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CORPORATE GROUP DECISIONS: A BEHAVIORAL APPROACH

Important organizational decisions are commonly made within groups. Within financial institutions, it is not rare for credit concessions to be decided by committees. In the government sphere, fundamental decisions, such as defining the economy's primary interest rate, are also made in collegiate. In large private companies, the board of directors is at the top of the organizational hierarchy and has the final word on investment strategies, financing, and mergers and acquisitions. However, the peculiarities of the group decision process are widely ignored in finance literature, which usually considers the group as if it were an individual. For example, studies in the field of behavioral corporate finance emphasize the cognitive processes and biases of the individual decision maker, but pay little attention to how these processes interact to make a group decision (for a literature review, see Baker & Wurgler, 2013). In this essay, I present, in a concise, selective manner, the current state of the emerging multidisciplinary discussion on the decision process in small groups and emphasize its behavioral aspects. First, I cover the advantages and difficulties of the group decision compared with the individual decision. Then, I present recent contributions indicating that the quality of group decisions depends on the context and on how small changes in the decision environment can have important consequences.

THE GROUP AND THE INDIVIDUAL

In a recent review of the literature on experimental psychology and related areas, Tindale and Kluwe (2015) show that, in many contexts, group decisions yield better results than decisions made by individuals alone. Groups have an easier time finding correct solutions for problems. They generate more precise forecasts and more creative ideas. They have better results in negotiations and academic tests. The contracting decisions made are superior, and information is recovered more precisely (i.e., they have a "collective memory" superior to individual memory).

One of the oldest and most consolidated research lines in this field investigates the phenomena of "wisdom of crowds," concluding that groups are efficient mechanisms for aggregating individual estimates and opinions when the members do not interact with each other. For example, Ariely et al. (2000) show that, under certain statistic conditions, the mean estimate from a group will always be better than the individual estimate of any of its members. This argument is supported by many empirical studies conducted in realistic conditions.

The social nature of the decision is probably an adaptive response to the conditions that shaped the evolution of life in society. The group decision process may have contributed to reducing individual cognitive limitations, and thus increased the availability of resources to everyone. Following this line, Hastie and Kameda (2005) simulated the choice of appropriate hunting sites by hunter–gatherer groups. Comparing different alternative decisions, the authors reported that simple majority/plurality rules (e.g., choosing the hunting site with the most votes among the group's members)

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result in great performance and require fewer cognitive resources, in addition to consistently overcoming the performance of rules based on the best decision maker. Some studies suggest that similar processes may also benefit other species. For example, Kameda, Wisdom, Toyokawa, and Inukai (2012) reported that bees apparently choose places to build their beehives based on majority/plurality rules.

Unfortunately, good performance of group decisions in real life is not guaranteed. There is consistent documentation of anomalies and dysfunctions in collective decisions, in both experimental contexts and case studies of highly important real decisions (e.g., the committee decision prior to the Challenger space shuttle explosion). For example, in many experimental contexts, groups tend to make decisions that are more ethically questionable than those of individuals (Nikolova, Lamberton, & Coleman, 2017). Other experiments show a polarization effect that leads groups to make more extreme decisions (more conservative or riskier) than their members would make individually (Bainbridge, 2002).

The causes of failures in collegial decisions reported in the literature are varied and controversial. Tindale, Smith, Dykema-Engblade, and Kluwe (2012) argued that the same group decision processes may lead to decisions that are better or worse than those made individually. The authors focus on the effects of two types of social sharing: preference sharing and task representations sharing. The first refers to the degree of alignment of group members regarding preferences for decision alternatives, while the second refers to the degree of sharing of any concepts, norms, perspectives, or cognitive processes relevant to a given task or situation (e.g., procedures used to find the "optimal" alternative among those considered). Tindale et al. (2012) investigated experimentally whether group decisions are worse than the average individual decision when the representations of tasks shared by group members are biased—for example, when the shared model used to process the information and rank alternatives is inappropriate for the problem in question. In such contexts, group discussions tend to exacerbate, rather than mitigate, individual biases and cognitive limits. For example, Tindale and Kluwe (2015) reviewed studies in which the distortions of decisions associated with some of the individual biases discussed in Kahneman, Slovic, and Tversky (1982) have been found to be greater in groups than in individuals.

Dysfunctions in group decision-making processes have also been associated with (excessive) compliance with the group. Raafat, Chater, and Frith (2009) distinguished two forms of thought transmission between members of a group: automatic contagion and rational deliberation. An example of the latter approach is the informational cascades theory, in which agents with imperfect information can rationally ignore their own information (Bikhchandani, Hirshleifer, & Welch, 1992). As an illustration, suppose that, by deliberating on a major strategic investment over which there is considerable uncertainty, the first three board members to come forward, one after another, approve the project. In this case, the theory predicts that the fourth board member will be inclined to approve the project, partially ignoring his own information. Although in this model the updating of judgment is rational, using Bayes' rule to incorporate the opinion of the colleagues who manifested themselves first, the informational cascade can cause inefficiency. This happens because the members of the group influenced by the opinion revealed by their colleagues partly ignore their own information, which could be potentially relevant to the collective decision.

Automatic contagion approaches look at the same phenomenon through the perspective of nonconscious processes. For example, Aydogan, Jobst, D'Ardenne, Müller, and Kocher (2017) induced compliance in group members by making experimental subjects inhale oxytocin in order to study ethical behavior in different environments. The authors show that inhaling oxytocin, a hormone associated with prosocial behavior, increases intragroup compliance. An increase in compliance, in turn, causes a reduction in group honesty in competitive environments. This evidence agrees with the results reported by Nikolova et al. (2017): groups tend to behave more dishonestly when the need for bonding among their members is greater.

A negative manifestation of excessive group compliance is the phenomenon known as groupthink, proposed by Janis (1972). It is associated with disastrous decisions made by councils and committees (e.g., the attempted invasion of Cuba supported by the US government in the 1960s). Distortions in decision making associated with groupthink include insufficient information collection or sharing, self-criticism failures, and biased estimates of risks, costs, benefits, and ethical implications of decisions. Although its original formulation is theoretically questioned and the empirical evidence of the phenomenon is controversial, groupthink remains one of the most influential ideas in the academic and practical debate on the difficulties of collegial decision (Baron, 2005).

DECISION ARCHITECTURE AND DEBIASING

One lesson from the preceding discussion is that the quality of group decisions, whether in absolute terms or when comparing with individual decisions, depends on the context in which they

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are made. Recent multidisciplinary literature in the behavioral field addresses this issue, focusing on elements comprising what is generally termed "decision architecture."

The current state of part of this literature is presented by Soll, Milkman, and Payne (2015). These authors focus on different "debiasing" procedures applicable to individual and/or group decision making. Soll et al. (2015) organize the various contributions into two approaches. The first proposes mechanisms to modify the decision maker, for example, through training (e.g., financial education); and the second focuses on modifying the decision-making environment. The second approach is more important to the discussion herein. It closely relates to the concept of nudging, which is understood as an intervention in the context of decision making using principles of psychology to influence behavior as desired, but without significantly restricting choices or changing incentives (Thaler & Sunstein, 2008).

Available evidence suggests that a critical mediator of the quality of group decision-making is the degree of information sharing. Following this line, Tindale and Kluwe (2015) suggested several mechanisms to increase the likelihood that all relevant information is shared during group discussions. These mechanisms include the establishment of formal rules and procedures for sharing information, which may involve encouraging the group leader (e.g., chairman of the Board) to exchange information with the meeting participants. It may also be important to instruct group members not to share their initial impressions or preferences early in the discussions, and thus avoid informational cascades. The main message of this line of investigation is that the focus should be on the information than the preferences of the group members, at least at the beginning of the meeting; further, the emphasis should be on the accuracy and correctness of the decision, not on seeking consensus. In this context, distributing the informational burden by delegating responsibility for specific types of information to different members of the group may also help.

Other mechanisms that contribute to improving the quality of the decision and reducing the scope for distortions, such as groupthink, involve expanding the decision-making framework to consider more alternatives and contrary evidence (Larrick, 2009). One such strategy is called premortem, a procedure that begins with the assumption that the group approved a proposal on the agenda, but its implementation was unsuccessful. Then, each member contributes by describing the precise causes of the hypothetical failure. Finally, the insights resulting from the exercise are used to refine the proposal and give feedback to the discussion. Premortem is included in a class of strategies known as "prospective hindsight," which shows increasing practical and academic acceptance (Soll et al., 2015). In the same vein, interruptions in discussions can be scheduled to elicit more thoughts about the object in question and reduce the likelihood of rash judgments. Such a strategy is especially useful in making important and infrequent decisions.

It is also possible to mitigate the deleterious effects of group bias by encouraging the integration of the opinion of all members, and perhaps outsiders, to take advantage of the "wisdom of the crowds," especially when the decision involves quantitative estimates (e.g., to rank strategic investment alternatives in order of priority). A refinement of this idea involves the aggregation (e.g., mean or median) of estimates produced by the same individuals at different times to mitigate biases associated with the temporal context of the decision. Such biases are more likely when estimates are produced under conditions of low decision-making readiness—for example, under the influence of intense emotional states, fatigue, or time pressure (Soll et al., 2015).

Ordóñez, Benson, and Pittarello's (2015) review of the literature on the effects of time pressure on decision-making processes states that some time pressure can have beneficial effects, helping to avoid procrastination and paralysis due to excessive options. This, in turn, increases the decision-makers' productivity. Conversely, scientific evidence clearly associates severe time pressure with reduced creativity, increased salience of negative information, reduced analytical processing, consideration of fewer options/attributes, reduced cognitive processes related to consequences, and increased automatic affective decision processes, which can lead to increased intragroup compliance and groupthink. Moreover, there is evidence to show that time pressure is positively associated with the use of stereotypes in trading contexts and unethical behavior of groups, especially when such behavior is easily justifiable (Ordóñez et al., 2015). Therefore, if the decision requires empathy with people outside the group or has important ethical implications, it may be crucial to design the process to prevent it from being made under severe time pressure.

Finally, the most widespread antidote against social bias and poor performance of groups is increasing diversity—that is, including members capable of contributing to the decision-making process from different points of view associated with differences in training and prior knowledge, gender, or ethnicity, for example. Theoretical arguments and experimental evidence in this area suggest that diverse groups make more accurate decisions (Davis-Stober, Budescu, Dana, & Broomell, 2014; Tindale & Kluwe, 2015). In the organizational and corporate governance literature, increasing diversity has been recommended as a mechanism capable of producing better decisions in highly complex

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environments. For example, Torchia, Calabrò, and Morner (2015) show that "deep diversity" (i.e., background and personality differences) is associated with greater creativity and "cognitive conflict" (i.e., contributions from several perspectives and mental models) on the boards of Norwegian companies. Similarly, the results of the experiment reported by Mok and Morris (2010) suggest that individuals with conflicting cultural identities (e.g., subgroups of immigrants or individuals with relevant experiences in distinct cultures) are more resistant to consensus when they are incorrect, reducing the risk of groupthink.

Available evidence suggests that compliance biases can be mitigated by gender diversity. For example, Nikolova and Lamberton (2016) show that, under different experimental conditions, pairs of males tend to make more extreme decisions than individuals and pairs of females or mixed pairs. Gender diversity, in this context, may reduce over-compliance to male norms that prioritize extremes, which may help explain why groups often make more extreme decisions than individuals (Bainbridge, 2002).

Conversely, similarly to other solutions for group decision problems, increasing diversity is not a panacea; its effectiveness depends on the context and how it is implemented. For example, Harvey, Currall, and Hammer (2017) describe, in a thorough qualitative study, the internal dynamics of a board whose meetings they monitored in loco for five years. The authors report that a change in the composition of the group in order to increase the diversity of perspectives and interests apparently led to a dysfunctional process called "decision diversion." In this negative dynamic, the objectives related to the group's effective performance were replaced by the negotiation of interests of its subgroups, resulting in the deterioration of the quality of the decisions. Such dysfunctions may be responsible for the ambiguous evidence on the performance of heterogeneous groups. Therefore, increasing diversity may benefit or undermine group performance, depending on a delicate balance between forces that promote creative divergence and forces that promote dysfunctional conflicts. Following this line, Homan, Knippenberg, Kleef, and Dreu (2007) show that, under different experimental conditions, heterogeneous groups perform better when their components are trained and convinced about the positive value of diversity when making group decisions.

CONCLUDING REMARKS

This essay is based on multidisciplinary literature that investigates patterns of systematic interaction in small groups resulting from rational and non-rational cognitive processes. Scientific evidence shows that these patterns of interaction influence the quality of group decisions and are influenced by the decision-making environment.

The discussion above suggests that interventions on "decision architecture" can help prevent dysfunctions and optimize collegial decision-making processes—among them, strategies that induce greater information sharing and use of the contribution of each group member, and strategies focused on the accuracy of the decision, production of more alternatives, and consideration of contrary evidence. However, what works in one case may be counterproductive in another, as suggested by the debate on the pros and cons of intragroup diversity. Further studies may refine knowledge about the conditioning factors of the effectiveness of different strategies, as well as explore new possibilities. For example, little is known about the potential effects of new communication technologies on the quality of the collegial decision (for a discussion of the potential impacts of technology, see Tindale & Kluwe, 2015).

In descriptive or prescriptive corporate finance and governance studies, there is room to investigate how group dynamics influence strategic decisions and firm performance, whether by adopting a descriptive or prescriptive perspective. It seems important to go beyond the superficial consideration of decision-making structures (e.g., basic composition of the Board of Directors or CEO characteristics) and truly open the "black box" of the senior management collegiate bodies.

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