

Do independent boards pay attention to corporate sustainability? Gender diversity can make a difference

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Do Independent Boards Pay Attention to Corporate Sustainability? Gender Diversity

Can Make a Difference.

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Abstract

Purpose: Using the attention-based view, this paper aims to examine whether and how board composition might influence the allocation of board attention to corporate sustainability.

Study design/methodology/approach: This is a conceptual paper that uses a theoretical perspective pointing to the importance of generating a board composition that might benefit

both business case framing and paradoxical framing, a typology introduced in managerial cognition literature to explain managerial decision making.

Findings: The conclusions emerging from the reviewed literature suggest that boards that have realized an independence of perspective focus on shareholder profit maximization at the expense of considerations of corporate sustainability. It emerges that women directors who have adopted paradoxical framing can enable boards to consider not only economic but also environmental and social issues of sustainability during board decision making. Further, it is noted that the effect of gender diversity on allocation of board attention to corporate sustainability is contingent upon contextual (board openness) and structural (chairperson leadership) factors which facilitate social interactions inside boardrooms.

Originality/value: By considering alternative cognitive frames as well as social interactions, our propositions contribute to a better understanding of the allocation of board attention regarding ambiguous sustainability issues.

Key words: Board attention, cognitive frames, board diversity

INTRODUCTION

The corporate scandals surrounding Enron, Global Crossing, WorldCom, and Adelphia, as well as the financial crises of the 21st century, resulted in the restructuring of boards for higher levels of board independence (Razaee et al., 2003; Robins, 2006; Lenssen et al., 2014). Board independence refers to the degree to which a board is comprised of non-executive directors (NEDs) not affiliated with the firm and/or management (Van den Berghe and Baelden, 2005). Increasing board independence results in replacing executive directors with NEDs. However, this change results in male-dominated boards whose members have similar values, functional backgrounds, and professional experience and reputations for safeguarding shareholder profit maximization (Westphal and Zajac, 2013). Furthermore, studies propose a critical view on how well boards' independent directors actually advised big banks prior to the crisis (Adams, 2012). This theoretical paper examines whether board independence is still considered as a best corporate governance practice amidst the increasing pressures on boards to make decisions that account for corporate sustainability (Aras and Crowther, 2008, 2016).

Sustainability has become prevalent in both the international and corporate performance discourses (Aras and Crowther, 2016; Lacy and Hayward, 2011; White, 2009). Corporate sustainability is a substantial corporate issue at the board level and "refers to a company's activities ... demonstrating the inclusion of social and environmental concerns in business operations and in interactions with stakeholders" (Van Marrewijk and Werre, 2003, p.107). Considering the sustainability perspective, boards need to focus on the economic, environmental, and social outcomes of their decisions, which are achieved simultaneously during board discussions (Fernando, 2012; Gao and Bansal, 2013; Padin et al., 2016). Additionally, this implies that decisions of corporate sustainability require boards to work collectively to harmonize different perspectives on economic, environmental, and social issues.

Prior research has linked board compositional factors (board independence) with certain measures of corporate sustainability, including corporate social responsibility (CSR) and environmental performance (Liao et al., 2018; Post et al., 2015). However, these studies do not offer a deeper understanding of how board compositional factors might impact allocation of board attention in corporate sustainability, which might explain the mixed results earlier studies have reported (Rao and Tilt, 2016).

Applying an attention-based view (ABV) and drawing on the literature on managerial cognition (Hahn et al., 2014), we develop a cognitive framing of the allocation of board attention in corporate sustainability to theoretically explain exactly how board independence impacts allocation of board attention on corporate sustainability. The ABV theory analyzes how decision makers allocate their attention to issues in order to understand the outputs and behavior of an organization. ABV posits that decision makers regulate the firm's attention through their cognitive frames which reflect the specific skills, knowledge, experience, beliefs, and values they bring to the firm (Ocasio, 1997). Hahn et al. (2014) theoretically introduce a taxonomy on the cognitive frames of top managers—business case framing and paradoxical framing—and argue that different cognitive frames explain different managerial decisions regarding sustainability issues. Additionally, Hahn et al. (2014) specify certain characteristics of each frame to clearly differentiate them from each other. The business case frame eliminates tensions among the three aspects of corporate sustainability and simply argues for an alignment of environmental and social outcomes with economic outcomes (Hanh et al., 2014). The paradoxical frame claims that corporations could concurrently meet a few requests that and the ability to possess this level of attentiveness is essential for lasting endurance (Smith and Lewis, 2011). The paradoxical frame accepts tensions and accommodates conflicting yet interrelated economic, environmental, and social concerns rather than eliminating them (Hahn et al., 2014).

We argue that such differences are a reflection of the board compositional factors of board independence and gender diversity. Considering the previous studies, we theoretically argue that business case framing might become the dominant thinking on independent boards comprised of male NEDs who have certain backgrounds (e.g., finance, accounting) and a reputation for safeguarding shareholder interests (Hillman et al., 2002). On the contrary, we theoretically argue that paradoxical thinking might be used in boards that are comprised of women directors who have different functional backgrounds and values from their male counterparts (e.g., members who are ethical, risk averse, and collaborative) (Hillman et al., 2002; Huse and Solberg, 2006). Accordingly, we propose that the more a board is characterized by independence, the more that board will pay attention to the economic aspects of a prevailing decision problem and face the risk of neglecting environmental and social issues of sustainability. We further propose that gender diversity increases the allocation of board attention to environmental and social aspects of the decision problem at hand, compensating for the risk faced due to board independence.

This article first introduces ABV and reviews the relevant literature to highlight the need for a more socialized view of ABV. Next, we develop the theoretical link between board independence and business case thinking on the one hand and gender diversity and paradoxical thinking on the other. Later on, we develop propositions for how board independence and board gender diversity influence the allocation of attention in corporate sustainability, as well as on the contextual and structural factors that moderate these effects. The study concludes with a discussion of key implications and suggestions for future research.

Attention-Based View

The central argument of ABV “is that to explain firm behavior is to explain how firms distribute and regulate the attention of their decision-makers” (Ocasio, 1997, p.188). Therefore, organizational attention generates a firm’s strategic agenda—the issues and action alternatives that guide the allocation and deployment of resources. At the individual level, ABV posits that organizational attention is a reflection of decision makers’ cognitive frames which reflect the specific skills, knowledge, experience, beliefs, and values they bring to the firm (Ocasio, 1997). ABV postulates that what decision makers focus their attention on depends on three principles. The first is focused attention, or the notion that decision makers attend to issues based on the focus of their attention. The second is situated attention, where the attention of decision makers is situated in firms’ procedural and communication channels such as board meetings whose context and degree of formality or informality shape the allocation of the directors’ attention. The third is structural distribution of attention, which is based on the idea that controls such as rules, formal committee structure, and meeting agendas, used inclusively, affect the focus of an actor’s attention (Ocasio, 1997).

Socialized View of ABV

ABV literature review reveals that scholars have focused on investigating the structural determinants of attention while neglecting the individual and contextual determinants as noted by Ocasio et al. (2018, p.156), who writes, “... most research on the ABV remains primarily structural.” For example, previous studies examined how characteristics of the industry such as the level of turbulence velocity and organizational situational factors including firm performance, firm reputation, and network relationships impact organizational attention. To a lesser degree, prior research explored how values and/or demographics of top management teams and contextual factors such as incentive systems influence the attention allocation of top managers (Cho and Hambrick, 2006). ABV research applying this traditional approach focuses

on exploring the impact of structural factors on the allocation of attention. Therefore, the traditional approach has remained under-socialized because cognitive processes and how interactions between players might impact the allocation of attention have not been taken into consideration (Cho and Hambrick, 2006).

There is, however, a growing awareness that the under-socialized view of ABV is limited in explaining how attention dynamics, or social interactions between players, impacts the allocation of attention (Ocasio et al., 2017). Ocasio et al. (2018) emphasize that communication practices, vocabularies, rhetorical tactics, and talk and text play an important role in shaping organizational attention in strategic change. Scholars recommend future investigations on the effects of cognitive or social processes on allocation of attention on upper echelons (Cho and Hambrick, 2006).

In the board context, use of ABV has revealed interesting insights. On one hand, research is greatly limited with only two studies (Tuggle et al., 2010a, 2010b). Respectively, these two studies provide examples for both the traditional and socialized views of ABV. The traditional view is applied by Tuggle et al. (2010a), who demonstrate that deviation from prior performance (contextual factor) and CEO duality (structural factor) affect the allocation of directors' attention to boards' monitoring tasks. Interestingly, it was Tuggle et al. (2010b) who adopted a socialized view of ABV and demonstrated how tenure variance, industry background heterogeneity, and the proportion of directors with output-oriented backgrounds impact the allocation of directors' attention to entrepreneurial issues and how social categorization processes (subgroupings in the boardroom) moderate these relationships. In this regard, an early support for considering social interactions during the allocation of board attention has come from board context.

This research on board context is a step forward as an emerging research stream. Building on existing literature, our research provides a deeper understanding of the link between

board compositional factors and the allocation of board attention. Additionally, our extended theory of board attention investigates the important effects of contextual and structural factors that affect the social interactions between directors which influence the allocation of board attention. Lastly, while previous studies have focused on efficiency-related outcomes, we link board independence and gender diversity to the allocation of attention in corporate sustainability (Tuggle et al., 2010a, 2010b). Drawing from literature on ABV, managerial cognition, and corporate sustainability, a cognitive framing perspective on corporate sustainability is developed involving two cognitive frames—a business case frame and a paradoxical frame—to explore how differences in cognitive content and structure influence the scanning, interpreting, and attention choice stages of the attention allocation process.

Directors' Different Cognitive Frames and Boards' Attention in Corporate Sustainability

Corporate sustainability is surrounded by a multitude of demands and objectives at organizational and societal levels that are “inextricably connected and internally interdependent” (Bansal, 2002, p.123). From the perspective of sustainability, boards need to allocate attention to and address economic, environmental, and social outcomes, which are achieved simultaneously during board discussions. Board attention allocation in corporate sustainability produces an attention allocation context with highly ambiguous signals. In such a context, individual cognitive frames determine the limited set of elements that draw directors' energy, effort, and mindfulness (Ocasio, 1997). It is critical, therefore, to understand the process of attention allocation at the individual and board level and the role of cognitive frames that directors use to cognitively process these ambiguities.

Boards' Allocation of Attention

The ABV is an information processing perspective in which attention is the critical limit on the information-processing capacity of the decision-making groups (Ocasio et al., 2018). Information processing occurs at two levels: at the individual level, information processing produces ideas and decisions, and judgments are based on group members' individual knowledge and skills. At the group level, individual contributions are shared and processed to produce a "coherent, feasible, sensible, and, if needed, creative group judgment or decision, reflecting group-level information processing" (De Dreu et al., 2008, p. 28).

Similarly, although neglected in ABV theorizing, it can be inferred that to realize the impacts of attention at the individual level on the allocation of attention at group level during the board discussion, a decision maker needs to share both "(a) issues – the available repertoire of categories for making sense of the environment: problems, opportunities, and threats; and (b) answers – the available repertoire of action alternatives: proposals, routines, projects, programs, and procedures" (Ocasio, 1997, p.189). In turn, these issues are processed at the board level to decide which issues to draw attention to. Therefore, the effects of a director on the allocation of board attention depends on their cognitive frames, social interactions between directors, and the mechanisms that shape and regulate these interactions inside boardrooms.

The boards' attention allocation is divided into three phases: scanning, interpreting, and attention choice (Thomas et al., 1993).

i. Scanning phase

The scanning phase involves information gathering shaped by the director's cognitive frames. A cognitive frame is a "mental template that individuals impose on an information environment to give it form and meaning" (Walsh, 1995, p. 281). As human rationality is bounded, directors do not achieve a complete understanding of strategic situations but use

cognitive frames to develop subjective representations of the environment that drive their firm's strategic decisions and actions (Rindova, 1999).

Cognitive framing is based on past learning and categorization and is thus self-referential and retrospective, resulting in a confirmatory bias that directs attention towards signals that fit existing frames and away from signals that are inconsistent with these frames (Hahn et al., 2014). Hence, cognitive framing does limit the directors' understanding of a situation as it "may encourage stereotypic thinking; subvert controlled information processing; discourage disconfirmation of the existing knowledge structure; and inhibit creative problem solving" (Walsh, 1995, p. 282). From this perspective, since cognitive frames are acquired and learned, a director's cognitive framing can be thought to reflect his/her educational, functional, and professional backgrounds (Hambrick, 2007).

ii. Interpretation Phase

This is the act of carving out meaning from information that is selectively collected. The interpretation phase is core in the identification of issues and generating answers. Once directors interpret ambiguous sustainability issues based on their cognitive frames, they allocate attention on that basis.

iii. Attention Choice Phase

The presence of directors with different cognitive frames may lead to different topics of attention. If this is the case, attention allocation at board level turns into a negotiation. During board discussions, individually collected information is processed and different perspectives are evaluated to reach a consensus. Consequently, the allocation of board attention reflects a

socialized view of ABV, and the three phases demonstrate the importance of board composition and the social interactions inside the boardrooms in understanding and explaining the choice of a board with regard to the allocation of attention in corporate sustainability.

Business Case and Paradoxical Frames

Hahn et al., (2014) specify two frames based on two approaches managers adopt to deal with ambiguity: the business case frame and the paradoxical frame. The business case frame is based on an alignment logic and reflects the “belief in a unitary truth [which] means inconsistencies cannot fundamentally coexist” (Smith and Tushman, 2005, p. 525). It holds that managers deal with ambiguities by trying to eliminate tensions and creating contingencies that reconcile any inconsistencies. Consequently, the business case frame proposes an alignment of environmental and social outcomes with the economic outcome (Hahn et al., 2014).

Paradoxical frames are described as “mental templates in which managers recognize and accept the simultaneous existence of contradictory forces” (Smith and Tushman, 2005, p. 526). The content of the paradoxical frame is characterized by the juxtaposition of multiple competing economic, environmental, and social attributes to make sense of ambiguous sustainability issues (Hahn et al., 2014). Use of paradoxical thinking enables directors to notice and embrace competing yet interrelated economic, environmental, and social concerns that reside at different levels and operate in different logics and time frames (Gao and Bansal, 2013). However, since the paradoxical frame does not systematically emphasize one sustainability dimension over any other, it does not offer unequivocal guidance on which aspect of a sustainability issue to prioritize (Hahn et al., 2014).

The differences in content and underlying logic between the two frames influence their structure, both with regard to the number of salient frame elements (i.e., the degree of

differentiation) and the complexity and multitude of connections between these elements (i.e., the degree of integration) (Hahn et al., 2014). Through the representation of the endpoints of a continuum, the two ideal-type frames represent an accentuated abstraction of the relationship between economic, environmental, and social aspects of sustainability as either aligning the environmental and social aspects with the economic dimension (business case frame) or accepting and accommodating the interrelated yet contradictory nature of all three aspects (paradoxical frame).

We argue that certain board structures (compositional factors) might be more likely than others to reflect those alternative cognitive frames in boardrooms and, therefore, might be an important determinant of allocation of board attention in corporate sustainability. With regard to the three aspects of corporate sustainability, the presence of both frames might be desirable in boardrooms, but the degree of spread of each frame in boardrooms might represent the endpoints of the continuum explained above.

Board Attention in Corporate Sustainability

This research focuses on the two most popular compositional factors—board independence and gender diversity—to propose how different cognitive frames result in different attention choices in corporate sustainability. Several studies recognize that boards are still an “old boys’ club” where decision making is shaped by male directors elected by male CEOs (Gabaldon et al., 2018). The members of old boys’ clubs share similar educational, functional, and professional experiences that are highly salient among directors. The shift towards a more gender-diverse board has been demonstrated by businesses seeking to improve their sustainability and overall performance (EY, 2021). Also, insights from Deloitte (2021) show that gender seems to be significantly outperforming race as a factor in new board membership. White women have

increased their board seats in Fortune 500 businesses more than any other demographic, increasing by 21% after 2018.

Effective boards are viewed as independent boards where a majority of male directors are NEDs with no affiliation with the firm or the management. Considering board independence, board effectiveness is the effective monitoring of managerial decisions where shareholder profit maximization is secured while top managers' self-interests are minimized (Hillman and Dalziel, 2003). Therefore, the independent directors develop a business case perspective rather than paradoxical thinking, as they would most likely prioritize efficiency concerns and objectives during their board tenure.

On the contrary, women directors are expected to use paradoxical thinking due to their different functional backgrounds and different values compared to their male counterparts (Huse and Solberg, 2006). Hillman et al. (2002) show that while a great majority of male directors come from a business background, a majority of female directors come from banking, marketing, law, and public relations. Women directors are more likely to report having strengths in marketing and sales (Groysberg and Bell, 2013).

Despite differences in their functional backgrounds, female directors value interdependence, benevolence, and tolerance (Adams and Funk, 2012). Additionally, they are likely to consider corporate sustainability development issues and thus help elicit multiple viewpoints and deliberativeness in decision making (Post and Byron, 2015). Bart and McQueen (2013) suggest that female board members are more empathetic than men and more likely to accept others' viewpoints. In a study in which board directors completed a test of moral reasoning, Bart and McQueen (2013) found that female directors were more likely to use a cooperative decision-making approach that resulted in fair decisions when competing interests were at stake; in contrast, male directors were more likely to make "decisions using rules, regulations and traditional ways of doing business" (p. 97).

Moreover, meta-analytic evidence suggests that, compared to men, women tend to apply stricter ethical standards and are more likely to judge questionable business practices as unethical (Pan and Sparks, 2012). Others suggest that women tend to be more risk averse, which manifests in an increased motivation to fulfil the boards' obligatory role to provide fiduciary oversight to avoid the legal, ethical, and reputational risks of not doing so (Post and Byron, 2015). These value differences suggest that female directors embrace their fiduciary responsibility more strongly than male directors by putting in extra effort. Inferences from these studies reveal that when confronted with ambiguities of corporate sustainability, women directors are open to considering all three aspects of corporate sustainability related to financial performance.

Directors exert different effects of board independence and gender diversity on the scanning phase of allocation of board attention in corporate sustainability. The directors with a business case frame will not fully notice the multitude of sustainability issues. While the business case frame limits the breadth of scanning, it enables directors to approach decision situations with known objectives. The clear focus on the business relevance of sustainability issues allows directors to employ highly formalized search routines to collect detailed information.

In contrast, since the paradoxical frame does not emphasize one sustainability dimension over any other, it fails to offer direction for information collection. A female director with a paradoxical frame will gather diverse information on sustainability issues irrespective of immediate financial implications and consider opinions from different stakeholders. Hence, the following propositions are introduced:

Proposition 1a: Directors with a more business case-oriented cognitive frame are likely to allocate in-depth attention to a narrow range of sustainability issues during scanning.

Proposition 1b: Board independence is negatively related to the breadth of attention in corporate sustainability.

Proposition 2a: Directors with a paradoxical cognitive frame are more likely to notice a wide range of aspects of numerous sustainability issues during scanning.

Proposition 2b: Gender diversity is positively related to the breadth of attention in corporate sustainability, such that all three aspects will draw attention during scanning.

Female directors have different backgrounds and values compared to their male counterparts (Post and Byron, 2015). Moreover, female directors bring different experiences and knowledge to the board by virtue of their path to directorships: they are less likely to have been CEOs or COOs and are more likely to come from non-business backgrounds (Hillman et al., 2002). Research on differences between female and male directors reveals that female directors possess a diverse set of non-work interests including philanthropy and community service (Groysberg and Bell, 2013). Indeed, research shows that gender diversity increases the likelihood that firms will become involved in CSR activities (Rao and Tilt, 2016). For instance, women demonstrate stronger environmental attitudes and commitment to green entrepreneurship programs than males, and more evidence suggests that female directors influence different aspects of CSR. Following the above discussion, the following propositions are made:

Proposition 3: Board independence is positively related to the number of economic issues discussed during board meetings with regard to corporate sustainability.

Proposition 4: Gender diversity is positively related to the number of social and environmental issues discussed during board meetings with regard to corporate sustainability.

Allocation of Board Attention in Corporate Sustainability: Contextual and Structural Factors

Considering the best practices and national regulations that increase numerical representation of women on boards, two different frames co-exist in boards. The final phase of attention choice turns into a negotiation arena discussing the social and environmental aspects of corporate sustainability. The traditional ABV assumes that directors would freely and openly share personally collected information as well as communicate different perspectives, which are all reflections of their cognitive frames (Ocasio, 1997). In this regard, while ABV stresses the importance of contextual and structural factors on allocation of attention (Ocasio, 1997), it is not the important effects of those factors on social interactions between decision makers that are theorized.

Several studies demonstrate that women directors, as minorities in boardrooms, might be categorized as members of the out-group by dominant male directors, thus limiting their contribution and participation in board activities (Huse and Solberg, 2006). To avoid further social distancing and biased evaluations, minority women directors with paradoxical thinking refrain from sharing their perspectives on corporate sustainability issues. In this regard, due to the dominance of independent directors with business case thinking, boards might pay in-depth attention to efficiency concerns but not environmental and social issues of the same decision-making problem. According to the critical mass hypothesis, group interactions may be influenced by factors such as size. It becomes possible for a subgroup to have some influence on the larger group when it reaches a certain level or has a sufficient number of members (Kanter, 1977). Theory suggests that when there is a critical mass of female board members, the group dynamics will fundamentally shift. However, in this study, the emphasis is on where the board members' attention goes. Also, studies using critical mass theory mainly look at

gender diversity and not other forms of diversity. For those reasons, the ABV theory is more suitable in this paper.

Board Openness: This is widely specified as one of the core aspects of boardroom atmosphere necessary for effective functioning. Sun et al. (2015, p. 364) report, “[openness in the board] means that a board’s decision-making process should recognize distributed knowledge among different stakeholders, especially among marginalized groups such as women directors, and should be open to the participation of people with different experiences and ideas.” Gabrielsson et al. (2007) argue that openness is characterized by board members’ willingness to give advice based on private knowledge, ideas, and points of view and then accepting and recognizing that they may be wrong in their considerations. Previous studies have demonstrated that board openness may enhance women directors’ active participation in decision making and the consequent quality of investment decision making (Kanadlı et al., 2018a). The above discussion yields the following propositions:

Proposition 5a: Board openness will have no effect on the link between board independence and allocation of board attention in corporate sustainability.

Proposition 5b: Board openness will moderate the link between gender diversity and allocation of board attention in corporate sustainability.

Board Leadership: The formal structure of the board is expected to affect the allocation of attention (Ocasio et al., 2018). We identified the separation of the CEO and chairperson positions (non-CEO-duality structure) as a structural factor to influence allocation of board attention in corporate sustainability. While board leadership research provides unfavorable effects of CEO duality on social interactions, the same studies have emphasized the favorable effects of the separation of the CEO and chairperson positions on social interactions in boardrooms (Kakabadse et al., 2018).

In the scope of this study, previous research has indicated the important influence of chairpersons on the social categorization processes women directors face on male-dominated boards such that a non-duality structure enhances women directors' influence on board decisions (Kakabadse et al., 2015; Kanadlı et al., 2018) and the quality of investment decisions (Sun et al., 2015). The chairperson, as the leader of board, may encourage women directors' active participation in board discussions, consequently reducing the silencing effect of out-group categorization.

A non-duality structure impacts the allocation of attention to the economic aspects of corporate sustainability. A powerful male CEO has the incentive to have lighter monitoring by directors on his managerial decisions (Westphal and Zajac, 2013). Accordingly, a CEO who occupies the chairperson position may have incentives to direct board attention away from economic concerns and objectives. Indeed, Tuggle et al. (2010a) indicate that the CEO duality structure leads to a lower allocation of attention to the monitoring of economic concerns and objectives. Following this discussion, the following are proposed:

Proposition 6a: A non-duality structure will moderate the link between board independence and the allocation of board attention in corporate sustainability, such that an increased number of economic issues will be discussed during board meetings.

Proposition 6b: A non-duality structure will moderate the link between gender diversity and the allocation of board attention in corporate sustainability, such that an increased number of environmental and social issues will be discussed during board meetings.

Proposition 7: Independent boards characterized by gender diversity will allocate greater attention to decisions of corporate sustainability where more economic, environmental, and social issues will be discussed.

DISCUSSION

Firms are recognizing that to maintain their competitive positions and legitimacy in society, addressing societal and environmental issues is paramount. Sustainability is a substantial corporate issue that should be addressed at the board level (Aras and Crowther, 2008). To this end, this paper develops an extended attention-based perspective on corporate sustainability.

Previous board research has underlined the importance of directors' cognition in the allocation of board attention to economic issues and objectives (Tuggle et al., 2010a, 2010b). Our study is the first to offer a more fine-grained understanding of the role that directors' cognition plays in the allocation of attention to corporate sustainability that requires simultaneous consideration of economic, social, and environmental issues and objectives. Precisely, we advanced a theoretical understanding of the stance directors take on sustainability issues by proposing how two different cognitive frames affect the allocation of board attention in corporate sustainability. Consequently, we contribute to ABV studies that realize the importance of cognition in exploring the effects of top managers' attention but have neglected to consider the effects of different cognitive frames on managerial decision making. Our cognitive framing perspective enriches the theoretical understanding of other influential cognitive theories such as upper echelons (Hambrick, 2007), information processing (Khanna et al., 2014), and behavioral theory (Torchia et al., 2018) and, hence, inspires future research.

In addition to incorporating different cognitive frames in explaining the allocation of board attention, our second intended contribution is related to the introduction of an extended ABV. As aforementioned, ABV research has mainly directed attention towards exploring the effects of structural factors on the allocation of attention (Ocasio et al., 2018). This traditional view is criticized for being under-socialized and neglecting the consideration of attention dynamics on attention allocation (Cho and Hambrick, 2006). Our theoretical model of directors' attention reflects a socialized view of ABV and suggests the importance of social interactions

in the allocation of attention. Further, our model suggests that how directors distribute their attention and thus shape corporate practices is better understood through investigating the role of cognitive and social interactions between directors. On the other hand, our arguments suggest that contextual and structural factors might have an indirect impact on the allocation of attention through facilitating cognitive and social processes in boardrooms. However, such alternative arguments are yet to be empirically investigated within the ABV framework.

The third theoretical implication of this study connects with the aspects of the debate about board effectiveness. Existing research investigating the effects of both board independence and gender diversity on financial performance has provided mixed results (Tuggle et al., 2010a). Our theory of board attention might provide one explanation for those results. Our model suggests that failures in effective governance might not be related only to a lack of independent directors or directors with different skills, knowledge, and experience in boardrooms (Hillman and Dalziel, 2003). Our theory highlights that it might be simply the fact that a director could allocate attention to only a limited number of issues in an environment of continuous stimuli. Our theory proposes that an independent board is effective in safeguarding shareholders' economic gains at the cost of paying very limited attention to the social and environmental consequences of such acts. Such limited attention would not mean that directors have failed to effectively perform their fiduciary duty, but it still may result in huge economic losses.

We theoretically suggest that increasing the number of women directors on boards would be a safeguard for ensuring that independent boards pay attention to environmental and social aspects. However, to make gender diversity work in favor of corporate sustainability, our theory of board attention proposes the influence of contextual and structural factors in shaping the allocation of attention and demonstrates that directors' attention can be regulated, shaped, and manipulated. The importance of such mechanisms brings one other contribution of this

study to the board effectiveness and board diversity literatures. Board diversity scholars often assume that directors will use their various skills, knowledge, and professional experience to benefit board tasks.

Galbreath (2011) demonstrates that social categorization processes may limit women directors' influence on how well firms address climate change. ABV as well as other cognitive perspectives (e.g., the upper echelons theory) often adopt the same assumption. Yet, our arguments suggest that this is only true when board meetings are situated in a certain context where board structures are in place to encourage active participation in board discussions. Thus, our arguments call into question the baseline assumption that characteristics of directors will uniformly affect the allocation of board attention (Ocasio et al., 2018). Therefore, investigating the mechanisms that manipulate the allocation of board attention is an important but challenging task. We theoretically argue that board openness and chairperson leadership in boardrooms might be two important mechanisms affecting the allocation of board attention by influencing the social categorization processes between directors.

The last theoretical implication of our paper draws attention to board research on sustainability. Several studies indicate the positive effects of board independence and gender diversity on sustainability-related measures such as environmental quality (Galbreath, 2011) and environmental performance (Post et al., 2015). On the other hand, Walls et al. (2012) found no positive association between board gender diversity and environmental performance strengths and only a statistically weak relationship between board gender diversity and environmental performance concerns

One possible explanation of these mixed results is that previous board research on corporate sustainability has stayed rather under-socialized so that the effects of cognitive and social processes in boardrooms on sustainability practices have remained underexplored (Rao and Tilt, 2016). We introduce a novel cognitive perspective that incorporates social interactions

to explain the link between board compositional factors and corporate sustainability. Additionally, we theoretically provide a cognitive explanation for the question of “how or through which mechanisms women directors might influence corporate sustainability” which has not been addressed.

Finally, our theory regarding directors’ attention on corporate sustainability has implications for policy makers as well as corporate leaders. Governance failures matter to the corporate leaders and national economies. While directors are questioned over failures in their accountability and fulfilment of fiduciary responsibilities, less attention is given to the factors and processes behind those failures. As long as board independence is given to boards on a golden platter, it might be only economic concerns and objectives that attract the most attention. Unless certain solutions are in place, a lack of attention to the social and environmental aspects of sustainability may result in more corporate failures. Given the importance of corporate sustainability for everyone, we suggest that gender diversity can make a difference.

LIMITATIONS AND FUTURE RESEARCH

While this work proposes a new cognitive framing perspective for research on boards of directors, it is only a first step in introducing a theoretical model of directors’ attention in such exploration and can be advanced further. Empirical testing of our ideas is facilitated by adopting existing scales to measure board independence and board diversity (Tuggle et al., 2010a; Tuggle et al., 2010b). Utilizing these scales is the easy part. Gaining access to board members and developing scales for directors’ attention entails more effort in capturing the attention dynamics and social interactions in boardrooms (Ma et al., 2020), which we deem as important in understanding and explaining allocation of directors’ attention. A participant observation method will provide greater insights.

We focus on exploring the effects of the two most popular compositional factors—board independence and gender diversity—on the allocation of attention. We greatly benefited from extant research on these types of factors in developing our arguments. Further research can incorporate other types of compositional factors and specify the effects of other types of board diversity on the allocation of directors’ attention. We consider age diversity to be particularly deserving of more scholarly attention. Additionally, our study posits that independent boards will result in male-dominated boards whose members share comparable beliefs, functional backgrounds, and professional expertise, as well as a reputation for maximizing profits (Westphal and Zajac, 2013). In the future, this pattern may shift.

Further research can explore other interactions expected to impact the allocation of directors’ attention. At the individual level, attention is the noticing, encoding, interpreting, and focusing of time and effort by organizational decision makers on both issues and perspectives on answers (Ocasio, 1997). Huse and Solberg (2006) suggest that women directors, being less experienced in board work, may spend more time preparing for board meetings. Future research may further explore women directors’ influence on the allocation of attention through their impact on overall effort levels of directors, defined as effort norms which may provide new insights into the understanding of corporate practices.

Additionally, future research can explore the rules for agenda setting before board meetings and investigate how these rules impact the allocation of directors’ attention. Whether and how a female CEO or chairperson might impact directors’ allocation of attention is an interesting topic to explore.

CONCLUSION

Various researchers have observed differences in male and female board behavior and attention to issues, whether through the use of paradoxical thinking (Huse and Solberg, 2006), skill set (Hillman et al., 2002; Groysberg and Bell, 2013), compassion and interdependence (Adams and Funk, 2012), sustainability perspectives (Post and Byron, 2015), empathy and cooperation (Bart and McQueen, 2013), ethics (Pan and Sparks, 2012), or risk aversion (Post and Byron, 2015). According to these studies, women directors are ready to study all three dimensions of business sustainability, which led us to propose that gender diversity is positively associated with business sustainability attention. Furthermore, since independent directors are more likely to highlight efficiency concerns and goals during their board tenures, they develop a business case perspective. Directors who concentrate only on the business case generally overlook numerous sustainability issues, which is why we recommended that board independence is negatively connected to corporate sustainability attention. Furthermore, because of their diverse functional backgrounds and goals, female directors are compelled to adopt paradoxical thinking (Huse and Solberg, 2006). The paradoxical framing does not prefer one component of sustainability over another, and it fails to drive data collection. A female director with a paradoxical cognitive frame would gather knowledge on sustainability issues and listen to stakeholders, leading us to suggest that paradoxical cognitive frames are more likely to scan for a variety of sustainability challenges.

Gender diversity improves firms' engagement in CSR according to research (Rao and Tilt, 2016); hence, we postulate that gender diversity raises the quantity of social and environmental issues raised during board meetings. Furthermore, we argue that the number of economic issues discussed at board meetings is positively related to board independence as a result of the business case frame (Hillman and Dalziel, 2003). Kanadl et al. (2018) demonstrated that board openness may increase female directors' active participation in decision making and thus quality investment decisions, leading us to argue that board openness will mitigate the

relationship between gender diversity and board attention in corporate sustainability, and we propose that independent boards with gender diversity will pay more attention to business sustainability choices that address economic, environmental, and social challenges. However, we suggest that board openness has minimal influence on board independence in corporate sustainability since independent directors have a business case perspective.

The formal structure of the board should have an impact on attention allocation (Ocasio et al., 2018). Board leadership research shows that while CEO duality has a negative impact on social interactions, CEO and chairperson separation has a positive impact on social interactions in boardrooms (Kakabadse et al., 2018), suggesting that a non-duality structure will moderate the relationship between board independence and business sustainability, allowing more economic problems to be raised during board sessions. Furthermore, as a consequence of the non-duality structure, a broader range of environmental and social issues will be addressed during board meetings.

Dominant performance-oriented theories seem to be limited in explaining how boards differ in their decisions regarding corporate sustainability. Previous studies that link boards and corporate sustainability have provided mixed results. Thus, it is important for future board research to bring in new insights from other theories (ABV) to better understand and explain the effects of board structure on decisions of corporate sustainability. We believe that our theoretical model of board attention, which incorporates the importance of different cognitive frames of directors as well as social interaction between them in boardrooms in making decisions of corporate sustainability, serves to this end. We hope this paper will encourage and promote research accordingly. It is equally important to draw practitioners' and policy makers' attention to the challenging idea that board independence alone might be one barrier to their efforts in better serving society.

REFERENCES

- Adams, R. (2011), "Governance and the financial crisis", *International Review of Finance*, Vol. 12 No. 1, pp. 7-38
- Adams, R. and Funk, P. (2012), "Beyond the glass ceiling: Does gender matter?" *Management Science*, Vol. 58 No. 2, pp. 219-235
- Aras, G. and Crowther, D. (2008), "Governance and sustainability", *Management Decision*, Vol. 46 No. 3, pp. 433-448
- Aras, G. and Crowther, D. (2016), "Corporate governance and corporate social responsibility in context", In: Aras, G. and Crowther, D. (Ed.) *In Global Perspectives on Corporate Governance and CSR*, Routledge, pp. 23-64.
- Bansal, P. (2002), "The corporate challenges of sustainable development", *Academy of Management Perspectives*, Vol. 16 No. 2, pp. 122-131
- Bart, C. and McQueen, G. (2013), "Why women make better directors", *International Journal of Business Governance and Ethics*, Vol. 8 No. 1, p. 93
- Cho, T. and Hambrick, D. (2006), "Attention as the mediator between top management team characteristics and strategic change: The case of airline deregulation", *Organization Science*, Vol. 17 No. 4, pp. 453-469
- De Dreu, C., Nijstad, B. and van Knippenberg, D. (2008), "Motivated information processing in group judgment and decision making", *Personality and Social Psychology Review*, Vol. 12 No. 1, pp. 22-49
- Doyle, R. (2020) *How boards can lead on racial diversity, equity and inclusion*. [online] EY. Accessed 2 January 2021. Available from: https://www.ey.com/en_us/board-matters/how-boards-can-lead-on-racial-diversity-equity-and-inclusion

- Fernando, R. (2012), "Sustainable globalization and implications for strategic corporate and national sustainability", *Corporate Governance*, Vol. 12 No. 4, pp. 579-589
- Gabalton, P., Kanadlı, S. and Bankewitz, M. (2018), "How does job-related diversity affect boards' strategic participation? An information-processing approach", *Long Range Planning*, Vol. 51 No. 6, pp. 937-952
- Gabrielsson, J., Huse, M. and Minichilli, A. (2007), "Understanding the leadership role of the board chairperson through a team production approach", *International Journal of Leadership Studies*, Vol. 3 No. 1, pp. 21-39
- Galbreath, J. (2011), "Are there gender-related influences on corporate sustainability? A study of women on boards of directors", *Journal of Management & Organization*, Vol. 17 No. 1, pp. 17-38
- Gao, J. and Bansal, P. (2013), "Instrumental and integrative logics in business sustainability", *Journal of Business Ethics*, Vol. 112 No. 2, pp. 241-255
- Groysberg, B. and Bell, D. (2013), "Dysfunction in the boardroom", *Harvard Business Review*, Vol. 91 No. 6, pp. 89-97
- Hahn, T., Preuss, L., Pinkse, J. and Figge, F. (2014), "Cognitive frames in corporate sustainability: Managerial sensemaking with paradoxical and business case frames", *Academy of Management Review*, Vol. 39 No. 4, pp. 463-487
- Hambrick, D. (2007), "Upper echelons theory: An update", *Academy of Management Review*, Vol. 32 No. 2, pp. 334-343.
- Hillman, A., Cannella, A. and Harris, I. (2002), "Women and racial minorities in the boardroom: How do directors differ?", *Journal of Management*, Vol. 28 No. 6, pp. 747-763

- Hillman, A. and Dalziel, T. (2003), "Boards of directors and firm performance: Integrating agency and resource dependence perspectives", *The Academy of Management Review*, Vol. 28 No. 3, p. 383
- Huse, M. and Grethe Solberg, A. (2006), "Gender-related boardroom dynamics", *Women in Management Review*, Vol. 21 No. 2, pp. 113-130
- Kakabadse, N., Figueira, C., Nicolopoulou, K., Hong Yang, J., Kakabadse, A. and Özbilgin, M. (2015), "Gender diversity and board performance: Women's experiences and perspectives", *Human Resource Management*, Vol. 54 No. 2, pp. 265-281
- Kakabadse, A., Goyal, R. and Kakabadse, N. (2018), "Value-creating boards—Diversity and evolved processes", *Journal of Creating Value*, Vol. 4 No. 1, pp. 22-41
- Kanadli, S., Torchia, M. and Gabaldon, P. (2018), "Increasing women's contribution on board decision making", *European Management Journal*, Vol. 36 No. 1, pp. 91-104
- Kanter, R. M. (1977), *Men and Women of the Corporation*. Basic Books.
- Khanna, P., Jones, C. and Boivie, S. (2013), "Director human capital, information processing demands, and board effectiveness", *Journal of Management*, Vol. 40 No. 2, pp. 557-585
- Lacy, P. and Hayward, R. (2011), "A new era of sustainability in emerging markets? Insights from a global CEO study by the United Nations Global Compact and Accenture", *Corporate Governance*, Vol. 11 No. 4, pp. 348-357
- Liao, L., Lin, T. and Zhang, Y. (2016), "Corporate board and corporate social responsibility assurance: Evidence from China", *Journal of Business Ethics*, Vol. 150 No. 1, pp. 211-225
- Lenssen, J.J., Dentchev, N.A. and Roger, L. (2014) "Sustainability, risk management and governance: Towards an integrative approach", *Corporate Governance*, Vol. 14 No. 5, pp. 670-684

- Ma, S., Seidl, D. and McNulty, T. (2020), "Challenges and practices of interviewing business elites", *Strategic Organization*, Vol. 19 No. 1, pp. 81-96
- Ocasio, W. (1997), "Towards an attention-based view of the firm", *Strategic Management Journal*, Vol. 18 No. S1, pp. 187-206
- Ocasio, W., Laamanen, T. and Vaara, E. (2017), "Communication and attention dynamics: An attention-based view of strategic change", *Strategic Management Journal*, Vol. 39 No. 1, pp. 155-167
- Padin, C., Ferro, C., Wagner, B., Valera, J.C.S., Høgevoid, N.M. and Svensson, G. (2016), "Validating a triple bottom line construct and reasons for implementing sustainable business practices in companies and their business networks", *Corporate Governance*, Vol. 16 No. 5, pp. 849-865
- Pan, Y. and Sparks, J. (2012), "Predictors, consequence, and measurement of ethical judgments", *Journal of Business Research*, Vol. 65 No. 1, pp. 84-91
- Post, C., Rahman, N. and McQuillen, C. (2015), "From board composition to corporate environmental performance through sustainability-themed alliances", *Journal of Business Ethics*, Vol. 130 No. 2, pp. 423-435
- Post, C. and Byron, K. (2015), "Women on boards and firm financial performance: A meta-analysis", *Academy of Management Journal*, Vol. 58 No. 5, pp. 1546-1571
- Rao, K. and Tilt, C. (2016), "Board composition and corporate social responsibility: The role of diversity, gender, strategy and decision making", *Journal of Business Ethics*, Vol. 138 No. 2, pp. 327-347
- Rindova, V.P. (1999), "What corporate boards have to do with strategy: A cognitive perspective", *Journal of management studies*, Vol. 36 No. 7, pp. 953-975

- Robins, F. (2006), "Corporate governance after Sarbanes-Oxley: An Australian perspective", *Corporate Governance*, Vol. 6 No.1, pp. 34-48
- Smith, W. and Lewis, M. (2011), "Toward a theory of paradox: A dynamic equilibrium model of organizing", *Academy of Management Review*, Vol. 36 No. 2, pp. 381-403
- Smith, W. and Tushman, M. (2005), "Managing strategic contradictions: A top management model for managing innovation streams", *Organization Science*, Vol. 16 No. 5, pp. 522-536
- Sullivan, E. (2021) *Data points: Bite-size insights from Deloitte research*. [online] Deloitte. Accessed 2 January 2021. Available from: <https://www2.deloitte.com/global/en/insights/deloitte-insights-magazine/insights-data-points.html>
- Sun, S., Zhu, J. and Ye, K. (2015), "Board openness during an economic crisis", *Journal of Business Ethics*, Vol. 129 No. 2, pp. 363-377
- Thomas, J., Clark, S. and Gioia, D. (1993), "Strategic sensemaking and organizational performance: Linkages among scanning, interpretation, action, and outcomes", *Academy of Management Journal*, Vol. 36 No. 2, pp. 239-270
- Torchia, M., Calabrò, A., Gabaldon, P. and Kanadli, S. (2018), "Women directors contribution to organizational innovation: A behavioral approach", *Scandinavian Journal of Management*, Vol. 34 No. 2, pp. 215-224
- Tuggle, C., Sirmon, D., Reutzell, C. and Bierman, L. (2010a), "Commanding board of director attention: Investigating how organizational performance and CEO duality affect board members' attention to monitoring", *Strategic Management Journal*, Vol. 31 No. 9, pp. 946-968

- Tuggle, C., Schnatterly, K. and Johnson, R. (2010b), "Attention patterns in the boardroom: How board composition and processes affect discussion of entrepreneurial issues", *Academy of Management Journal*, Vol. 53 No. 3, pp. 550-571
- Van Marrewijk, M. and Werre, M. (2003), "Multiple levels of corporate sustainability", *Journal of Business Ethics*, Vol. 44 No. 2, pp. 107-119
- Walls, J., Berrone, P. and Phan, P. (2012), "Corporate governance and environmental performance: Is there really a link?", *Strategic Management Journal*, Vol. 33 No. 8, pp. 885-913
- Walsh, J. (1995), "Managerial and organizational cognition: Notes from a trip down memory lane", *Organization Science*, Vol. 6 No. 3, pp. 280-321
- Westphal, J. and Zajac, E. (2013), "A behavioral theory of corporate governance: Explicating the mechanisms of socially situated and socially constituted agency", *Academy of Management Annals*, Vol. 7 No. 1, pp. 607-661
- White, P. (2009), "Building a sustainability strategy into the business", *Corporate Governance*, Vol. 9 No. 4, pp. 386-394