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# The Dual Function of Organizational Structure: Aggregating and Shaping Individuals' Votes

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**Abstract.** How do organizational structures influence organizational decision making? This article reveals organizational structures' dual function: they both (1) aggregate and (2) shape individuals' decisions. What makes this dual function so remarkable is that the two effects are diametrically opposed to one another. Ceteris paribus, a less stringent decision-making structure reduces the amount of support required for a given project to be greenlit at the organizational level, which should result in more investments getting approved. However, we find that this ceteris paribus assumption does not hold, because a less stringent decision-making structure also reduces individuals' tendency to provide their support for an investment. Our experimental investigation of organizational voting provides evidence for our position that organizational structure plays an important role beyond mere aggregation: voting thresholds also affect individuals' voting behavior. The combination of both effects explains why the organizational adoption of a new voting threshold may not yield the intended outcome.



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When the committee of the venture capital firm Draper Fisher Jurvetson (DFJ) voted on possible investments, promising (and eventually successful) ventures often did not receive the necessary number of votes. In response, the firm implemented a lower threshold such that only a single committee member voting in favor of investing in a given venture would trigger the go-ahead (Liu et al. 2017). The managers believed that a key reason for the firm's limited growth was that it required too high an internal consensus to invest. The adoption of a lower threshold was intended to fix this problem and substantially increase the number of investments. However, once the new, lower threshold was adopted, it turned out it did more than just change the number of votes needed to make an investment; it also changed the voting behavior of the committee members, who suddenly became much less inclined to vote yes. Ultimately, the newly introduced voting structure did not have the desired effect.

In this article, we examine the consequences of alternative thresholds when aggregating votes into an organizational decision. Following Sah and Stiglitz (1986), research on organizational structure has pointed to the crucial role that voting thresholds play (Csaszar 2012, Csaszar and Eggers 2013). Ceteris paribus, a lower threshold should result in a greater number of investments by the organization, simply because it reduces the required number of yes votes (Sah and Stiglitz 1986, Knudsen and Levinthal 2007, Christensen and Knudsen 2010). However, we argue that relaxing this ceteris paribus assumption can help advance research in this domain because the adoption of a lower threshold has a neglected but important side effect: it leads individual members of the organization[1] to adjust their voting behavior conditional on the voting rule. Specifically, we examine whether a lower voting threshold reduces members' tendency to cast a yes vote in favor of an investment, which may ultimately keep the

organization's number of investments from rising. In other words, more liberal organizational aggregation rules may be counteracted by more conservative individual voting—with the result that these two countervailing forces may (in part) cancel each other out. Therefore, to capture the true effects of differences in organizational structure, it is necessary to account for the ways in which these differences change individuals' behavior.

Understanding the effects of organizational design choices—and specifically of voting thresholds—is crucial for understanding the behavior of organizations, including their evaluation and selection of investments. All organizations face the challenge of deciding in which alternatives to invest (Bardolet et al. 2011, Piezunka and Dahlander 2015, Boudreau et al. 2016, Criscuolo et al. 2017, Sengul et al. 2019, Lane et al. 2022). Because eventual success of these investment opportunities is uncertain, managers often need to go beyond the information given to them and attend to even subtle cues in their immediate environment (Phadnis et al. 2015). In this article, we investigate how organizational structure, and specifically the voting threshold employed in committee decisions, provides such clues and in turn affects the degree to which organizational members support investments in uncertain alternatives.

Our investigation builds on and extends the literature on aggregation structures in organizations. Beginning with the seminal work by Sah and Stiglitz (1986), a growing body of organizational design research has examined how different ways of designing thresholds shape organizations' decisions (Knudsen and Levinthal 2007, Christensen and Knudsen 2010, Csaszar 2013, Csaszar and Eggers 2013, Christensen et al. 2021, Piezunka et al. 2022). The majority of this work has developed formal models in which individual voting behavior is assumed to be unaffected by the aggregation mechanism. In our article, we overcome this limitation and offer a theory that focuses on how thresholds can substantially affect individual voting behavior. For this purpose, we introduce the notion of *strategic voting* from political science (e.g., Feddersen and Pesendorfer 1996, 1998; Guarnaschelli et al. 2000; Battaglini et al. 2010; Baltz 2022) to develop and test the argument that voters take into account information beyond signals directly related to the alternative they evaluate. Specifically, we suggest they attend to the organization's aggregation structures, which thus have an effect that goes far beyond their mere calculus (transforming individual votes into an organizational decision) in that they affect the very votes they use as inputs.

Our core claim is therefore that organizational structures have a dual function: they (1) aggregate and (2) shape voting behavior. What makes it critical to account for and disentangle these two functions is that they are in direct opposition: a lower, more liberal threshold reduces the bar for a project to be greenlit at the organizational level, but it also reduces individuals' tendency to vote in favor of an investment. Conversely, a higher, more conservative threshold raises the bar for a project to be greenlit at the organizational level, but it also increases individuals' tendency to vote in favor of an investment. As a result, changing the organizational voting threshold may not yield the anticipated effect, because individuals' behavior is a function of the voting regime.

Our theory emphasizes that decision-making structures and individual behavior are deeply intertwined and thus must not be studied in isolation. It is critical to account for the macro-to-micro implications of organizational structures in order to capture their true effects (Gavetti et al. 2007, Greve 2013). Our findings therefore shed new light on the microfoundations of aggregation (Barney and Felin 2013, Davis and Aggarwal 2020, Cowen et al. 2022) in an effort to better understand how organizational structure manifests itself in individual cognition and behavior, which ultimately shape organizational action. More broadly, our study showcases the usefulness of Coleman's (1990) bathtub for examining organizational behavior that it is fundamentally shaped by cross-level processes.

To test our theory empirically, we build on and extend an emerging body of research that deploys experiments to study organizational design (e.g., Keum and See 2017, Csaszar and Laureiro-Martínez 2018, Knudsen et al. 2018, Christensen et al. 2021, Johnson et al. 2022). In our experimental task, participants assume the roles of partners in a venture capital firm voting on whether to invest in certain startups. Whereas participants vote autonomously, their votes are aggregated into an organizational decision, which allows us to manipulate the voting threshold. Taken together, our article offers a bridge between research on information aggregation in political science and organizational design, elucidates the dual function of thresholds, and provides empirical evidence for the effect of thresholds on voting behavior.

## Theoretical Background

### Organizational Aggregation

This investigation follows a microstructural approach to organizational design, which places aggregation structures linking the individual and the organizational level at center stage (Knudsen and Levinthal 2007, Christensen and Knudsen 2010, Turco 2016, Puranam 2018). Organizational decisions are commonly not made by unitary actors but rather by multiple agents who make decisions jointly (Sah and Stiglitz 1986, Csaszar 2012, Mack and Szulanski 2017). Rich empirical evidence illustrates how organizations rely on multiple agents who make decisions without resorting to authority as the primary coordination mechanism. Such decision

making among equals is particularly widespread in top management teams (Eisenhardt 1989, Hambrick et al. 1996), boards (Westphal and Fredrickson 2001, Garg 2013), steering committees (Loch et al. 2017), investment committees (Csaszar 2012, Hu et al. 2022), and panels (Boudreau et al. 2016, Criscuolo et al. 2017).

The question of how to organize in the absence of authority while integrating individual agents' choices has endured as one of the most fundamental and pressing issues in organizational design (Puranam 2014, Maciejovsky and Budescu 2020). Organizational structures that deploy voting to aggregate people's choices and to make decisions at the organizational level represent one key approach to addressing this issue (Sah and Stiglitz 1986, Csaszar 2012). Indeed, it has become increasingly common for decisions involving multiple individuals to take place via voting (Csaszar and Enrione 2015, Mack and Szulanski 2017). Organizational members vote whether an organization should pursue a particular initiative in an effort to separate the good alternatives from the bad (Christensen and Knudsen 2009). Voting is often seen as the natural way to aggregate individual choices at the organizational level (Turco 2016), particularly in the case of strategic decisions,[2] which tend to be high-stakes, complex, and nonroutine. The types of strategic decisions on which organizational agents regularly vote range from firms narrowing down innovation ideas to pursue (Reitzig and Maciejovsky 2015) to mutual funds choosing stocks in which to invest (Csaszar 2012) to venture capitalists picking ventures to support (Wu 2016, Liu et al. 2017).

Voting has several desirable features that explain its popularity in the context of organizational decision making. Most notably, it is a mechanism that allows tapping into the knowledge of several individuals. The knowledge held by multiple organizational members tends to be more diverse and more comprehensive than that held by a single individual. As a result, organizations that pool the knowledge of many members have the potential to benefit from error cancelation and thus engage in more effective organizational decision making (Surowiecki 2004, Csaszar 2018, Csaszar and Steinberger 2022). Therefore, it is not surprising that many organizations rely on voting; however, there is considerable variety in how organizations aggregate individual votes (Piezunka et al. 2022).

Research in organization design, going back to Sah and Stiglitz (1986), has examined the implications of various kinds of aggregation structures. The majority of research in this domain has deployed formal models (Knudsen and Levinthal 2007; Christensen and Knudsen 2009, 2010; Csaszar 2013; Csaszar and Eggers 2013; Piezunka et al. 2022). These formal models have more recently been complemented by empirical studies investigating the different kinds of aggregation structures deployed by organizations and how these structures shape organizational decisions (Reitzig and Maciejovsky 2015, Keum and See 2017, Christensen et al. 2021). In a large-scale archival study of investment funds, for instance, Csaszar (2012) shows that organizations in this field vary considerably in how they aggregate votes and that such variations may translate into differences in these organizations' investment decisions. A key concern in this literature is how alternative voting thresholds affect organizational decisions. Specifically, research has focused on the linkage between the magnitude of the voting threshold and the likelihood that an organization pursues a particular course of action.

However, what has largely been neglected so far is how the magnitude of the voting threshold may affect individual agents' voting behavior—a key mechanism linking voting thresholds to organizational action. Whereas Sah and Stiglitz (1986) did mention that the deployed structure may influence individuals' voting behavior, this claim has yet to be examined empirically and elaborated theoretically. The research on organizational structure that has built on Sah and Stiglitz (1986) has been mostly conceptual in nature and has to the most part focused on the mechanical aggregation of votes, studying how different voting thresholds affect organizational selection, but assuming that individual voting behavior is exogenous (Knudsen and Levinthal 2007; Christensen and Knudsen 2009, 2010; Csaszar 2013; Csaszar and Eggers 2013). Csaszar (2012) constitutes a rare exception in that he examines empirically the combined overall effect (i.e., the structural and behavioral effect). But what is still lacking is a theoretical account (and empirical examination) of the behavioral effect—that is, how aggregation structures shape individual decision makers' voting behavior. Such a cross-level account can add both greater precision and much-needed insight into the theoretical mechanisms of organizational design choices. In developing our conceptual argument, we draw on relevant insights from political science, specifically the Condorcet jury model and strategic voting.

## Condorcet Jury Model

In its original formulation, the Condorcet (1785) theorem refers to juries in criminal and civil trials voting on the innocence or guilt of a defendant; however, the framework can be readily generalized to collective decision making under uncertainty more broadly (Guarnaschelli et al. 2000), and to organizational decision making specifically (Csaszar 2018). The general model features a committee of size $n > 1$ that is deciding on a binary policy. The policy is determined by an election, in which each committee member can cast either a yes or a no vote, after which the individual votes are aggregated into a group decision according to some voting rule (Ali et al. 2008). In this model, one can compare voting behavior under alternative voting rules, consistent

with our interest in the effect of different forms of organizational aggregation on strategic decision making.

Both the Condorcet model and our investigation assume general objective utility in the group decision and that individuals all have the same ultimate preferences (Austen-Smith and Banks 1996, Guarnaschelli et al. 2000). For instance, when a committee of decision makers decides whether to invest in a project, it is assumed that all committee members will seek the decision that maximizes organizational performance (i.e., greenlight the promising projects and avoid the lemons). Correspondingly, there is no conflict of interest or heterogeneity of preferences among the committee members as they strive to invest in successful projects. However, under conditions of uncertainty regarding the true quality of the projects, differences among individual committee members' judgments as to which investment will yield high performance are likely. These differences create an information aggregation problem, making it harder for the group to reach a consensus on the "right" conclusion and producing a need for formalized voting regimes (Guarnaschelli et al. 2000). The presence of such differences underscores the crucial importance of voting thresholds, as they determine the minimum degree of consensus required.

### Strategic Voting

Until relatively recently, the literature employing the Condorcet jury model has assumed that actors engage in "naïve voting" (cf. Feddersen and Pesendorfer 1998). Naïve voters simply vote sincerely, based on their private signal and individual judgment of the considered alternative; they vote as if they were the only voter and completely ignore the organizational context of the decision. Naïve voting thus implies that there will be no difference between individuals' private judgment of a project and their vote on it. As a result, organizational design—and more specifically, how votes are aggregated—will have no effect on naïve voters' behavior.

However, many voters do not behave this way and instead engage in strategic voting (Austen-Smith and Banks 1996, 1999, 2005; Feddersen and Pesendorfer 1996; Coughlan 2000; Guarnaschelli et al. 2000; Austen-Smith and Feddersen 2009, Battaglini et al. 2010, Bhattacharya et al. 2017). On the most general level, the notion of strategic voting highlights that the way people vote as part of an organization is typically not the same as the way they would make choices on their own as they take the organizational context into account (e.g., elements such as the voting threshold, the reward structure, or the opinions of others). That is, when voting as a member of a collective, an individual may not make the same decision as when that individual alone selects the outcome. A strategic voter determines whether to vote for an alternative based upon both their private information and the information they infer from the organizational context. Research has repeatedly demonstrated that strategic voting constitutes an apt description of decision makers' behavior (Baltz 2022). For example, Maug and Rydqvist (2008) illustrate how shareholders engage in strategic voting when screening management proposals at annual general meetings. Similarly, Oraiopoulos and Kavadias (2020) show how strategic voting considerations are at play in the context of executive committees in pharmaceutical firms deciding on drug development projects. We can thus expect strategic voting to be common in organizational settings. Building on Sah and Stiglitz (1986), our hypotheses focus on how a particular feature of the organizational context—the voting threshold—shapes strategic voting.

In developing and testing our theory, we start from the assumption that all decision makers know the aggregation rule ex ante and vote in secrecy and simultaneously (i.e., decision makers do not observe how their peers vote). We further assume—consistent with the Condorcet model—that voters have no conflictual goals or heterogenous preferences and instead all try to identify the "correct" choice that maximizes the collective outcome. In other words, they are performing an expected utility maximization, where their own utility is aligned with the utility of the organization.

## Hypotheses

### Voting Thresholds and Strategic Voting

We suggest that the voting threshold (i.e., how many organizational members must vote yes to trigger an organizational investment) has a substantial effect on people's voting behavior. We test this proposition and elaborate the underlying logic based on the strategic voting model. We start with the observation that voters hold some private information about a given project that shapes their individual beliefs about project success. Because this belief must ultimately be translated into a binary yes/no vote, voters determine the *reservation level* they deem necessary in order to vote yes—that is, how strongly convinced they must be of project success to cast a yes vote. But how do voters set their reservation level? Voters are aware that their private information may be biased or that they may have made a mistake in their interpretation of the information; that is, they are well aware of the uncertainty that underlies the probability distribution. Given this uncertainty, voters may act strategically in setting their reservation level while taking the voting context into account. Specifically, we suggest they will condition their reservation level—and thus, their vote—on the voting threshold.

Consider the case of a low voting threshold and let us assume the extreme case where each voter has the power to trigger the organizational investment with their single yes vote. A voter who strives to maximize

organizational performance will likely be especially careful to vote yes under this voting regime. Because their yes vote alone is sufficient to make the organization invest in the project, even if all others voted no, the voter will be particularly concerned that their private information may be noisy or positively biased or that their interpretation of this information may be misguided. To avoid triggering an organizational investment when project success is uncertain but the voting threshold is low, the individual is likely to set a rather high reservation level—that is, the individual will only support the project when he or she is strongly convinced of its success.

Compare this scenario to a case of a high voting threshold, such as a regime in which the majority of voters has to show their support in order for the organization to invest (e.g., three out of five). Here the individual voter is likely to set a lower reservation level, rendering the individual more likely to vote yes. A higher organizational threshold helps to attenuate people's concern that their noisy or biased information may misguide them to vote favorably and trigger an organizational investment in an unsuccessful project given that the organization is "protected" from individual outliers by the higher threshold.

The proposed linkage between the organizational voting threshold and the personally set reservation level is consistent with the logic suggested by research in political science (Feddersen and Pesendorfer 1998, Guarnaschelli et al. 2000, Austen-Smith and Feddersen 2009). This research suggests a focal agent assumes they turn out to be the *pivotal voter*—that is, the voter whose vote makes the difference between a go and a no go. As Palfrey (2016, p. 401) puts it, a person's vote depends "not only on his or her private signal, but also on the information implied by the event that he or she is a pivotal voter." Specifically, the individual voter assumes to be the pivotal voter when setting his or her reservation level.

Consider again the case of a low voting threshold, where each voter has the power to trigger the organizational investment with a single yes vote. If a voter now imagines to be the pivotal voter, this means he or she is the only member of the individual's committee who voted yes. We expect an individual is only willing to be the only supporter and thus to single-handedly trigger the organization's investment if the individual is highly convinced of the project's quality. The individual knows that a scenario in which he or she is the only one who votes yes is most likely to occur if his or her private information is noisy or positively biased or the individual's interpretation of this information is misguided. Anticipating this scenario will thus lead the individual to set a high reservation level that accounts for potential noise and positive bias the individual may be subject to. In contrast, in the case of a high threshold (e.g., three out of five), turning out to be the pivotal voter does not suggest that the voter's private information is noisy or positively biased or the individual's interpretation of this information is misguided—after all, several other committee members must have voted yes as well. In brief, the pivotal voter logic suggested by political science supports our position that a higher voting threshold (i.e., more votes are needed to trigger the organizational investment) will result in a lower reservation level, rendering the individual voter more likely to vote yes. Conversely, a lower voting threshold (i.e., fewer votes are needed to trigger the organizational investment) will result in a higher reservation level, in turn reducing the likelihood of an individual voting yes. Our core argument can thus be captured by the following hypotheses.

**Hypotheses 1.** *Actors are more likely to support strategic projects when the aggregation structure's voting threshold is high (rather than low).*

**Hypotheses 2.** *Inferred information mediates the positive effect of the voting threshold on actors' project support, such that a higher threshold has a positive effect on inferred project quality, which in turn has a positive effect on actors' project support.*

## Asymmetric Information

Beyond the proposed main and mediating effects, our article also aims to establish an important boundary condition with the potential to "turn off" the influence of thresholds on voting behavior, offering further insight into the underlying mechanism. Expanding upon our earlier theorizing regarding information inferred from the pivotal vote constellation, we develop the argument that voters' private *level of information*—that is, whether they feel worse versus better informed relative to the other voters—will interact with the organization's voting threshold. Accounting for differences in the private level of information reflects the fact that committee members are usually not equally well informed about the project on which they are voting. Better-informed voters may have more experience or education pertinent to the project, or they may have invested more time and effort in doing their research and preparing for the committee vote. Other voters may be more poorly informed, lacking relevant expertise and/or background information.

Building on theory about asymmetric information in group decisions (Piketty 1999, Battaglini et al. 2010, Bhattacharya et al. 2017), we argue that strategic voting—that is, the process of taking into account the organizational context and specifically the voting threshold—will be comparatively more pronounced when the focal voter has a lower information level than other committee members. Poorly informed voters who have little private information about project quality relative to the other voters are more concerned about their information being noisy and are thus (even) more focused on the

organizational voting threshold when determining how to vote. Poorly informed voters may effectively strive to delegate the decision to the better-informed ones so as not to interfere with the efficient information aggregation performed by voters with more information. If this is true, the threshold-level effect proposed in our first hypothesis should be especially pronounced among voters with low levels of information, as these voters are particularly attuned to inferring how others may vote and conditioning their own vote accordingly. By contrast, high levels of private information should increase the decision maker's tendency to vote sincerely—that is, based upon their private judgment of project quality. Voters who have reason to believe they are better informed relative to the other voters are likely to abstain from inferring the behavior of voters with lower information levels. This position is consistent with prior research finding private information to weaken heuristic types of judgments (See 2009). In sum, poorly informed voters will pay more attention to situational cues stemming from the pivotal vote constellation than highly informed voters who are confident in their private assessment of project quality.

**Hypotheses 3.** *When actors' level of information is high (rather than low) relative to the other voters, the effect of the aggregation structure's threshold on actors' voting behavior is attenuated. In other words, there will be a negative interaction between actors' level of information and the aggregation structure's threshold in predicting actors' support of strategic projects.*

## Study Overview

We conducted a series of 10 experimental studies to test our three hypotheses. In addition to their well-known ability to pinpoint causality and disentangle microlevel mechanisms (e.g., Agarwal et al. 2010, Levine et al. 2017, Li et al. 2018, Lonati et al. 2018), experiments are particularly useful for research on information aggregation because of the sensitivity of results to exact voting parameters and because of the lack of relevant archival datasets (Ali et al. 2008, Csaszar and Laureiro-Martínez 2018). In our setting, specifically, it would be virtually impossible to obtain the required data (e.g., exact voting parameters, committee member characteristics, their level of information, and vote outcomes) from either archival sources or surveys. And even if that data were available, we could still not be entirely sure that any observed effect is causally due to the voting threshold. In experiments, participants are randomly assigned to conditions such that potentially confounding factors can be held constant, affording high internal validity. It is thus not surprising that Cyert et al. (1959, p. 94) insist that "(m)any of the major propositions in organization theory depend on evidence generated by studies in the laboratory." More and more researchers are now following this call, and experimental designs are becoming commonplace in organization theory and strategy alike (Croson et al. 2007, Di Stefano and Gutierrez 2019, Billinger et al. 2021, Bitektine et al. 2022, Bolinger et al. 2022). A possible drawback pertains to external validity, in that generalizing from the laboratory to real-world settings may be seen as more difficult than generalizing from one real-world setting to another (Krause et al. 2014). We believe that we have struck an acceptable balance between internal and external validity by closely following pertinent recommendations regarding experimental design in organizational research (e.g., Aguinis and Bradley 2014, Bitektine et al. 2018). For instance, our samples include Master of Business Administration (MBA) students (Study 1A), Executive MBA participants (Study 3), and working professionals (Studies 1B–2C) rather than undergraduates, the population traditionally used in experimental research (Falk and Heckman 2009). Perhaps more importantly, we devised an experimental task that resembles key decision-making features found in organizations while also ruling out extraneous factors that would be difficult to isolate in complex field settings.

Specifically, we developed an experimental setting that fits the particular needs of the current investigation. Consistent with the parameters of the general Condorcet model, the experimental task needed to involve a group of size $n > 1$ that decides over a binary policy with uncertain outcomes and uses a voting rule to aggregate individual votes. Consistent with our objective to inform organization theory and strategy research, the nature of the decision needed to be one that is organizational, of strategic import, and commonly made through managerial committees. To create such a setting, we built on experimental procedures established in the jury literature in political science (Guarnaschelli et al. 2000, Ali et al. 2008) while adapting the decision context to a venture capital scenario, an organizational setting in which group decision making among partners is particularly common (Sahlman 1990, Bottazzi et al. 2016). Different venture capital firms use different voting rules (Liu et al. 2017), and individual venture capital partners differ in their level of information about specific ventures brought up for consideration (Wu 2016); for these reasons, the venture capital setting is an ideal fit to test our hypotheses.

In the experimental task, each participant assumed the role of a member of the investment committee of a venture capital firm and cast a series of go/no-go votes on a total of nine early-stage ventures, in a set-up very similar to typical real-life scenarios in which investors need to make decisions based on limited information (Huang and Pearce 2015). After learning about the voting threshold (which varied across conditions, as explained later), participants were asked to read a brief dossier for each company containing background information about the product, market, and team (see Online Appendix A). Whereas the information

provided was relevant for making funding decisions, the complexity of the dossiers was kept at a relatively manageable level. To make sure the company dossiers were high in psychological realism (Colquitt 2008), we based them on pitch-day profiles of companies graduating from the prominent startup accelerator Y Combinator but changed the identifying details. We chose the nine companies so as to cover a wide variety of different industry sectors and—unknown to the participants—eventual success outcomes (i.e., five of the companies failed, whereas four of them demonstrated steady growth—see Online Appendix A). Companies graduating from prominent accelerators constitute highly plausible targets for venture capitalists, as they are preselected and nurtured by the accelerator (Hallen et al. 2020, Krishnan et al. 2021). The order in which the nine profiles were presented was randomly determined but consistent across all participants.[3] The presentation of these profiles was followed by a vote on each of the nine companies (see Online Appendix B).

We employ this task as the basis for all experimental studies reported in the paper. The first six studies test the proposed main effect (Hypothesis 1) across various settings, the next three consider mediation models (Hypothesis 2), and the final one analyzes moderation (Hypothesis 3). More specifically, Study 1A establishes the effect of thresholds of one versus two yes votes on voting behavior. We then examine whether the effect generalizes to thresholds of different magnitudes (Study 1B), the possibility to abstain (Study 1C), thresholds framed in terms of no votes (Study 1D), groups of different sizes (Study 1E), and the presence of prevote deliberation among group members (Study 1F). Having demonstrated robustness, we move on to shed light on the mediation mechanism proposed in Hypothesis 2, using both a measurement-of-mediation (Study 2A) and a causal-chain design (Study 2B) and also examining a potential alternative explanation (Study 2C). The final study, Study 3, investigates the moderating role of the level of information (Hypothesis 3). Table 1 provides an

**Table 1.** Study Overview

| Study | Hypothesis addressed | Type of effect | Specific purpose | Experimental manipulation(s) | Sample | Key finding |
|---|---|---|---|---|---|---|
| 1A | 1 | Main effect | Show that voting threshold affects voting behavior | Voting threshold (1 vs. 2 yes votes) | 140 MBA students | A higher voting threshold increases people's tendency to vote yes on a project |
| 1B | 1 | Main effect | Demonstrate robustness to other thresholds | Voting threshold (1 vs. 2 vs. 3 yes votes) | 351 online seminar participants | Results of Study 1A generalize to a threshold of 3 |
| 1C | 1 | Main effect | Demonstrate robustness to possibility to abstain | Voting threshold (1 vs. 2 yes votes) | 328 online seminar participants | Results of Study 1A generalize to situations in which voters may abstain |
| 1D | 1 | Main effect | Demonstrate robustness to no vote framing | Voting threshold (1 vs. 3 no votes) | 232 online seminar participants | Results of Study 1A generalize to situations in which the threshold is framed in terms of no votes |
| 1E | 1 | Main effect | Demonstrate robustness to other group sizes | Voting threshold (1 vs. 2 yes votes) × Group size (3 vs. 6 members) | 520 online seminar participants | Results of Study 1A generalize to groups of 3 and 6 members |
| 1F | 1 | Main effect | Demonstrate robustness of mediation effect in a causal-chain design | Voting threshold (1 vs. 3 yes votes) × Deliberation (absent vs. present) | 623 online seminar participants | Prevote group deliberation attenuates the threshold effect |
| 2A | 2 | Mediating effect | Show evidence for mediation | Voting threshold (1 vs. 3 yes votes) | 410 online seminar participants | Inferred information mediates the threshold effect |
| 2B | 2 | Mediating effect | Show evidence for mediation | Priming (information inference vs. control) | 401 online seminar participants | Inferred information affects people's tendency to vote yes on a project |
| 2C | 2 | Mediating effect | Explore alternative mediating mechanism | Voting threshold (1 vs. 2 yes votes) | 355 online seminar participants | Perceived pivotality does not appear to mediate the threshold effect |
| 3 | 3 | Moderating effect | Show evidence for boundary condition | Voting threshold (1 vs. 2 yes votes) × Level of information (low vs. high) | 99 Executive MBA students | The threshold effect goes away when people are highly informed about a project, but is amplified when they are poorly informed |

overview of the studies reported in this article. We posted data collection and analysis plans for Studies 1B–2C prior to commencing data collection using the preregistration template developed by van 't Veer and Giner-Sorolla (2016), and we made the study materials, along with the data (in anonymized form, with personal identifiers removed) and log files for all studies, publicly available—links are provided in the study descriptions. Power analyses for all studies are reported in Online Appendix C.

## Main Effect Studies

### Study 1A

**Sample.** Participants in the first study were full-time students in a first-year MBA entrepreneurship course at a large business school with a *Financial Times* Top 10 MBA program. These students identified entrepreneurship as their primary major or area of study, which ensured that all participants possessed some degree of interest in and knowledge related to evaluating entrepreneurial ventures (Lee and Huang 2018). The class consisted of 16 sessions containing a total of 140 students (39 women, 101 men), all of whom volunteered to participate in the study. Three students left some sociodemographic information unanswered, but we retained their data for the remaining analyses. Participants were between 25 and 36 years of age ($M$ (mean) = 29.48 years, $SD$ (standard deviation) = 2.23), and their working experience ranged from 2.5 to 15 years ($M$ = 6.32 years, $SD$ = 2.31). A total of 15.1% of the participants indicated they had some first-hand work experience related to venture investments, such as work in private equity or venture capital. Online Appendix D shows condition-specific summary statistics for this and the other studies.

**Procedures.** The study was conducted as part of a class activity, and participants expected to be graded as a team according to their venture capital firm's performance. Specifically, they were told that team investments in successful ventures would earn them two points, team investments in failures would result in losing one point, and the team abstaining from investment would leave their score unchanged.[4] How their score on the task would translate into a class grade was deliberately left unspecified. The teams used for the study ranged in size from three to five participants ($M$ = 4.76 participants, $SD$ = 0.56); these teams had been formed at the beginning of the semester for various group-based class activities, and hence the participants were familiar with their teammates. Participants cast their votes individually and without any prior team discussion. The activity was conducted during class without prior announcement, was self-paced, and took approximately 40 minutes to complete. Once the signal to begin was given, all instructions were provided through the written study materials, which participants completed individually in a paper-and-pencil format.

Teams and their members were randomly assigned to one of the two experimental conditions in this single-factor between-subjects design: (1) a threshold of one yes vote versus (2) a threshold of two yes votes ($n$ = 70 and $n$ = 70 participants, respectively). That is, study materials were identical across conditions, except for the information on how individual votes were aggregated at the team level. In both conditions, participants were told that although they and their teammates would vote on each investment opportunity individually, their votes would subsequently be aggregated at the team level via a predefined voting rule, and their performance on the task would be assessed at this aggregated level. In the one-vote-threshold condition, participants were told that the following voting rule would be applied to form a team decision: "If just one team member votes yes, your team will invest in the specific venture." In contrast, in the two-vote-threshold condition, participants were shown the following voting rule: "If two or more of the team members vote yes, your team will invest in the specific venture." Participants then saw a table showing illustrative examples of how team members' individual votes would be aggregated into a team decision and reminding them of the names of their teammates. Participants were then asked to respond to a comprehension question,[5] to read the nine company profiles, and to indicate their yes/no investment vote for each of these nine companies. Finally, participants were asked to provide some basic personal information (including sex, age, work experience, experience with venture investments, number of siblings, and an abbreviated version of Snyder's (1974) self-monitoring scale) and were debriefed. Instruments, data, and log files for Study 1A are available on the Open Science Framework (OSF).[6]

**Results.** Random assignment to treatment conditions allowed us to assume that all other relevant factors were controlled for by design. Because including unnecessary control variables can decrease statistical power and heighten the chances of type I and type II errors, our paper presents the results using only the hypothesized independent variable as predictor. As a robustness check, we included controls for sex, age, work experience, number of siblings, and self-monitoring in our analyses, and results remained virtually unchanged (see Online Appendix E). Because participants voted on nine different companies, we computed the total number of yes votes for each participant to capture the count-dependent variable of "support of uncertain projects." A Poisson regression was run to predict this count based on the study condition.[7] Online Appendix F presents the regression tables for this and the other studies. Results revealed a difference across conditions that was statistically significant at $p$ = 0.001: individuals in the

two-vote-threshold condition greenlighted 1.36 (95% confidence interval (CI), 1.13 to 1.63) times as many investments ($M = 3.89$; $SD = 1.31$) compared with participants in the one-vote-threshold condition ($M = 2.86$; $SD = 1.21$). The obtained effect size is large ($d = 0.82$; 95% bootstrapped CI, 0.51 to 1.11).

**Discussion.** The results of Study 1A were consistent with Hypothesis 1. As predicted, we identified a main effect of the aggregation structure's threshold on participants' support of investment projects, with greater support in the two-yes-votes than in the one-yes-vote condition. Study 1B was designed to extend our investigation by examining whether the effect generalizes to a threshold of three yes votes.

## Study 1B

**Sample.** Participants in Study 1B (as well as in Studies 1C–2C) were attendees of an online seminar on entrepreneurship with a focus on venture capital. Hosted on Zoom, the seminar was offered in multiple sessions between July 2020 and July 2021. The seminar was primarily advertised to alumni of a large business school. Using a snowball sampling approach, we asked participants to recommend the seminar to some of their colleagues and friends who might find it relevant. The three-hour seminar covered a variety of issues in entrepreneurship, and one of the activities involved an online version of the investment task described earlier. A total of 351 individuals took part in Study 1B. Of these study participants, 68.66% were male. The average age was 36.52 years ($SD = 9.05$), the average full-time work experience was 13.19 years ($SD = 8.60$), and 29.63% had some first-hand work experience related to venture investments. Among the 86.32% of participants that were not full-time students at the time of data collection, many participants' job function was in finance (22.11%) or operations (13.86%). The most frequently reported job levels included manager (16.50%) and owner (15.84%).

**Procedures.** Toward the beginning of the seminar session, participants were assigned to a breakout group that would engage in several short activities. One of the group-related activities involved completing the investment simulation task. Procedures resembled those of Study 1A, except that the task was administered online via Qualtrics (rather than via paper and pencil). Participants were provided with a study link and asked to complete the task individually within 30 minutes. Teams and their participants were randomly assigned to one of the three experimental conditions in this single-factor between-subjects design: (1) a threshold of one yes vote ($n = 115$), (2) a threshold of two yes votes ($n = 126$), and (3) a threshold of three yes votes ($n = 110$). Our preregistration, instruments, data, and log files for Study 1B are publicly available on OSF.[8]

We would like to acknowledge the tradeoffs associated with collecting data in online seminars (rather than in person). On the one hand, this approach allowed us to continue data collection during the Covid-19 pandemic, when most in-person classes at our institutions got canceled, and to obtain access to a managerial population with considerable relevant work experience. On the other hand, the online seminar setting means that we had to give up a certain amount of control compared with collecting data in a traditional laboratory environment or in-person classes (Hergueux and Jacquemet 2015). Specifically, we had to sacrifice some control regarding the sizes of the groups, because some people dropped out whereas others joined the seminar late (in Study 1B, for example, we aimed for groups of five, but the eventual number of participants per group was 4.13 on average, $SD = 1.97$). Fortunately, as Study 1E will reveal, our key result holds for groups of different sizes. Relatedly, people dropping out early can produce a discrepancy between what instructions told participants about the number of group members and the actual number of responses obtained per group. Although this discrepancy will not influence the main effect on individuals' voting behavior, it complicates actual aggregation of individual responses to the group level. We therefore limit our post hoc group-level analyses, reported later, to data obtained in person (i.e., the data from Studies 1A and 3).

**Results.** We ran a Poisson regression to predict the number of yes votes (ranging from 0 to 9) based on the study condition (threshold of 1, 2, or 3) and found a strong effect ($p = 0.001$). Individuals in the three-yes-votes condition greenlighted the greatest number of ventures ($M = 4.65$; $SD = 1.18$), followed by those in the two-yes-votes condition ($M = 4.22$; $SD = 1.50$), and those in the one-yes-vote condition ($M = 3.74$; $SD = 1.53$).

**Discussion.** The findings from Study 1B lend additional support to Hypothesis 1, also showing that the proposed threshold effect holds for the higher threshold of three yes votes. The first two studies only gave participants the option of voting in favor or against a given investment opportunity. In many settings, however, investors have the option to abstain (e.g., Mallin 2012). Study 1C examines whether the proposed threshold effect continues to hold when the third option of abstaining is introduced.

## Study 1C

**Sample.** For Study 1C, we recruited a total of 328 participants. Of these participants, 66.16% were male, and the average age was 35.77 years ($SD = 12.02$). Participants had an average of 13.03 years of full-time work

experience ($SD$ = 11.00), and 29.27% of them had venture investment work experience. The vast majority of participants (78.96%) were not currently enrolled as full-time students. Among these nonstudents, operations (14.29%) and finance (12.74%) were frequently reported job functions, and owner (22.01%) and analyst/associate (14.67%) the most frequently reported job levels.

**Procedures.** Participants were randomly assigned to one of two experimental conditions in this one-factor between-subjects design: (1) a threshold of one yes vote ($n$ = 150) or (2) a threshold of two yes votes ($n$ = 178). The procedures were based on those of Study 1B, except that in addition to voting yes or no on each project, participants were also given the third option to abstain. The preregistration, instruments, data, and log files for Study 1C are posted on OSF.[9]

**Results.** A Poisson regression predicting the number of yes votes showed that the voting threshold has an effect that is significant at $p$ = 0.02. Participants in the two-vote-threshold condition supported 1.14 (95% CI, 1.02 to 1.27) times as many investments ($M$ = 4.16; $SD$ = 1.34) as participants in the one-vote-threshold condition ($M$ = 3.67; $SD$ = 1.44), which corresponds to a medium effect size ($d$ = 0.36; 95% bootstrapped CI, 0.14 to 0.58).

**Supplementary Analyses.** Our main analysis focused on the number of yes votes as the dependent variable, consistent with the other studies reported in this article. In separate Poisson regressions, we explored whether the number of abstentions and no votes, respectively, differ across experimental conditions. In the first model, we found no difference in the number of abstentions ($p$ = 0.70) across the threshold-of-two condition ($M$ = 1.22; $SD$ = 1.30) and the threshold-of-one condition ($M$ = 1.27; $SD$ = 1.49). However, the number of no votes was lower ($p$ = 0.04) in the threshold-of-two condition ($M$ = 3.62; $SD$ = 1.48) than in the threshold-of-one condition ($M$ = 4.07; $SD$ = 1.80).

**Discussion.** The results of Study 1C provided additional empirical support for Hypothesis 1, even when participants had the option of abstaining from the vote. The first three studies framed the voting rule in terms of yes votes—that is, the number of yes votes required to trigger the investment. Study 1D was designed to investigate whether our findings generalize to voting rules framed in terms of no votes.

## Study 1D

**Sample.** Data were obtained from 232 study participants, 166 (or 71.55%) of whom were male. On average, participants were 35.66 years old ($SD$ = 11.13) and had 12.57 years of work experience ($SD$ = 9.65). A total of 58 (or 25.00%) participants had first-hand experience investing in ventures. Whereas 43 participants were students, most were employed adults, many of whom reported job functions in operations (19.05%) and research and development (12.17%) and job levels of manager (16.93%) and analyst/associate (14.81%).

**Procedures.** Participants were randomly assigned to either a threshold of three no votes ($n$ = 111) or a threshold of one no vote ($n$ = 121) in this one-factor between-subjects design. Specifically, participants in the former condition were informed that "(i)f three or more of the team members vote no, your team will not invest in the specific venture" whereas participants in the latter condition learned that "(i)f just one team member votes no, your team will not invest in the specific venture." Based on our first hypothesis, we expected that the number of greenlighted projects should increase across these two conditions. The rest of the procedures mirrored those of Study 1B. The preregistration, instruments, data, and log files for Study 1D are available on OSF.[10]

**Results.** We ran a Poisson regression to predict the number of yes votes based on the threshold condition (coded as 0 for the threshold of three no votes and 1 for the threshold of one no vote). Results revealed a statistically significant effect at $p$ = 0.04. Participants in the threshold-of-one-no-vote condition supported 1.13 (95% CI, 1.01 to 1.27) times as many ventures ($M$ = 5.26; $SD$ = 1.55) as participants in the threshold-of-three-no-votes condition ($M$ = 4.66; $SD$ = 1.59); $d$ = 0.39; 95% bootstrapped CI, 0.11 to 0.67.

**Discussion.** Study 1D provided evidence that the effect proposed in Hypothesis 1 can be generalized from voting thresholds framed in terms of yes votes to those framed in terms of no votes. The first four studies had only little variation in the number of group members, leaving the question of whether group size may affect the threshold effect open. Specifically, one might expect the threshold effect to be comparatively weaker among smaller groups. Study 1E's objective was to analyze if the threshold effect continues to hold when group size is systematically varied.

## Study 1E

**Sample.** Considering the lack of control over group size discussed earlier, we decided to overrecruit and obtained data from 685 participants. Because the goal of this study was to systematically analyze the role of group size, we dropped 165 participants whose group size deviated from our study conditions of three and six group members,[11] for 510 usable responses. A total of 351 of these 510 participants (or 67.50%) were male. The mean age was 35.31 years ($SD$ = 9.59), and the mean full-time work experience was 12.42 years ($SD$ = 8.77). Of the participants, 148 (or 28.46%) had venture

investment work experience, and 456 (or 87.69%) were not enrolled as full-time students. Among the frequently reported job functions were finance (18.98%) and operations (11.70%), and the most frequent job levels included manager (17.00%), owner (16.56%), and analyst/associate (15.01%).

**Procedures.** Participants were randomly assigned to one of the four experimental conditions in this two (threshold: one vs. three yes votes) × two (group size: three vs. six) between-subjects design. Except for the group size, procedures mirrored those of Study 1B. The preregistration, instruments, data, and log files for Study 1E are posted on OSF.[12]

**Results.** We first ran a Poisson regression predicting the number of yes votes based on the voting threshold alone and replicated the effect ($p = 0.004$). We then estimated a Poisson regression in which only the group size, coded as a dummy, predicted the number of yes votes, but failed to find an effect ($p = 0.24$). Finally, we conducted a Poisson regression with voting threshold, group size dummy, and their interaction included and found no clear evidence for an interactive effect ($p = 0.68$). (A factorial analysis of variance (ANOVA) produced highly comparable results.) We then conducted Poisson regressions in subgroups, which revealed an effect of the voting threshold both among groups of six ($p = 0.02$) and among groups of three ($p = 0.09$). Online Appendix G displays the condition means, further illustrating that the threshold matters for groups of both six and three, whereas no notable main effect of group size and no interaction of group size with threshold are discernible.

**Discussion.** The results from Study 1E offer additional support for Hypothesis 1 and demonstrate that the threshold effect is robust across different group sizes. Notably, we did not observe an interaction between voting threshold and group size. We can only speculate that the difference between three and six group members might not have been salient enough for participants to substantially alter their strategic voting behavior and encourage future research that employs stronger group size manipulations (e.g., contrasting groups of two vs. groups of 10). The first five studies had participants vote in isolation and without communicating with their teammates. Although this approach to voting may not be uncommon in certain organizational settings, other organizational votes are preceded by a debate among committee members (e.g., Guo 2016). Study 6 was thus designed to examine whether the threshold effect is robust when allowing for prevote deliberation among teammates. Specifically, we manipulated both the voting threshold and the presence (vs. absence) of deliberation to examine whether deliberation might mute the threshold effect.

## Study 1F

Due to high show-ups in the four seminar sessions in which we ran this experiment, a total of 623 individuals participated in Study 1F. Of these 623 participants, 423 (or 67.90%) were male. On average, participants were 36.85 years old ($SD = 11.93$) and had 14.23 years of full-time work experience ($SD = 10.79$). A total of 182 (or 29.21%) participants had first-hand venture investment experience, and 521 (or 83.63%) were not enrolled as full-time students. Many participants worked in finance (14.20%) or research and development (12.48%) and held positions as owner (17.85%) or director (14.01%).

**Procedures.** Participants were assigned to one of four experimental conditions in this two (threshold: one vs. three yes votes) × two (deliberation: absent vs. present) between-subjects design. Like before, we manipulated the voting threshold at the group level using Qualtrics question randomization, whereas we manipulated deliberation at the seminar session level, such that two sessions excluded and two sessions included a prevote deliberation task. To minimize other differences between sessions, we scheduled all four at around the same time of the day and during weekdays; as usual, in Online Appendix E, we also report results while including a number of controls in the model. The preregistration, instruments, data, and log files for Study 1F are available on OSF.[13]

**Results.** We started by estimating a Poisson regression that only contained the threshold condition as the predictor of the number of yes votes and found a main effect that was statistically significant at $p = 0.000$. We then ran another Poisson regression model that only included a deliberation dummy as predictor and found a negative effect ($p = 0.053$). Finally, we conducted a Poisson regression that included the threshold condition, the deliberation dummy, and their interaction. In line with our expectations, the threshold × deliberation interaction term had a negative coefficient ($p = 0.039$). (A comparable ANOVA yielded similar results.) Running Poisson regressions in subgroups revealed that the threshold effect was more pronounced when deliberation was absent ($p = 0.000$) and noticeably weaker when groups deliberated prior to their vote ($p = 0.099$). Online Appendix H visualizes the condition means. The figure demonstrates that the threshold effect matters for groups both without and with prevote deliberation, but it is comparatively stronger among the former, in line with a negative interaction effect.

**Discussion.** The findings from Study 1F offer greater insight into the role of prevote deliberation. Whereas deliberation does attenuate the effect of the voting threshold (as demonstrated by the interaction term), it does not erase it. Taken together, the first six studies

demonstrate considerable robustness of the proposed threshold effect across a wide variety of settings. The studies that follow next further extend the investigation and proceed to offer evidence for a key mechanism underlying the threshold effect.

## Mediation Effect Studies

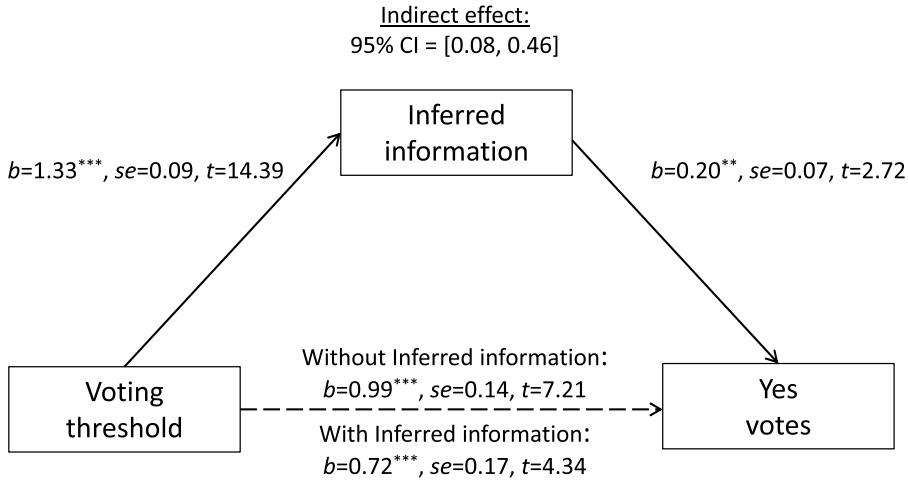
### Study 2A

**Sample.** We obtained data from 410 online seminar participants. Of these participants, 282 (or 68.78%) were male. The mean age of participants was 36.64 ($SD$ = 9.23), and the mean work experience was 13.54 years ($SD$ = 8.99). A total of 113 (or 27.56%) of the participants indicated they had first-hand experience with venture investing. Most of the participants (91.22%) were not enrolled as full-time students, and among them, many worked in finance (17.91%) or operations (13.90%) and reported a job position as manager (16.58%) or analyst/associate (15.51%).

**Procedures.** In this one-factorial between-subjects design, participants were randomly assigned to either a one-yes-vote ($n$ = 200) or a three-yes-votes condition ($n$ = 210). The procedures followed those outlined for Study 1B while adding survey questions regarding the way participants interpret the voting context in-between the presentation of the venture descriptions and the casting of votes. Specifically, to measure the mediator of inferred information, we included the following two items (anchored on a five-point answer scale ranging from 1 = strongly disagree to 5 = strongly agree): "My 'yes' vote only matters if my teammates had a negative opinion of the venture" and "If all of my teammates vote 'no,' my 'yes' vote can hurt my team's performance." To facilitate interpretation of the results, we reverse-coded both items before computing their average. The preregistration, instruments, data, and log files for Study 2A can be accessed on OSF.[14]

**Results.** To further probe the main effect, we started by estimating a Poisson regression to predict the number of yes votes on the basis of the study condition (threshold of one or three yes votes). Just like before, we found evidence for the proposed threshold effect ($p$ = 0.000). Participants in the threshold of three condition greenlighted 1.28 times (95% CI, 1.16 to 1.41) as many investments ($M$ = 4.48; $SD$ = 1.25) as participants in the threshold-of-one condition ($M$ = 3.49; $SD$ = 1.52), for a medium-to-large effect size of $d$ = 0.71; 95% bootstrapped CI, 0.50 to 0.93. We began testing Hypothesis 2 by running mediation bootstrapping tests (Preacher and Hayes 2004; the mediation tests were run with 5,000 bootstrap samples using the PROCESS macro in Statistical Package for the Social Sciences (SPSS); Hayes 2017, model 4). Employing bootstrap mediation analysis to calculate the indirect effect has the advantage of greater statistical power without making the assumption of multivariate normality in the sampling distribution (Hayes 2017). If the 95% bias-corrected CI for the parameter estimate does not contain zero, then the respective indirect effect is evident, and mediation is established. Figure 1 shows that the CI for the indirect effect of the threshold condition on project support through inferred information does not contain zero. A higher voting threshold increases information inference, and information inference in turn increases project support. We also ran this model for each of the

**Figure 1.** Mediation Model, Study 2A




*Notes.* $n$ = 410. Results from PROCESS model are shown. The statistics directly above the dashed arrow indicate the direct effect of voting threshold on yes votes, not accounting for the mediator. The statistics below the dashed arrow indicate the direct effect of voting threshold on yes votes, with the mediator included in the regression model. Asterisks denote coefficients at different significance levels ($^{\dagger}p < 0.10$; $^{*}p < 0.05$; $^{**}p < 0.01$; $^{***}p < 0.001$; two-tailed tests).

two mediator items separately, and results were very similar. Finally, we estimated a mediation model using the paramed routine in Stata (Emsley and Liu 2013) and again found evidence for an indirect effect.

**Discussion.** The results from Study 2A offer initial empirical support for the mediating role of inferred information in the voting threshold–project support link. In this traditional measurement-of-mediation design, we captured the focal mediator of inferred information via survey. However, because we measured (rather than manipulated) this variable, our ability to establish its causal effect is somewhat limited based on this design. Hence, consistent with recommendations by Spencer et al. (2005) and others, we complemented Study 2A's measurement-of-mediation approach with an experimental-causal-chain design in Study 2B, which examined a causal link from inferred information to project support, as predicted by Hypothesis 2.

## Study 2B

**Sample.** We obtained data from a total of 401 online seminar attendees. Participant characteristics are comparable to those of the previously reported online studies, with 285 participants (71.07%) being male and a mean age of 34.69 years ($SD$ = 8.32). On average, participants had 11.81 years of work experience ($SD$ = 7.86), and 98 of them (or 24.44%) had first-hand experience investing in ventures. Full-time student status was reported by 56 participants; many of the remaining 345 nonstudent participants worked in operations (17.39%) or finance (14.20%) and held job titles of manager (16.81%), senior manager (14.78%), owner (14.20%), or director (14.20%).

**Procedures.** Participants were randomly assigned to either a control ($n$ = 205) or an information-inference priming condition ($n$ = 196) in this one-factor between-subjects design that held the voting threshold constant at a level of one yes vote. At this low threshold, we expected that greater information inference would lead to fewer yes votes, consistent with our theoretical logic of participants inferring that no other team member must have voted yes for their own vote to become pivotal.

We followed the general procedures of Study 1B but added an essay-writing assignment right after participants read the venture descriptions and before they cast their votes. Employing an essay priming approach similar to Galinsky et al. (2003), we asked participants in the information-inference condition to envision the situation in which the team invests in a venture only because of their yes vote. Specifically, we asked participants to elaborate on three issues related to this hypothetical situation: (1) How many team members (including yourself) must have voted yes for this situation to occur (…)? (2) What can you infer from these votes regarding the likely quality of the venture (…)? (3) Retrospectively, do you think it was a good choice to vote yes in this situation? Consistent with priming logic, the goal of this manipulation was to make information inference more salient among participants in this condition. Participants in the control condition were instead asked to write on a topic unrelated to the task. These participants elaborated their opinion about the merits of teaching entrepreneurship in business school. Online Appendix I shows the differences in instructions across priming conditions. The preregistration, instruments, data, and log files for Study 2B have been uploaded to OSF.[15]

**Results.** To examine the effect of the essay manipulation, we ran a Poisson regression to predict the number of yes votes based on the priming condition (information inference vs. control) and identified an effect that was statistically significant at $p$ = 0.04. Individuals in the information-inference condition supported 0.90 (95% CI, 0.81 to 0.99) times as many ventures ($M$ = 3.45; $SD$ = 1.36) as participants in the control condition ($M$ = 3.84; $SD$ = 1.41); $d$ = 0.29; 95% bootstrapped CI, 0.10 to 0.47.

**Discussion.** Study 2B showed that when the voting threshold is fixed at a low magnitude, pronounced information inference reduces the support for uncertain projects relative to a control condition, thus providing evidence for the causal effect of the information-inference mechanism on voting behavior. In combination with Study 2A, these findings provide empirical support for Hypothesis 2. Although it is beyond the scope of this article to examine all possible mechanisms that could help explain the proposed threshold effect, one potential alternative explanation might have to do with perceptions of vote pivotality. In particular, different voting thresholds may lead to different perceived probabilities of casting the pivotal vote, and such variations in perceived pivotality may in turn affect voting behavior.[16] Study 2C was designed to explore this alternative mechanism.

## Study 2C

**Sample.** Data collection concluded after data from 355 participants were obtained in three seminar sessions. A total of 247 (or 69.58%) of these participants were male. On average, participants were 34.69 years old ($SD$ = 10.56) and had 12.06 years of work experience ($SD$ = 10.84). A little less than a quarter (21.97%) of these participants had prior experience investing in venture. Only 18.03% of the participants were students. Many worked in finance (17.18%), operations (13.06%), or research and development (13.06%) and held job titles of analyst/associate (19.59%) or manager (14.78%).

**Procedures.** Participants were randomly assigned to either a one-yes-vote ($n$ = 193) or a two-yes-votes ($n$ = 162) threshold condition in this one-factorial between-subjects design. Procedures were identical to those of our mediation Study 2A, except that we replaced questions about information inference with an item capturing perceived pivotality. In particular, we built on the belief elicitation approach of Duffy and Tavits (2008) (also see Dittmann et al. 2014) and included the following question (anchored on a nine-point semantic differential scale with "Very unlikely" and "Very likely" as anchors): "Given this voting rule, how likely is it you will find yourself in a constellation in which your individual vote is going to make a difference for the joint team decision?" The preregistration, instruments, data, and log files for Study 2C can be accessed on OSF.[17]

**Results.** As usual, we started by estimating the main effect of voting threshold on the number of yes votes in a Poisson regression and found further evidence for this effect ($p$ = 0.015). Participants in the threshold-of-two condition supported 1.13 (95% CI, 1.02 to 1 1.25) times as many venture investments ($M$ = 4.58; $SD$ = 1.22) as participants in the threshold-of-one condition ($M$ = 4.04; $SD$ = 1.53), resulting in a medium effect size of $d$ = 0.39; 95% bootstrapped CI, 0.19 to 0.58. To explore the potential mediating effect of perceived pivotality, we ran a mediation bootstrapping test with 5,000 bootstrap samples using the PROCESS macro in SPSS (Hayes 2017). Online Appendix J shows that the CI for the indirect effect in this model does contain zero. Neither did the threshold condition predict pivotality perceptions, nor did those perceptions explain voting behavior. A mediation model using the paramed routine in Stata (Emsley and Liu 2013) similarly failed to show support for a mediating effect of perceived pivotality.

**Discussion.** Results of Study 2C did not point to perceived pivotality playing a substantial role in explaining the effect of voting thresholds on voting behavior in our setting. Combined with the results of Studies 2A and 2B, this should raise confidence that it is indeed inferred information that is driving this effect. To further bolster this evidence, the last study was designed to investigate a boundary condition consistent with our strategic voting account and proposed in Hypothesis 3: the level of private information.

## Moderation Effect Study

### Study 3

**Sample.** Participants in Study 3 were enrolled in an Executive MBA program and attended an entrepreneurship class on the creation of new business ventures. In total, 99 people took part in the paper-and-pencil study, of whom 73 (73.74%) were male. Two participants left individual investment decisions unanswered; we retained these participants under the assumption that they did not want to invest in the respective ventures (but results are essentially unchanged when assuming positive investment or dropping these participants). Participants were an average of 37.85 years old ($SD$ = 3.95) and had an average of 15.14 years of full-time work experience ($SD$ = 4.08), with 18.18% indicating they had some work experience related to venture investments.

**Procedures.** Study procedures resembled those of Study 1A, with the key difference being that Study 3 used a two (threshold: one vs. two yes votes) × two (level of information: low vs. high) between-by within-subjects design.[18] As in Study 1A, the voting threshold was manipulated by assigning participants to a threshold of either one yes vote ($n$ = 50) or two yes votes ($n$ = 49). Except for the details of how individual votes were aggregated at the team level, study materials were identical across the two threshold-level conditions. In addition, we also manipulated level of information as a within-subjects factor. Specifically, four randomly selected company profiles in each participant's handout contained five to six lines of blurred-out, unreadable text (low level of information), whereas five contained five to six lines of bold and underlined text (high level of information). Additional instructions provided with each low-level-of-information company profile informed participants: "Some of your team members have done additional research and therefore have more information on this company than you do. The information that is blurred is information that some of your teammates have, but you do not have." In contrast, each high-level-of-information company profile was preceded by the instructions: "You have done additional research on this company and therefore have more information on the company than your team members. Specifically, the information that is highlighted in the text (bold and underlined) is information that you have exclusively and that your teammates lack." Online Appendix K shows examples of the blurred and highlighted text used to manipulate the level of information. Except for one four-person team, all teams had five members ($M$ = 4.96 participants, $SD$ = 0.20), and all but four participants gave a correct response to the study comprehension question.[19] Instruments, data, and log files for Study 3 are publicly available on OSF.[20]

**Results.** Because individual company profiles differed in terms of information levels (the within-subjects variable), we moved to a trial-level analysis as our default analytic method and coded the dependent variable of investment as a dummy variable for each company. To account for the fact that individual trials were nested within participants, we used random-intercept logistic regression with participant as clustering variable (Rabe-Hesketh and Skrondal 2012). The model included voting

threshold, level of information, and their interaction as predictors.

Results provided additional support for the proposed main effect (Hypothesis 1): the voting threshold had a positive impact on the propensity to invest ($b = 1.51$; $SE = 0.33$; $z = 4.51$; $p = 0.00$). Further, we found that the level of information positively affected the dependent variable ($b = 2.74$; $SE = 0.31$; $z = 8.98$; $p = 0.00$). Most importantly, the negative coefficient of the interaction term was consistent with the moderation effect proposed in Hypothesis 3 ($b = -1.37$; $SE = 0.37$; $z = -3.71$; $p = 0.00$). Figure 2 graphically illustrates the percentages of positive investment decisions averaged by condition. Subsample regression analyses revealed that the effect of the voting threshold was no longer present when focusing only on the five trials with high levels of information ($b = 0.13$; $SE = 0.18$; $z = 0.70$; $p = 0.48$), whereas this effect was positive when focusing on the four low-level-of-information trials ($b = 1.79$; $SE = 0.47$; $z = 3.79$; $p = 0.00$). Consequently, the level of information constitutes a critical boundary condition to the threshold-level effect.

Finally, to explore the alternative explanation that the observed voting-threshold effect might be driven by changes in risk attitude, Study 3 also captured participants' risk attitude using Holt and Laury's (2002) hypothetical lottery-choice instrument. A Poisson regression revealed that the count of risky lottery choices is virtually unaffected by the threshold condition ($b = 0.08$; $SE = 0.08$; $z = 1.02$; $p = 0.31$), thus alleviating concerns about this alternative explanation.

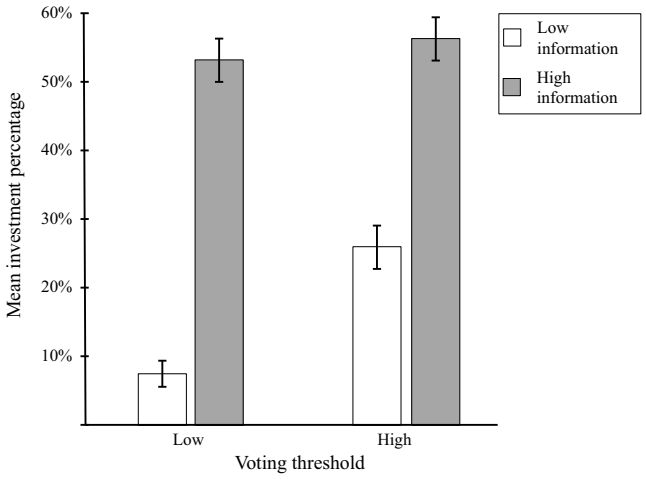
**Discussion.** The results of Study 3 both replicate and extend our findings. Using a sample of Executive MBA participants, we again find a positive main effect of the voting threshold on investment, illustrating the robustness of this effect and generalizing our findings across various different populations (Bettis et al. 2016). In addition, Study 3 provides novel evidence on the role of the level of information as a moderator of the voting threshold–investment effect. In situations with low levels of information, the effect of the voting threshold on investment likelihood is more pronounced than in situations with high levels of information.

## Post Hoc Group-Level Analyses

Although the paper's hypotheses pertain to effects on individuals' voting behavior, we were curious whether the voting-threshold manipulation might also have downstream effects on decisions at the level of the organization. We thus pooled our data from Studies 1A and 3 (resulting in 239 participants and 50 groups), applied the respective voting rule to compute team-level decisions, and compared them across conditions.[21] Interestingly, a Poisson regression revealed that the number of team-level investment decisions was not statistically different across conditions at the conventional 5% level ($z = -1.68$; $p = 0.09$. This implies that redesigning an organization's aggregation structure in an effort to influence organizational decisions may not create the anticipated downstream effect, as the mechanics of the aggregation rule appear to be substantially countervailed by changes in individual voting behavior. We return to this insight in our General Discussion section.

To dig a bit deeper, we also computed "statistical counterfactuals" (e.g., Csaszar and Laureiro-Martínez 2018), applying the two-vote aggregation mechanism to the decisions of teams exposed to the one-vote threshold (and vice versa) and thus allowing for a comparison between actual voting behavior and voting behavior unaffected by the threshold condition. The ensuing analyses show that the threshold effect appears to play out asymmetrically at the team level. As we uniformly

**Figure 2.** Mean Investment Percentage by Condition, Study 3




*Note.* Error bars represent standard errors.

apply the two-vote-threshold aggregation mechanism to all teams, we see a notable difference in the resulting team decisions across experimental conditions, with more investments among teams in the two- than in the one-vote-threshold condition ($z = 2.63$; $p = 0.01$). That is, even when holding constant the aggregation mechanism itself, individual voting differences produce differences in outcomes, such that teams exposed to the higher threshold will engage in more investments. However, when we uniformly apply the one-vote-threshold aggregation mechanism to all teams, a difference between conditions does not materialize ($z = 1.34$; $p = 0.18$). These results suggest that the endogenous changes in individual behavior are particularly consequential at the team level when voters anticipate a low threshold. And more broadly, they underline our position that it is not tenable to treat aggregation rules and voting behavior as independent phenomena. Data and log files for these post hoc group-level analyses are available on OSF.[22]

## General Discussion

To examine whether organizational structure has the hypothesized dual function of not just aggregating but also shaping individuals' voting behavior, we conducted a series of experiments among student, managerial, and executive populations. Results reveal that voting thresholds indeed influence individuals' votes, and substantially so. Specifically, a lower threshold renders people significantly more conservative, whereas a higher threshold causes them to be more liberal in their voting. In support of the robustness of this voting-threshold effect, we show that it holds across different threshold magnitudes, different group sizes, and in the presence of prevote deliberation. We also illuminate the theoretical mechanism and offer empirical support for information inference underlying the observed threshold effect, in line with our strategic voting account. Finally, we show that the effect is contingent on individuals' level of private information about the underlying decision, with increasing levels of information "turning off" this effect. In sum, our article highlights the dual function of thresholds, it helps isolate the theoretical mechanism underlying the threshold effect while ruling out an alternative explanation, and it establishes an important bridge between research on jury decisions in political science and on information aggregation in organization theory.

### Organizational Structure: Aggregating and Shaping

Our study adds to the reinvigorated line of research on the effects of organizational structure (Bernstein et al. 2016, Burton and Obel 2018, Puranam 2018, Joseph and Gaba 2020, Lee 2022). The specific stream we contribute to is scholarship on the aggregation of information from organizational members (Knudsen and Levinthal 2007, Christensen and Knudsen 2010, Csaszar 2013, Csaszar and Eggers 2013, Christensen et al. 2021, Piezunka et al. 2022). Our goal in this manuscript is to address repeated calls for "a theory of aggregation that explains how individuals combine their behavior to produce collective outcomes" (Freeman 1999, p. 175).

Our first and primary contribution is to draw attention to the dual role of organizational structure, which both (1) aggregates and (2) shapes individual votes. We elaborate and provide empirical evidence for the second—so far largely neglected—function of organizational aggregation rules: their shaping of individual votes. This notion resonates with recent research insisting that individuals' behavior is fundamentally affected by the organizational structures surrounding them. For instance, Piezunka et al. (2022) illustrate in a simulation that organizational structure influences individuals' votes, as it codetermines what kind of feedback people receive and thus what they learn. In this study, we illustrate that even in the absence of learning (and thus even in the short term), organizational structure shapes individual votes. The underlying mechanism is that organizational members take organizational structure as an important clue—and use it to adjust their reservation level.

By illustrating how organizational structure shapes individual voting behavior, we relax a key assumption in prior research: the exogeneity of individual voting behavior. Earlier work on organizational aggregation, often deploying formal modeling, tended to treat individual voting behavior as exogenous and independent of structure. Our article refutes the exogeneity assumption and emphasizes that neither decision-making structures nor individual voting behavior should be studied in isolation, as they are deeply intertwined. Our experimental approach allows us to endogenize individuals' votes and to demonstrate that these votes are a function of organizational structure.

The effect that aggregation rules have in shaping voting behavior is particularly remarkable given that it countervails their effect in combining votes into an organizational decision. Whereas a smaller threshold lowers the bar for a project to be greenlit at the organizational level, it also reduces organizational members' tendency to support that project. The two functions of combining and shaping are thus in direct opposition. As a result, organizations that deliberately adopt a new voting threshold may not achieve the desired effect, as the change in individual voting behavior may undermine the structural change.

This insight—that is, that aggregation rules have two countervailing functions—is of high relevance for research on organizational aggregation. Studying the effect of aggregation rules on organizational decision making without considering how aggregation rules

shape individuals' voting behavior may result in inaccurate estimates of the effect of aggregation rules on organizational decision making. It is thus critical to account for the macro-to-micro implications of organizational structures to capture their true effects (Gavetti et al. 2007, Greve 2013, Keum and See 2017, Lee and Csaszar 2020). Consider an investigation examining strategic decision making while only studying individual choices and ignoring aggregation structures. Such a study would be unable to account for the fact that actors in organizations commonly make decisions in committees and, in doing so, engage in strategic behavior that can differ markedly from how they would behave in isolation. Conversely, a study focusing on aggregation structures while bracketing individual behavior may overestimate how these structures will affect organizational decisions. As our findings show, the microlevel effect can attenuate or even offset the macro-level effect. As such, our investigation directly supports the microfoundations perspective, to which we will turn further below.

## Organizational Selection: A Decision by Organizations—and Their Members

A rich body of work has examined organizations' selection of strategic projects (Bardolet et al. 2011, Piezunka and Dahlander 2015, Boudreau et al. 2016, Criscuolo et al. 2017, Sengul et al. 2019, Lane et al. 2022). Whereas one key goal of many organizations may be to minimize the frequency of false positives and false negatives (Sharapov and Dahlander 2022), the number of projects being greenlit is a meaningful outcome variable in itself, as organizations find themselves either too liberal or too conservative in their project selection (Piezunka and Dahlander 2015, Boudreau et al. 2016). Organizational structure appears like a plausible lever for adjusting an organization's selectivity. The introductory example illustrates how the venture capital firm DFJ considered itself too conservative and therefore adapted its structure in an attempt to correct for this problem. Our study, however, shows that such a structural change may be in vain if it is overturned by changes in individuals' decisions.

## Microfoundations: From the Organization to Individuals and Back

The study of microfoundations has recently witnessed unprecedented interest and continued growth in organizational theory and strategy alike, to the extent that we can speak of a microfoundations movement that is fundamentally changing the landscape of these formerly purely macro-level fields (Felin et al. 2015, Zucker and Schilke 2020). Microfoundational research seeks to explain how relations between macro variables (such as organizations' structures and decisions) are mediated by micro cognitions and actions (such as agents' inferred information and voting behavior) (Barney and Felin 2013, Cowen et al. 2022).

At the core of the microfoundational approach is the question of what it means for organizations to act, given that they are rarely represented by only one individual (King et al. 2010, Steele and King 2011, Bromley and Sharkey 2017, Halgin et al. 2018, Schilke and Lumineau 2022). That is, how does collective organizational action emerge and take on forms that cannot be explained by taking the simple average among the organization's members? Our article provides one important answer to this question. We show that aggregation structures transform how organizational members act, in a way that deviates from how they would act either in isolation or under different aggregation structures. As such, on the one hand, our article offers support for the notion that there is something fundamentally supraindividual and uniquely organizational that drives the decision making of organizations (i.e., voting structures), demonstrating that organizations are indeed much more than the simple sum of their parts. On the other hand, our findings qualify the extreme view that individuals do not matter, as we show that their behavior may in fact go against and counteract tendencies inherent in the organizational structure. Overall, then, we contribute to elaborating a more balanced middle-ground perspective (Schilke 2018) that transcends the conventional dichotomy of structure versus agency and unpacks the mechanisms through which the two interact. Our approach highlights the importance of organizations' voting rules as unique properties that structure the decision process (as briefly alluded to by Coleman 1974) while doing justice to the important role of individual behavior in organizational decision making. Whereas earlier research on organizational actorhood primarily traced an organization's character back to its identity and goals (e.g., King et al. 2010, Schilke 2018), we suggest that organizational structures—and in particular aggregation structures—should be added to the list of uniquely organizational features that explain the nature of the actions taken by an organization.

In addition to speaking to the issue of organizational actorhood, our research may also contribute specifically to elucidating the microfoundations of dynamic capabilities—that is, firms' capacity to purposefully create, extend, or modify their resource base (Helfat et al. 2007, Schilke 2014). Organizational design has been recognized as a critical enabler of dynamic capabilities (Felin and Powell 2016), and more specifically, the decision rules that organizations employ have been linked to the degree to which firms are able to seize opportunities (Teece 2007). Nevertheless, more fine-grained theorizing about specific types of decision rules and empirical research directly linking such rules to concrete organizational investment decisions have been largely absent in this literature (also see

Felin et al. 2015, Schilke et al. 2018). As such, dynamic capabilities scholars should find it insightful that voting thresholds significantly impact investment decisions and, by implication, the extent to which firms routinely change their resource base. Put differently, voting rules may qualify as a central (albeit underappreciated) microfoundation of firms' dynamic capabilities (Teece 2007), a notion that contributes to a more refined picture of how specifically the complex concept of dynamic capabilities (which has been criticized as being vague and elusive; Arend and Bromiley 2009) manifests inside firms.

### Strategic Voting: In Political Science and Organization Theory

Another key contribution of our investigation lies in bringing the concept of strategic voting from political science to organization theory. Our investigation thus serves as a bridge between the political science literature on strategic voting and research on organization design and information aggregation in strategic management. Beyond merely "importing" the concept of strategic voting, our research also helps advance knowledge of strategic voting. There is a heated ongoing debate in political science on whether strategic or sincere voting offers a better approximation of voters' actual behavior (e.g., Kawai and Watanabe 2013, Esponda and Vespa 2014). Our investigation adds to this issue in several respects.

First, our article provides new evidence that strategic voting indeed provides a good approximation of voters' actual behavior. Whereas political science has primarily focused its analysis on jury and electoral votes and collected experimental data from a student population (e.g., Guarnaschelli et al. 2000), our investigation establishes the generalizability to and robustness of the threshold effect across a variety of organizational settings and a broader set of participants. The effect holds across different threshold magnitudes, different group sizes, different threshold frames, when voters have the option to abstain, and in the presence of prevote deliberation. Therefore, we demonstrate that the threshold effect is anything but narrow (as surmised by Margolis 2001) and applies to different organizational voting contexts.

Second, our investigation endeavors to isolate the information-inference mechanism that is central to the process by which strategic votes are cast. Whereas political scientists have made much progress in examining different voting rules (Palfrey 2016), they have paid relatively little empirical attention to the precise cognitive mechanisms that explain these rules' effects (see Duffy and Tavits 2008). Our examination of Hypothesis 2 (Studies 2A–2B) and Hypothesis 3 (Study 3) provides concrete evidence for the information-inference mechanism that is at the heart of the strategic voting account but has previously been merely assumed rather than demonstrated. Beyond their theoretical value, these insights also have important practical implications that go beyond prior work. For example, our research helps to illuminate when or by whom strategic voting should most likely be expected. The degree to which actors engage in strategic voting and update their beliefs depends on their own information (with more private information leading to less engagement in strategic voting) as well as the information of their peers (with better-informed peers leading to more engagement in strategic voting). Taken together, our article contributes to an improved understanding of how inferred information serves as a key process explaining divergent outcomes across voting regimes, thus adding important insights to the burgeoning voting literature in organization theory (e.g., Rao and Sivakumar 1999, Krause et al. 2014, Aadland et al. 2019, Andrei et al. 2022).

### Managerial Implications

Although drawing managerial implications from experimental research should be treated with caution (Bitektine et al. 2018), the results reported here speak to the roles of aggregation structures as organizational design tools that are relatively easy for firms to change but whose effects are not as straightforward as they may seem. For instance, changing the voting threshold may not have much effect at the organizational level unless committee members possess relatively high levels of information about the underlying investments. However, especially in settings where managers face significant information asymmetries and are thus uncertain about the prospects of an investment, they may vote strategically, in the hope that their colleagues might be better informed. As such, one implication of our findings is that firms trying to make strategic changes by adjusting voting thresholds may be well advised to also implement deliberation routines through which each voting member's level of information is made transparent to the group and the better-informed individuals are given the opportunity to share their insights before votes are collected. Another implication is that the transparency of the voting rule constitutes a relevant design lever in itself. Our theory suggests that knowledge of the voting threshold induces strategic voting. If strategic voting is not desired, it may be decided not to disclose the voting threshold to the committee members. More generally, an organization may consider adjusting its structure without communicating the change to its members. If an organization strives to change its selection policy, and a change of the organizational structure will have the two countervailing effects demonstrated in this article (i.e., the mechanical aggregation and the shaping of votes), the organization may experience the first effect but not the second if it manages to conceal the change.

## Limitations and Future Research

This investigation is subject to several limitations that result from our methodological and conceptual choices. Clearly, our study constitutes only an initial step in making voting a central issue in organization theory, and future research is urgently needed to continue this project and elucidate organizational voting in the various forms it can take. Methodologically, we relied on experiments, making it important to acknowledge that findings are generalizable only via theory rather than being directly transferable to the field (Zelditch 1980). Several simplifying assumptions are necessary to bring organizational decision making to the laboratory, and it is important to be transparent about the resulting boundary conditions. Nonetheless, there is a central place for experiments in organization theory (Bitektine et al. 2022), and more and more scholars are making use of experimental methods in order to shed light on the cross-level dynamics in organizational decision making (e.g., Raveendran et al. 2016, Schilke 2018, Klingebiel 2022, Di Stefano and Micheli 2022, Molina et al. 2022, Billinger et al. 2023), a movement that will surely only continue to grow.

It is also crucial to note that the voting structure we study in this article characterizes only one particular form of information aggregation (see, for instance, the taxonomy of information aggregation structures proposed by Piezunka et al. (2022)). Organizations may adopt other kinds of structures; for example, they may weigh individual members' votes differently and/or give certain members veto rights (Phadnis et al. 2015). Future research may explore how other organizational structures (e.g., structures that are more hierarchical or that allow individuals to share more granular information; Lee and Csaszar 2020) affect organizational decision making.

Our study builds on a set of additional conceptual assumptions that point to fruitful avenues for further generalization and assessment in future research. Most crucially, for our findings to hold, decision makers must be aware of the aggregation structure (which we accomplished in our experiments by prominently highlighting the voting threshold before the participants made their decisions). However, as mentioned above, it is possible that members of an organization may not be fully aware of the voting regime and thus may not take it into account when voting. Organizations may even gather their members' votes without having established an a priori voting regime at all. In such cases, the effects observed here may be absent or attenuated—an issue to be explored in future research. Moreover, it is worth highlighting that our experiments randomly assigned voting thresholds, and results might differ if teams self-select into different structures (Gibbons et al. 2021) or if participants were given specific reasons why the organization uses a particular structure. Future work may endogenize structure itself, and examine if and how the effect of voting thresholds changes when organizational members themselves choose a voting threshold for their organization rather than being assigned one. Also, the individuals in our setting were incentivized to be concerned about the overall organizational outcome, consistent with our assumption of homogeneous preferences for optimal selection. The degree to which managers care about the organizational implications of their actions may vary across managers and organizations (Eisenhardt 1989, Garg 2013), and representatives from different departments may have different preferences when it comes to strategy making. Future research should thus examine organizational voting dynamics while allowing for divergent utility functions among voters. Such an approach would open the door to considering the possibility of misaligned voting (Kawai and Watanabe 2013), whereby actors deliberately vote for an option that they do not view as the optimal choice for the organization. Another assumption we made pertains to votes being cast simultaneously in a one-shot election. Voters' considerations and behavior might differ if votes were cast over several consecutive stages (Coughlan 2000). Our account also assumed that the focal decision maker engages in strategic voting while believing that others vote sincerely—that is, in direct accordance with their private information regarding project quality. This standard assumption in the strategic voting literature is highly aligned with the cognitive realities of voting (Ladha et al. 1999). Whereas mounting empirical evidence suggests that decision makers can indeed be expected to conceive of the pivotal vote constellation and condition their vote accordingly (Palfrey 2016), it is less realistic to assume they will also go through the cognitively daunting task of envisioning other voters possibly going against their private information, which would require a highly sophisticated understanding of Bayesian probabilities that is rather uncharacteristic of human thought processes in risky choice (Ladha et al. 1999, Camerer et al. 2015). Nonetheless, future research should investigate the effect of making actors aware of the fact that others might be voting strategically (Myatt 2007), which may in turn reduce the informativeness of the voting threshold. Motivated by the real-world case of the venture capital firm DFJ, we contrasted regimes with thresholds of one versus two versus three yes votes, but organizations may use higher thresholds than that. It is clear that we need further investigations to generalize our findings to other voting thresholds and different voting rules. Moreover, although our investigation moves beyond the common practice of using either undergraduates or crowdsourced participants for our experiments, MBA and Executive MBA students and online seminar participants may not be a representative sample of the population of venture capitalists, potentially limiting the generalizability of our research.

Our research has zoomed in on the role of information inference as an underlying mechanism explaining the effect of voting thresholds on voting behavior. Whereas our article offers considerable evidence in support of this mechanism, there could certainly be others at play in addition. We explored one alternative explanation—perceived pivotality—in Study 2C and found no support for it, but the lack of a statistically significant effect of course does not establish the absence of an effect, so future research might use other approaches to further examine perceived pivotality while also broadening the scope and consider others. Perceived accountability might be one plausible candidate, considering that a higher threshold may translate into a diffusion of responsibility (O'Connor 1997), which may make actors feel more comfortable voting in favor of a risky project when the threshold is high.

We also urge future research to tease out additional theoretical contingencies that condition the link between voting thresholds and voting behavior. Our investigation highlights the important role of the level of private information, but future research should venture out to establish additional moderators. For instance, even though we found no evidence for perceived pivotality as a mediating mechanism (Study 2C), this factor could plausibly play a relevant role as a moderator: actors may invest more cognitive resources in information inference when they believe it is likely they will affect the vote, which should strengthen the proposed threshold effect. In addition, future research may explore how characteristics of the group of organizational members (e.g., the diversity of the group, fault lines between organizational members, interaction routines) may affect the linkage between voting structure and behavior.

We also encourage future research to examine additional outcomes of alternative voting structures. A particularly promising avenue is to examine the effect of alternative voting thresholds on selection accuracy—that is, the frequency of errors of omission and commission at both the individual and organizational level (Csaszar 2013, Keum and See 2017). Ideally, actors will want to select those alternatives that will help the organization succeed while staying away from those that are likely to fail, thus avoiding under- and overinvestment. Supplementary analyses (which are available upon request) indicate that higher voting thresholds reduce individuals' tendencies to make errors of omission while increasing their tendency to make errors of commission. As a result, voting thresholds appear to have important implications for an organization's level of under- and overinvestment. Ideally, future work will track the causal chain from the adopted voting threshold via individuals' tendency to vote yes or no to organizational errors of omission and commission—and ultimately to organizational performance. Along similar lines, we see great value in exploring the relationship between voting thresholds and aspirations, adding to our knowledge of the antecedents to organizational aspirations (e.g., Keum and Eggers 2018).

For all of these reasons, we hope that our study will spark further research that expands on our findings. Whereas we see significant opportunity for further experimental research, there is also a clear need for studies using complementary methods in order to shed more light on the complex and dynamic process through which voting unfolds in organizations. Most notably, we see much promise in accessing new archival data sources that enable investigations of aggregation structures' cross-level effects. For example, to coordinate their voting, organizations rely on professional service firms such as Qualtrics or Slack. Gaining access to these firms' data would allow a study of cross-level effects in a wide population of organizations. Other research may be able to leverage variance in voting thresholds across decisions within the same organization.

## Concluding Remarks

This article offers valuable new insights into how aggregation structures shape information inference and voting behavior—and more broadly, decision making—in organizations. Most prior research on organizational aggregation structures focused on the bottom-up process of transforming the votes of individual agents into an organizational decision while taking individual voting behavior as a given. By contrast, we point to the top-down process through which aggregation structures go far beyond merely combining the votes of individual agents and instead play an active role in molding them. Individual agents assume center stage in this line of inquiry that the current investigation aims to bolster, thus laying further groundwork for a microfoundational agenda of organizational design research that considers structural and individual dynamics simultaneously in order to account for their interactions.

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## Endnotes

[1] In this paper, we use the terms "organizational members," "committee members," "decision makers," "actors," and "agents" interchangeably to refer to the individuals participating in the organizational vote.

[2] We follow Phadnis et al. (2015, p. 1402) in defining strategic decisions as those that deal "with the long-term allocation of existing resources and the development of new ones essential to assure the continued health and future growth of the enterprise".

[3] Manual inspection of participants' responses across the nine trials failed to reveal any discernable order effects.

[4] This scoring scheme was meant to reflect the fact that "good" investments in successful ventures tend to overcompensate venture capitalists for their "bad" investments in flops (e.g., Gompers and Lerner 2004).

[5] The comprehension question was: "Imagine you turn out to be the only one in your team who votes in favor of investing in a specific venture, but all other members of your team voted no. Will your team then invest in that venture?" The correct response differed between conditions. We also ran the analyses excluding those seven participants who either answered this question incorrectly or left it unanswered (i.e., with $n$ = 133); the results were substantively similar.

[6] See https://osf.io/gfc26/.

[7] To demonstrate robustness, we also (1) ran a Wilcoxon-Mann-Whitney test and (2) transformed the data from wide to long to estimate a random intercept logistic regression with participant as the clustering variable (Rabe-Hesketh and Skrondal 2012). The results of these analyses are consistent with those of the Poisson regression (please see Online Appendix E).

[8] See https://osf.io/rjc8x/.

[9] See https://osf.io/bnvmp/.

[10] See https://osf.io/gcpw7/.

[11] Results for the threshold effect are substantially similar when retaining these 165 responses.

[12] See https://osf.io/txkqp/.

[13] See https://osf.io/btvd2/.

[14] See https://osf.io/982ws/.

[15] See https://osf.io/c7b3s/.

[16] We thank one of our anonymous reviewers for sharing this intriguing idea.

[17] See https://osf.io/p5ncz/.

[18] The measures collected from participants were also identical across studies, with the only exception being that we also included a risk attitude measure in Study 3 (as explained further later) and obtained sex and age from student records (rather than through the posttask questionnaire).

[19] The comprehension question was the same as in Study 1A, and results remained virtually unchanged when dropping the four respondents who provided an incorrect response to this question. Likewise, results are very similar to those reported in the paper when including a control for team size in the analyses.

[20] See https://osf.io/tjxqw/.

[21] One participant was mistakenly provided with materials for the other study condition than the participant's teammates. Whereas this did not affect the individual-level analyses reported previously, it precluded us from team-level aggregation, so we omitted this particular team from the post hoc analyses.

[22] See https://osf.io/td42z/.

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