

Board Diversity: An Analysis of the Market Reaction to the Gender Diversity Rules for TSX Listed Companies

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Abstract

This paper examines the wealth effects of increasing disclosure of gender diversity policy for Canadian firms. Using the Zellner's Seemingly Unrelated Regression (SUR) method, the study shows that the stock market reacts positively to several news announcements leading up to the Ontario Securities Commission's final rules on gender diversity. Using the Board Shareholder Confidence Index (BSCI) ranking, firm with high BSCI rating (well governed) experienced lower abnormal returns compared to those with lower BSCI rating. This is consistent with the findings of Adams and Ferreira (2009).

Keyword: Corporate governance, gender diversity, SUR, board of directors

JEL: G34, G38, M14, J16

1. Introduction

The ongoing debate on gender diversity in the corporate boardroom has led to several countries instituting policies requiring firms to take steps to increase diversity in the boardroom and in senior management. On one end of the spectrum several, countries have legislated a quota system. For example, Norway requires 40% of the board to be women. On the other hand, several countries have opted for a voluntary system of “comply or explain”. For example, in 2012 the U.K instituted a “comply or explain” model. We add to the literature on gender diversity by investigating the wealth effect of the Ontario Securities Commission (OSC) rules and Toronto Stock Exchange (TSX) listing requirement. We show that the stock market reacts positively to several news announcements leading up to the Ontario Securities Commission’s final rules on gender diversity. Also, we find that well governed experienced lower abnormal returns compared to weaker governed. This is consistent with the findings of Adams and Ferreira (2009)

Based on several recent surveys, the percentage of female directors in Canada appears to be stagnant at approximately 10% since 2009. This led to the Ontario Government (May 2, 2013) including a statement in its budget supporting broader gender diversity on boards and in senior management. The government, in conjunction with the Ontario Securities Commission, will consider the best way for firms to disclose their policies relating to gender diversity. Following the Ontario Budget announcements, several announcements related to gender diversity occurred during May 2013 and October 2014. On October 15, 2014, the OSC released its final rule to boost female participation on boards and in senior management. On an annual basis, TSX listed firms are required to disclose annually their policy regarding women representation on the board and senior management, targets for women representation and consideration of female director candidates in the director identification and selection process. The OSC argues that increased transparency is intended to assist investors in making investment and voting decisions.

The empirical evidence on the gender diversity is mixed. Several studies show that having female directors adds value to the board and increases shareholder wealth (Carter, Simkins, and Simpson (2003), Erhardt, Werbel, and Shrader (2003), Adams and Ferreira (2009), Srinidhi, Gul and Tsui (2011), and Gul, Srinidhi, and Ng (2011)). While others show that a larger proportion of female directors have a negative impact on firm value or returns (Dobbin and Jung (2011), Darmadi (2011), Minguez-Vera and Martin (2011) and Ahern and Dittmar(2012)). The evidence on the negative relationship appears to be prevalent in studies of small and medium-sized firms, in countries with quota systems, except of Dobbin and Jung (2011) with a sample of U.S. firms.

One issue that is central issues that affect more research relating corporate governance to firm value is the potential endogeneity problem (omitted variable or reverse causality). The omitted variable bias is typical account for using firm fixed effects. While the reverse causality is often addressed using two stage least square or instrumental variable approach. Finding good instrument is often difficult. The present study does not suffer from potential endogeneity since we are utilizing an exogenous shock in the disclosure requirements to study investor reaction to announcements leading up to changes in the listing requirements for the TSX.

The objective of this paper is to use stock market returns to evaluate shareholder wealth effects of announcements related to increased gender diversity in Canadian boardrooms. Since the various announcements leading to a final rule on gender diversity are calendar event dates, we utilize the Zellner's Seemingly Unrelated Regression (SUR) methodology. The SUR methodology is advantageous in testing for abnormal returns when the event involves a common calendar date due to the cross correlation of the residuals.

The results show that shareholders reacted positively to several of the announcement events leading up to the final rule on October 15, 2014. More specifically, the event day 0 or day +1 is economically significant for several of the announcements in the study. For example, the market reaction for the June 14, 2013 announcement is 0.58%. In addition, the cumulative abnormal returns (CAR -1, +1) are statistically and economically significant for several of the announcements. For example, the July 30, 2013 announcement CAR is 0.95% for the full sample with 1.39% CAR for the smallest quartile and 0.75% for the largest quartile. The final rule announcement (October 15, 2014) CAR is not significant for the full sample but positive (1.40%) and significant for the largest quartile. Surprisingly, the CAR for the smallest quartile is negative (-1.91%) and significant. Based on market reaction and the implicit wealth effects, the gender diversity policy appears to have a positive impact on the governance of Canadian firms. Using the Board Shareholder Confidence Index (BSCI) ranking for the largest group of firms¹, we show that firms with lower rankings experience higher abnormal returns compared to firms with high rankings (well governed). The evidence is consistent with the findings of Adams and Ferreira (2009).

The remainder of the paper is organized as follows. The literature review and research question is presented in Section 2. Section 3 provides a description of data and methodology. The results and several robustness checks are presented in Section 4 and Section 5 concludes the paper.

¹ The Clarkson Center for Business Ethics and Board Effectiveness ranking firms that are a part of the S&P/TSX Composite Index. These are the largest firms listed on the Toronto Stock Exchange.

2. Literature Review and Research Questions

2.1 Gender Diversity

It can be argued that corporate decision-making benefits from a diversity of viewpoints, professional experience, education, skill as well as individual attributes such as age, gender, ethnicity and cultural background. Board gender diversity is a central theme of corporate governance reform efforts worldwide (See Appendix A, Table 1A for details). We observed that several countries have opted to adopt a voluntary “comply or explain” model for gender diversity (for example, Australia, Denmark, etc.). While several other countries have opted to impose a quota system. For example, in 2006 Norway passed legislation requiring 40% of the board to be female directors. A similar law was passed in Spain in 2007 and in France in 2011.

The existing literature shows that female directors behave differently. Gender-diverse boards have more informed deliberations and discuss tougher issues and promote more effective board communication to investors (Stephenson (2004); Huse and Solberg (2006); McInerney-Lacombe, Billimoria, and Salipante (2008) and Joy (2008)). Adams and Ferreira (2009) show that female directors have a better attendance record than male directors and are more likely to join monitoring committees. They find that CEO turnover is more sensitive to stock performance and directors receive more equity-based compensation in firms with more gender diverse boards. They show that the impact of gender diversity on firm performance is negative for companies with fewer takeover defenses (good governing firms) and positive for firms with weak governance (strong takeover defenses).² They argue that mandating gender quotas for directors can reduce firm value for well-governed firms. Carter et al (2003) find a positive relationship between the fraction of women or minorities on the board and firm value. Firms with female directors exhibit higher earnings quality (Srinidhi et al., 2011). Gul et al. (2011) find that gender diversity improves stock price informativeness through the mechanism of increased public disclosure in large firms and by encouraging private information collection in small firms. Erhardt et al. (2003) find evidence of a positive relationship between the proportion of women and minorities on corporate boards and the return on assets as well as the return on investments in large U.S. firms.

On the other hand, Dobbin and Jung (2011) find a negative relationship between the number of women board members and Tobin’s Q for a sample of U.S firms.³ However, female directors do not affect ROA. In terms of studies on non-U.S. firms, Darmadi (2011) provides evidence of a negative relationship between female directors and return on assets

² The positive relationship is marginally significant that the 10% level.

³ They analyze data on 432 major American corporations for the period 1997 to 2006. This sample is drawn for the Fortune 500 group of firms.

and Tobin's Q for a sample of 169 Indonesian firms. Minguez-Vera and Martin (2011) find a negative relationship between female directors and return on equity for a group of small and medium-sized Spanish firms. Ahern and Dittmar (2012) examine the 40% female director quota for Norwegian firms and find a significant drop in stock price at the announcement of passage of the law and a large decline in Tobin's Q over the following years. They argue that the decline in Q ratio is due firms have younger and less experienced female directors because of the mandatory quota system.

Conversely, Farrell and Hersch (2005) find insignificant abnormal returns on the announcement of a woman added to the board.⁴ They argue that they fail to find convincing evidence that gender diversity in the corporate boardroom, on average, is a value enhancing strategy. Hence, demand for female directors is due to corporations responding to either internal or external calls for diversity. Francoeur et al. (2008) find a positive but insignificant relation between the fraction of female directors and average monthly abnormal returns in 230 Canadian firms. Similar findings were reported for studies based on Danish and U.K firms (Rose, 2007, and Gregory-Smith et al., 2012).

2.2 Canadian Context

Canadian corporate board gender diversity received significant attention recently. A 2011 report by Catalyst shows that the representation of women on Canadian boards is growing very slowly. In 2011, 10.3% of directors of public companies were women, which represent a zero increase from 2009. A survey completed by Ontario Securities Commission (OSC) in 2013 indicates that women hold only 10.5% of board seats and less than 10% of women occupy executive positions. Clearly, female representation in Canadian boardroom appears stagnant. This prompted the Ontario Provincial Government in their May 2013 budget to issue the following statement: "the government strongly supports broader gender diversity on the boards and in senior management of major businesses, not-for-profit firms and other large organizations. In conjunction with others, including the Ontario Securities Commission (OSC), the government will consider the best way for firms to disclose their approaches to gender diversity, with a view of increasing the participation of women on boards and in senior management".

Following the Ontario Government budget statement, on June 14, 2013, the Ontario Minister of Finance and the Minister Responsible for Women's Issues requested that the OSC undertake a public consultation process regarding disclosure requirements for gender diversity. In particular, a 'comply or explain' model of gender diversity in the boardroom and

⁴ Their analysis is complicated by confounding events since most board additions occur either at scheduled board meetings that involve other information releases or are communicated through proxy mailings and ratified by shareholders at annual meetings. In our study, we do not have this issue.

in senior management for reporting issuers on the Toronto Stock Exchange (TSX). As a result, the OSC undertook a public consultation process and on July 30, 2013, issued a consultation paper requesting comments on the OSC's proposed "comply or explain" model, including effective policies and practices for increasing the number of women on boards and the appropriate disclosure requirements.

On October 15, 2014, the Ontario Securities Commission (OSC) released its final rules to boost women on boards as well as in senior management for all TSX and other non-venture issuers.⁵ The amendments to disclosure of corporate governance practice and disclosure (National Instrument 58-101 and Form 58-101F1) are intended to increase transparency for investors regarding representation of female directors and senior managers. The OSC argues that the transparency is intended to assist investors in making investments and voting decisions. Issuers are required to provide annual disclosure on the following: director term limits and mechanisms of renewal of the board; policies regarding the representation of women on the board; board's or nominating committee's consideration of the representation of women in the director identification and selection process; representation of women in executive officer positions; targets regarding the representation of women on the board and in executive officer positions and the number of women on the board and in executive officer positions. Companies that do not comply with the above disclosure requirements would be required to explain why, but will not face sanctions. Table 1 provides a list and descriptions of several events leading to the final rule by the OSC.

Given the ongoing debate surrounding board diversity as well as the emphasis placed on diversity as a part of corporate governance, an examination of the wealth effects of increased disclosure of gender diversity policy in Canadian firms warrants examination. Stock market participants may view the proposed model "comply or explain" as an important step in improving corporate governance in Canada and therefore, react positively to events leading to the final rule on disclosure requirements. Alternatively, as the Ontario Teacher Pension Plan argues, the 'comply or explain' model does not go far enough to improve diversity and hence, stock market reaction may be muted. Therefore, the following hypothesis is tested:

H1: Gender diversity is expected to improve corporate governance and therefore, stock market participants are expected to react positively to news relating to improved disclosure of gender diversity in Canadian boardrooms and in senior management.

⁵ Securities regulatory authorities in Manitoba, New Brunswick, Newfoundland and Labrador, Northwest Territories, Nova Scotia, Nunavut, Ontario, Quebec and Saskatchewan have collectively agreed to the amendments. Alberta is the only province that did not to the amendments to National Instrument 58-101 and Form 58-101F1.

3. Data and Methodology

3.1 Data

We extract data for all firms listed in the Canadian Financial Markets Research Centre (CFMRC) database. We require that firms have daily return data over the period 2012 to 2014 since several of the related news announcements occurred in 2013 and 2014. All accounting data is gathered from Compustat and the board shareholder confidence index is extracted from the Clarkson Centre for Business Ethics and Board Effectiveness (CCBE). The market index utilized in this paper is the CFMRC valued weighted index.⁶ After eliminating firms with incomplete stock return data and merging with Compustat, we have a final sample of 915 firms with complete data over the sample period.

3.2 Methodology

Amoako-Adu and Smith, (1995) argue that the SUR methodology is appropriate for testing a wide range of regulatory changes with common calendar day announcements for all stocks since the error term is not independent across all equations. With calendar events common to all firms, the residual tends to be correlated. The lack of independence of the regression residuals reduces the efficiency of the estimated coefficients and renders the t-statistics unreliable if each equation is estimated separately, as it is often done with the standard residual analysis. The seemingly unrelated regression (SUR) method of Zellner (1962) was developed to account for this correlation. Therefore, the SUR methodology is advantageous in testing for abnormal returns when the event involves a common calendar date since it explicitly accounts for the lack of independence of the regression residuals. Following Binder (1985), Allen and Wilhelm (1988), and Amoako-Adu and Smith, (1995), we estimate the following model for each firm simultaneously in order to isolate the impact of the proposed TSX rule change.

$$R_{i,t} = \alpha_i + \sum_{j=1}^6 \gamma_{i,j} D_{j,t} + \beta_i R_{m,t} + \varepsilon_{i,t} \quad (1)$$

Where $R_{i,t}$ is the stock returns for firm i over t periods. $R_{M,t}$ is the market returns (CFMRC value weighted portfolio). $D_{j,t}$ is a binary variables equal to 1 for the j^{th} announcement date as well as 1 day before and 1 day after the announcement dates and zero otherwise. The γ_{ij} coefficients measure the abnormal returns or marginal effects for each event

⁶ We also utilized the CFMRC equally weighted index and the TSX Composite Index in order to examine the robustness of our results.

j on the firm i . In order to determine the stock market reaction to the announced rule change, we follow the Fama-McBeth (1973) approach to construct the mean abnormal returns and their respective t-statistics.

4. Results

4.1 Descriptive Statistics

In Table 2, we report the descriptive statistics for the sample. We measure firm size using total assets for fiscal year ending 2012 and market value as of December 30, 2012. The mean size is \$7.64b and \$1.99b measured by total assets and market value of equity, respectively. In terms of debt, the average total liabilities are \$6.34b and the leverage ratio is 39% (total liabilities/total assets). Profitability is measured by return on asset (ROA) and return on equity (ROE)⁷. The mean (median) ROA is -2 % (5%) whereas the ROA for the 75% percentile is 12%. In terms of ROE, the mean (median) ROE is 8.82% (10%). The dividend payout is 29.8% while the average dividend yield is 2.5%.

4.2 SUR Regression & Market Reaction

In Table 3, the SUR regression results are presented. In the first column, the result for the overall sample is reported. In columns II to VI, the SUR regression results for each quartile are presented. Firms are sorted into quartiles according to size measured by market value of equity at the end of the 2012 calendar year. For the full sample, there are three events in which stock market reaction (day -1, 0 or +1) is positive and significant. Stock market reaction to the OSC's release of its final rule is negative but not significant. In addition, stock market participants reacted negatively to the first announcement on board gender diversity by Ontario government. However, since this announcement was made in conjunction with the Ontario Budget, it is possible that there are confounding effects.

On June 14, 2013 the Ontario Minister of Finance and the Minister Responsible for Women's Issues requested that the OSC undertake a public consultation process regarding gender diversity. The announcement abnormal return (0.58%) is positive and significant at the 1% level for the full sample and also significant for Quartile 1, 2 and 4. This can be seen as the first step towards improving board gender diversity in Canada.

The third related news announcement can be viewed as the most significant step forward towards improving gender diversity in the boardroom and in senior management. The OSC, on July 30, 2013, published its consultation paper for comments. The proposed model outlined in the paper is a voluntary option of "comply or explain". The abnormal return on the event date is not significant. However, market reaction on day +1 is positive (0.80%) and economically significant for the full sample as well as all four quartiles. On January 16, 2014,

⁷ ROA= Earnings before interest, taxes, depreciation and amortization/total assets. ROE = Earnings before interest, taxes, depreciation and amortization/Book value of common equity.

the OSC published for comments proposed amendments to the corporate governance disclosure practice (Form 58-101F1 of National Instrument 58-101). The announcement date return is positive (0.24%) but marginally significant. This is primarily driven by the smallest and largest quartiles.

Finally, on October 15, 2014 the OSC released its final rule for boosting women on boards and in senior management. Thus, making Canada one of several countries to have a voluntary system in place to improve diversity in the corporate boardroom. At first glance, the reaction appears muted for the full sample. However, examining the various quartiles, we observed that the market reaction is strong and positive (0.60%) for the largest group of firms. This is economically significant. The results are consistent with prior studies such as, Carter et al. (2003).

A somewhat puzzling result is that, the reaction to the final rule announcement is negative (1.55%), economically and statistically for the smallest quartile. One possible explanation is that it is not difficult for larger firms to attract qualified and experienced female directors. However, this may not be the case for their smaller counterparts. The evidence for the smallest quartile, however, is consistent with studies of non-U.S. firms and for small and medium firms (Darmadi (2011), Minguez-Vera and Martin (2011) and Ahern and Dittmar (2012)).

The cumulative abnormal returns (-1 to +1) for the full sample as well as the 4-size quartile groupings are reported in Table 4. The results mirror those in Table 3. For example, the CAR for the July 30, 2013 announcement is positive (0.95%) and significant at the 1% level. However, even though the event date abnormal return is positive significant for the June 14, 2013 announcement, the CAR is negative (-0.88%, $t=-4.87$) and statistically significant. In addition, the CAR for the final rule announcement is similar to the daily abnormal return reported in Table 3. The CAR is insignificant for the full sample, negative (-1.90%, $t=-2.73$) and significant for the smallest quartile and positive (1.40%, $t=4.20$) and significant for the largest group of firms. The final column of Table 4 shows the test for mean differences between the quartile 4 (Q4) and the smallest quartile (Q1). The results show that CAR for Q4 is very different from Q1.

4.3 Board Shareholder Confidence Index

Using takeover defenses as a proxy for corporate governance, Adams and Ferreira (2009) show that gender diversity have a negative impact on firms with few takeover defenses (well-governed firms) and positive impact on poorly governed firms. Along this line of examination, we utilize the 2012 Board Shareholder Confidence Index rankings constructed by the Clarkson Centre for Business Ethics and Board Effectiveness at the University of Toronto. The center produces rankings for firms that are a part of the S&P/Toronto Stock

Exchange Composite Index. These are the largest firms listed on the TSX and are primarily in our largest quartile group. The Center evaluates and rates boards of directors on their potential to act effectively and by their performance as indicated through past practices. The scoring criterion is broken down into three categories: individual potential, group potential and past practices⁸. The results are presented in Table 5. In Panel A, the dependent variable is the announcement day abnormal returns. For the June 14, 2013 (announcement by the Minister of Finance and Women's Issues Minister) and October 15, 2014 (OSC final rules) announcements, firms with higher BSCI scores experiences lower abnormal returns. This is consistent with the arguments in Adams and Ferreira (2009) that gender diversity policy can reduce the value of well-governed firms. It is possible that these firms already have diverse board in terms of gender, race, and experience. The results are similar for announcement of the OSC's final rules regarding gender diversity in Panel B where the dependent variable is cumulative abnormal returns (-1, +1).

5. Conclusions

This paper examines the wealth effects of several announcements leading to a final rule by the OSC to improve disclosure of gender diversity policy and boost female participation in Canadian boardrooms and in senior management. Several of the announcements events have a positive and significant impact on the wealth of shareholders. The positive stock market reaction implies that improved disclosure regarding gender diversity is important in enhancing the overall corporate governance structure of Canadian firms. Our results are consistent with the prior literature. For the final rules announcement, the negative abnormal returns for the smallest quartile are consistent with studies of non-U.S. firms and studies of small and medium size firms. The positive abnormal return for the largest quartile group is consistent with studies that show a positive relationship between the proportion of female directors and firm value. In particular, for the largest group of firms listed on the TSX, the abnormal returns is lower for better-governed firms measured by the BSCI ratings compared to those that have lower BSCI ratings.

⁸ The individual potential category is made up of director independence, meeting attendance and director ownership. The group potential category contains (1) board structure evaluation includes: CEO/Chair split, committee independence, and share structure (dual class shares) and (2) board systems which include: board and director evaluation process, disclosure skills and director continuing education and orientation. The final category is past practices, which includes: compensation (dilution, re-pricing, pay-related performance, option grants disclosed, options to directors, evergreen option plan and outstanding loans to directors or executives) director elections (majority voting, individual voting, annual elections and detailed voting results) and CEO succession plan disclosure.

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Table 1: Major events leading to changes in the TSX listing requirements

Event	Date	Description
1.	May 2, 2013	The Ontario Government Budget includes the following statement: The government strongly supports broader gender diversity on the boards and in senior management of major businesses, not-for-profit firms and other large organizations. In conjunction with others, including the Ontario Securities Commission (OSC), the government will consider the best way for firms to disclose their approaches to gender diversity, with a view of increasing the participation of women on boards and in senior management.
2.	June 14, 2013	The Ontario Minister of Finance and Minister Responsible for Women’s Issues requested that OSC undertake a public consultation process regarding disclosure requirements for gender diversity. In particular, “comply or explain” model for reporting issuers listed on the TSX relating to board and senior management gender diversity policies and practices and provide recommendations regarding specific disclosure requirements for TSX-listed issuers.
3.	July 30, 2013	Ontario Securities Commission published for comments staff consultation paper 58-401(Disclosure requirements regarding women on boards and in senior management. The proposed model is a voluntary option of “comply or explain”.
4.	October 4, 2013	Ontario Teacher’s Pension Plan (OTPP) wants OSC to force firms to add female directors and to have at least 3 women on their boards. OTPP recommends that after 2020, firms not in compliance should be delisted.
5.	January 16, 2014	OSC published for comments (over a 90-day period) proposed amendments to Form 58-101F1 of National Instrument 58-101 – Disclosure of Corporate Governance Practices.
6.	October 15, 2014	OSC released final rules to boost women on boards.

Table 2: Summary Statistics

All of the variables are measured as of the 2012 fiscal year end, except of market capitalization, which is measure as of the end of December 2012.

Q Ratio= (market value of equity + total debt)/total assets. Dividend payout=cash dividends /net income and dividend yield is cash dividend/stock price.

Variable	Mean	25 th Percentile	Median	75 th Percentile	Std. Dev.	Obs.
Total Assets (TA -\$m)	7,637.84	72.54	285.24	1,193.27	54,768.04	915
Market Capitalization (\$m)	1,989.82	58.74	204.89	870.93	6,834.49	915
Total Liabilities (\$m)	6,335.84	10.88	85.87	551.55	51,328.37	915
Total Common Equity (TE- \$m)	1,192.18	48.44	151.59	557.60	4,018.94	915
Sales (\$m)	1,380.43	2.43	86.60	544.61	4,655.29	915
EBITDA (\$m)	269.64	-2.08	12.52	95.62	1,073.09	915
Dividend Payout (%)	29.82	0.00	0.00	40.35	171.95	915
Dividend Yield (%)	2.49	0.00	0.00	4.10	4.37	915
Return on Assets (EBITDA/TA)	-0.02	-0.03	0.05	0.12	0.42	915
Leverage (Total Liabilities/TA)	0.39	0.14	0.38	0.59	0.30	915
Tobin's Q Ratio	1.44	0.69	0.98	1.40	2.61	915
Return on Equity (EDITDA/TE)	8.82	-3.35	10.00	25.91	92.46	915

Table 3: The market reaction to events leading to changes in the TSX listing requirements

		I		II		III		IV		V	
		Full sample		Quartile 1		Quartile 2		Quartile 3		Quartile 4	
Events	Variable	Est.	t-stat	Est.	t-stat	Est.	t-stat	Est.	t-stat	Est.	t-stat
1. May 2, 2013	Intercept	0.01	1.13	0.08	5.87***	-0.02	-1.40	-0.02	-2.26**	-0.02	-2.38**
	Market	0.91	34.80***	0.56	15.57***	0.85	17.54***	1.09	17.91***	1.12	21.90***
	Event day -1	-0.16	-1.24	-0.07	-0.16	-0.48	-2.10**	-0.32	-1.91*	-0.28	-2.83***
	Event day 0	-0.89	-6.76***	-0.75	-1.94**	-1.21	-4.58***	0.20	1.50	-0.42	-2.95***
	Event day +1	-0.02	-0.19	-0.30	-0.92	-0.09	-0.39	0.10	0.64	0.20	1.93*
2. June 14, 2013	Event day -1	-0.86	-7.76***	-1.44	-5.22***	-0.70	-2.74***	0.26	1.62	-0.31	-2.13**
	Event day 0	0.58	4.92***	0.78	2.08**	0.37	1.77*	-0.001	-0.01	0.32	3.07***
	Event day +1	-0.60	-4.73***	-0.38	-1.05	-0.78	-2.99***	-1.12	-5.25***	-0.14	-1.06
3. July 30, 2013	Event day -1	0.23	1.17	1.16	1.62	0.27	0.97	-0.40	-3.11***	-0.10	-0.76
	Event day 0	-0.08	-0.56	-0.59	-1.47	-0.57	-1.60	0.47	3.90***	0.38	2.99***
	Event day +1	0.80	5.84***	0.82	2.22**	1.04	3.25***	0.88	4.67***	0.46	2.91***
4. Oct. 4, 2013	Event day -1	0.37	2.72***	0.32	0.83	1.00	2.93***	0.36	2.24**	0.30	2.62***
	Event day 0	-0.08	-0.65	0.02	0.07	-0.24	-0.98	0.05	0.27	-0.42	-3.12***
	Event day +1	0.04	0.28	0.13	0.35	-0.29	-1.27	-0.02	-0.12	0.32	1.96**
5. Jan. 16, 2014	Event day -1	0.25	1.80*	0.53	1.44	0.65	1.78*	-0.01	-0.04	-0.18	-1.59
	Event day 0	0.24	1.68*	0.85	1.71*	-0.15	-0.67	-0.01	-0.07	0.26	1.75*
	Event day +1	0.16	1.16	0.16	0.38	0.53	1.91*	0.23	1.26	-0.28	-1.83*
6. Oct. 15, 2014	Event day -1	-0.31	-1.87*	-0.82	-1.83*	-0.71	-2.16**	-0.19	-0.78	0.49	2.01**
	Event day 0	-0.19	-1.08	-1.55	-3.08***	0.09	0.24	0.10	0.41	0.60	3.71***
	Event day +1	0.33	1.84*	0.46	0.85	0.12	0.35	0.43	1.62*	0.31	1.51
Obs.		915		228		229		229		229	

Table 4: Reports the Cumulative Abnormal Returns (-1 to +1) for events leading to changes in the TSX listing requirements

Event	Date	Full Sample		Quartile 1		Quartile 2		Quartile 3		Quartile 4		Q4-Q1		
		CAR	t-stat	CAR	t-stat	CAR	t-stat	CAR	t-stat	CAR	t-stat	Diff	t-stat	
1.	May 2, 2013	-1.07	5.97***	-1.11	-2.37**	-1.77	4.82***	-0.90	-2.64***	-0.50	2.40**	0.61	8.59***	
2.	June 14, 2013	-0.88	4.87***	-1.04	-2.32**	-1.11	-2.80***	-1.25	-3.79***	-0.12	-0.51	0.92	13.03***	
3.	July 30, 2013	0.95	4.02***	1.39	1.97**	0.74	1.43	0.95	3.60***	0.73	2.89**	*	-0.66	-6.30***
4.	October 4, 2013	0.33	1.72*	0.48	0.89	0.47	1.13	0.39	1.19	0.00	-0.01	-0.48	-6.00***	
5.	January 16, 2014	0.65	2.91***	1.54	2.27**	1.03	2.45**	0.21	0.72	-0.19	-0.73	-1.73	17.07***	
6.	October 15, 2014	-0.17	-0.65	-1.91	2.73***	-0.50	-1.07	0.34	0.74	1.40	4.20**	*	3.31	30.62***

Table 5: Regression of the board shareholder confidence index and market reaction to changes in the TSX listing requirements

The dependent variable is the announcement day abnormal returns (Panel A) or the cumulative abnormal returns (Panel B). BSCI is the board shareholder confidence index constructed by the Clarkson Centre for Business Ethics and Board Effectiveness, University of Toronto and size is the log of market capitalization as of the end of 2012.

Panel A: Announcement day abnormal returns

	June 14, 2013		July 30, 2013		October 4, 2013		January 16, 2014		October 15, 2014	
	Est.	Est.	Est.	Est.	Est.	Est.	Est.	Est.	Est.	Est.
	t-stat	t-stat	t-stat	t-stat	t-stat	t-stat	t-stat	t-stat	t-stat	t-stat
Intercept	0.019	0.035	0.005	0.026	-0.001	-0.003	0.0004	-0.003	0.020	0.037
	2.95***	3.63***	1.20	2.32**	-0.23	-0.45	0.09	-0.26	3.26***	3.19***
BSCI	-0.004	-0.004	-0.0003	-0.001	-0.0002	-0.0003	0.0002	0.0001	-0.004	-0.027
	-2.59**	-2.23**	-0.21	-0.58	-0.22	-0.36	0.15	0.02	-2.25**	-1.87*
Size		-0.002		-0.003		0.0004		0.0005		-0.00
		-2.84***		-2.20**		0.43		0.42		-1.91*
Obs.	222	222	222	222	222	222	222	222	222	222
Adjusted R	7.97%	10.3%	0.02%	2.06%	0.01%	0.11%	0.01%	0.06%	2.25%	2.69%

Panel B: Cumulative abnormal returns (CAR -1, +1)

	June 14, 2013		July 30, 2013		Oct. 4, 2013		Jan.16, 2014		Oct. 15, 2014	
	Est.	Est.	Est.	Est.	Est.	Est.	Est.	Est.	Est.	Est.
	t-stat	t-stat	t-stat	t-stat	t-stat	t-stat	t-stat	t-stat	t-stat	t-stat
Intercept	-0.013 -1.09	-0.057 -2.87***	0.004 0.52	0.043 2.28**	0.0155 2.11**	0.0166 1.06	0.0004 0.04	0.019 1.18	0.039 3.87***	0.084 4.44***
BSCI	0.002 0.79	0.0002 0.10	0.001 0.47	0.003 1.27	-0.004 -2.29**	-0.004 -2.13**	-0.001 -0.34	-0.001 -0.07	-0.007 -2.60**	-0.005 -1.73*
Size		0.006 2.96***		-0.006 -2.40**		-0.0001 -0.10		-0.027 -1.38		-0.007 -2.79**
Obs.	222	222	222	222	222	222	222	222	222	222
Adjusted R	0.42%	3.15%	0.07%	2.06%	2.04%	1.6%	0.05%	0.89%	2.99%	5.47%

Appendix A:

Table 1A: Provides a description of gender diversity policy instituted in several countries

Country	Policy	Description
Australia	Comply or Explain	Australian Stock Exchange (ASX) made amendments to the ASX Corporate Governance Council Principle and Recommendations for listed companies in 2010. The document sets out eight core principles. Principle 3, recommendation 3.2 – companies should established a policy concerning diversity and disclosure policy. The policy should include requirements for the board to establish measureable objectives for achieving gender diversity. Recommendation 3.4 –Companies should disclose in each annual report the proportion of women employees in the whole organization, women in senior executive positions and on the board.
Austria	Quota	In March 2011, the Austrian government agreed to the implementation of female quotas for supervisory boards of state-owned companies. A quota of 25% by 2013 and 35% by 2018. No sanctions for non-compliance have been set. No such rule exists for private owned companies.
Belgium	Quota	Belgium’s parliament adopted a plan in June 2011 to force public enterprises and companies linked on the stock exchange to give women 30% of the seats on management boards. Under the new rules, each time a board member leaves he or she is to be replaced by a woman until the quota is fulfilled. Large companies will have six years to meet the target while small and medium-sized enterprises will be given eight years.
Denmark	Comply or explain	From 2008 the ‘comply or explain’ code has required that diversity must be taken into account in all appointments.
Finland	Comply or explain	As of Jan. 2010, all listed companies have been required to have at least one man and one woman on the board. There are no penalties for non-compliance beyond the need to explain why the target has not been met.
France	Quota	Parliament passed a bill in Jan. 2011 applying a 40% quota for female directors of listed companies by 2017. The sanctions for noncompliance are that nomination would be void and fees suspended for all board members.
Germany	Comply or explain	The German Corporate Governance Code was amended in May 2010 to include a statement recommending boards of directors consider diversity when recruiting to fill board positions.
Iceland	Quota	Passed a quota law in 2010 applicable to publicly owned and publicly limited companies with more than 50 employees (40% for each gender by Sept. 2013).
Italy	Quota	A third of a company board must be women by 2015 or the business will face fines of up to €1m and nullification of board election.
Netherlands	Comply or explain	Government guidelines suggest that a minimum of 30% of the board members of all companies with more than 250 employees should be women. If this goal is not reached by Jan. 2016, companies must prepare a plan on how they intend to achieve it.
Norway	Quota	Jan. 2006 legislation was introduced (final deadline of Jan. 2008) to have 40% of women on the board. Companies would face fines or closure.
Poland	Comply or explain	The corporate governance code recommends balanced gender representation on boards.
Spain	Quota	Passed gender equality law in 2007 requiring public companies and IBEX 35-quoted firms with more than 250 employees to attain a minimum 40% share of each gender on their boards by 2015.
Sweden	Comply or explain	Requires companies to strive for gender parity on boards.
U.S.A	Neither	SEC permits companies to define diversity as they see fit, which leaves them with significant discretion as to the scope of their disclosure.
U.K.	Comply or explain	Financial Reporting Council amended The UK Corporate Governance Code in Sept. 2012.