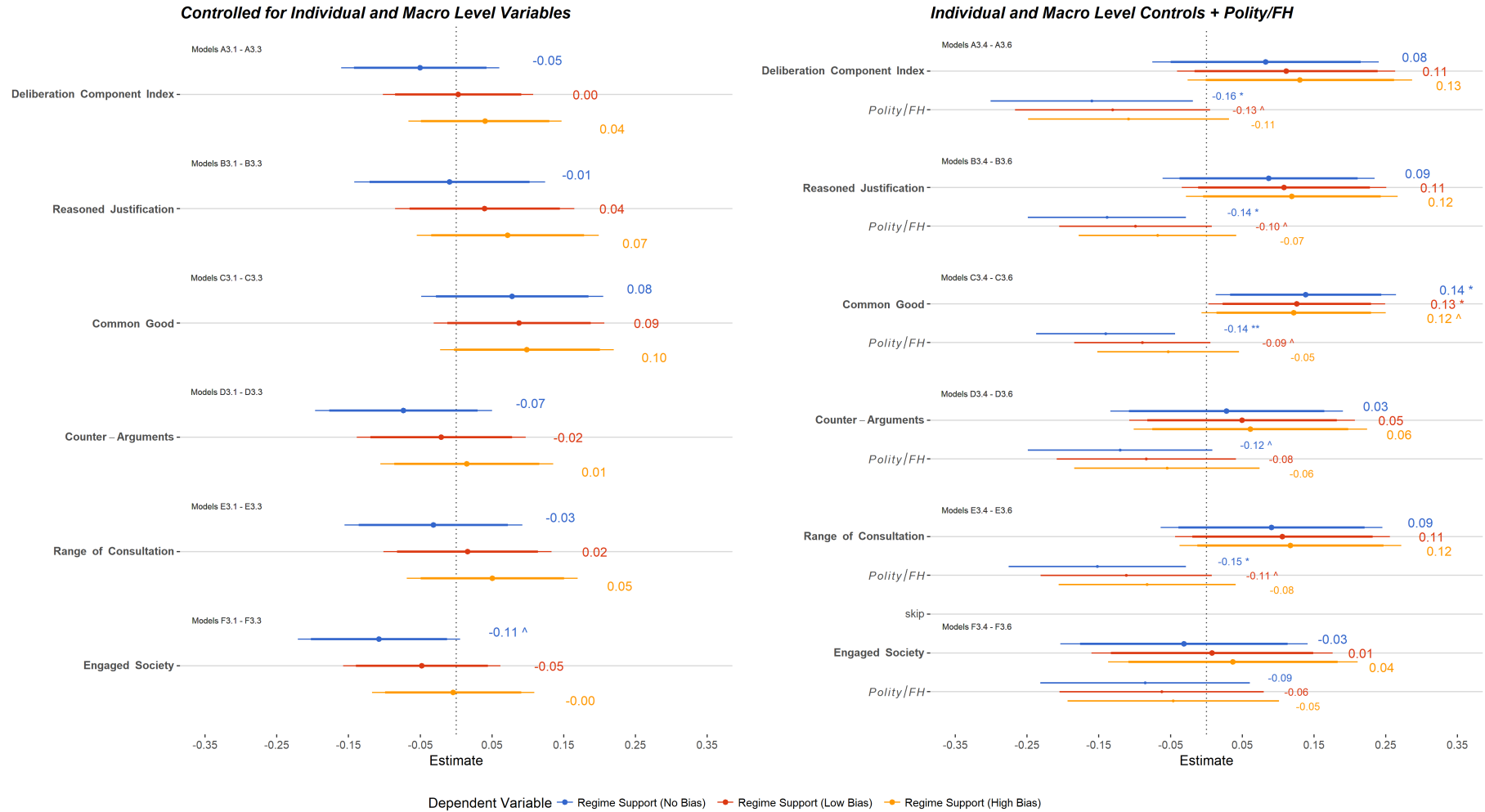
\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$ , ^ $p < 0.1$ . Unstandardized regression coefficients. 90% and 95% confidence intervals are shown as thin and thick lines, respectively. Reference category for Polity/FH dummies is Anocracy. All variables normalized to range from 0 to 1. Data weighted to same sample size (=1000). Own calculations.

The implication derived from theory is that deliberative qualities should increase regime support, especially within democracies. The findings are not as robust as one would hope for but some empirical evidence for the presumed relationship can be noted.

The effects of the deliberation indicators on regime support within the non-democracy subsample are reported in the left column of Figure 8. Rather similar to the results for the complete sample, the indicators mostly have weak negative effects on the unweighted dependent variable. The results follow no clear pattern for the weighted dependent variables, besides the previously observed shift towards more positive or less negative effects. Including the Polity/FH variable in the models has a similar impact as it had for the democracy subsample and as the dummies had in the complete sample (see Figure 8, right column): the effects of the respective deliberation indicators have positive but small coefficients in almost all cases (with the exception of Engaged Society, which is negatively associated for the unweighted regime support). Weighting regime support has the same impact already observed with the dummy variables, by shifting the effects of Polity/FH towards less negative/more positive coefficients. Recalling the previous discussion, deliberation indicators that correlate less than 0.5 with Polity/FH are: Range of Consultation, Reasoned Justification and Common Good. Overall, no systematic differences can be detected in the results of the presumably problematic and unproblematic indicators. The same can be said for the effects of the Polity/FH measure, which has consistently negative coefficients (and is also observed for the multilevel regression results of the models including only Polity/FH and the control variables).

In general the empirical evidence for the effects of deliberation in non-democracies is mixed. Only when including the Polity/FH variable the results imply a weak positive effect of deliberation. Without controlling for the level of democracy, the coefficients show mostly negative effects. Taking a look at the likelihood ratio tests (reported in the online appendix), one can see that the models that include Polity/FH as well as the deliberation components in general don't have a notably higher model fit than the model including only Polity/FH, indicating that the deliberation indicators do not contribute to a better fit for any of the models. In regard to the models including only the deliberation indicators, the models that include both variables exhibit a better fit, though this only applies for the dependent unweighted regime support and in no case for the Engaged Society models. Again, it has to be noted that the non-democracy subsample is affected by a possible bias in the self-reported regime support and that the weighting measure has not been tested for its accuracy.

Figure 8: Non-Democracy Sample: Models A1.1 to F1.6



\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$ , ^ $p < 0.1$ . Unstandardized regression coefficients. 90% and 95% confidence intervals are shown as thin and thick lines, respectively. Reference category for Polity/FH dummies is Anocracy. All variables normalized to range from 0 to 1. Data weighted to same sample size (=1000). Own calculations.

In sum, we did find evidence for an effect of deliberation on regime support, especially and least restricted by limitations within the democracy subsample. To begin with, general trends can be observed for the weighting of the dependent variable. In most cases, though not for the non-democracy subsample, the coefficients of the deliberation indicators become more positive/less negative when the weighting is applied. The effect of the democracy variable becomes less negative for the weighted dependent variables. A second trend can be observed when comparing the respective models with and without one of the Polity/FH measures. In all models, when including Polity/FH, negative effects of the deliberation indicators become positive and positive effects increase. This applies to models both presumably problematic and unproblematic in regard to multicollinearity. The results could indicate that deliberation has a positive effect on regime support, but at the same time positively correlates with Polity/FH, which itself has a negative effect on regime support. This could be interpreted as a suppressor effect. However, this interpretation has to be done very cautiously, due to the restrictions of our study.

## 4 Conclusions

Recalling the research question, *What role does Deliberation play for regime legitimacy across the world?*, a simple answer can not be given in light of the ambiguous empirical evidence. To test implications derived from deliberative theory, we conceptualized and operationalized legitimacy as regime support. In this respect, multilevel regression analyses were performed. The general conclusion and central finding of this study is that deliberation seems to have a positive effect on regime support, foremostly within democracies, for which the empirical evidence was the most unambiguous and robust. The results for the complete sample and non-democracy subsample bear the problem to be potentially affected by biased regime support data, or to be weighted with a rather unexplored procedure, which might undermine the reliability of the results. Moreover, the findings are more ambiguous than within the democracy subsample, and rather mixed concerning the direction of effects, though tendencies towards a positive effect of deliberation predominate slightly.

Since there are quite some restrictions and limitations of our study, they shall be briefly discussed in regard to implications for further research. First, the self-reported regime support data are presumed to be biased, since regime support in non-democracies is also investigated. The applied weighting to account for the bias has rather haphazardly chosen cut-off values and has not been tested for accuracy or validity. We therefore join Tannenbergs (2017) and encourage further research to take possible bias into account and find remedies, as for example specific survey

items and refined statistical methods. Moreover, specific sets of cases, like OECD or Western countries could be excluded from the analysis to further check for robustness of the results. The analysis is furthermore limited in that it primarily focuses on between-country effects and does not appropriately account for effects within countries or capture changes within a country over time. Instead of a cross-sectional analysis, one would have to conduct a cross-sectional time-series analysis. As data on regime support is only very shortly available for a decently high amount of countries and the data isn't always collected on a regular basis (though the WVS is a great achievement in this regard), such an analysis is hard to conduct. An analysis of long-time effects of increases or declines in deliberation within countries would be highly informative. Last but not least, our study might be limited in our measurement of deliberation through V-Dems DCI and its subcomponents. The validity of the measurement could be called into question, as it highly correlates with the index for democracy, Polity/FH. High correlations were expected and explainable to some degree, but a correlation of 0.80 (DCI with Polity/FH, complete sample) has to be evaluated very critically. We suggest that scholars should therefore make an effort to improve the measurement of deliberation on the country-level in order to improve it more precision and sensibility, for example through including more components than just five, which every other V-Dem component index does. Then again, we found some good news for the DCI and its components. Some of the deviations in the measures of deliberation and democracy appeared to be meaningful, with the three examples of China, Vietnam and Singapore appearing in our sample as well as in the literature as rather consultative or deliberative authoritarian polities. Moreover, expected multicollinearity wasn't as present as assumed (or at least not directly detectable). In this context, it seems moreover relevant for the findings, that the correlations of the DCI and its components with the Polity/FH measure vary between the overall correlations and the ones found in the subgroups of democracies and non-democracies, sometimes strongly. To recall two examples: Engaged Society has correlations of 0.78, 0.46 and 0.72, Reasoned Justification of 0.67, 0.68 and 0.28 in the complete, democracy and non-democracy sample, respectively. As the examination of such variations is beyond the scope of this study, we recommend further research to investigate the detected differences more thoroughly. It could be especially interesting to explore whether these findings are due to the time-period of this study, the estimation of 11 year means or the chosen democracy measurement and the classification of democracies and non-democracies. It should therefore be investigated whether the deviations between democracy and deliberation found in this study can be reproduced and if so, explained in a more general context. Another suggestion would be to estimate macro-micro interactions, as the results of Truex (2017) indicate that positive effects of participatory processes

in autocratic contexts might be restricted to the less educated and to the ones expecting less of the regime. Moreover, the effects of deliberation on regime support could be mediated by variables like democratic performance evaluations, which Mauk (2017) has found to be relevant in this context. Since we only assessed subjective legitimacy, measured as regime support, it would be recommendable to perform the analyses for presumably more objective legitimacy variables on the macro level as well (like infant mortality, political violence or mass emmigration) (cf. Gilley, 2006). In light of the discussed implications, we conclude that further research on relation of deliberation and regime support as well as the measurement of deliberation on the country level seems to be necessary as well as promising.

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