

## Do women on board matter? Evidence from India

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### Abstract

*Boards of directors play an important role in deciding firm-level outcomes in the business. Therefore, the role of board of directors is an important area of research. Especially, till date, very little research has focused on the effect of boards of directors in emerging nations, such as India. In this research, this gap in the existing literature is addressed through the following research questions in a sample of publicly listed large Indian firms for the time period 2010 to 2014: Does board gender diversity influence strategic orientation of the firm? The researcher has examined the above questions by employing the theoretical lenses of the upper echelons theory. A majority of prior studies on board diversity has focused only on gender diversity and firm performance leaving aside the other important aspect such as strategic decision making. The findings of this study indicate that an increase in board gender diversity significantly impacts the strategic orientation towards ambidexterity which aims at simultaneous focus on exploration and exploitation. The results of this study are also important for the organizations and public policy.*

**Keywords:** Gender diversity, strategy, emerging countries, board of directors, ambidexterity, content analysis

### 1. Introduction

Board of directors plays a vital role in a firm by designing the strategic focus of the firm (Hillman, 2015; Johnson, Schnatterly, & Hill, 2013). A board is also expected to supervise the functioning of the firm and provide an overall direction (Carroll & Buchholtz, 2014). However, majority of the research on board diversity has been examined in the developed nations (Banerjee, Oriani, & Peruffo, 2019).

A board of directors is expected to govern and guide the overall functioning of a firm (Carroll & Buchholtz, 2014). The upper echelons theory suggests that executives' demographic characteristics reflect their cognitive biases (Hambrick & Mason, 1984), which provide a basis for understanding their firm's environment, evaluating alternatives, and choosing a strategy. This demographic diversity of boards also shapes the discussion in board meetings for strategic choices. Hence, examining the demographic diversity of boards can facilitate understanding of organizational propensities for selecting the strategic orientation of the firm (Hambrick & Mason, 1984). Studies in this stream generally use top manager demographics as proxies for measures of managerial cognition (Ararat et al., 2015).

Strategic choices of a company can be predominantly classified as explorative strategy or exploitative strategy (March, 1991). Exploration strategy, in essence, focuses on experimenting with new alternatives. Its returns are uncertain, distant, and often negative. It requires a search for unique knowledge and unacquainted technology and involves creating products with unidentified demand. Exploration strategy does not quickly produce revenue, resulting in remote benefits. On the other hand, exploitation strategies are associated with refinement and extension of existing competencies, technology, knowledge, and paradigms. The returns associated with exploitation are positive, proximate, and predictable (March, 1991). Ambidextrous strategy employing simultaneous exploration and exploitation is important to survive in the competitive environment. In order to improve firm performance the simultaneous pursuit of exploration and exploitation is important (March, 1991).

There are two ways in which exploration and exploitation can be carried out within a firm. The first way is to ensure that there is a simultaneous pursuit of exploration and exploitation, leading to ambidexterity (March, 1991). The second way is to have alternating cycles of exploration and

exploitation, leading to punctuated equilibrium (Brown & Eisenhardt, 1997; Gupta, Smith, & Shalley, 2006). Organizations generally find it difficult to combine these two strategies of exploration and exploitation (March, 1991). Research evidence suggests that too little exploration or too little exploitation decreases firm performance (He & Wong, 2004).

The researcher proposes that firms with high levels of board gender diversity will engage in simultaneous pursuit of exploration and exploitation leading to ambidexterity. This is because researchers have reported that diverse boards comprising men and women are more innovative, bring a variety of perspectives, evaluate more alternatives, and are good at decision making (Dezsö & Ross, 2012).

To cater to the above-mentioned objective, the researcher collected data from the years 2010–2014 for 126 firms that are part of the National Stock Exchange's (NSE) NIFTY 200 list. In order to operationalize board gender diversity, the researcher utilized the Blau index (Ararat et al., 2015). In order to operationalize strategic orientation, the researcher computed ambidexterity as the multiplication of exploration and exploitation. Data on exploration and exploitation was collected by analyzing the content of annual reports of each and every firm in the sample (Oehmichen, Heyden, Georgakakis, & Volberda, 2017). The Panel data regression technique was used to examine the hypotheses.

#### Research Context: India

Corporate practices in India are majorly influenced by the Companies Act and have to abide by the regulations of the Security Exchange Board of India (SEBI). First, SEBI implemented and revised Clause 49 of the Listing Agreement for the listed companies in Indian stock markets. The agreement primarily aimed to protect the rights of shareholders by strengthening the role of independent directors on the company board and revising disclosure practices.

The Companies Act of 1956 regulates incorporation of a company, responsibilities of company directors, and dissolution of a company. This law was revised in 2013. The updated Companies Act became effective on 29 August 2013. The Companies Act of 2013 mandated the presence of at least one woman on the board of publicly listed firms.

## 2. Literature review

Within the literature on board composition, one of the recent and emerging issues rapidly gaining attention from both academics and practitioners is board demographic diversity (Rao & Tilt, 2015). Board diversity represents the heterogeneity among the board members concerning specific attributes, such as age, nationality, religious background, functional background, gender, skills, and political affiliations (Van Knippenberg, Dreu, & Homan, 2004). Diversity is primarily considered a “double-edged sword” (Post & Byron, 2015), and hence, a debate on homogeneity versus heterogeneity (diversity) is pervasive in the diversity literature, where several arguments have been put forward in favor or against diversity.

The business case behind board diversity has been studied widely in the literature from various disciplines. Researchers have linked board demographic diversity with strategic choice (Yoo & Reed, 2015), corporate social responsibility (CSR) and reputation (Bear, Rahman, & Post, 2010), growth orientation and organizational culture (Dwyer, Richard, & Chadwick, 2003), financial performance (Adams et al., 2015), and acquisition intensity (Chen, Crossland, & Huang, 2016).

As per the upper echelons theory, top management plays an important role in shaping firm strategy (Hambrick & Mason, 1984). This theory has been extended to board research (Post & Byron, 2015). The board of directors typically allocates resources to suitable activities in order to enhance firm performance (Tuggle et al., 2010). Boards have a fiduciary duty to identify, evaluate, and participate in the strategy-making process (Boyd, 1990). These kinds of board strategic functioning outcomes are entirely cognitive (Forbes & Milliken, 1999) and are influenced by demographic characteristics of board

members (Sekiguchi et al., 2011). This study builds the case for investigating the role of board demographic diversity (representing cognitive diversity) on a firm's strategic choices (Sekiguchi et al., 2011).

Researchers have defined board demographic diversity as the variety in board members' demographic characteristics, such as gender, age, education, and tenure (Harrison & Klein, 2007). Heterogeneous corporate boards can be advantageous as well as disadvantageous (Richard, Ford, & Ismail, 2006; Tuggle et al., 2010). This research paper contends that these advantages and disadvantages have some implications for the strategic orientation of firms.

As per the upper echelons theory, board diversity influences board cognitive aspects that are needed for decision making (Hambrick & Mason, 1984). A diverse board brings distinctive perspectives to board discussions (Arfken, Bellar, & Helms, 2004), which contributes to effective problem-solving and better monitoring by the boards (Ararat et al., 2015; Ferreira, 2011). Diversity also contributes to more productive discussions through evaluation of a broader range of alternatives, which eventually improve decision quality.

The positive effects of greater diversity in corporate boards can be seen in the light of strategic choices explicitly favouring ambidexterity by taking exploration and exploitative decisions. Women directors may have different experiences in their working lives and their non-working lives compared to men. They may have a better understanding than men of some market segments, which may improve creativity and the quality of the decision-making process (Smith et al., 2006). Research has also found that gender diversity enhances innovation (Miller & Triana, 2009). Moreover, gender diversity can enrich problem-solving because of the variety of perspectives that emerges from a more diverse board as more alternatives are evaluated (Campbell & Mínguez-Vera, 2008). This broader view results in a better understanding of the complex business environment. A more gender-diverse board will foster the competitive advantage of the firm by creating a positive reputation for the firm as well as by creating a positive impact on customers (Miller & Triana, 2009; Smith et al., 2006). The variety in thought processes on a diverse board leads to more exploration as it taps into novel opportunities that involve higher creativity (Ali, Kulik, & Metz, 2011; March, 1991). Hence, it is hypothesized:

*Hypothesis:* The higher the board's gender diversity, the greater is the orientation of the firm toward ambidexterity favouring exploration and exploitation.

### 3. Research methodology

#### **Sample and research design**

To test the hypotheses, data was collected for large publically listed companies that are part of the NIFTY 200 list. Out of the 200 firms, the final sample consisted of 126 firms. Firms that are in the domain of financial services were eliminated because they are typically regulated and behave differently regarding exploration (Jackling & Johl, 2009). Furthermore, firms that lacked all of the required data for the study period were eliminated.

#### **Data sources**

Data was collected from different sources. The source of demographic variables was NSE's Infobase database, which contains information on the boards of directors of NSE-listed companies in India. Accounting variables were collected from the Center for Monitoring Indian Economy (CMIE) Prowess database. Additionally, annual reports of each company, downloaded from the respective official website of each company, were used to calculate relative exploration.

#### **Measures**

Dependent variable- Ambidexterity

The ambidexterity of a firm is conceptualized in this study as the simultaneous emphasis on exploration and exploitation, measured annually at the firm level. To measure the ambidexterity, content analysis approach is used employing innovative computer-aided text analysis (CATA) (Heyden et al., 2015; McKenny, Aguinis, Short, & Anglin, 2018; Uotila et al., 2009). The CATA enables the measurement of constructs by considering the frequency of specified dictionary words from textual sources.

Independent variable- board diversity

To operationalize the board diversity, this study has used the Blau diversity index, which is widely used in board diversity literature (Harrison & Klein, 2007).

Formula of Blau Index

$$Blau\ Index = 1 - \sum_{i=1}^k P_i^2$$

Where  $P_i$  = the proportion of the board members in the 'i'th category of a given attribute;  
k = the number of categories in a given attribute

Gender Index (GI) = Blau index value for gender diversity (gender is 1, if the board member is female; 0, otherwise),

Control variable

This study includes the following control variables: firm's age (log of the number of years of existence of the firm), leverage (debt to equity ratio), board size (log of the number of board members), firm performance (return on assets – ROA), firm size (log of total assets).

### Analysis method

This study aimed to examine the influence of board diversity on the strategic orientation of a firm. The Generalized Method of Moment (GMM) estimator was used to examine the hypotheses (Arellano & Bond, 1991).

Table-1 Regression analysis

Method	GMM
Dependent variable	Ambidexterity
Ambidexterity (Lag_1)	0.621 (0.045)***
Gender diversity	0.036 (0.016)**
Firm's age	-0.009 (0.001)
Firm's size	-0.001 (0.003)
ROA- Firm performance	-0.034 (0.067)
Leverage	0.001 (0.002)
Board size	0.014 (0.013)
Hansen J-statistics <sup>a</sup>	2.93E-06 0.998
Robust standard errors in parenthesis. ***p<.001; **p<.05; *p<.01; a. H0: instruments are valid; b. Degree of freedom in parenthesis;	

#### 4. Results

The regression results shows that positive and significant value of Gender diversity, it supports the hypothesis that diversity on boards positively and significantly influences firm's strategic orientation towards ambidexterity.

#### 5. Discussion and conclusion

Scholarly inquiry into the relationship between board diversity and various firm dynamics has been gaining significant momentum (Post & Byron, 2015; Kagzi & Guha, 2018). Many governments around the world are taking initiatives to enhance board diversity (Terjesen et al., 2015), but the outcomes are not clear (Ali et al., 2013). To advance the understanding of board diversity literature, this study has empirically examined the relationship between board diversity and strategic orientation of the firm. The resulting analysis, using a sample of 126 NSE-listed large firms in India, generally supports the propositions of this study regarding the beneficial effects of higher gender diversity on corporate boards. Specifically, it was found that diverse boards prefer ambidexterity strategy following exploratory strategies and exploitative strategies.

#### 6. Contributions

To the best of the researcher's knowledge, this study is the first in an emerging market context (in this case, India) to examine the effects of board diversity on Strategic orientation. Although there are many studies on corporate governance conducted in developed nations, the Indian context was not explored. The findings will help companies to design boards including women on boards.

This study also provides support to the Indian government's mandate on the presence of at least one woman on the boards of listed companies in India (see the Companies Act of 2013).

#### 7. Limitations and future research

As with any research, the present study has certain limitations that may pave avenues for future research. In the present study, the researcher measured strategic orientation (CATA). Even though this method has been widely used in research, other methodology should also be explored such as interviews and product lines of the company to further examine the strategic orientation.

This study has focused on large, India-based, publicly listed companies that are a part of the NIFTY 200 list. Therefore, the findings of the study cannot necessarily be generalized to other countries. Future research could compare and contrast the effects of board demographic diversity in multiple countries.

#### 8. References

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