

## **Which diversity for green innovation?**

### **The impact of board diversity on environmental benefits of innovation**

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#### *Abstract*

Some previous research brought evidence of the influence of board composition and board diversity for bringing strategic resources, as well as evidence of positive outcomes for innovation. The board of directors is a crucial factor that supports all the innovation activities and influences the level of firm innovation (Zahra *et al.*, 2000). A few studies have investigated the effects of various indicators of board diversity on innovation (Torchia *et al.*, 2011; Miller and Triana, 2009; Galia and Zenou, 2012), and highlight the influence of diversity indicators on the level and type of innovation.

Board diversity also makes the board more sensitive to corporate social responsibility (CSR) initiatives, and help the company to better respond to its environment and better manage CSR issues (Bear *et al.*, 2010). There are relatively few studies that capture empirically the features that increase a firm's probability to invest in environmental innovation (Galia *et al.*, 2013; Horbach, 2008; De Marchi, 2012b).

Consistent with these studies, this article aims at providing a better understanding of the link between board diversity and environmental innovation, by considering *how various patterns of diversity on board can impact the company's ability to implement environmental innovation*, as well as the intensity of environmental innovation. In this perspective, we explore the relationship between several aspects of diversity in board composition (*gender diversity, age diversity, and proportion of employee directors*) and the probability and intensity of *environmental benefits of innovation*, from a sample of 142 French innovative firms based on data from French Community Innovation Survey (CIS) in 2008. Data from board composition have been drawn from annual reports.

Our results show significant evidence of a positive relationship between environmental innovation and gender diversity as well as age diversity, and a negative relationship with the proportion of employee representatives. These findings provide discussions for the impact of diversity in board composition on environmental benefits of innovation.

#### **Key words**

Board of directors – Board composition – Diversity – Gender – Age – Employee directors – Responsible innovation – Environmental innovation – Community Innovation Survey (CIS) – Annual reports.