Cognitive group influence on sustainability investment

Practitioners and academics alike converge on the view that Corporate Social Responsibility (CSR) is in fact a driver of competitive advantage for the firm. This is illustrated by the fact that 80 percent of CEOs surveyed by Accenture and the UN Global Compact reveal that CSR is already a "*differentiator*" in their respective industries (Accenture, 2016). Relatedly, the extant management literature investigating CSR as a driver of competitive advantage has provided evidences that CSR positively contributes to firms' competitiveness (Cheng et al., 2014; Dhaliwal et al., 2011; Flammer, 2015). Thus, investment decisions regarding CSR bears strategic importance for the firm. However, while the extant literature identifies several factors as antecedents of CSR engagement including institutional pressure (Zhang et al., ja) and competitive pressure (Flammer, 2015), the role of managerial cognition in CSR engagement remains underexplored with some exceptions (Bansal and Roth, 2000; Boal and Peery, 1985; Fassin et al, 2011; Secchi, 2009). More specifically, the impacts of both cognitive strategic group and inter-firm cognitive dynamics on sustainability investment remain unexplored. Indeed, studies that have investigated the role of managerial cognition in CSR engagement have skirted a systemic approach that concurrently consider external attention parameters such as the situational context, which encompasses the firm's cognitive strategic group, along with internal attention parameters such as the focus of attention. Given that a cognitive strategic group represents a community of firms that share similar mental models (Porac et al., 1989), and that hold mutual cognitive influence on each other because of learning and imitation (Surroca et al., 2016), the cognitive strategic group can influence strategy formulation at the firm level. Indeed, as advanced by Porac et al., (1989), even the concept of rivalry is a social construction and the categorization of firms as competitors is the fruit of managers' beliefs, and thus, not necessarily the result of material concepts such as industry and pricing. Furthermore, in their study of the airline industry in the United States, Cho and Hambrick (2006) demonstrated that the *focus of attention* of managers was a determinant of the organization's strategic choices. In that lens, an exploration of antecedents to sustainability investment that also takes into account cognitive dynamics such as cognitive strategic groups and attention structure would complement the current discussion on the drivers of CSR engagement.

In this essay, we bridge that gap by introducing cognitive strategic group and firms' appropriation of group's identity as antecedents of CSR investment decision. Since there are evidences that CSR is an important dimension of corporate strategy that allows firms to achieve higher competitiveness (Flammer, 2015; Cheng et al., 2014), deconstructing the joint influence of cognitive strategic group and firm's appropriation of group identity in the context of CSR investment decision bears strong relevance for organizations.

As Porac and colleagues (1989) showed in their study of the knitwear industry in Scotland, individual firms may not necessarily identify rivals according to material basis of competition such as industry or pricing. Instead, Firms can rely on shared beliefs as a basis for rivalry in order to identify competitors subjectively; this process can then result in the formation of a cognitive strategic group. We build on that observation here to investigate the behavioral implication of cognitive strategic groups' affiliation and identity appropriation on CSR investment decision.

Accordingly, in this paper, we strive to answer the following question: How does the interplay between a cognitive strategic group affinity with CSR and the focal firms' appropriation of group identity affect the sustainability investment decision of the focal firm? We use gender diversity, a familiar construct in the CSR literature, to define cognitive strategic groups. Specifically, we segment firms from the *SBF 120*, an index of the *Euronext Paris* stock exchange, into two groups based on the level of gender diversity in their top-management team (TMT). Therefore, if the top-management team of a firm has a diversity percentage that ranks above the median for the firms in the index, we categorized them in the group with high CSR affinity; otherwise, we categorized them in the second group. We make the assumption here that gender diversity in the top-management team signals differences in cognitive frames. Moreover, the CSR literature reveals that diversity in governance structures such as board of directors is positively associated with organizations' engagement in CSR (McGuiness et al, 2017). Furthermore, using diversity in the top-management team to define cognitive strategic group is in line with Peteraf and Shanley (1997) who identify shared institutional histories as a basis for the formation of cognitive groups. Thus, a shared history of diversity at the executive level could suggest affinity among firms.

Borrowing from the attention-based view of the firm (Ocasio, 1997) and the literature on cognition in strategy (Kaplan, 2008; Kaplan, 2011), we posit that the firm's investment decision in corporate social responsibility is a product of cognitive strategic group and the extent of firm's identification with the group. Thus, the decision to engage in CSR bridges firm and group dynamics. The attention-based view of the firm (Ocasio, 1997) provides an ideal framework that links individual, social and organizational level attention parameters. The mechanism identify three premises to organizational attention: focus of attention at the manager level, situational context or *situated attention*, which influences the focus of attention, and the organization attention structure that provides for internal regulators of attention within the organization such as incentives and capabilities (Ocasio, 1997). These parameters interact to orient organizational attention toward specific issues and to prioritize specific answers to these issues. Accordingly, a cognitive group in the firm environmental context that favor CSR engagement will most likely redirect managers' attention toward sustainability issues arising from the firm's situational context, including other firms within the cognitive strategic groups for learning opportunities (Surroca et al., 2016). Thus, the cognitive strategic group, as part of the situated attention of the firm, is an important factor in the decision process for sustainability investment.

In order to operationalize the degree of appropriation of group identity in this study, we measured the distance in CSR practice between the focal firm and the centroid of its group. This measure of distance in CSR practice is similar to the differentiation metric used by Zhang et al. (ja) in the context of *Optimal Distinctiveness*,

Using a longitudinal methodology, we assess how the interplay between the cognitive strategic group favorability toward CSR and the firm's extent of identification with the group affect the sustainability investment decision of group members. We use the CSR rating information of 104 firms from the SBF 120 index of the Euronext Paris stock exchange available in the *Thomson Reuters Eikon* database, which provides Environmental, Social, and Governance (ESG) ratings. This information covers a five-year period from 2014 to 2018. The result of the study reveals that the interplay of cognitive group affinity with CSR and the firm's stronger identification with the cognitive group increase the probability of investing in sustainability. This means that the more distant the CSR practices between the focal firm and its cognitive strategic group, the weaker the effect of the group on the firm's sustainability investment decision.

This study makes the following contribution to the extant literatures on CSR and cognition and the extant literature on drivers of CSR investment. We show that cognitive strategic groups affinity with CSR and the firm's appropriation of group identity concurrently influence the investment decision in sustainability.