

DO INVESTORS VALUE BOARD ETHNIC DIVERSITY? A CANADIAN STUDY

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Abstract

How to cite this paper: Talbot, C., Coulmont, M., & Berthelot, S. (2023). Do investors value board ethnic diversity? A Canadian study. *Corporate Board: Role, Duties and Composition*, 19(1), 20–28. <https://doi.org/10.22495/cbv19i1art2>

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ISSN Online: 2312-2722

ISSN Print: 1810-8601

Received: 10.03.2023

Accepted: 15.06.2023

JEL Classification: M4, M14, M12

DOI: 10.22495/cbv19i1art2

The purpose of this study is to examine whether investors take the ethnic diversity of boards of directors into account. Based on a sample of 563 Canadian firms listed on the Toronto Stock Exchange (TSX) for fiscal years 2019 to 2021 inclusively, our results suggest that investors positively perceive the nomination of a greater number of visible minority board members. However, the study findings also show that the impact of ethnicity on investors' perception is nearly 50 percent less than the impact of gender diversity. The study conducted in the Canadian context corroborates the results observed in some previous work by confirming the positive impact that gender and ethnic diversity can have on business performance.

Keywords: Corporate Governance, Ethnic Diversity, Board of Directors, Value Relevance, Firm Market Value

Authors' individual contribution: Conceptualization — C.B.; Methodology — M.C.; Formal Analysis — C.T. and M.C.; Writing — Original Draft — C.T.; Writing — Review & Editing — C.T., M.C., and S.B.; Supervision — C.T., M.C., and S.B.

Declaration of conflicting interests: The Authors declare that there is no conflict of interest.

1. INTRODUCTION

Over the last 10 years, a number of European countries have legislated to promote greater diversity in management positions and on boards of directors of listed corporations. While some have adopted the quota model to increase diversity, others rely on a purely voluntary initiative accompanied by a “comply or explain” approach. Most of these countries define diversity as gender diversity and issue recommendations to increase the proportion of women on their boards of directors and management teams (Organisation for Economic Co-operation and Development [OECD], 2021). In 2015, the Canadian Securities Administrators (CSA) amended the regulation on disclosure of governance practices to encourage issuers to adopt a policy on the representation of women and to publish it in their proxy circulars or to explain the reasons for its non-adoption.

Corporations have also realised that enhanced diversity in strategic corporate positions is strategically important to help align business strategies more effectively with a growing demographic diversity among stakeholders in the markets in which they operate (Vairavan &

Zhang, 2020). Since then, a new broader definition of diversity, targeting adequate representation of the general population, has been promoted in financial markets. Responding to the evolution of the general public's conception of diversity, the government of Canada amended the Canada Business Corporation Act (CBCA) to encourage the nomination of a broader diversity of individuals on boards of directors as well as in senior management positions in public corporations (Dauphin & Allaire, 2021). Canadian federally incorporated corporations are required to provide shareholders with information on their diversity policy and practices respecting their boardrooms and strategic management positions. With this new regulation, Canada became the first jurisdiction worldwide to formally expand diversity beyond gender (Jeffrey et al., 2019). The objectives of these amendments, effective since January 2020, are to increase the nomination not only of women, but also of ethnic minorities, Aboriginal communities, and persons with disabilities.

Although these changes particularly affect federally incorporated corporations in Canada, 101 firms included in the S&P/Toronto Stock Exchange (TSX) Composite Index are subject to these

requirements. While the other corporations in the index, incorporated at the provincial level, are not required to follow CBCA recommendations, they are subject to the same pressures for inclusion, equality, justice, and representativeness of society. Pressures from society and new requirements from CBCA to make boards more inclusive seem to have borne results. In 2021, 35% of the new director appointments in Canada's 100 largest publicly traded companies were filled by historically underrepresented groups¹ (Spencer Stuart, 2022).

To demonstrate the merits and thereby promote diversity on boards, supporters of the values of inclusion and ethnic diversity in strategic corporate positions hope to demonstrate that gender, race, or any other discriminating factor improves the performance of publicly traded corporations. Proponents refer to the agency and resource dependence theories to defend their position. The agency theory posits that since the board's role is to monitor and discipline managers (Jensen & Meckling, 1976), decisions will be made in the shareholders' best interests and should improve firm performance. In addition, the resource dependence theory proposes that boards operate on a strategic level to advise and counsel management (Pfeffer & Salancik, 1978). Here again, it may be proposed that a more diverse board will have access to more diversified resources and will therefore better advise management (Ben-Amar et al., 2013; Aggarwal et al., 2019), in turn improving corporate performance. While several works in the literature have studied the link between diversity and performance, empirical evidence has not reached a consensus to support this theory (Aggarwal et al., 2019). Opponents of board diversity instead base their position on social identity theory to illustrate that heterogeneity could reduce group cohesion and alter the efficiency of the board's monitoring and advisory function (Ntim, 2015). They may also refer to the theory of tokenism to justify the marginalisation of minorities and their lack of real effect on board efficiency.

We have identified several different forms of board diversity in previous studies. While the majority of studies define diversity as gender diversity (Adams & Ferreira, 2009; Srinidhi et al., 2011; Ali et al., 2014; Larcker & Tayan, 2015; Garcia Lara et al., 2017), others have studied the demographic characteristics of board members, such as age, tenure, independence and interlocking directorships, to describe diversity (Jhunjhunwala & Mishra, 2012; Ali et al., 2014; Aggarwal et al., 2019). Race or ethnic diversity is sometimes considered as a binomial variable taking the value of 1 if the board includes a non-Caucasian director; as an index of diversity that incorporates diverse measures of diversity (Ben-Amar et al., 2013); or as a percentage where the proportion of minority directors in relation to total members is measured (Guest, 2019).

Given the recent emphasis on board ethnic diversity as an important element of good corporate governance and the lack of empirical studies on the issue, we propose to empirically examine whether the market values board gender and ethnic diversity. In other words, we are attempting to answer the following question:

RQ1: Do shareholders perceive greater ethnic diversity of directors on the boards of Canadian listed companies as positive?

Board diversity is defined as the percentage of visible minority directors on the board, while firm market value is measured using Ohlson's (1995) model. The empirical analyses were carried out using a sample of 563 observations of Canadian companies listed on the S&P/TSX Composite Index over the period 2019-2021 for which data on governance, gender and ethnic diversity on boards were collected. We control for possible endogeneity between firm market value and ethnic diversity by using a two-stage least square analysis. The results suggest that, in accordance with a portion of the literature, the financial market positively considers the share of visible minority members on boards of directors. This result holds after controlling for gender diversity, board independence and industry.

Our paper makes the following contributions to the literature. First, our results support the regulatory initiative that requires federally incorporated Canadian corporations to disclose information about board diversity, namely gender and visible minority, in their official documentation. Also, we extend the literature that addresses board diversity. While many studies have examined the link between diversity and performance, we have not seen any studies investigating whether investors take board diversity into account. In addition, we improve our understanding of ethnic diversity and its effects, an area that is still not actively researched despite its importance to firms and policymakers (Guest, 2019). The results of this study also suggest that although regulatory bodies are promoting diversity and inclusion values on boards, investors currently see more value in building a board that is gender rather than ethnically diverse.

The remainder of the paper is organised as follows. Section 2 reviews the relevant literature associated with board diversity. Section 3 describes the empirical model and the sample. Section 4 presents the study results and discussion, and lastly, Section 5 reports its main conclusions, limitations, and potential avenues for future research.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Corporate governance scholars view the gender and ethnic composition of boards of directors as drivers in structuring organisational governance mechanisms and policies through their influence on executive actions (Abebe & Dadanlar, 2021; Nielsen & Huse, 2010; Hillman et al., 2000). Moreover, the demand for a more diversified board is now seen as a priority in the marketplace due to increased diversity in the workforce in terms of age, gender and ethnicity (Darmadi, 2011). In North America, the concepts of diversity and inclusion have gained importance in the last decade, during which time representativity on boards and executive positions has extended well beyond gender (Dauphin, 2022). Canada is the first jurisdiction to require federally incorporated corporations to disclose the participation of women, visible minorities, Aboriginal communities, and people with disabilities in their official documents. Other jurisdictions are also sensitive to

¹ Spencer Stuart (2022) defines underrepresented groups as Indigenous peoples, visible minorities, persons with disabilities, LGBTQ2S+ and other.

expanded inclusion values on boards but have so far refrained from imposing specific requirements. For example, the UK Corporate Governance Code mentions how important it is to promote diversity on boards in order to foster constructive debates. According to this Code, a diversified group includes but is not limited to, diversity of gender and race (Financial Reporting Council [FRC], 2016).

In the literature, board diversity has been studied through the perspectives of agency, resource dependence, and social identity theories, as well as tokenism. The agency theory illustrates the agency problems that can arise when managers' interests differ from those of shareholders (Jensen & Meckling, 1976). To mitigate these conflicts of interest, the corporate board of directors has a dual mandate — to monitor management's decisions and advise management (Jensen, 1993). From this perspective, proponents of board diversity suggest that a diverse board promotes board independence, improves monitoring of management (van der Walt & Ingley, 2003; Carter et al., 2007, 2010), provides enhanced disclosure that reduces agency costs and information asymmetry, and protects the reputation of board members (Lim et al., 2007), thereby enhancing performance.

According to resource dependence theory, an organisation's performance is influenced by its external environment (Pfeffer & Salancik, 1978). For a corporation to be successful, the board of directors and management must develop links with other corporations to reduce the challenges and uncertainties arising from their dependency on other corporations' resources (Ali et al., 2014). Consequently, resource dependence theory suggests that more diversity on boards will increase the legitimacy and resources, such as expertise, skills, and access to a diversified network (Hillman et al., 2000), provided by board members and ultimately affect a firm's short- and long-term performance. Many explanations have been put forward to support this idea since diversified resources enable a better match with the demographic representation of the population and enhance understanding of employees, customers, and suppliers (Robinson & Dechant, 1997). Cognitive diversity in a group is linked to better creativity, innovation and decision-making (Baranchuck & Dybvig, 2009). According to Adams et al. (2010), a more diverse group brings more diverse viewpoints, which in turn leads the board to make better decisions and play a better advisory role since it represents the population, minority customers and employees.

However, opponents of board diversity point out that since heterogeneity interacts with board processes, monitoring efficiency and decision-making, it could alter the board's performance (Ntim, 2015). According to the social identity theory, success in fulfilling a mandate's tasks is linked to the ability of individuals to function efficiently as a group. Since individuals prefer to build relationships with other people who belong to similar social categories (Williams & O'Reilly, 1998), age, gender and ethnic heterogeneity could also act as drivers of board conflicts, inhibit boardroom cohesion, and ultimately lead to negative performance (Ely & Thomas, 2001).

Ethnic appointments on boards could also have a neutral effect on monitoring or advisory efficiency. While diversity in the boardroom is desirable, nominating individuals with specific attributes solely to comply with diversity is not. The theory of tokenism (Kanter, 1977) illustrates that on a board with a skewed proportion of visibly different directors, minority members are seen as tokens because of their rarity. This token status could encourage majority members to have certain perceptions, such as greater visibility, polarization (exaggeration of differences within social groups), and assimilation of minority attributes to fit stereotypes (Rixom et al., 2023). When minorities are barely represented on boards, they could be marginalised and disregarded until they have attained a certain level of representation. Consequently, when investors or other market actors believe that these nominations do not enhance firm performance, tokenism results and the gain expected from a diverse board are not achieved (Rixom et al., 2023).

In the literature and with policymakers worldwide, more attention has been focused on board gender than on ethnic diversity (Guest, 2019). Particularly over the past two decades, initiatives have been introduced to make boards and executive positions more gender inclusive. Efforts made by investors groups, such as the Institute for Governance of Private and Public Organization (IGOPP) in Canada, and changes to the legislation adopted by the Canadian government improved the representation of women on boards from 15% to nearly 30% in 2020 (Dauphin & Allaire, 2021). Findings have emerged from previous studies that examined gender diversity in the boardroom. For example, the literature indicates that female directors behave differently than their male counterparts, particularly in terms of risk-aversion (Levi et al., 2014), women being seen as more risk-averse than men and as adopting more conservative dividend pay-out policies (Chen et al., 2017). Women are also associated with better performance in firms with agency problems (Adams & Ferreira, 2009). The representation of women is greater on key monitoring committees and in corporations offering lower compensation (Adams & Ferreira, 2009). As well, women are associated with better earnings quality (Srinidhi et al., 2011), a decrease in discretionary revenue recognition and a lower earnings management practice (Garcia Lara et al., 2017). Accordingly, previous work in accounting literature shows differences in behaviour across gender in director and executive positions and concludes that female directors are better at monitoring responsibilities than male directors.

In addition, with the different theories explaining the lack of diversity on boards in the academic literature and given arguments put forward by the general population to enhance gender representativity in strategic business positions, researchers have attempted to test empirically whether greater gender diversity on boards results in better or worse performance. A variety of studies conducted in the last two decades in many countries have not reached a consensus; some found a positive relationship (Carter et al., 2003; Conyon & He, 2017), while others did not find any relationship at all (Carter et al., 2010;

Gregory-Smith et al., 2014), or even found a negative relationship (Ely & Thomas, 2001; Ahern & Dittmar, 2012; Matsa & Miller, 2013).

Contrary to gender diversity, which has been addressed in numerous studies that see some tangible benefits in board gender diversity, ethnic diversity has received much less attention, despite the fact that better ethnic representation in key management positions should be a priority for the market and legislators (Guest, 2019). One strand of the empirical literature shows that diversity in the boardroom is associated with higher market valuation. For example, Erhardt et al. (2003) study the association between demographic diversity and the board of directors. The demographic diversity variable considers both ethnic and gender representation on boards. The authors find a positive association between financial indicators of firm performance and demographic diversity on US boards of directors. In a study of 169 organisations listed on the Johannesburg Stock Exchange (JSE) for the years 2002 to 2006, Ntim (2015) finds that board diversity is positively associated with market valuation, measured respectively by Tobin's Q, return on assets (ROA) and total share return. He also clearly demonstrated that the stock market places more value on ethnic diversity than on gender diversity.

Similarly, when Ameer et al. (2010) evaluated ethnic diversity according to the representation of outside and foreign directors, they found that diversity is associated with better performance. They argue that a more racially diverse board would have a better understanding of the different stakeholders in today's corporate environment. They rely on the resource dependency theory to justify the notion that more policies and strategies will be developed by a diverse board to accommodate and please the variety of stakeholders, which would also benefit the firm financially and please investors. Other studies measure the moderating effect of employee satisfaction and productivity on firm performance. A more diverse board is more likely to adopt corporate practices that enhance employee satisfaction and productivity (Creek et al., 2019), which in turn contributes to the firm's financial performance (Vairavan & Zhang, 2020).

Other empirical studies on ethnic diversity fail to demonstrate the beneficial effects of racial diversity in the boardroom on corporate performance. In a study based on a sample of 1,500 S&P firms, Vairavan and Zhang (2020) found that increasing board racial diversity has no significant direct effect on a firm's financial performance when measured by return on assets and Tobin's Q. In a similar study of 11,916 firm-years for the years 1996 to 2011, Guest (2019) found no relationship between board

ethnic diversity and firm performance, nor any links to chief executive officer's (CEOs) compensation, accounting misstatements, CEO turnover, performance sensitivity or acquisition performance. One explanation he proposes is that a board member is cautiously selected and likely to be very similar to the rest of the Caucasian group. He also suggests that a visible minority member is pressured to conform to the rest of the group, positing here that minorities could be assimilated into the group majority and therefore their behaviour would not differ from that of the majority.

With respect to Canada and its two successive legal requirements, pertaining to gender in 2015 and visible minorities in 2020, to make corporate boards more inclusive and representative of the general population, and considering mixed empirical evidence from recent studies examining the association between gender and ethnic diversity and firm performance, we predict a statistically significant association between board diversity and market valuation, without specifying the direction of the sign of the coefficient. Therefore, our main hypothesis to be tested in this study is as follows:

H1: There is a significant positive or negative relationship between a firm's market value and board diversity based on both ethnicity and gender.

3. RESEARCH METHODOLOGY

3.1. Research design

To evaluate how investors value diversity, we built on the empirical version of Ohlson's (1995) model, similar to those used by Xu et al. (2007), Coulmont and Berthelot (2015), and Wegener and Labelle (2017), rather than examining the separate relationship between ethnic diversity and financial measures such as ROA, return on equity (ROE) and Tobin's Q (Carter et al., 2010; Vemala et al., 2018; Chebri & Bahoussa, 2020; Qian et al., 2021; EmadEldeen et al., 2021; Morrone et al., 2022). Ohlson's (1995) model has been used in many studies for many years because it measures firm equity valuation as the function of book values, earnings and other incremental information (Boonlert-U-Thai & Schaberl, 2022). According to Boonlert-U-Thai and Schaberl (2022), this model always provides an excellent accounting-based valuation approach to investigate the role of book values, earnings and other incremental information on a firm's equity valuation. Accordingly, the model used to study the information incremental value of the percentage of board members belonging to an ethnic group is expressed as follows:

$$MV_{it+4} = \alpha_0 + \alpha_1 BV_{it} + \alpha_2 EARN_{it} + \alpha_3 EARN_{it} * NEG_{it} + \alpha_4 \%ETHNIC_{it} + \alpha_5 \%WOMEN_{it} + \alpha_6 \%IND_{it} + \alpha_7\text{-}10 SEC_{it} + \alpha_{11\text{-}12} YEAR_{it} + \varepsilon_{it} \quad (1)$$

where,

- MV_{it+4} — represents the market value for firm i 4 months after fiscal year-end t ;
- BV_{it} — represents the book value (equity) for firm i at the end of the year t ;
- $EARN_{it}$ — represents the net earnings for firm i at the end of the year t ;

- NEG_{it} — is a dummy variable equal to 1 when earnings are negative to control for the potential differential impact of negative earnings on market value for firm i in year t ;
- $\%ETHNIC_{it}$ — is the percentage of board members belonging to an ethnic group as declared by the firm i for the year t ;

- $\%WOMEN_{it}$ — is the percentage of women directors for firm i at the end of year t ;
- $\%IND_{it}$ — is the percentage of independent board members as declared by the firm i for the year t ;
- SEC_{it} (SEC_MAT_{it} , SEC_ENER_{it} , SEC_FIN_{it} , SEC_IND_{it}) — are dummy variables representing an industry sector and equal to 1 if the industry sector of firm i at year t is material (energy, financial, industrial) and 0 otherwise;
- $YEAR_{it}$ ($YR2019_{it}$, $YR2020_{it}$, $YR2021_{it}$) — are dummy variables representing each year covered by the observations and equal to 1 if the year covered is 2019 (2020, 2021) and 0 otherwise;
- ε_{it} — represents the error term for firm i in year t .

3.2. Sample and data collection

The sample used in this study is composed of all Canadian corporations included in The Globe and Mail's Board Games Director and Company Diversity Reports for the years 2019 to 2021 inclusively, representing 655 firms-years where information about the percentage of ethnic diversity, female representation and independence was collected. These reports pertain to major Canadian companies listed on TSX, primarily those included in the S&P/TSX Composite Index. Accounting and financial data were derived from the Capital IQ database. We eliminated income trusts (64 firms-years) since their business strategy and tax incentives are not comparable with other corporations. We also eliminated 22 firms-years from the sample for firms whose financial structure has changed (public to private, merger) and 6 firms-years with negative book value, leaving 563 firms-years in our final sample, where 195 apply to 2019, 177 to 2020

and 191 to 2021. Table 1 presents the distribution of firms by sector. Four sectors appear to be more represented: 24% in the materials sector, 14% in financial, 13% in energy and 13% in the industrial sector.

Table 1. Descriptive sectors

Sector	Number	% of sample
Materials	137	24.33%
Financial	78	13.85%
Energy	75	13.32%
Industrials	75	13.32%
Consumer discretionary	46	8.17%
Utilities	40	7.10%
Consumer staples	33	5.86%
Information technology	32	5.68%
Communications services	20	3.55%
Health care	20	3.55%
Real estates	7	1.24%
Total	563	100.00%

4. RESEARCH RESULTS AND DISCUSSION

4.1. Descriptive statistics

Table 2 presents the descriptive statistics for the variables included in our analyses. The mean firm market value is \$13,039 million, the mean book value is \$6,901 million and the mean earnings are \$606 million. With the minimum market value and book value at \$392 and \$122 million, corporations included in the sample represent relatively large players in the Canadian financial market. Boards seem to be relatively independent, with an average of 79% of board members considered independent by the firm. Women represent on average 29% of the total board members, while ethnic representation is only an average of 6% (median of 0%) of total board members.

Table 2. Descriptive statistics (N = 563)

Variables	Mean	Std. dev.	Median	Minimum	Maximum
MV_{it+4}	13,039.38	22,862.11	4,248.69	392.23	18,118
BV_{it}	6,901.42	12,612.10	2,268.25	122.36	89,853
$EARN_{it}$	606.10	1,758.65	140.00	-5,660.1	12,591
$\%ETHNIC_{it}$	0.0572	0.09059	0	0	0.6
$\%WOMEN_{it}$	0.2887	0.09585	0.2857	0	0.6
$\%IND_{it}$	0.7925	0.12456	0.8182	0.14	1.0

Note: Financial figures are presented in millions of Canadian dollars.

Table 3 presents the Pearson correlation coefficients for the variables included in our equation. As expected, the largest correlation coefficients are between market value (MV_{it+4}), book value for common equity (BV_{it}), and earnings ($EARN_{it}$). Also, the correlation coefficients representing a board's ethnic diversity ($\%ETHNIC_{it}$), representation of women ($\%WOMEN_{it}$), and independence ($\%IND_{it}$)

are weaker but still significantly correlated to the financial variables (MV_{it+4} , BV_{it} and $EARN_{it}$). The coefficient of the control variables women representativity ($\%WOMEN_{it}$), independence ($\%IND_{it}$) and ethnic diversity ($\%ETHNIC_{it}$) are not significantly correlated with each other, reducing the potential of multicollinearity in the regression analyses.

Table 3. Correlation coefficients (value model) (N = 563)

Variables	MV_{it+4}	BV_{it}	$EARN_{it}$	$\%ETHNIC_{it}$	$\%WOMEN_{it}$	$\%IND_{it}$
MV_{it+4}	-					
BV_{it}	0.842**	-				
$EARN_{it}$	0.774**	0.832**	-			
$\%ETHNIC_{it}$	0.086*	0.124**	0.099*	-		
$\%WOMEN_{it}$	0.229**	0.242**	0.244**	-0.042	-	
$\%IND_{it}$	0.141**	0.172**	0.126**	0.045	0.277**	-

Note: ** $p < 0.05$, * $p < 0.1$.

4.2. Regression analyses

Table 4 presents the results of the estimation of Eq. 1. Model 1 (M1) is our model without the variable on board ethnic diversity. Model 2 (M2) estimates the incremental significance provided by adding the variable on board ethnic diversity to the equation. For both models, we ran least squares regressions. Neither of our regression models (M1 or M2) presents a variance inflation factor higher than the maximal prescribed threshold of 10 proposed by Hair et al. (2009), indicating serious multicollinearity problems. In addition, we ran the Dublin-Watson statistic test for autocorrelation problems. With both models, the value obtained was close to 2, indicating that autocorrelation does not seem to be problematic. Furthermore, considering that we noted a weak, but positive and significant, correlation between each of our interest variables, that is, ethnic diversity ($\%ETHNIC_{it}$), women's representativity ($\%WOMEN_{it}$) and board independence ($\%IND_{it}$), and our independent variable's market value (MV_{it+4}) and book value (BV_{it}), there is a possibility that some of the effects of these three interest variables are already incorporated in the two accounting variables, making it difficult to measure their real effect on market value. To address this possibility, we first regressed each of the two accounting variables BV_{it} and $EARN_{it}$ on ethnic diversity, women's representativity and independence ($\%ETHNIC_{it}$, $\%WOMEN_{it}$, and $\%IND_{it}$). The residuals from these pre-regressions $RES_{BV_{it}}$ and $RES_{EARN_{it}}$ replace the raw accounting variables in our models M1 and M2. These minor statistical replacements eliminate the correlation between the adjusted accounting variables and the market value.

Table 4. Results of the regression analysis

<i>Independent variables</i>	<i>M1</i>	<i>M2</i>
BV_{it}	1.093**	1.1**
$EARN_{it}$	4.8**	4.717**
$EARN_{it} * NEG_{it}$	-3.519**	-3.25**
$\%ETHNIC_{it}$		20,739.308**
$\%WOMEN_{it}$	44,484.35**	46,214.545**
$\%IND_{it}$	18,255.506**	17,295.685**
SEC_MAT_{it}	-4,648.108**	-4 728,704**
SEC_ENER_{it}	-6,846.096**	-6 180,111**
SEC_FIN_{it}	-8,865.993**	-9 014,167**
SEC_IND_{it}	750.241	988,12
$YR2020_{it}$	-1,817.703	-1,932.683
$YR2021_{it}$	2,681.269**	2,328.326*
Intercept	-12 235,445**	-13,024.632**
R	0.866	0.87
R ²	0.751	0.757
Adjusted R ²	0.746	0.752
F-value	150.78**	142.9**
Incremental adjusted R ²		0.007
F-test improved fit		14.765**
D-COOK	0.189	0.197
VIF	6.182	6.188
Durbin-Watson	2.173	2.173
No. of observations	563	563

Note: Dependent variable — MV_{it+4} , *** $p \leq 0.001$, ** $p \leq 0.05$, * $p \leq 0.1$ (two-tail); D-COOK — Maximum value, VIF — variance inflation factor.

The first model (M1) of our analysis shows that, as expected, coefficients associated with a book value of equity (BV_{it}) and earnings ($EARN_{it}$) are positive and significant. These results are similar to the findings of Xu et al. (2007) and Coulmont and

Berthelot (2015). Like Xu et al. (2007), the coefficient associated with the interaction variable resulting from the net earnings and the dummy variable NEG_{it} is negative and significant. The slope of the negative net earnings is thus different from that of positive earnings. The coefficients associated with women's representativity and board independence are positive and significant, indicating that investors positively value greater representativity of women on boards as well as board independence. The coefficient associated with the variable year 2021 ($YR2021_{it}$) used to control for the influence of the observation year on the results is positive and significant for 2021, as the new requirement to disclose diversity was amended in January 2020, favouring the nomination of minorities, including women, on boards. Major sectors like materials, energy, and financials (SEC_MAT_{it} , SEC_ENER_{it} , and SEC_FIN_{it}) are significantly negatively valued by shareholders compared to other sectors included in our sample. These results can be explained by the pandemic in the years 2020 and 2021 when activity in these sectors was particularly affected. Overall, the adjusted R² for Model 1 (M1) indicates that the independent variable's book value for common equity (BV_{it}) and earnings ($EARN_{it}$) explain 74.6% of the market value variation, which is very similar to the variance explanation offered in other studies using Ohlson's (1995) model.

Model 2 (M2) examines whether adding a new independent variable to the equation will impact the level of significance of Eq. 1 (M1). The coefficient associated with board ethnicity ($\%ETHNIC_{it}$) is positive and significant. Results show that investors positively value a board composed of a greater proportion of non-Caucasians. The findings support our hypothesis that the market significantly values board ethnic diversity and clarifies the direction of the relationship. The coefficient associated with the variable year 2021 ($YR2021_{it}$) is still positive but less significant than in model M1. One possible explanation is the fact that the new legal requirement encouraging better representation of visible minorities on boards has only been in effect since 2020, in contrast to the requirement encouraging the nomination of women on boards, which was introduced in 2015. Board members are not necessarily replaced every year and new qualified board members proposed for election do not necessarily belong to a visible minority. Sectors continue to significantly impact the relationship between our independent and dependent variables, as was the case in M1. In addition, there is a slightly significant increase in the explanatory power of the independent variables over the dependent variable of Model 1 (M1), now at 75.2%, with the addition of the new board diversity measure ($\%ETHNIC_{it}$). The difference between the adjusted R² statistic is significant (F-test improved fit of 14.765).

4.3. Discussion

Although board ethnic diversity has received more attention from the financial market, academics, and legislators in some countries in recent years, the evidence supporting the benefits of greater board ethnic diversity is inconclusive (Carter et al., 2010; Chebri & Bahoussa, 2020; Qian

et al., 2021; Morrone et al., 2022). The objective of this study is rather to evaluate how the market perceives board diversity, which brings a different perspective of analysis through a more sophisticated and complete empirical model. Another important distinctive feature of our study is that it is conducted in a jurisdiction where new requirements have been introduced to encourage the nomination of visible minority directors. In 2020, Canada established regulations requiring federally incorporated corporations to disclose the participation of women, visible minorities, Aboriginal communities, and people with disabilities in their official documents. This new requirement is a tangible response from a governing body to the general population for whom the values of gender and racial inclusion and equality now occupy an important place in societal debates. The objective of our study is to determine whether investors also attach importance to these same values. Our results are similar to those of EmadEldeen et al. (2021) and Vemala et al. (2018), and enable us to conclude that they do. These results, which diverge from those of Carter et al. (2010), Chebri and Bahoussa (2020), Qian et al. (2021) and Morrone et al. (2022), can perhaps be explained by the fact that the analyses were carried out, similarly to those of EmadEldeen et al. (2021) and Vemala et al. (2018) (the United States), with a sample of companies operating in very multicultural contexts (i.e., Canada, the United Kingdom, and the United States). In such contexts, investors may be more sensitive to ethnicity issues.

5. CONCLUSION

This study aims to examine whether investors value the ethnic diversity of boards of directors. Based on a sample of 563 firm-years from the S&P/TSX Composite Index, our results suggest that the market takes gender and ethnic diversity into account, thereby empirically supporting the participation of visible minorities on boards of directors. The results also show that the impact of ethnicity on value for investors is nearly 50% less than that of gender diversity. However, while the impact of board ethnic diversity is not substantial, it remains significant. Although the relationship between ethnic diversity and shareholder value is significant, including the ethnic diversity variable in the second regression model slightly improves its strength. One reason could be that the cause-and-effect relationship between ethnicity and perceived shareholder value is difficult to validate empirically. Another could be that investors view the nomination of visible minority candidates as a requirement for being considered a good corporate citizen, rather than as

an initiative to bring more technical expertise to the board. Investors could therefore perceive these nominations as an indication that the corporation follows the rules and manages the business as a good corporate citizen, promoting sustainable values that eventually tie into corporate performance.

This study has certain limitations. While the number of firm-years constituting our sample is less than in certain previous studies that covered more than 10,000 firm-years (Guest, 2019), it is comparable to others (Rixom et al., 2023). It should be noted however that the composite index of the S&P/TSX on which we based our sample contains 51% of firms required to comply with the new disclosure requirement on board diversity. In addition, our sample also represents approximately 95% coverage of the Canadian equities market (TSX, 2023). Therefore, since the data used in the paper are based on large public firms, the results may not be generalized to small or private firms. Furthermore, the data used in this study was limited to three years because the new requirement is recent, thus, in turn, limiting the number of firm-years. A second limitation lies in the challenge of determining whether a director belongs to a visible minority. Although the new Canadian regulation requires federally incorporated corporations to disclose information on directors belonging to visible minority groups, a number of corporations in our sample are not subject to this regulation and those that are can still adopt the compliance or explain the approach and choose not to comply for the years under study. It is therefore possible that the information collected in The Globe and Mail database underestimates the directorships of visible minority groups or that the data collected contains errors. However, to mitigate the possibility of errors in the ethnic diversity variable, we compared the representation of visible minority directors in our sample with another study for the same period (MacDougall et al., 2022).

A future project could investigate whether women and members of visible minorities have few responsibilities as directors or become members of audit, compensation, and governance committees or even chair of the board. It could also be worthwhile examining whether the impact on the future benefits that shareholders appear to perceive translates into increased earnings thanks to better strategic decisions or more effective control of agency costs. In other words, it might be interesting to examine whether the contributions of women and visible minorities stem from their role as advisors and resource providers in terms of strategic decision-making or from their role of monitoring management.

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