# The Impact of a Principles-Based Approach to Director Gender Diversity[*]

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## Abstract

We study the impact of a principles-based regulatory approach to female board representation, requiring firms to disclose a gender diversity policy or explain its absence. Post-regulation, firms respond with more female-friendly disclosures. However, those with less access to female directors often justify their lack of diversity. Although the regulation does not mandate increasing female board representation, the fraction of female directors increases by 38% relative to control groups after the regulation. Investors respond to the disclosures, increasingly engaging firms and voting against boards with low female representation. Firms most likely impacted by the regulation exhibit positive abnormal announcement returns.

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## I. Introduction

The gender composition of corporate boards has attracted significant policy and investor attention. Many countries have responded with rules-based approaches mandating female board quotas. France, Italy, Belgium, the Netherlands, and Norway have imposed such quotas (Winters and Jacobs-Sharma, 2016), and the European Union adopted a 40% quota set to take effect in mid-2026.[1] However, critics argue that one-size-fits-all mandates may be inefficient, as the cost and benefits of compliance vary across firms. In the U.S., such mandates have also encountered political resistance.[2] Moreover, while quotas have increased female board representation in places like Norway and California, the evidence of the effects on shareholder value is mixed at best (Ahern and Dittmar, 2012; Eckbo, Nygaard and Thorburn, 2022; Hwang, Shivdasani and Simintzi, 2020; Greene, Intintoli and Kahle, 2020; Allen and Wahid, 2023).

An alternative to a prescriptive rules-based regulatory approach is a principles-based one in which firms publicly disclose their compliance with suggested "best practice" guidelines, and if their practices depart from guidelines, firms must explain their non-compliance. This approach recognizes that one-size-fits-all rules may not suit every firm and thus allows firms to tailor their governance practices to their specific circumstances, as long as they disclose the reasoning behind their choices.

In 2014, the Canadian government introduced a principles-based approach to improve board gender diversity,[3] which was implemented by the Ontario Securities Commission (OSC)

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[1] See *The Guardian* (June 7, 2022) "EU agrees 'landmark' 40% quota for women on corporate boards" and The European Parliament (November 22, 2022) "Parliament approves landmark rules to boost gender equality on corporate boards".

[2] On May 16, 2022, a California court ruled that California's gender mandate violates the right of equal treatment under the California constitution. See Public Broadcasting Service (May 16, 2022) "Judge says California law requiring women on corporate boards is unconstitutional" (retrieved from pbs.org).

[3] See the Amendment to the National Instrument 58-101 Disclosure of Corporate Governance Practices on the Ontario Securities Commission (OSC) website.

as an amendment to National Instrument 58-101 ("Disclosure of Corporate Governance Practices"), effective December 31, 2014. The OSC amendment includes three comply-or-explain provisions relating to board diversity, which require the disclosure of: (i) a diversity policy (or explain the absence of such a policy), (ii) the board's or nominating committee's consideration of women in the director identification or selection process (or explain the absence of such consideration), and (iii) whether the firm has adopted a target for the representation of women on the board (or explain the absence of such a target).

In this paper, we examine the effectiveness of the OSC's amendment on gender diversity in Canadian corporate boards.[4] *A priori*, it is not clear what effect this principles-based regulatory approach will have on board diversity. On one hand, by requiring firms to disclose their compliance or explain non-compliance, the amendment enables stakeholders to evaluate corporate diversity practices, potentially prompting increased pressure to diversify boards. On the other hand, because the amendment allows firms the option to explain their lack of board diversity, this approach may be too weak to increase the presence of females on corporate boards. Ultimately, this approach places the burden on investors to assess and respond to the adequacy of firms' policies regarding female board representation (see e.g., Hart and Zingales, 2017).

The OSC amendment may influence firm behavior through several channels. Firms must report female representation, disclose whether they consider gender in board nominations and selections, and indicate whether they set targets for female representation. Even firms which choose not to adopt board diversity measures are required to articulate their stance, which may subject them to greater scrutiny. This can raise the cost of inaction, especially for firms

[4] Although the amendment also includes disclosure requirements regarding female representation in executive officer positions, our analysis focuses primarily on board representation, as the evidence presented later in the paper indicates that the effects of the amendment are concentrated in board, rather than executive officer, representation.

concerned about investor and public perception. The requirement to formalize and disclose nomination procedures may also compel boards to reassess recruitment pipelines, renewal practices, and selection criteria, potentially leading them to identify structural barriers and encourage more inclusive policies. Greater transparency may reduce information costs for investors, enabling them to evaluate diversity performance and integrate it into ESG decisions. It may also foster peer benchmarking and help normalize gender diversity as a core element of good governance.

To shed light on the relative costs of this principles-based regulation for shareholders, we run an event study around the OSC's first announcement that it would be introducing comply-or-explain requirements for board diversity. Firms most likely affected by the amendment – those without a voluntary female representation policy and those with an all-male board – exhibit positive and statistically significant cumulative abnormal returns around the announcement, with two-day abnormal returns of 1.4% and 2.0% respectively. In multivariate regressions, we find that these firms exhibit 1.2% higher announcement returns than other firms, and returns increase with the proportion of male directors on the board.

Given that the Ontario government had already signaled its intent to regulate board and executive gender diversity in May 2013, the market likely anticipated some form of regulation before the July 30 announcement. Thus, the July 30 announcement clarified the nature of the regulation rather than its existence. Our results suggest that investors reacted favorably to the clarification that the forthcoming regulation would take a principles-based, disclosure-oriented form rather than impose prescriptive quotas. With some studies suggesting that board gender diversity mandates have significant compliance costs (Ahern and Dittmar, 2012; Hwang, et al., 2020); Greene, et al., 2020), our event study results are consistent with investors perceiving a principles-based approach as mitigating some of the anticipated compliance costs associated with

prescriptive board diversity mandates.

Consistent with investors viewing the proposal as economically meaningful, firms moved quickly to adopt and disclose diversity policies following the announcement of the amendment. To assess the impact of the amendment, we classify firms based on their compliance level (see Panel A of Table 1). "Full Compliers" fulfill the maximum level of compliance, adhering to all three provisions – they disclose a gender diversity policy for board nominations, consider the representation of women in the director identification and selection process, and set formal targets for the representation of women on the board. "Partial Compliers" disclose a gender diversity policy for board nominations and consider the representation of women in the director identification and selection process but do not set targets. "Explainers" meet the minimum compliance standard by disclosing a gender diversity policy without adopting targets or considering women's representation in director selection. Their disclosures justify non-adoption rather than reflect meaningful integration of gender diversity into governance practices. Using these classifications, we assess firms' responses to the OSC amendment.

We find that firms moved quickly to adopt and disclose diversity policies (see Panel B of Table 1).[5] While in the two years preceding the amendment, only 12% of firms included a diversity policy in their proxy statements, by three years after the amendment fully 100% of firms implemented a diversity policy. However, the tone and content of policies vary significantly. While some firms express a clear commitment to enhancing board gender diversity, others emphasize that appointments should be based solely on merit, with no consideration of

[5] Although the amendment did not become effective until late 2014, we treat 2014 as the effective shock year because firms had strong reasons to anticipate the amendment after it was first proposed in 2013 and before its formal effective date in December 2014. Public feedback on the initial proposal in 2013 was overwhelmingly supportive: 82% of 89 comment letters were positive and none negative, and a revised proposal in January 2014 received similarly strong support (77% positive). Media coverage was also favorable—among articles in major Canadian outlets discussing the initiative, 63% were positive in 2013 and 71% in 2014—suggesting broad expectation that the amendment would be implemented.

gender. Thus, the mere act of disclosing a diversity policy does not necessarily reflect a substantive commitment to improving board diversity. Accordingly, we next examine the extent to which firms comply beyond merely disclosing a diversity policy.

Over our sample period, full compliance rose markedly: from just 3% of firms in the year before the OSC amendment, to 15% in the year of its enactment, rising to nearly 41% by 2018. Full Compliers adopt female director targets averaging 28.9% and ranging from 12.5% to 50%. The most common target used before 2014 was 25%, while the most common target utilized after the amendment's introduction is 30%. The average target is just under 29% each year since 2014, with the median at 30% since 2014. Partial compliance increased substantially from 21% pre-amendment to 72% in the post-amendment year, declining to 52% in 2018 as firms adopted targets and transitioned to full compliance. By 2018, fewer than 7% of firms remained as explainers, offering justifications for non-adoption rather than demonstrating meaningful integration of gender diversity into governance practices.

A key advantage of a principles-based regulatory approach is that it provides firms the flexibility to choose between compliance and explanation, allowing them to account for economic frictions that may affect the cost of compliance. However, this flexibility can also enable strategic non-compliance, for instance, due to agency costs. To distinguish between these two contrasting views on principles-based governance, we examine cross-sectional differences in the types of firms that choose to comply versus explain.

We find that firms are more likely to fully comply when they are located near a larger pool of qualified female directors and when their directors are connected to female directors through other board appointments or to peers at other fully-compliant firms, highlighting the importance of local access and network ties. In addition, firms with greater media coverage are significantly more likely to fully comply, suggesting that public scrutiny may serve as a

reputational incentive for adopting stronger gender diversity policies. Conversely, controlled corporations, which typically face weaker market and governance pressures, are less likely to fully comply, indicating that ownership structure may dampen responsiveness to regulatory and social expectations. Overall, firm responses to the OSC amendment, in particular with regard to setting a gender target, appear shaped by both structural barriers and strategic considerations.[6] This variation in compliance prompts a broader question: Has the amendment had a measurable impact on the representation of women on boards?

Despite the absence of a mandate, we find a meaningful increase in board diversity among firms affected by the amendment. The share of firms adding a female director doubled after the amendment, rising from 20% in 2011-2013 to 40% in 2015-2017. Multivariate regression results show that partial compliance is associated with a 2.8 percentage point increase in the female director ratio the following year, while full compliance corresponds to a 6.1 percentage point increase. To contextualize these findings, we compare Canadian firms to similar U.S.-listed firms that experienced no gender diversity regulation during the sample period. Difference-in-differences (DiD) estimates show that Canadian firms increased the proportion of female directors by 3.8 to 4.3 percentage points in the two years following the amendment, representing a 38% to 43% increase relative to the pre-amendment average, in which women held 10% of board seats. Notably, this effect is comparable to the 40% rise in female directors observed in California following the SB 826 diversity mandate (Greene, Intintoli, and Kahle, 2020). Importantly, these effects appear persistent rather than short-lived, as both female board representation and full compliance continue to increase through the end of our sample period.

[6] While these factors predict whether firms adopt female director targets, they do not explain target magnitude once adopted. Conditional on setting a target, target levels are largely unrelated to observable governance, network, and director supply characteristics, with only institutional ownership positively associated with higher targets.

Several aspects of our results point to a causal explanation that the amendment led to a meaningful increase in female director ratios. First, our matched U.S. control group offers a plausible counterfactual. U.S. firms are geographically proximate and more closely linked to Canadian firms in terms of board connections, culture and business relationships relative to firms in other countries. Mitigating concerns that different trends in governance may drive our results, our results also hold when we restrict our sample to Canadian firms cross-listed in the U.S., which are thus subject to SEC governance regulation. Second, our matched U.S. control firms are similar to our Canadian treated firms pre-regulation. Third, the treated and control firms show parallel trends in female director ratio and the rate of change in female director ratio prior to the introduction of the amendment. Fourth, to mitigate potential concerns that our results could be due to contemporaneous trends that may have influenced institutional investors' attitudes towards board diversity, we use Google Search Trends to construct an index of public attention to gender diversity. We find a high correlation (0.91) between societal attention to gender diversity between the two countries during our sample period. This high correlation suggests that both US control firms and Canadian treated firms in our study are subject to similar societal trends. Therefore, our DiD specifications isolate the impact of the OSC regulation from broader societal trends and bolster our confidence that the observed increases in female director ratios are attributable to the regulation.

To ensure our results are not an artifact of our choice of using matched U.S.-based firms as a control group, we also examine year-on-year changes in female director ratios within Canada. We find a statistically significant increase in the year-on-year change in female director ratios for Canadian firms after 2014, confirming the existence of a kink in the trajectory of female director ratios following the amendment. Moreover, firms with all-male boards before the amendment – those most likely to be impacted by the OSC's announcement – exhibited a

significantly larger increase. These findings are further evidence that the pronounced increase in female director ratios is a result of the OSC amendment.

These findings are notable given that the OSC amendment did not mandate increased gender diversity on boards but instead required firms to disclose their policies regarding board representation. So, what precipitated these changes? In its consultation paper proposing the amendment, the OSC stated that such disclosures provide investors and stakeholders with information on advancing women's representation on boards, which may in turn impact investment and voting decisions.[7] Consistent with this, we find that when the firm's disclosure dismisses gender targets as unnecessary or inappropriate, nominating committee chairs of all-male boards receive more votes withheld and against. This suggests that the increase in board diversity post-amendment may result from shareholder pressure. Thus, we examine institutional investor engagements and voting outcomes surrounding the regulation to gain insights into how shareholders respond to the enhanced disclosures. We find that institutional investor engagements on board diversity increase after the amendment, followed by increased board diversity and use of gender targets. Additionally, after the amendment, shareholders are increasingly likely to vote against nominating chairs (and committees) of firms with non-diverse boards. Overall, the evidence suggests that the required disclosure of diversity policies led to an increase in board diversity, at least partly via investor engagement and voting.

In sum, our findings suggest that a principles-based approach to director diversity regulation offers a viable alternative to rules-based governance when one prescription does not fit all. The choice between these two approaches ultimately depends upon regulators' priorities.

[7] See Section 4.2 (page 18) of the OSC Staff Consultation Paper 58-401 (July 30, 2013). https://www.osc.ca/en/securities-law/instruments-rules-policies/5/58-401/osc-staff-consultation-paper-58-401-disclosure-requirements-regarding-women-boards-and-senior

For a regulator that prioritizes increasing board diversity at any cost, a rules-based approach will undoubtedly be most effective, as it allows a regulator to prescribe and enforce a board diversity target quickly. Our results suggest a principles-based disclosure regulation can still have the desired effect of increasing board diversity, albeit to a lesser extent and at a slower pace. For a regulator that also prioritizes limiting compliance costs, a principles-based approach may thus be a compelling option, and key similarities between Canada and other markets such as the U.S. and the U.K. are likely to make our results generalizable to such markets. More generally, external validity is likely strongest in jurisdictions with similar enabling features such as active institutional investors, high proxy voting participation, and disclosure regimes that allow shareholders to compare governance practices across firms.

## II. Related Literature

There is inconclusive evidence on the impact of board and management gender diversity on firm performance (Dezso and Ross, 2012; Liu, Wei and Xie, 2014; Adams and Ferreira, 2009; Matsa and Miller, 2013). As a result, studies have hypothesized that regulation aimed at increasing female board representation can have both positive and negative effects on shareholder value.

Existing evidence on director gender diversity regulation largely focuses on prescriptive regulation enforcing director gender quotas. Our study differs in that we focus on the introduction of board gender diversity rules under a principles-based/comply-or-explain mandatory-disclosure approach that is far less prescriptive than a mandatory quota. Consequently, whereas an enforced mandatory quota may be assumed to result in increased female presence on boards, the effectiveness of a principles-based approach cannot be taken for granted. How effective principles-based regulation is at increasing director gender diversity, particularly relative to mandatory quotas, is thus an important and interesting question that is yet to be fully answered. Our paper fills this gap providing evidence showing that even principles-

based regulation that only mandates disclosure of gender diversity policies is followed by measurable increases in female board representation and the use of female director targets.

Much of the existing evidence on the impact of mandatory director gender quotas is event-study based. Event studies of mandatory quotas in Norway (Ahern and Dittmar, 2012) and California (Hwang, et al., 2020; Greene, et al., 2020) point to a negative impact on shareholder value and are suggestive of high compliance costs. In contrast, Eckbo, et al. (2022) find that the effect of the Norwegian director gender law on shareholder value is statistically insignificant. Their findings are echoed by Allen and Wahid (2023) who show that the market reaction to the introduction of the California rules is also statistically insignificant and is, if anything, positive. Still, Matsa and Miller (2013) report that the rules introduced in Norway are associated with a reduction in firm profitability. Overall, the evidence on the value effect of prescriptive regulatory approaches to gender diversity may be viewed as mixed. Our event study evidence points to an unambiguously positive market reaction for firms most affected by the principles-based regulation we study. Our evidence therefore suggests that principles-based regulation is perceived to be less costly for shareholders than more prescriptive regulation.

Our paper is broadly related to studies that contrast an agency cost view of governance reform (e.g. Bebchuk and Fried, 2003; Schoar and Washington, 2011), which contends that regulation is needed to override powerful managers to implement optimal governance practices, with a private ordering view (e.g., Demsetz and Lehn, 1985; Hermalin and Weisbach, 1998; Larcker, Ormazabal and Taylor, 2011), which purports that firms' chosen governance practices are optimal. Our findings suggest that a principles-based approach, which may be viewed as a hybrid between prescriptive regulation and private ordering, is likely to retain benefits of both approaches, such as broad compliance and flexibility, while mitigating many of their costs.

Our paper contributes to the literature on the impact of a principles-based approach to

governance reform more generally (see Ford, 2008; Broshko and Li, 2006; Dahya, McConnell, and Travlos, 2002; Dahya and McConnell, 2007; Dahya, Golubov, Petmezas, and Travlos, 2019; and Arcot and Bruno, 2018). Consistent with Arcot, Bruno, and Faure-Grimaud (2010) who focus on the UK, we find an increasing trend of compliance following the adoption of principles-based regulation (for director gender diversity in Canada) and that ownership structure is associated with the degree of compliance. In the context of principles-based regulation, we are the first to examine the effect of economic frictions on firms' compliance. Our findings indicate that economic frictions that vary across firms (e.g., access to qualified female directors due to geographical proximity or board connections) are the main determinants of firms' compliance. We are also the first to examine the mechanism through which principles-based regulation affects corporate policy. We show that principles-based regulation strengthens institutional investor engagement on board gender diversity, highlighting investor pressure as an important channel driving compliance.

Finally, our study also speaks to the issue of mandatory enhanced disclosure, in the specific context of director diversity. In mandating firms to disclose a gender diversity policy or explain its absence, the form of the principles-based regulation we study resembles enhanced disclosure regulation, particularly given the absence of a best practice guideline. There is broad evidence on the benefits (Dye, 1990; Healy and Palepu, 2001; Leuz and Wysocki, 2008; Khurana, Pereira, and Martin, 2006; and Hope and Thomas, 2008), costs (Bushee and Leuz, 2005; Harris, 1998), and effectiveness (Perry and Zenner, 2001; Faulkender and Yang, 2013; Bakke, Mahmudi and Newton, 2020) of mandatory enhanced disclosure. We present evidence showing that requiring Canadian listed firms to disclose their director diversity policies created the benefit of increased female directorships while mitigating compliance costs associated with mandatory quotas. In the next section, we discuss the specifics of the OSC gender diversity

policy that we study.

## III. The Ontario Securities Commission's Gender Diversity Policy

Government support for regulatory action on board gender diversity in Canada led the Ontario Government to signal its intention to introduce such regulation in May 2013.[8] This occurred when the government included the following statement in its annual budget: "the government strongly supports gender diversity on boards… the government will consider the best way for firms to disclose their approaches to gender diversity, with a view to increasing the participation of women on boards and in senior management." Subsequently, in a move not publicly disclosed at the time (see Table 2), the OSC was asked to begin a consultative process regarding disclosure norms pertaining to gender diversity on June 14, 2013.

In response, the OSC issued a consultation paper on July 30, 2013. The paper proposed revisions to National Instrument 58-101 (Disclosure of Governance Practices) to incorporate the disclosure of gender diversity in a proposed "comply or explain" framework. Companies listed on the Toronto Stock Exchange (TSX) would be required to annually disclose policies—or their absence—pertaining to the representation of women on their boards and among executive officers. The OSC indicated that the proposed amendment was intended to bolster board effectiveness and corporate decision-making by requiring greater transparency for investors and other stakeholders regarding the representation of women on boards and in senior management positions of firms listed on the TSX. Notably, rather than compelling companies to diversify

[8] Based on government pronouncements and media reports, the forces driving the regulation stemmed from increased societal support for more female representations in leadership (e.g., politics, corporations etc.) and from low representation of females on Canadian boards and in executive officer positions relative to peer countries (i.e., the sense that Canada was a laggard and changing more slowly than other countries). Although there was broad governmental and societal support for regulatory action aiming to increase gender diversity on boards and in senior management, there was less agreement on how regulation should be enacted or regarding the strength and nature of any regulation. Additionally, business and investor groups seemed relatively receptive (or at least not strongly opposed) to regulatory action on gender diversity in corporate leadership, but more skeptical about prescriptive regulation.

their boards and executive suites, the OSC's proposed changes would drive diversity improvements within corporate leadership through the public disclosure of each firm's diversity practices.

After the period for initial comments concluded, a revised version of the proposal was published on January 16, 2014. This iteration included an additional requirement to disclose policies regarding director term limits—a feature not present in the original draft. This amendment was implemented on October 15, and the OSC made a declaration on December 11, 2014 that the final amendment would come into force on December 31, 2014.[9] The final amendment, which has been in place since December 31, 2014, requires TSX-listed and certain other non-venture issuers in Ontario to include the following disclosure annually in their proxy circulars or annual information forms, as applicable:

1) whether there are any director term limits or an explanation for the absence of such limits;
2) the details of any policies regarding the identification and nomination of women directors or an explanation for the absence of such policies;
3) the board's or nominating committee's consideration of the representation of women in the director identification and selection process or an explanation for the absence of such consideration;
4) the consideration given to the representation of women in executive officer positions when making executive officer appointments or an explanation for the absence of such consideration;
5) targets (number or percentage) adopted regarding the representation of women on the board and in executive officer positions or an explanation for the absence of such targets;

[9] For a complete timeline of events related to the Amendment to National Instrument 58-101 (Disclosure of Governance Practices), see Table 2.

6) the number and proportion of women on the board and in executive officer positions.

Although the OSC amendment requires disclosure of items 1–6 above, the amendment is notable in that it does not require—or even recommend—a gender target quota. In fact, the amendment only requires firms to disclose *whether* they have adopted gender targets. This is in sharp contrast to the quota mandates increasingly implemented in other jurisdictions. The OSC takes a subtler stance by neither recommending a particular gender balance nor compelling firms to establish targets or quotas. Rather, the OSC amendment relies on the power of transparency: the belief that through the open reporting of a firm's diversity practices, stakeholders and investors are better equipped to assess and influence the diversity profile of corporate boards.

## IV. The Conceptual Framework

Before the OSC amendment, firms' board diversity practices were largely opaque. Gender representation was seldom tracked, standardized information for investors was limited, and expectations around board composition varied widely. The amendment changed this by requiring firms to disclose both their diversity policies—or their reasons for not having them—and numerical data on gender representation and targets. This disclosure regime provides investors with comparable annual data to inform proxy voting and investment decisions, while also shaping norms by elevating board diversity from a peripheral concern to a recognized element of corporate governance.

The OSC amendment may influence firm behavior through several key channels, as follows:

**1. Disclosure Pressure:** The amendment mandates that firms disclose their diversity policies, including whether they consider gender in director nominations. It also mandates firms to disclose whether they set targets for women on the board and requires firms to report board

gender representation. The amendment's public disclosure requirements force firms to internalize and articulate their stance on gender diversity. Even non-compliance must be explained, increasing reputational risk—especially for firms concerned about investor, media, or public perception. The result may be higher costs for firms that maintain inaction or implement only superficial policies.

**2. Internal Policy Reevaluation:** The amendment encourages boards and nominating committees to reexamine internal recruitment pipelines, renewal practices, and selection criteria. By requiring explicit articulation of these processes, the policy compels organizations to evaluate their board nomination procedures, which may uncover unconscious biases or structural barriers. Additionally, enhanced disclosure requirements incentivize firms to formalize their approach to gender diversity in board appointments. Together, these mechanisms may drive substantive changes in nomination practices and, ultimately, board composition.

**3. Investor Influence:** The standardized diversity data required by the OSC amendment reduces information costs, facilitates the identification of laggards, and heightens the reputational risks of inaction. This transparency thus allows investors to evaluate and compare firms based on diversity performance, incorporating this data into ESG analysis, voting, and engagement. Jennifer Coulson, Chair of the 30% Club Canada Investor Group, emphasized that the key impact of the OSC regulation was its role in making board composition data broadly accessible. "It becomes hard to implement [engagements] if we don't have data [on board gender diversity]," she noted. By enabling investors to track progress on female representation, transparency may thus drive engagement and incentivize firms to strengthen diversity practices as a signal of good governance. Firms with robust diversity disclosures may, in turn, be viewed more favorably by investors, potentially attracting greater investment, benefiting from lower capital costs, or gaining inclusion in ESG indices.

**4. Peer Benchmarking:** With greater visibility into peer practices, firms can benchmark themselves against industry leaders, and institutional investors can better compare diversity practices across firms. As prominent firms adopt robust diversity policies, they help shape evolving norms and expectations, both among other firms and institutional investors, creating pressure on others to follow—even absent regulatory enforcement.

**5. Shifting Norms:** The normalization of diversity metrics and target-setting can gradually reshape perceptions of board composition. Over time, stakeholders—directors, employees, investors—may come to view gender diversity not as a compliance task, but as a fundamental element of corporate responsibility.

In sum, the OSC amendment reshapes the firm–level cost–benefit trade-offs associated with board gender diversity by transforming disclosure into a governance mechanism. Increased transparency raises the expected costs for non-diverse boards through reputational exposure, investor scrutiny, and peer comparison, while enhancing the signaling value of diversity and its alignment with prevailing governance expectations. Importantly, the comply-or-explain structure preserves firm discretion: firms for which adoption costs exceed expected benefits may disclose non-adoption without formal penalty, while firms facing either lower implementation costs or higher reputational and governance-related benefits are incentivized to comply more substantively. Accordingly, the amendment operates through a sequence in which enhanced disclosure enables market-based enforcement mechanisms rather than direct regulatory enforcement. At the same time, because full compliance is an endogenous firm choice rather than a mandated outcome, firms that choose to comply more substantively may differ along both observable and unobservable dimensions from firms that continue to explain non-compliance.

**A. Public Reaction to the OSC Proposed Amendment**

The public first became aware that the OSC was considering legislation on board gender

diversity in July 2013, when the OSC released Staff Consultation Paper 58-401, which proposed "comply or explain" disclosure requirements to encourage greater gender diversity on corporate boards and in senior management. The OSC invited feedback by September 2013 and received 89 comment letters from a wide range of stakeholders, including corporations, advocacy groups, investment firms, professional associations, academics, and individuals (see Table 3). The proposal received broad public support. Overall, 82% of submissions expressed a positive tone, 18% were neutral, and none were negative.[10] Corporate responses were largely favorable, with 74% in support and 26% neutral. The highest level of support came from advocacy groups, with 95% supporting the proposal and only 5% expressing a neutral stance.

In January 2014, the OSC released a revised proposal, incorporating a single addition: the inclusion of director term limits. Stakeholders were again invited to submit feedback, with a deadline of April 2014. The response remained overwhelmingly positive: 77% had a positive tone about the amendment, with 21% neutral and 2% negative. The consistently strong support across both consultation periods indicated early on that the proposal was likely to proceed to implementation.

Beyond stakeholder comment letters, media coverage of the proposed amendment was also broadly supportive, reflecting and reinforcing the broad public and institutional approval of the initiative. Table 4 presents an analysis of 211 articles published between 2012 and 2016 in three major Canadian news outlets—*Globe and Mail*, *Financial Post*, and *Toronto Star*—that specifically discuss board gender diversity and the OSC's initiative. Applying sentiment analysis, we classify 62% of the articles as positive in tone, 38% as neutral, and none as

[10] The sentiment analysis is conducted by TextBlob, a natural language processing (NLP) library in Python. The result is a Polarity Score for each article that is between -1.0 and +1.0. Articles with Polarity Scores > +0.1 are categorized as Positive, < -0.1 as Negative, and in between as Neutral. We use the same methodology when analyzing the sentiment of media coverage of OSC's ruling.

negative. Media sentiment was particularly favorable in 2014, the year the revised proposal was released and a second round of comments was invited: 71% of articles that year conveyed a positive tone.[11] This consistently supportive media environment suggests broad public acceptance of the amendment and reinforces the perception that its implementation was likely.

**B. How Did the Market React to the Policy Announcement?**

In this section, we study market reaction to the OSC policy to understand how the principles-based policy was perceived by shareholders.

*B.1. Identifying the Event Date*

In studying the market reaction to the OSC amendment, we primarily focus on the policy announcement released on July 30, 2013. Although the Ontario Government publicly announced its intention to consider regulating gender diversity on boards in May 2013, it provided no details, leaving the market uncertain about key issues such as the prescriptiveness of the regulation and whether targets for female directorships would be required. This uncertainty was compounded by the OSC's shift from a "comply or explain" policy on majority voting for director elections to a mandatory policy in June 2013. This policy shift for majority voting is likely to have contributed to uncertainty over whether the OSC's board gender diversity regulation would be principles- or rules-based. The July 30 announcement was pivotal as it confirmed that the gender diversity regulation would follow a "comply or explain" format, resolving uncertainty. The final rules adopted on December 31, 2014 were largely consistent with the July 30 consultation paper, with the only addition being requirements for director term limits. The July 30 announcement was also covered by the *Globe and Mail* (a prominent

[11] The modest decline in positive coverage by 2016 does not reflect growing opposition to the rule itself but rather increased media debate over whether the "comply or explain" approach had gone far enough—prompting more neutral-toned articles questioning if stronger mandates were needed to achieve more progress.

Canadian news outlet), underscoring the significance and interest in the proposed policy.[12] We conduct an event study around the OSC's release of its proposed rules on July 30, 2013. We compute cumulative abnormal returns (CARs) around the announcement following standard event study methodology (see e.g., Campbell, Lo and Mackinlay, 2012). The data requirements for computing CARs result in a sample of 274 firms.[13]

*B.2. Identifying Firms Most Affected by the OSC Amendment*

We posit that firms with all-male boards and those that did not disclose gender diversity policies before the OSC's July 2013 announcement are likely to be most impacted by the amendment. In contrast, firms that had already disclosed a gender diversity policy or had at least one female director may have been seen as being already compliant with the diversity disclosure requirement and thus less impacted. Using BoardEx, we identify 127 firms with all-male boards in 2013, while the remaining 147 firms had at least one female director. We determine which firms had a voluntary gender diversity policy by reviewing proxy circulars for the 2013 fiscal year. Given the lack of guidelines before the amendment, we classify firms that explicitly state that they have a board gender diversity policy or express a commitment to board gender diversity as having such a policy. In 2013, 61 firms disclose having a gender diversity policy or consider gender diversity in director nominations, while the remaining 213 firms do not.

*B.3. Announcement Returns*

Panel A of Table 5 reports the average CARs in the (0,0), (0,+1) and (-1,+1) announcement windows, along with t-statistics and p-values for testing whether the average

[12] *The Globe and Mail,* Janet McFarland (July 30, 2013), "OSC proposes gender equity policy for boards."

[13] We use a 4-factor return model (Fama and French, 1993, Carhart, 1997) and a 250-day estimation window ending on day -30, with at least 60 observations. We obtain stock return data from Datastream.

CARs are statistically different from zero, following Kolari and Pynnonen (2010).[14] While the average CAR during these windows is positive but not statistically significant, firms without a disclosed voluntary female representation policy and those with all-male boards exhibit positive and mostly statistically significant announcement CARs (at the 5% and 1% level, respectively). Specifically, the two-day (0,+1) CAR is 1.4% for firms without a female director policy and 2.0% for firms with all-male boards.[15] Other firms do not exhibit significant announcement CARs. Panel B shows that 63% of firms without a female representation policy and 72% of those with all-male boards have positive (-1,+1) CARs, suggesting the results are not driven by outliers. Table 6 presents OLS regressions of the CARs, focusing on the (0,+1) window following MacKinlay (1997).[16] We include an indicator for firms without a disclosed voluntary female representation policy (models 1 and 2), an indicator for firms with all-male boards (models 3 and 4), and the proportion of male directors on the board (models 5 and 6). All specifications control for total assets and one-digit SIC industry, with models 2, 4 and 6 also controlling for market-to-book assets, return-on-assets and debt/assets. The coefficients on our key explanatory variables of interest align with the univariate analysis in Table 5. In models 1 and 2, firms without a disclosed female representation policy have CARs that are 1.2 percentage points higher than those that disclose such a policy. Similarly, in models 3 and 4, firms with all-male boards have CARs that are 1.2 percentage points higher than for those with female directors.[17]

[14] The Kolari and Pynnonen (2010) correction to standard errors addresses the biases from cross-sectional correlation between firm returns and event-induced variance in event study tests.

[15] Note that although the mean (0,+1) CAR for firms with at least one female director is positive, the reported t-statistic is negative because our t-statistics are computed using scaled abnormal returns following Kolari and Pynnönen (2010).

[16] We find similar results using the (-1,+1) window.

[17] In Internet Appendix Table C.1 we employ methodology following Sefcik and Thompson (1986) that accounts for the potential bias introduced by cross-correlation and obtain similar results. We thank the authors of Stanfield and Tumarkin (2018) for sharing code for this methodology.

Despite the insignificant CARs for firms with some female directors in Table 5, models 5 and 6 of Table 6 show that the CARs are increasing in the proportion of male directors on firms' boards. Combined with the fact that firms with female directors added more women post-regulation, albeit at a lower rate than firms with all-male boards (see Internet Appendix Figure C.1.), these results suggest the following: having female directors at the time of the event announcement may signal a firm's willingness to add more women to its board, even without regulation. In contrast, all-male boards may be perceived as less likely to do so. This does not imply that the regulation has no effect on firms with female directors, but rather that the behavioral shift expected of them is smaller compared to firms with all-male boards.

The results in Tables 5 and 6 contrast sharply with the negative abnormal returns documented for firms subject to California's SB-826 law mandating gender diversity, as shown by Hwang, et al. (2020) and Greene, et al. (2020), though these findings been challenged by Allen and Wahid (2023). One might hypothesize, based on these prior studies, that the positive returns we observe reflect relief that the regulation would not force changes on firms.[18] If this were true, we would expect the positive abnormal returns to be concentrated among firms that continued to have all-male boards post-regulation. In models 7 and 8, we re-estimate models 3 and 4, adding an indicator for firms with all-male boards in 2013 that still had an all-male boards in 2017. The coefficient on this indicator is negative and not statistically significant, contradicting this hypothesis. Coupled with our Section VI findings that the regulation led to an increase in female director representation, these results suggest it is highly unlikely that the positive CARs for firms with all-male boards reflect an expectation that the principles-based regulation would not lead to real change.

[18] Alternatively, investors may have viewed the principles-based structure favorably because it reduced the likelihood that firms would be forced into potentially suboptimal governance changes relative to more prescriptive quota-based approaches.

A potential concern is that the non-random assignment of firms to treated and control groups (e.g., all-male vs. non-all-male boards) might be correlated with our event returns. We address this issue by using two approaches suggested by Roberts and Whited (2013). First, we compare observable characteristics between firms with all-male boards and firms with female directors (see Internet Appendix Table C.2). Both groups have similar proportions of female top five executives (6.6% versus 6.8%), confirming that our results in Tables 5 and 6 are related to OSC rules on female directors, but not executives. We find similar patterns when we compare firms with and without a voluntary director gender diversity policy. Second, we conduct a placebo test using 500 "placebo" event dates around the actual event (see Internet Appendix Figure C.2 and Table C.3). This test shows that the regression coefficients in Table 6 fall far in the right tail of the distribution of the placebo distribution, indicating that results are not driven by persistent differences between treatment and control groups and are unlikely to be due to chance.

In untabulated tests, we do not find statistically significant market reactions to female director nominations. Because standalone announcements of female director appointments are rare, we identify nominations using proxy filing dates; however, proxy statements bundle considerable market-relevant information, making it difficult to isolate the valuation effect of a director nomination. Moreover, many appointments were likely anticipated following the OSC's proposed ruling and, for some firms, the adoption of female director targets.

*B.4. Interpreting the Market Reaction to the OSC's Announcement*

Given that the Ontario government had already signaled its intent to regulate board and executive gender diversity in May 2013, coupled with a broader societal focus on board diversity (see Internet Appendix Figure C.3), the market likely anticipated some form of regulation before the July 30 announcement. Thus, the July 30 announcement clarified the nature of the regulation

rather than its existence. Our event study analysis shows that, amidst uncertainty about the prescriptiveness of the new rules, the market responded positively to the news that compliance would not be prescriptive, instead allowing firms to define and implement their own diversity policies. Given the spectrum of potential regulation, ranging from relatively weaker forms of comply or explain to stringent gender mandates, the OSC's rules were relatively mild compared to more stringent regulations in other jurisdictions such as Norway and California, with no requirements to increase board gender diversity nor to adopt "best practices" guidelines or diversity targets. For example, Nasdaq's 2021 comply-or-explain board diversity rules were more prescriptive in defining compliance as having at least two diverse directors.[19]

When combined with existing evidence of potentially high compliance costs associated with board gender diversity mandates (Ahern and Dittmar, 2012; Hwang, et al., 2020; Greene, et al., 2020), our event study results are more consistent with investors perceiving the OSC's principles-based approach as less costly than a prescriptive mandate, rather than as value-enhancing relative to no regulation at all. The event study evidence therefore speaks to investors' relative valuation of regulatory designs, rather than whether any diversity regulation is welfare enhancing.

*B.5. Market Reactions to Other Relevant Announcements*

In this section, we examine key events preceding the July 30, 2013 announcement (see Table 2 for a timeline): the Canadian government's April 5, 2013 announcement of a committee to advise the government on board gender diversity; the Ontario budget statement released on May 2, 2013, which expressed support for gender diversity on corporate boards and senior

[19] On December 11, 2024, the U.S. Court of Appeals for the Fifth Circuit held that the SEC exceeded its statutory authority when it approved Nasdaq's 2021 board diversity rules and vacated the SEC's order approving those rules. As a result, Nasdaq-listed firms are no longer required to comply with the board diversity listing standards.

management; remarks by the Ontario's Minister Responsible for Women's Issues, Laurel Broten on May 28, 2013, indicating the province's cooperation with the OSC on this issue; and a request on June 14, 2013 (not publicly disclosed at the time) by the Minister of Finance, Charles Sousa, and then Minister Responsible for Women's Issues, Laurel Broten for the OSC to undertake a public consultation on gender diversity disclosure requirements. We examine the two-day (0,+1) CARs around these four events and find no statistically significant CARs overall, nor for firms without a disclosed voluntary female representation policy in 2013 or for firms with all-male boards in 2013 (see Internet Appendix Table C.4). This suggests that the events preceding the July 30, 2013 announcement did not significantly reduce uncertainty regarding the OSC's subsequent diversity regulation.

On January 16, 2014, the OSC added the disclosure of director term limits to the requirements of the proposed regulation, not originally included in the July 30, 2013 consultation paper. We do not find statistically significant CARs around this news (see Internet Appendix Table C.4) for all firms in our sample, for firms with all-male boards, firms without a disclosed voluntary diversity policy, nor for firms without a disclosed director term limit policy. Similarly, there are no significant CARs around the final adoption of the new rules by the OSC on October 15, 2014. These findings suggest that subsequent announcements did not provide additional value-relevant information beyond the July 30, 2013 announcement.

Allen and Wahid (2023) find that several events leading up to the final adoption of California's board gender diversity mandate elicited statistically significant market reactions, highlighting the need to evaluate these events collectively. In contrast, the only event in our study with a significant market reaction is the unveiling of the proposed OSC rules on July 30, 2013.

In addition to board gender diversity policies, the OSC amendment on July 30, 2013 also

included an executive gender diversity policy (see Section III for details). We analyze the market reaction for firms with all-male top five named executives (i.e., the CEO and the next four executives ranked according to their compensation per firms' proxy circulars) using univariate and multivariate analyses (see Internet Appendix Tables C.5 and C.6). We do not find statistically significant abnormal returns around any of the release dates mentioned above. This aligns with our findings of no statistically significant increase in the prevalence of female top executives (see Section VI.A.3). The results suggest that the market reaction to the July 30th amendment was driven by the board gender diversity provisions rather than the executive gender diversity provisions.

**C. Incentives for Firms to Comply Early**

The high visibility and favorable framing of the proposed OSC regulation may have prompted firms to adjust their governance practices in advance of formal implementation, particularly for those sensitive to reputational concerns. Consistent with this view, the market reaction results indicate that little new economically material information was released after the July 30, 2013 proposal. Among the major regulatory milestones, only the July 30, 2013 proposal generates statistically and economically significant abnormal returns, while we observe no significant reaction to the January 16, 2014 revision or the October 15, 2014 formal adoption (see Section IV.B.5 and Internet Appendix Table C.4). This pattern suggests that the informational content of the amendment was largely incorporated at the initial proposal, consistent with firms beginning anticipatory adjustments prior to formal implementation.

By adopting governance changes in anticipation of the proposed amendment, firms could influence the evolution of emerging best practices, signal readiness for regulatory change, and mitigate the risks associated with a last-minute compliance rush. Some firms may have also aimed to influence the final form of the regulation by demonstrating the practical feasibility of

disclosure-based requirements, thereby positioning voluntary compliance as a credible alternative to more prescriptive interventions, such as mandatory quotas. This concern was salient in the policy debate: several comment letters expressed concerns that the proposed amendment might be insufficient and suggested that quotas could be necessary to achieve more meaningful progress. By taking early action and nominating female directors during the spring 2014 proxy season, firms also positioned themselves to secure qualified female candidates ahead of anticipated competition following the rule's formal adoption.

## V. Evolution of Compliance: How Does Disclosure Change Over Time?

The adoption of the OSC's disclosure-based framework did not produce uniform responses across firms. While some issuers embraced comprehensive diversity practices, others limited their disclosures to the minimum required or resisted setting measurable goals altogether. This section examines how firms responded to the amendment, traces changes in disclosure practices over time, categorizes firms by their level of compliance, and analyzes the conditions under which companies shifted from minimal disclosure toward more robust commitments to board gender diversity.

### A. Assessing Compliance with the OSC Amendment

To analyze firms' choices of whether to comply or explain with disclosures on board diversity, we manually collect data from annual proxy statements for 2011-2018 of firms' disclosed policies regarding female board representation. For each firm, we record whether it has a diversity policy (item 2), whether it considers women in the director identification or selection process (item 3), and whether it has implemented a target for the number or percentage of women directors (item 5). We categorize firms into three distinct groups based on their adherence to these three aspects of the OSC amendment (see Panel A of Table 1).

**Full Compliers** meet all three key provisions – they disclose a gender diversity policy for board nominations (item 2), consider the representation of women in the director identification and selection process (item 3), and they set formal targets for the representation of women on the board (item 5). These firms show the highest level of engagement with the regulation, complying with all provisions regarding board diversity.

**Partial Compliers** satisfy items (2) and (3) but do not adopt a formal target. These firms indicate that they take gender into account in the director identification and selection process, acknowledging gender diversity as a factor in board appointments. However, they stop short of setting quantitative benchmarks or targets.

**Explainers** fulfill the minimum level of compliance. They disclose a gender diversity policy but do not adopt a formal target nor do they consider the representation of women in the director identification and selection process. Their disclosures offer explanations for non-adoption rather than demonstrating active integration of gender diversity into governance practices.

**B. Incentives for Compliance Choice**

Full compliance, particularly when firms adopt more ambitious female director targets, sends a stronger signal to investors, analysts, and regulators that the firm is genuinely committed to gender diversity. This can enhance its attractiveness to long-term institutional investors and strengthen public messaging around diversity leadership. However, full compliance requires a strong internal commitment and may require structural changes. We posit that full compliers are more likely to be larger firms with lower relative compliance costs and firms with greater access to qualified female directors.

Partial compliance enables firms to signal a commitment to good governance and avoid the perception of inaction, without adopting quantitative targets that might constrain board

decisions. For these firms, such targets may be seen as overly prescriptive or may generate internal tensions, including concerns about tokenism or challenges to merit-based selection. In some cases, partial compliance may also reflect a desire to align with peers that have not yet widely adopted gender targets.

Explainers may emphasize managerial discretion in board appointments, signaling a strategic resistance to external accountability mechanisms and prevailing normative expectations regarding board composition. For these firms, disclosing formal diversity policies may risk exposing a lack of progress or creating unwanted future accountability. In contrast, offering explanations enables them to retain control over the narrative without making binding commitments. Among smaller firms, tracking and reporting on board gender representation may be perceived as administratively burdensome. In contexts where investor scrutiny is minimal, the firm operates within male-dominated industries, or public visibility is low, the incentives to comply with diversity expectations are significantly reduced. Moreover, explainers may face greater frictions in appointing female directors—for example, due to fewer network connections to female candidates, a limited local pool of potential female directors, or higher recruitment costs. Under these conditions, the perceived benefits of aligning with normative standards may be outweighed by the costs. Moreover, some firms may view diversity initiatives as externally imposed, politically motivated, or fundamentally misaligned with their corporate identity and values.

**C. Levels of Compliance**

Panel B of Table 1 illustrates the evolution in compliance with the OSC's board diversity disclosure requirements. Prior to the OSC's initial public call for commentary on board diversity in July 2013, only about 12% of firms disclosed a diversity policy. However, in the wake of OSC announcement, there was a notable upswing, with 23% of firms reporting the existence of a

diversity policy by the end of 2013, sharply increasing to 95% by 2014. Compliance became nearly universal after the official effective date of the amendment at the end of 2014, with all but two firms disclosing a diversity policy. By 2017, all firms disclose a diversity policy, with compliance of item 2 at 100%. Notably, though all firms disclosed a diversity policy, not all firms embraced board diversity. While some show a clear commitment to board gender diversity in their diversity policies, others are vocal in their reluctance to consider gender in board appointments, stating that they give precedence to the role of skills and experience in selecting board members. Such firms often maintain that they make board appointments based on merit without considering gender or racial attributes.

The trend for firms disclosing their consideration of women in the director identification or selection process (item 3) displays a similar upward trajectory over the sample period. Prior to the OSC's announcement, only about 11% of companies take gender into account when identifying or selecting directors. Following the 2013 announcement this figure rose to 21%, indicating a growing awareness and response to the upcoming implementation of the amendment. With the OSC's policy implementation in 2014, compliance increased significantly to 89%. This high level of compliance persists through the end of the sample period, with 93% of firms disclosing their consideration of gender in the director identification or selection process in 2018.

Item 5 calls for companies to disclose whether they have set targets for female board representation. As shown in Panel C of Table 1, it was rare for firms to have gender targets in place before 2014. However, coinciding with and following the amendment's introduction in 2014, target adoption rose from eight firms in 2013 to 40 firms in 2014, to 77 firms by 2017, and to 102 firms (41% of all firms) by 2018. This indicates a notable escalation in the embrace of quantifiable goals for the inclusion of women on corporate boards.

While the amendment did not mandate the form of these targets, whether as a percentage or a specific number, most firms that implement a target utilize a percentage. Common benchmarks include female director targets of 25%, 30%, and 33%. Over the entire sample period, the mean target among firms adopting targets is 28.9%, while the median target is 30%, with targets ranging from 12.5% to 50%. Panel C of Table 1 reports the evolution of the female director targets adopted by Full Compliers. As indicated by the mode, the most common target used before 2014 was 25%, while the most common target utilized after the amendment's introduction is 30%. The average target is just under 29% each year since 2014, with the median at 30% since 2014. Notably, firms rarely scale back existing targets once adopted, suggesting that target adoption reflects persistent rather than symbolic commitments to board gender diversity.[20]

The targets adopted by Canadian firms under the OSC's principles-based framework differ from the quota structures implemented in several other jurisdictions. Norway requires that at least 40% of board members be of each gender, while the European Union adopted a 40% quota for women on corporate boards set to take effect in mid-2026. California's now-invalidated SB 826 mandate similarly imposed minimum numerical requirements based on board size, requiring two female directors for five-member boards and three female directors for boards with six or more directors. While the voluntarily adopted targets in our sample are on average somewhat lower than the quotas imposed under mandatory regimes, they nevertheless represent meaningful commitments to increasing female board representation. More broadly, the variation in targets under the OSC framework is consistent with the idea that a principles-based regime

[20] No firm that adopts a female director target subsequently eliminates it during our sample period. Only five firms reduce an existing target to a lower level, and no firm does so more than once. Of the 102 firms with targets, 18 raise an existing target after initially adopting one. In addition, 79 firms maintain an unchanged target following adoption throughout the remainder of the sample period.

allows firms flexibility in determining target levels rather than converging toward a single mandated threshold.

Among Partial Compliers and Explainers that do not employ targets, 75 percent offer a rationale. The most frequently cited reasons are as follows:

- Appointments are based on merit / Skills and experience are most important (63.2%)
- Targets are not necessary or advisable / Targets are arbitrary (10.3%)
- We are too small for a diversity policy or to consider targets (3.5%)
- Targets are not an appropriate method to increase diversity (2.6%)
- Targets do not result in identifying, selecting the best candidate (2.5%)
- Infrequent turnover makes targets impractical (1.0%)

Figure 1 shows the proportions of firms that fall into one of the three compliance categories. The solid line illustrates the full sample, with the long-dashed line representing firms with female directors in 2013, and the short-dashed line representing firms with all-male boards in 2013. Panel A shows the proportion of firms with a gender diversity policy (item 2). Panel B indicates a significant surge in the proportion of firms classified as Partial Compliers around the amendment, from 19% in 2013 to 74% in 2014. Firms with all-male boards in 2013 are more likely than firms with a female director in 2013 to fall into the Partial Complier category after the OSC amendment. However, the percentage of Partial Compliers diminishes for both groups after 2014 as firms advance to full compliance status. Indeed, over the sample period, Panel C shows a notable increase in Full Compliers: with just 6% in 2014, this figure rises to 30% by 2017, and then to 41% in 2018. Notably, the proportion of Full Compliers increases more substantially for firms that had all-male boards in 2013, exhibiting a nine-fold increase from 2014-2018, compared to a two-fold increase for firms that had at least one female director in 2013.

Panel D shows that the proportion of Explainers, firms with only a diversity policy (item 2), increases from 6% in 2014 to 8% between 2015 and 2017, then declines to 7% by 2018. After

adopting a diversity policy, many firms begin to add items 3 and 5 (considering women in the director identification or selection process and setting targets for female board representation), moving from Explainers to Partial or Full Compliers. This progression underscores a shift towards increased adoption of structured gender diversity policies in board governance over time, even among firms that initially had no women directors. We find similar trends towards more supportive language regarding board gender diversity used in the proxy statements post-amendment (see Internet Appendix Table C.7 and Figure C.4).

*C.1. Multivariate Analyses of Determinants of Compliance*

We next study cross-sectional differences that explain varying levels of compliance with the OSC amendment. We posit that firms facing greater frictions in identifying and appointing female directors are less likely to adopt more female friendly diversity policies. We measure these frictions using two proxies capturing a firm's access to female directors: (1) the number of female directors on corporate boards for all firms within 100 km of the firm's headquarter that are from the same one-digit SIC industry, and (2) the average number of interlocks between the board's directors and female directors on other firms' boards. We expect higher values for both proxies to predict a greater likelihood of adopting more friendly gender diversity policies post-amendment.

Building on the idea that a firm's culture can be influenced by its connections with other firms, we posit that firms with directors who are interlocked with directors of other firms that have already implemented board diversity practices will be more likely to adopt such practices themselves. Specifically, we use the following network variables to measure the influence of director networks on board diversity policy: (1) the number of board interlocks with directors at firms that consider gender diversity in board nominations, and (2) the number of board interlocks with directors at firms with female director targets.

Finally, we posit that firms whose management is insulated from market pressures are more likely to eschew board diversity practices, opting to explain rather than comply. To capture whether management is shielded from market pressures, we consider whether the firm is a controlled corporation, measured by dual-class voting shares or closely-held shares exceeding 30% of shares outstanding, and we also control for board independence. In the same vein, we posit that firms with greater media coverage are more likely to comply, as they are likely subject to more external scrutiny. We measure media coverage by the number of times a firm is cited in the *Financial Times, Financial Post*, and *Toronto Star* during the year. Additionally, we control for board characteristics such as size, average age and tenure of directors, average degree centrality of a board's directors based on the number of other directorships ever held, and firm characteristics such as total assets, market-to-book assets, return-on-assets, institutional ownership, and debt/assets. All specifications include year and one-digit-SIC industry fixed effects. When constructing industry fixed effects, we use a one-digit SIC classification rather than a finer 2-digit classification because, although Canada has the same industries as the U.S., finer categories often contain few firms, leading to sparse counts.

We report the results of linear probability regressions in Table 7.[21] Model 1 examines the determinants for full compliance for the entire sample, with the dependent variable indicating whether the firm is a Full Complier (i.e., complies with items 2, 3 and 5). Thus, model 1 compares Full Compliers with the remainder of the sample (Partial Compliers and Explainers). The results show that firms headquartered in regions with a higher concentration of local female directors within the same one-digit SIC industry are significantly more likely to fully comply.[22]

[21] Results are similar using logistic regressions.

[22] We find similar results when using (1) an indicator for whether a firm is headquartered in the city of Calgary, where a high proportion of firms in energy and mining (industries with fewer female directors and executives) are located, and (2) the mean fraction of female directors on boards for all firms in the province in which the firm is

Similarly, firms with more board interlocks to companies that have female directors or to Full Compliers are also more likely to fully comply. In addition, greater media coverage is associated with a higher likelihood of full compliance, while firms with concentrated ownership structures (i.e., controlled corporations) are significantly less likely to fully comply.

The economic significance of these effects is substantial. A one standard deviation increase in the number of female directors in the same industry and geographic area raises the probability of full compliance by 5.9 percentage points. Given that only 25% of firms in the sample are Full Compliers, this translates to a 23.4% increase relative to the baseline compliance rate, highlighting the importance of local access to qualified female directors. Similarly, a one standard deviation increase in board interlocks with female directors is associated with 5.9 percentage point increase in the likelihood of full compliance, a 23.4% relative increase. Connections appear especially influential: firms with more interlocks to other fully compliant firms see an 11.3 percentage point higher probability of full compliance, a 45% increase over the baseline. In contrast, controlled corporations are 11.8 percentage points less likely to fully comply. This suggests that agency concerns or resistance to external pressure may play a role in discouraging adoption of comprehensive diversity practices.

Model 2 examines the determinants of full compliance by comparing Full Compliers with Partial Compliers, excluding Explainers. The results closely mirror those in Model 1, which compares Full Compliers to both Partial Compliers and Explainers, suggesting that Partial Compliers and Explainers behave similarly along observable dimensions. To further explore this, Model 3 focuses specifically on distinguishing Partial Compliers from Explainers—the two groups that do not adopt female director targets. Model 3 shows limited explanatory power

headquartered as alternative proxies for the geographical supply of female directors (see Internet Appendix Table C.8).

(Adjusted $R^2 = 0.074$), and none of the predictors are statistically significant. This likely reflects the narrow behavioral distinction between these two groups. Variables that effectively explain full compliance—such as board interlocks, proximity to potential female directors, connections to full compliers, or media attention—do not meaningfully differentiate firms that opt out of targets. The choice to partially comply versus explain may instead be shaped by unobserved or qualitative factors, such as disclosure preferences, or organizational culture. Alternatively, this is consistent with the notion that partial compliance is essentially similar to explaining from a cost perspective: access to female director proxies or governance mechanisms does not predict whether a firm partially complies versus provides an explanation for non-compliance. In other words, partial compliance does not appear to be systematically driven by these observable determinants, in sharp contrast to full compliance.

More broadly, the results suggest that firms' responses to the OSC amendment are heterogeneous rather than uniformly substantive. While some firms appear to embrace the spirit of the amendment through more comprehensive diversity disclosures and policies, some firms may instead respond in a more symbolic manner by limiting compliance to disclosures that avoid measurable commitments. The observational similarity between Partial Compliers and Explainers is consistent with this interpretation.

Model 4 examines the determinants of the magnitude of self-adopted female director targets, restricting the sample to firms that fully comply (i.e., those that set a target). In this specification, the dependent variable is continuous, capturing cross-sectional variation in the level of the target rather than the decision to adopt one. The results indicate that the observable factors that strongly predict the adoption of targets in Models 1 and 2—such as director supply, board interlocks, and exposure to other compliant firms—do not explain variation in the size of the targets once a firm chooses to set one. Most coefficients are small and statistically

insignificant, with the exception of institutional ownership, which is positive and significant, suggesting that firms with greater institutional ownership adopt marginally higher targets. Overall, the findings imply that while network connections, local supply of female directors, and external visibility are important for the extensive margin (whether to adopt a target), they do not meaningfully shape the intensive margin (how ambitious the target is). This pattern suggests that the level of self-adopted targets is likely influenced by pressure from institutional investors and other unobserved factors, rather than the observable governance and network characteristics considered here.

Overall, the results in Table 7 suggest that access-related frictions and external visibility significantly influence firms' compliance with the OSC's gender diversity amendment. Firms are more likely to fully comply when they are located near a larger pool of qualified female directors and when their directors are connected to female directors or to peers at other fully-compliant firms, highlighting the importance of local access and network ties.[23] In addition, firms with greater media coverage are significantly more likely to fully comply, suggesting that public scrutiny may serve as a reputational incentive for adopting stronger gender diversity policies. Conversely, controlled corporations, which typically face weaker market and governance pressures, are less likely to fully comply, indicating that ownership structure may dampen responsiveness to regulatory and social expectations.

## VI. The Effects of the Policy: Did Canadian Firms Add Women to Their Boards?

Unlike mandates that enforce increased diversity, it is uncertain whether the OSC's

[23] Our proxy for access to qualified female directors is indirect and captures the number of female directors serving on boards of nearby firms in the same industry. Although geographic proximity and industry overlap make these directors plausibly more relevant candidates for board appointments, the measure is indirect in that we do not directly observe director qualifications or suitability. The measure may also reflect endogenous equilibrium conditions, such as regional industry composition, historical board networks, or local demand for female directors, rather than exogenous variation in director supply.

principles-based approach will have a meaningful effect on board diversity. On the one hand, by requiring firms to disclose their compliance or explain non-compliance, the OSC amendment enables capital markets to evaluate the effectiveness of a firm's diversity policies, potentially increasing stakeholder pressure to improve board diversity.[24] On the other hand, the amendment may be too weak to increase the presence of women on corporate boards, as it permits firms to choose whether to comply with the disclosure requirements. Ultimately, the onus is on investors to judge the adequacy of a firm's policies on social issues like female representation in the boardroom (see e.g., Hart and Zingales, 2017). In this section, we assess the impact of the OSC amendment on board gender diversity by analyzing changes in the gender composition of Canadian boards before and after the amendment's introduction. Our sample consists of Canadian-listed firms in the S&P TSX Composite Index at any point during our sample period, with directorship data in BoardEx and financial data in Compustat, resulting in 296 unique firms.

### A. Changes in Board Composition

During the three-years prior to the OSC amendment (2011-2013), only 20% of firms appointed a female director. In contrast, more than half of all firms (51%) appointed a female director in the three years after the amendment (2015-2018). The response was particularly strong among firms with all-male boards in 2013: ~59% added a female director within four years post-amendment, compared to 48% of firms that already had at least one female director in 2013 (see Internet Appendix Figure C.1).

These data demonstrate that Canadian firms increasingly added women to the boards post-amendment. However, it remains unclear whether this increase is directly attributable to the

[24] Under this regulation, firms are required to disclose details of any policies concerning the identification and nomination of women directors and whether the firm has adopted a target for the representation of women on the board. Therefore, the newly disclosed information would not otherwise be easily available to investors and thus the enhanced disclosure in the amendment may plausibly influence investor behavior.

OSC amendment or part of a broader trend. To address this, Figure 2 shows the annual trend in the average proportion of female directors on Canadian boards from 2011-2018, compared with various samples of U.S. firms as controls. For Canadian-listed firms, the solid line in Panel A reveals a noticeable kink – a steepening of the upward trend – after 2013, suggesting that the amendment prompted firms to accelerate the appointment of female directors, raising the average rate at which women are added to boards. This increased rate persists for the remainder of our sample period. For comparison, Panel A also tracks U.S. firms in the S&P 500 at any point between 2010 and 2016. The U.S. firms, which are not subject to any such regulation during our sample period, do not exhibit the same trend after 2014, reassuring us that this phenomenon is unique to Canadian firms and is thus plausibly a consequence of the OSC's amendment.

In Panel B, we compare Canadian firms to U.S. firms matched on total assets and three-digit SIC industry.[25] U.S. firms are geographically proximate and more closely linked to Canadian firms in terms of board connections, culture and business relationships relative to firms in other countries and thus present a plausible control group. Prior to the amendment, the average female director ratio moves in parallel fashion for both groups, but after the OSC amendment, an upward kink appears for the Canadian sample. In Panel C, we compare Canadian firms cross-listed on a U.S. stock exchange (and thus subject to both Canadian and U.S. exchange regulations) to matched U.S. firms (subject only to U.S. regulations). Despite being governed by SEC regulations, cross-listed Canadian firms display an upward kink and an increased trajectory post-amendment, a pattern not observed in their U.S.-based counterparts. These findings further support the conclusion that the kink in the female director ratio on Canadian boards is driven by the OSC amendment.

[25] Only Canadian firms with an available match are included.

Next, we compare pre-treatment firm characteristics of the treated and control firms used in the analyses in Panels B (full sample) and C (Canadian cross-listed firms) to make sure that the two groups are similar prior to OSC's rule. As shown in Table C.9, the Canadian treated and matched U.S. control groups are similar, as we find only a couple of statistically significant differences between the means of observable characteristics of the two groups (ROA and institutional ownership are higher for the matched U.S. control group). Prior literature suggests that higher institutional ownership may lead to increases in board gender diversity, but we observe higher institutional ownership in the U.S. matched control firms, suggesting that differences in institutional ownership are unlikely to explain our findings. Importantly, the two groups are similar in female director ratio and the rate of change in this ratio, suggesting parallel trends in the outcome variable prior to the amendment. The overall similarity in observable firm characteristics is reassuring because it makes it less likely that unobserved differences between the groups are driving our results.

The regressions in Table 8 confirm the statistical significance of the patterns shown in Figure 2. The unit of observation is firm-year, with the dependent variable being the proportion of a firm's board consisting of female directors. The sample period is 2011-2018. Control variables include the level of compliance in the prior year, institutional ownership, media coverage, total assets, market-to-book assets, return-on-assets, and debt/assets. All specifications include firm fixed effects and focus exclusively on Canadian-listed firms. In model 1, the coefficient on the post-2014 indicator is significantly positive, indicating that the representation of female directors increased by about 7.4 percentage points, on average, following the 2014 OSC amendment.

In model 2, we include independent variables for partial and full compliance and find that the post-2014 indicator remains statistically significant, though the magnitude of the effect is

slightly reduced compared to model 1. Model 2 shows that partial compliance is associated with a 2.8 percentage point increase in the female director ratio the following year,[26] while full compliance, which includes disclosing a director gender diversity target, is associated with a 6.1 percentage point increase. Given that female directors accounted for an average of 10% of directors in Canadian firms before the amendment, these results imply that partial compliance leads to a 28% increase in female director representation, with full compliance leading to a 61% increase. In model 3, these findings remain statistically significant when we replace the post-2014 indicator variable with year dummies.

*A.1. DiD with U.S. Control Sample*

The increase in board gender diversity observed in the previous section may reflect a broader positive trend in female representation rather than a direct response to the OSC amendment. To better isolate the effect of the OSC amendment, we employ a DiD approach in Table 9.[27] In model 1, we compare Canadian firms with all U.S. listed firms in the S&P 500 (similar to Panel A of Figure 2). The coefficient on "Canadian Firm×Post-2014" in model 1 suggests that following the amendment, Canadian firms increased female director representation by about 3.3 percentage points more, on average, than U.S. firms during the same period. In model 2, we match U.S. firms to Canadian firms based on total assets and three-digit SIC industry, and in model 3, we match Canadian firms cross-listed on a U.S. exchange with firms listed only in the U.S. In both cases, we find a similar relative increase in female director representation for Canadian firms (4.3 and 3.8 percentage points, respectively). Since female

[26] It is important to point out that no firms regress in terms of compliance. For example, no firm that is fully complying with the regulation switches to mixed compliance in later years.

[27] Unlike the tests in Table 8, we are unable to study the effect of the level of compliance on female director representation in the DiD specifications in Table 9, as the control group consists of matched U.S. firms and compliance with OSC's regulation is not well-defined for such firms.

directors accounted for an average 10% of directors in Canadian firms before 2014, the coefficients imply that the OSC amendment is associated with a 38% to 43% increase in female director representation.

*A.2. Societal Trends*

Are the observed changes in board gender diversity attributable to the OSC amendment or could they be attributable to other contemporaneous trends? For example, societal trends that led to the OSC regulation may have also influenced institutional investors' attitudes towards board diversity. Consistent with this conjecture, studies such as Giannetti and Wang (2023) show that U.S. firms are more likely to appoint women to their boards during periods of heightened public attention to gender equality. For societal trends to explain the increase in female board representation, these trends would need to affect our treatment group (Canadian firms) differently from our control group (matched U.S. firms). To better assess this, we construct a measure of societal trends using Google Search Trends to construct an index of public attention to gender diversity.[28]

We argue that Search Volume Indices (SVI) are a strong indicator of societal trends for several reasons. First, as Da, Engelberg, and Gao (2011) argue, SVIs capture millions of users' collective interest in an issue better than news coverage. Second, SVIs have proven useful in various contexts. For example, Google searches accurately estimate influenza epidemics across different countries (Ginsberg et al., 2009) and can forecast useful economic indicators like home sales and automotive sales, etc. (Choi and Varian, 2012). Additionally, Google searches for

[28] Google Search Trends constructs the Google Search Volume Index (SVI) starting from January 2004 as the ratio of the monthly total queries for a specific search term or topic in a given geographical region relative to the total number of queries in the same month and region. Google rescales the monthly ratios in a given time period so that the month with the highest (lowest) search intensity for the given search term or topic gets a value of 100 (0). Google Search trends provide the time series SVI for the U.S. as well as for Canada.

specific firms are reliable proxies for investors' demand for information about them (Drake, Roulstone and Thornock, 2015). Finally, directly related to our purpose, Giannetti and Wang (2023) use SVI data to measure public attention to gender equality and show that firms are more likely to appoint women directors during periods of heightened public focus on gender issues.

We plot the 12-month moving average of the monthly Google SVI for the term "Gender Diversity" from January 2011 to December 2018 in Canada and the U.S. (see Internet Appendix Figure C.3). Public attention to gender diversity rises sharply in the latter part of our sample, with a similar pattern in both countries. The correlation between the SVI time series for the U.S. and Canada is 0.91, indicating that societal attention to gender diversity was highly correlated between the two countries during this period. This high correlation suggests that both the U.S. control firms and Canadian treated firms in our study are subject to similar societal trends, which the DiD specification differences out, isolating the impact of the OSC regulation from contemporaneous shifts in attitudes towards board diversity. Combined with the market reaction and the rapid adoption of diversity policies in 2014, this evidence indicates that firms responded to the OSC's July 2013 proposal rather than a continuation of pre-existing trends.

*A.3. Changes within the Canadian Sample*

To ensure that our results are not an artifact of our choice to use U.S. firms as control groups, we next examine changes in the female director ratio within Canada alone. Specifically, we focus on the trajectory of female director ratios of Canadian firms as shown in Figure 2, where there is a visible kink in 2014 when the new OSC rules were passed, indicating an increased rate of change in female director ratios post-regulation. To verify the statistical significance of this kink, we examine the year-on-year change in the female director ratios of Canadian firms over the 2011-2018 sample period by estimating the following regression specification:

$$\Delta\, Female\ Director\ Ratio_{i,t} = \alpha + \sum_{j=2012}^{2018} \theta_j \cdot \times \mathbb{1}[Year = j] + \varphi_{i,t} \cdot Controls + \gamma_i + \varepsilon_{i,t}\,.$$

Observations are at the firm-year level, with *i* indexing firms and *t* indexing calendar years. The dependent variable is the percentage point change in the proportion of a firm's board consisting of female directors between the current year, *t,* and the previous year, *t-1*. Control variables include Log(Assets), Market-to-Book Assets, ROA and Debt/Assets. Firm fixed effects ($\gamma_i$) are included, and $\varepsilon_{i,t}$ is an error term. The variables of interest are year indicator variables, with the omitted year being 2011 (the benchmark year). Results are presented in Panel A of Figure 3, which plots the coefficient estimates, $\theta_j$, of the percentage point change in the female director ratio in each year, relative to 2011, with error bars that indicate 95% confidence intervals for the coefficient estimates.

Panel A of Figure 3 shows that in the pre-regulation period (2012 and 2013), changes in Canadian firms' female director ratios are not statistically different from the benchmark year, 2011. However, in 2014, there is a distinct and statistically significant increase of about 2 percentage points in the annual change in female director ratios relative to 2011. The elevated rate of change persists at a similar magnitude of between 1.5 to 2 percentage points and remains statistically significant through 2018. These findings confirm a statistically significant increase in the rate of change in female director ratios for Canadian firms following the OSC amendment, validating the kink observed in Figure 2.

We next examine variations within the sample of Canadian firms to investigate whether the rate of change in female director ratios differs for firms with all-male boards. We augment the regression from Panel A by adding an interaction between the year indicator and an indicator for firms with all-male boards as of 2013 as follows:

$$\Delta\, Female\ Director\ Ratio_{i,t} = \alpha + \sum_{j=2012}^{2018} \beta_j \cdot All\ Male\ Board_{i,2013} \times \mathbb{1}[Year = j] +$$

$$\sum_{j=2012}^{2018} \theta_j \times \mathbb{1}[Year = j] + \varphi_{i,t} \cdot Controls + \gamma_i + \varepsilon_{i,t}\ .$$

Panel B of Figure 3 displays the coefficient estimates, $\beta_j$, of the difference between the change in the female director ratio for firms with all-male boards and firms with female directors, relative to 2011.[29] The figure indicates that following the amendment in 2014, firms with all-male boards in 2013 increased their female director ratios by about 1.5 percentage points more than firms with female directors in 2013 (the difference is statistically significant at the 10% level). The increase persists with similar magnitudes (of between 1 to 3 percentage points) through 2018 and is statistically significant (at the 5% level) in all subsequent years except 2016. The results indicate that, between the pre- and post-regulation periods, firms with all-male boards exhibited a larger increase in the rate of change in female director ratios than did firms with female directors. This pattern is consistent with Panel B of Figure C.1, which showed that firms with all-male boards were more likely to add female directors in the post-regulation period. These results, which are akin to examining how a difference-in-differences coefficient changes dynamically over time, help address our concerns that our findings in Table 9 are driven by another Canada specific event that also affects female ratios. That is, the results shown in Figure 3 make it less likely that the results in Table 9 are an artifact of the choice of using U.S. firms as a control group.

A potential concern is that the increase in female board representation reflects the same women being appointed to multiple boards, increasing the number of busy female directors, rather than an expansion in the pool of female directors. However, we find little evidence

[29] This methodology is similar to the dynamic leads-and-lags model – also utilized in studies such as Autor (2003), Atanasov and Black (2016), Jeffers (2019) and Xu and Kim (2021) – that allows for inference in regard to whether differences in the dependent variable between the treatment and control firms each year are statistically different relative to the difference in the omitted benchmark year in the pre-shock period (2011 in our analysis).

consistent with this interpretation. As shown in Internet Appendix Figure C.5, the number of unique female directors in our sample increases substantially following the OSC amendment, rising from 246 in 2013 to 430 in 2018. At the same time, the average number of board seats held by a female director declines from 3.09 in 2013 to 2.78 in 2018, and the percentage of female directors in our sample holding three or more board seats falls from 54.1% to 46.5% over the sample period. Together, these patterns suggest that firms increasingly drew from a broader pool of female directors rather than relying on the same women to fill multiple board positions.

In addition to board representation, the OSC amendment requires listed firms to disclose policies regarding female representation in the top executive team. Although the focus of our study is board representation, we also examine changes in the composition of the top named executives (from annual proxy circulars) in the years surrounding the OSC amendment. In practice, female executive targets are substantially less common than female director targets: during 2014–2018, only 27 firms in our sample adopt female executive targets compared to 111 firms adopting female director targets, and all firms adopting female executive targets also adopt female director targets.

The increase in the annual average proportion of female top executives at Canadian firms between the pre- and post-regulation periods is much smaller than for female directors, increasing from 6% to 8.9% between 2011 and 2018 (vs 10% to 22% for directors). Moreover, similar analyses to those in Table 9 do not show substantial evidence of an increase in female executive ratios among Canadian firms relative to U.S. firms (see Internet Appendix Table C.10). We suggest the reason the OSC regulation impacted board gender diversity but not executive gender diversity is due to the higher costs associated with replacing top executives. Directors are up for election annually and can be added without displacing an existing board member. Moreover, unlike directorships, executive positions are not easily scalable, as a single

executive typically cannot serve comparable executive roles across multiple firms, potentially making supply constraints more binding and slowing the development of a broader pipeline of female executives. Furthermore, institutional investors who acted upon the regulation appear to have been focused on improving female board representation (see Section VII below), and media coverage of the regulation's initial announcement appears to be more focused on board composition rather than that for executives.[30]

## VII. Mechanisms

Our analysis thus far shows that firms increasingly implement gender diversity policies following the OSC amendment. Moreover, even though the amendment contained no explicit requirement to increase board gender diversity nor did the OSC propose "best practices" guidelines for board gender diversity, female board representation significantly increased post-amendment (an economically significant 38% increase relative to U.S. firms). Additionally, we observe a positive association between a firm's diversity disclosures and its female director ratio in subsequent years, suggesting a link between disclosure and board diversity. These findings are thus somewhat surprising, given that the only *requirements* of the amendment are with regard to disclosure of the firm's gender diversity policy and female ratios. In fact, this was a point of contention among some institutional investors who felt the OSC amendment should have gone further. In its 2014 response to the amended OSC Consultation Paper, the Canadian Coalition for Good Governance (CCGG), an association comprised of large Canadian institutional investors, argued that the amendment should include "best practices" guidelines rather than just disclosure requirements: "We believe establishing positive guidelines with which companies can comply or explain why they chose not to comply, which is a true "comply or explain" regime, is more

[30] See e.g. *The Globe and Mail*, Janet McFarland (July 30, 2013), "OSC proposes gender equity policy for boards." and *CBC News* (July 30, 2013), "OSC pitches gender equality on corporate boards."

likely to promote change than simple disclosure requirements."[31] CCGG's position was that the OSC policy fell short by not providing clear guidelines for good gender diversity practices.

Given that the OSC amendment neither required firms to diversify their boards nor provided explicit guidance on "best practices" for board diversity, what prompted Canadian firms to increase board diversity after the amendment? The OSC's initial consultation paper offers insights: "These types of disclosures are intended to provide investors and other stakeholders with information on the issuer's approach to advancing the representation of women on boards and in senior management, which in turn may impact investment and voting decisions."[32] This suggests that shareholder pressure, particularly from institutional investors, may have been a key channel driving the increase in board diversity after the OSC amendment. Indeed, Gormley, Gupta, Matsa, Mortal and Yang (2023) find that campaigns launched in 2017 by "The Big Three" institutional investors in the U.S., aimed at increasing gender diversity on corporate boards, led to a significant rise in the number of female directors.

To gain insight into how enhanced disclosure required by the OSC amendment may have empowered shareholders to influence board diversity in Canada, we examine engagements by a major coalitions of institutional investors in Canada: the Canadian Coalition for Good Governance (CCGG). We also analyze voting outcomes for nominating committee chairs to determine whether shareholders became more likely to express dissatisfaction with a lack of board diversity through their votes after the amendment.

### A. Institutional Investor Engagement

The Canadian Coalition for Good Governance (CCGG) was established in 2003 by

[31] See April 16, 2014 letter from CCGG to the OSC providing commentary to the amendments proposed by the OSC in January 2014 (page 6): https://ccgg.ca/wp-content/uploads/2019/03/submission_to_osc_april_16_2014__re_disclosur_gading_women_on_boards_and_in_senior_mgmt.-1-1-1.pdf

[32] See Section 4.2 (page 18) of the OSC Staff Consultation Paper 58-401 (July 30, 2013).

institutional investors to promote improved corporate governance practices among Canadian public companies. CCGG currently represents 51 major institutional investors in Canada, accounting for approximately 22% of the total institutional ownership of Canadian firms in our sample, with $5.5 trillion in assets under management. Since 2008, CCGG has engaged directly Canadian public company boards on various governance issues. These board engagement meetings offer a private forum for dialogue and exchange of views between independent directors and institutional investors.[33] The CEO of CCGG stated, "Board engagements are the appropriate forum to discuss a company's governance practices, including shareholder rights, board composition, executive compensation, and board oversight of corporate strategy and material business risks…."[34]

We obtained proprietary data from CCGG on all its engagement meetings with Canadian companies from 2008-2018. Panel A of Table 10 summarizes these engagements. On average, CCGG engages about 40 companies annually. We received a summary report for each engagement, allowing us to categorize what was discussed, and particularly whether board gender diversity was among the issues raised. Notably, there was no discussion of board gender diversity in any engagement meeting before 2012. While the topic of diversity began to surface in 2012 and 2013, there was a marked increase after 2013 in discussions of board gender diversity. For example, of the 36 engagements in 2014, 27 (75%) included discussions on board gender diversity. Gender diversity continued to be a popular topic representing 59% of all engagements in 2015, and about 40% in 2016 and 2017. Interestingly, many of these discussions on board gender diversity were not initiated by CCGG; instead, firms themselves often used

[33] https://ccgg.ca/engagement-program/

[34] See CCGG's Annual Report on 2023 Engagement Season: https://ccgg.ca/engagement-program/

these meetings to inform CCGG of their actions regarding board diversity.[35] Forty-two percent (15 out of 27) of gender diversity discussions were proactively initiated by firms in 2014, with 62% of gender diversity discussions being proactively initiated by firms in 2015. These statistics suggest that OSC amendment's disclosures requirements may have heighted boards' focus on diversity, particularly in the years immediately following the amendment. The last two columns show the number of engagements in which CCGG commends or questions the firm on gender diversity of its board. Examples of questions asked by CCGG include whether the board has considered the issue of gender diversity, whether the board considers gender when adding new directors, whether directors believe it makes sense to have one or more females on the board, what the board is doing to identify appropriate female candidates, or asking directors to comment on the lack of gender diversity on their board.

Panel B estimates the impact of CCGG's activism on female corporate board representation. The dependent variable is the proportion of a firm's board made up of female directors. *CCGG Engagement Fixed Effect* is an indicator equal to 1 if CCGG questioned the firm on director gender diversity in any year in our sample (between 2011 and 2018). *CCGG Post-Engagement* is an indicator variable that equals 1 if CCGG questioned the firm on director gender diversity in a prior year (i.e., equals 1 in year *t* and all subsequent years if a firm was engaged in year *t-1*). All models are linear probability models and include year fixed effects. Models 1 and 2 include one-digit-SIC industry fixed effects while models 3 and 4 include firm-

[35] In all 65 cases where firms proactively engaged with CCGG regarding director gender diversity, the firms were simultaneously engaged by CCGG on other governance issues during the same meeting, and only two had previously been engaged by CCGG specifically on gender diversity. At the time of their meeting with CCGG, these firms also exhibit stronger diversity practices than the average firm during the sample period: 24.6% are Full Compliers, approximately 7% higher than the sample average, and none are Explainers. We see no substantial further diversity improvements, as these firms are using the engagements to highlight their recent improvements. This differs from the pattern documented later in Panel B for CCGG-initiated engagements on director gender diversity, which are associated with subsequent increases in female board representation.

fixed effects. Models 2 and 4 also include observable firm characteristics and governance controls.

The coefficient of our main explanatory variable (*CCGG Post-Engagement*) indicates the change in the female director ratio following CCGG's engagement, relative to firms not engaged on gender diversity during this period. The coefficient is positive and statistically significant in three of the four models, demonstrating that CCGG engagements on gender diversity lead to a higher subsequent female director ratio. In terms of economic significance, the coefficient in model 2 suggests an increase of about 3 percentage points in the female director ratio following CCGG's engagement. The negative and statistically significant coefficient on *CCGG Engagement Fixed Effect* indicates that firms targeted by CCGG have a female director ratio that is, on average, 3 percentage points lower. This suggests that CCGG targets firms with lower female board representation and that these engagements result in an increase in female board representation. Our findings are consistent with Doidge, Dyck, Mahmudi and Virani (2019), who study CCGG engagements related to the adoption of majority voting, say on pay, and specific compensation policies – but not diversity policies – and find that firms engaged by CCGG are more likely than non-engaged firms to adopt CCGG's specific governance proposals.

We acknowledge potential caveats to these findings. First, firms engaged by CCGG are not randomly selected, raising concerns about causal interpretation. Engaged firms might have improved board gender diversity even without these engagements. However, consistent with a causal interpretation, CCGG are unlikely to expend scarce resources to engage firms that already plan to make these governance changes. Moreover, we show that CCGG targets firms with lower female board representation (without a gender diversity target), and we find that these engagements are followed by increases in female board representation. Second, it's possible that an omitted variable (e.g., the same societal trends that spurred the OSC regulation) affected

institutional investors' attitudes towards board diversity around 2014 and led to their engagements. While we acknowledge this possibility, our discussions with CCGG suggest enhanced disclosure of the OSC amendment facilitated their engagement efforts. Catherine McCall, CEO of CCGG noted that the OSC amendment provided their institutional investors members "meaningful information and disclosure, allowing them to express their disapproval of a lack of diversity by voting against one or more directors."[36]

**B. Voting Outcomes**

The OSC stated that its gender disclosure regulation aimed to provide investors and stakeholders with information on a company's efforts to advance women's representation on boards and in senior management, suggesting these disclosures might influence investment and voting decisions. Notably, CCGG indicates that their members may withhold votes based on diversity considerations. CCGG's Gender Diversity Policy notes, "Investors are looking to see the extent of diversity when evaluating a company and boards are increasingly facing investors' higher expectations in this area," and also mentions that "several of CCGG's members have proxy voting guidelines that recommend voting to withhold from some directors in certain circumstances where gender diversity is considered to be inadequate."

The OSC amendment requires firms to disclose their stance on board diversity, giving investors additional data upon which to act. This increased post-amendment disclosure provides

[36] A related initiative is the 30% Club, which is a global initiative led by Chairs and CEOs committed to increasing gender diversity at the board and executive levels, advocating for a minimum 30% women on boards and in C-suites worldwide. The Canadian Chapter, which includes the 30% Club Canada Investor Group, was launched in 2015. The Investor Group, which began engagements in 2017 (3 years post-amendment), specifically engages companies to implement gender targets. This is in contrast to CCGG, which began engaging firms on board diversity prior to the amendment. Notably, in its initial statement of intent, the 30% Club Investor Group refers to the OSC amendment and calls on companies to disclose their diversity policies (see http://30percentclub.org/wp-content/uploads/2021/10/30-Club-Canadian-Investor-Group-Statement-of-Intent.pdf). Jennifer Coulson, the current Chair of the Investor Group, emphasized to us that the OSC regulation is crucial because "it becomes hard to implement [engagements] if we don't have data [on board gender diversity]" and highlighted that the regulation's greatest benefit was in making data on board composition widely available, allowing them to assess firms' efforts to increase female representation.

investors with information which may allow them to express dissatisfaction with board diversity. We posit that investors will be more likely to express such dissatisfaction via votes against the chair of the nominating committee post-amendment when firms must disclose their stance on board diversity. To analyze whether the OSC regulation impacted voting decisions in director elections, we obtain shareholder voting data from ISS and from the Johnston Centre for Corporate Governance Innovation at the University of Toronto.[37] Since the ISS data for Canadian firms starts in 2013, our analysis in Table 11 covers 2013-2018 (two years pre- and four years post-regulation). The dependent variable is the percentage of votes withheld and against, reflecting the lack of support for the chair of the nominating committee. The main explanatory variables are the interaction of female director ratio and a post regulation dummy (*Post-2014×Female Director Ratio)* in models 1 and 3, and the interaction between gender diversity target dummy and post regulation (*Post-2014×Female Director Target*) in models 2 and 4. All specifications are OLS regressions with year fixed effects. Models 2 and 4 also include firm characteristics and governance controls. Models 1-4 include one-digit-SIC industry fixed effects, while models 5 and 6 include firm fixed effects.

In Table 11, the coefficient on *Post-2014×Female Director Ratio* is negative and statistically significant in models 1 and 3, indicating that after the OSC amendment, firms with lower female director ratios receive less voting support for the chair of their nominating committee than they did before the amendment. Similarly, the negative and statistically significant coefficient on *Post-2014×Female Director Target* in models 2 and 4 suggests that after the amendment, not having a director gender target is associated with less voting support for the nominating chair than it was before the amendment.[38] These results are consistent in

[37] We use data from the Johnston Centre when data are not available in ISS for our sample firms.

[38] Notably, we find no relation between having a gender target and voting support and mixed evidence between the female director ratio and voting support in the pre-regulation period. Thus, female representation in the boardroom

models 5 and 6 with firm-fixed effects. In terms of economic significance, the coefficient in model 5 implies that after the OSC amendment, a one standard deviation lower female director ratio results in 3.7% lower voting support for the nominating committee chair, while the coefficient in model 6 suggests that not having a gender target results in 5.2% lower voting support relative to the pre-amendment period. In untabulated regressions, we find similar results using the average votes withheld and against the nominating committee as the dependent variable (as opposed to the nominating chair).[39]

Table 11 shows that shareholders were more likely to vote against the nominating committee chair at firms with low female board representation after the OSC amendment, but not before. This suggests that the amendment increased shareholder attention to gender diversity on boards. Importantly, the OSC amendment also required firms to disclose their position on board gender diversity. Accordingly, Table 12 examines voting outcomes for nominating committee chairs based on common justifications provided by explainers and partial compliers for not setting gender diversity targets. Among firms with all-male boards, we find that the chair receives 7% more votes withheld or cast against when the firm claims that targets are unnecessary or inadvisable, and 8.4% more when the firm states that targets are not an appropriate tool to improve diversity. In contrast, we find no similar effect for firms citing merit-based appointments, firm size, or board turnover constraints. These findings suggest that shareholders distinguish between firms perceived as dismissing board diversity initiatives and firms providing more substantive or operational explanations for not adopting targets. More

and the use of gender diversity targets become of paramount importance to nominating committees voting support after the OSC gender diversity regulation.

[39] In 2018, ISS adopted a gender diversity policy for S&P/TSX composite index companies suggesting to withhold votes for the Chair of the Nominating Committee where (1) the company has not disclosed a formal written gender diversity policy and (2) there are zero female directors on the board. Given that the change in ISS's proxy voting guidelines for TSX listed companies happened after our sample period ends (2018), it is unlikely that this change would be contaminating our results that are obtained around OSC's proposed amendment in 2014.

broadly, the evidence indicates that investors respond not only to the presence or absence of diversity disclosures, but also to their specific content and framing in proxy statements.

In Internet Appendix Table C.11, we focus on firms that fully comply and examine whether the adopted female director target is associated with voting support for the chair of the nominating committee. The coefficient on Female Director Target is negative and statistically significant, indicating that firms adopting higher targets receive lower percentages of withheld or against votes. Using the estimate from model 2, a one standard deviation increase in Female Director Target (0.056) is associated with approximately a 2.4% reduction in withheld or against votes. We do not find evidence that this relation differs for firms with all-male boards. Overall, the evidence suggests that, among Full Compliers, shareholders respond more favorably to firms adopting more ambitious female director targets.

**C. Summary of Mechanisms**

Although the OSC amendment did not explicitly provide "best practices" guidelines, it was designed to give investors insights into firms' board diversity practices, potentially influencing investment and voting decisions. Following the regulation, the OSC facilitated access to this information by mandating the disclosure of firms' board diversity practices. The evidence suggests that the OSC's reasoning was correct: board diversity increased even without an explicit mandate. This increase appears to be driven at least in part by investor pressure: post-amendment, institutional investor engagements on board diversity increase, and investors are more likely to vote against nominating chairs and committees of firms with non-diverse boards. Moreover, investors respond to diversity disclosures through voting. Overall, our evidence suggests that the disclosure of diversity policies required by the amendment contributed to increased board diversity through investor engagement and voting.

## VIII. Conclusion

This paper finds that firms responded to the OSC amendment by increasing board gender diversity, despite the amendment's flexible, non-mandatory design. Following the OSC's disclosure-based approach, the share of firms with at least one female director rose from 56% prior to the announcement to 94% by 2018, and the ratio of female directors increased significantly more in Canada than among comparable U.S. firms over the same period. Importantly, firms that did not increase board diversity are those facing economic constraints in identifying qualified female director candidates, consistent with director supply frictions rather than regulatory inattention. That firms respond to a regulation that does not mandate board diversification, but instead relies on disclosure and explanation, highlights the power of market-based enforcement mechanisms.

These findings also speak directly to ongoing policy debates about the relative merits of quota-based mandates versus principles-based disclosure regimes. Unlike quotas, which require firms to meet fixed numerical thresholds within prescribed timeframes, the OSC amendment allows firms discretion over both the timing and form of compliance. As a result, changes in board composition following the amendment are smaller on average and more heterogeneous across firms than those documented under quota regimes. This outcome reflects policy design rather than weaker effectiveness. Prior studies of binding quotas show that large, discrete adjustments—particularly among firms far from mandated thresholds—can require costly board restructuring and exacerbate director supply constraints, contributing to negative or mixed valuation effects. In contrast, the OSC's principles-based framework permits firms to adjust both the timing and level of female director targets based on investor demand and candidate availability, mitigating the costs associated with forced board restructuring and convergence toward a single mandated quota.

Consistent with this mechanism, we find that firms most affected by the OSC amendment—those with all-male boards or without pre-existing diversity policies—exhibit a directly linked sequence of responses: positive announcement returns, enhanced disclosure, increased investor engagement and voting pressure, and subsequent increases in female board representation. These results suggest that investors anticipate net benefits when diversity objectives are pursued through flexible, disclosure-based regulation rather than binding mandates.

Our findings also inform the broader applicability of "comply or explain" regulation. While such regimes vary in their stringency, the OSC amendment represents a particularly light-touch version: it does not prescribe a "best practice" target for female board representation, but instead requires firms to disclose whether they have set a target and to explain if they have not. This structure emphasizes transparency and accountability rather than mechanical compliance. In contexts where legal or political constraints limit the feasibility of binding mandates, principles-based disclosure regulation may offer a viable alternative. Its effectiveness, however may depend on the institutional environment. Because our findings point to a mechanism based on investor scrutiny and reputational pressure, the external validity of our findings is likely strongest in markets with similarly active institutional investors, high proxy voting participation, and disclosure regimes that make firm-level governance practices comparable across issuers. Where these conditions are weaker, such as settings with limited investor engagement or less transparent proxy disclosure, principles-based regulation may have more muted effects.

Overall, our evidence suggests that enhanced disclosure combined with "comply or explain" regulation can meaningfully increase board gender diversity while potentially imposing lower costs on firms than quota-based approaches. Given the leniency of the OSC amendment, our estimates may represent a lower bound on the level of female board representation

achievable under comply-or-explain regulation, benchmarked against a more prescriptive regime that sets a target. We note, however, that a more prescriptive regime need not produce greater representation: if its target were set sufficiently low, it could anchor firms at or below the levels they adopt voluntarily under disclosure alone, in which case our estimate would not be a lower bound. At the same time, our findings caution that such approaches may not be sufficient in all contexts: while the OSC amendment applies to executive diversity disclosure, we do not observe any effect on executive diversity outcomes, suggesting that when adjustment costs are high, disclosure alone may not induce change.

**References**


Adams, R., Ferreira, D. 2009. Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics* 94(2), 291-309.

Ahern, K. R., and Dittmar, A. K. 2012. The changing of the boards: The impact on firm valuation of mandated female board representation. *The Quarterly Journal of Economics*, 127(1), 137 197.

Allen, A., and Wahid, A. S. 2023. Regulating gender diversity: Evidence from California senate bill 826. *Management Science*.

Arcot, S., and V. Bruno, 2018, Corporate Governance and Ownership: Evidence from a Nonmandatory Regulation. *Journal of Law, Finance and Accounting* 3(1), 59-84

Arcot, S., Bruno V., and A. Faure-Grimaud, 2010, Corporate Governance in the UK: Is the Comply or Explain Approach Working? *International Review of Law and Economics*, 30(2), 193-201

Atanasov, V.A., and Black, B.S. 2016. Shock-based causal inference in corporate finance and accounting research. *Critical Finance Review* 5, 207-304.

Autor, D. H., 2003. Outsourcing at will: The contribution of unjust dismissal doctrine to the growth of employment outsourcing. *Journal of Labor Economics* 21(1), 1-42.

Bakke, T.E., Mahmudi, H., Newton, A. 2020. Performance peer groups in CEO compensation contracts. *Financial Management* 49(4), 997-1027.

Bebchuk, L. A., and Fried, J. M. 2003. Executive compensation as an agency problem. *The Journal of Economic Perspectives* 17(3), 71-92.

Broshko, E. B., and K. Li. 2006. Playing by the Rules: Comparing Principles-based and Rules-based Corporate Governance in Canada and the U.S. *Canadian Investment Review* 19, 18-23.

Bushee, B. J., and C. Leuz. 2005. Economic consequences of SEC disclosure regulation: evidence from the OTC bulletin board. *Journal of Accounting and Economics* 39(2), 233-264.

Campbell, J. Y., A. W. Lo, and. C. MacKinlay. 2012.The econometrics of financial markets. Princeton University Press.

Carhart, M. M., 1997. On Persistence in Mutual Fund Performance. *Journal of Finance*, 52(1), 57-82.

Choi, H., and Varian, H. 2012. Predicting the Present with Google Trends. *Economic Record*, 88, 2-9.

Da, Z., Engelberg, J., and Gao, P. 2011. In Search of Attention. *Journal of Finance*, 66, 1461-1499.

Dahya, J., McConnell, J.J. and Travlos, N.G., 2002. The Cadbury committee, corporate performance, and top management turnover. *The Journal of Finance*, 57(1), pp.461-483.

Dahya, J. and McConnell, J.J., 2007. Board composition, corporate performance, and the Cadbury committee recommendation. *Journal of Financial and Quantitative Analysis*, 42(3), pp.535-564.

Dahya, J., Golubov, A., Petmezas, D. and Travlos, N.G., 2019. Governance mandates, outside directors, and acquirer performance. *Journal of Corporate Finance*, 59, pp.218-238.

Demsetz, H., & Lehn, K. 1985. The structure of corporate ownership: Causes and consequences. *Journal of Political Economy* 93(6), 1155-1177.

Dezso, C. L., and D. G. Ross. 2012. Does female representation in top management improve firm performance? A panel data investigation. *Strategic Management Journal* 33, 1072-1089.

Doidge, C., Dyck, A., Mahmudi, H., and Virani, A. 2019. Collective action and governance activism. *Review of Finance* 23(5), 893-933.

Drake, M. S., Roulstone, D. T., and Thornock, J. R. 2015. The Determinants and Consequences of

Information Acquisition via EDGAR. *Contemporary Accounting Research*, 32, 1128-1161.

Dye, R. A. 1990. Mandatory versus voluntary disclosures: The cases of financial and real externalities. *The Accounting Review* 65(1), 1-24.

Eckbo, B. E., K. Nygaard, and K. S. Thorburn. 2022. Valuation effects of Norway's board gender-quota law revisited. *Management Science* 68(6), 4112-4134.

Faulkender, M., and J. Yang. 2013. Is disclosure an effective cleansing mechanism? The dynamics of compensation peer benchmarking. *The Review of Financial Studies* 26(3), 806-839.

Fama, E., and K. French, 1993. Common risk factors in the returns on stocks and bonds. *Journal of Financial Economics*, 33(1), 3-56.

Fried, J., 2021. Will Nasdaq's Diversity Rules Harm Investors?, *Working Paper*.

Ford, C. L. 2008. New Governance, Compliance, and Principles-Based Securities Regulation *American Business Law Journal*, 45(1), 1-60.

Giannetti, M. and T. Y. Wang. 2023. Public attention to gender equality and board gender diversity. *Journal of Financial and Quantitative Analysis* 58(2), 485-511.

Ginsberg, J., Mohebbi, M. H., Patel, R. S., Brammer, L., Smolinski, M. S., and Brilliant, L. 2009. Detecting Influenza Epidemics Using Search Engine Query Data. *Nature,* 457, 1012-1014.

Gormley, T., Gupta, V., Matsa, D., Mortal, S., and L. Yang, 2023. The Big Three and Board Gender Diversity: The Effectiveness of Shareholder Voice. *Journal of Financial Economics,* 149(2), 323-348.

Greene, D., V. Intintoli, and K. Kahle, 2020. Do board gender quotas affect firm value? Evidence from California Senate Bill No. 826. *Journal of Corporate Finance,* 60*,* 101526.

Hart, O., Zingales, L., 2017. Companies Should Maximize Shareholder Welfare Not Market Value. *Journal of Law, Finance, and Accounting,* 2(2), 247-275.

Harris, M. S. 1998. The association between competition and managers' business segment reporting decisions. *Journal of Accounting Research* 36(1), 111-128.

Healy, P. M., and Palepu, K. G. 2001. Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of Accounting and Economics* 31(1-3), 405-440.

Hermalin, B.E., & Weisbach, M. S. 1998. Endogenously chosen boards of directors and their monitoring of the CEO. *American Economic Review* 88(1), 96-118.

Hope, O.-K., and W. B. Thomas. 2008. Managerial empire building and firm disclosure. *Journal of Accounting Research* 46(3), 591-626.

Hwang, S., Shivdasani, A., Simintzi, E. 2020. Mandating Women on Boards: Evidence from the United States. *Working Paper*.

Jeffers, J., 2019. The impact of restricting labor mobility on corporate investment and entrepreneurship. *Working Paper*.

Khurana, I. K., Pereira, R., Martin. X. 2006. Firm growth and disclosure: An empirical analysis. *Journal of Financial and Quantitative Analysis* 41(2), 357-380.

Kolari, J. W., & Pynnönen, S., 2010. Event study testing with cross-sectional correlation of abnormal returns. *Review of Financial Studies* 23(11), 3996-4025.

Larcker, D. F., Ormazabal, G., & Taylor, D. J. 2011. The market reaction to corporate governance regulation. *Journal of Financial Economics* 101(2), 431-448.

Leuz, C., and P. Wysocki. 2008. Economic consequences of financial reporting and disclosure regulation: A review and suggestions for future research. *Working paper.*

Liu, Y., Wei, Z., and Xie, F. 2014. Do women directors improve firm performance in China? *Journal of Corporate Finance* 28, 169–184.

MacKinlay, A. C. (1997). Event studies in economics and finance. *Journal of Economic Literature*, 35(1), 13-39.

Matsa, D. A., Miller, A .R. , 2013. A female style in corporate leadership? Evidence from quotas. *American Economic. Journal: Applied Economics* 5 (3), 136–169.

Perry, T., and M. Zenner. 2001. Pay for performance? Government regulation and the structure of compensation contracts. *Journal of Financial Economics* 62(3), 453-488.

Roberts, M, Whited, T.M. 2013. Endogeneity in Empirical Corporate Finance. In: Constantinides, G.M, Harris, M., Stulz, R.M., (Eds.), Handbook of the Economics of Finance. Elsevier B.V., pp. 493-572.

Sefcik, S. E., & Thompson, R., 1986. An approach to statistical inference in cross-sectional models with security abnormal returns as dependent variable. *Journal of Accounting Research*, 24(2), 316-334.

Schoar, A., Washington, E. L. 2011. Are the seeds of bad governance sown in good times? (No. w17061). *National Bureau of Economic Research*.

Stanfield, J., and R. Tumarkin., 2018. Does the political power of nonfinancial stakeholders affect firm values? Evidence from labor unions. *Journal of Financial and Quantitative Analysis* 53, 1101-1133.

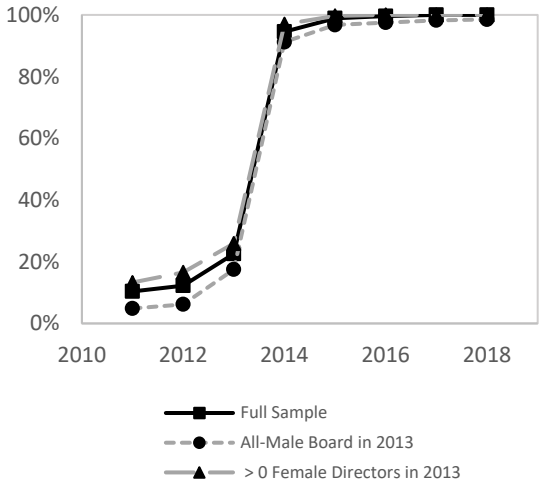
Winters, T., Jacobs-Sharma, M. 2016. Gender Diversity on Corporate Boards: The Competing Perspectives in the U.S. and the EU. *Working Paper*.

Xu, Q., and Kim, T., 2021. Financial constraints and corporate environmental policies. *Review of Financial Studies*, forthcoming.

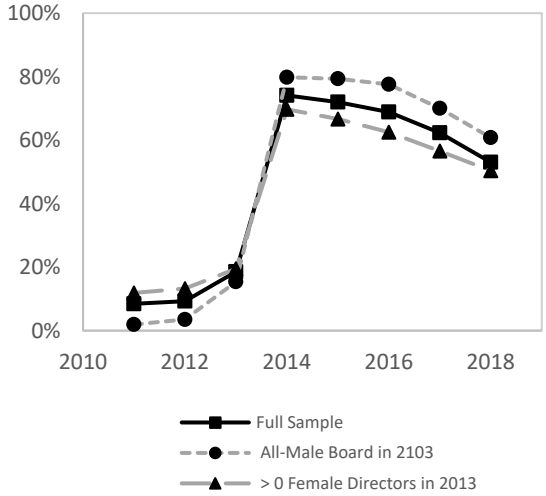
## Figure 1 – Gender Diversity Policy in Canada Following OSC's Amendment

This figure presents data on Gender Diversity Policy for Canadian firms included in S&P TSX Composite Index, with directorship data in BoardEx and financial data in Compustat, over the 2011-2018 period. The sample is split by whether firm had female directors in 2013. Panel A plots the average fraction of firms with gender diversity policy each year (complying with item 2 in OSC's regulation). Panel B plots the average fraction of Partial Compliers – firms which consider gender diversity in their director nomination process but do not disclose a targeted number of women directors (complying with items 2 and 3 but not 5 in OSC's regulation). Panel C plots the average fraction of Full Compliers – firms which consider gender diversity in their director nomination process and disclose targeted number of women directors each year (complying with items 2, 3 and 5 of OSC's regulation). Panel D plots the average fraction of Explainers – firms which comply with 2 by disclosing a gender diversity policy but do not comply with 3 and 5. The solid lines represent the full sample, the short dashed line represents firms with all-male boards in 2013 and the long dashed lines represent firms with at least one female director in 2013.

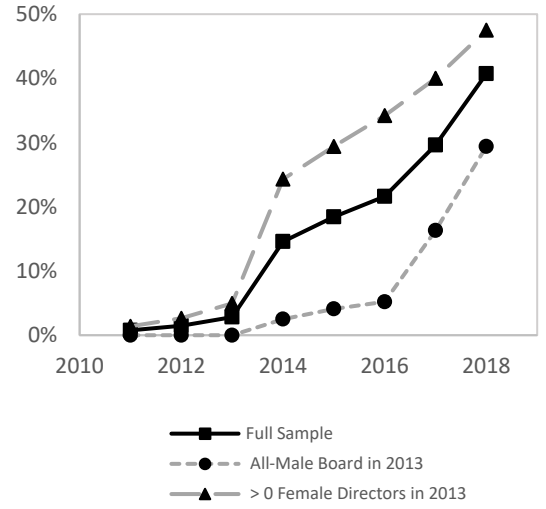
**Panel A. Percent with a Gender Diversity Policy (Item 2)**



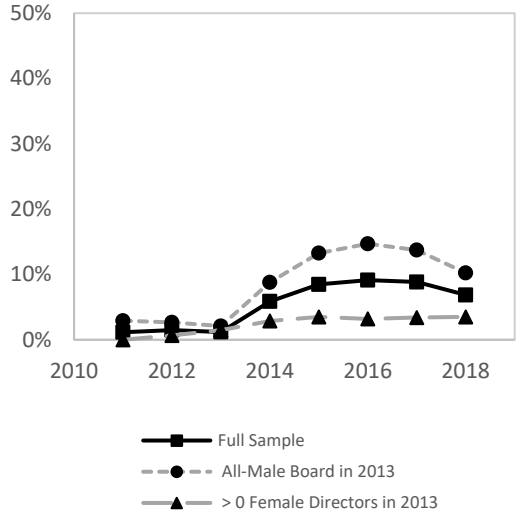

**Panel B. Percent with Partial Compliance (Items 2 and 3)**




**Panel C. Percent with Full Compliance (Items 2, 3, and 5)**



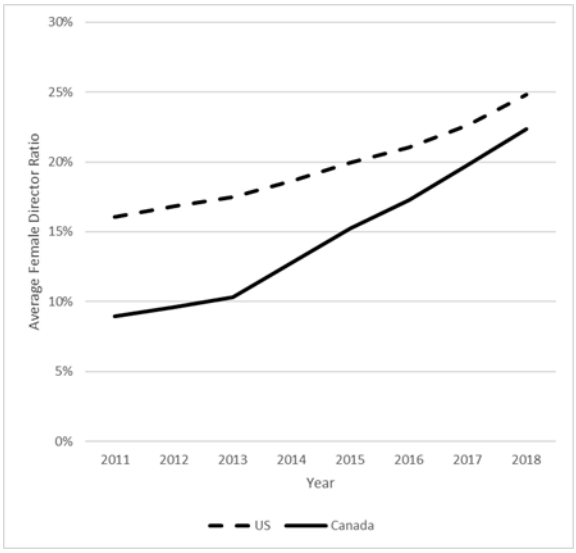

**Panel D. Percent with Explanation (Item 2, but not 3 or 5)**



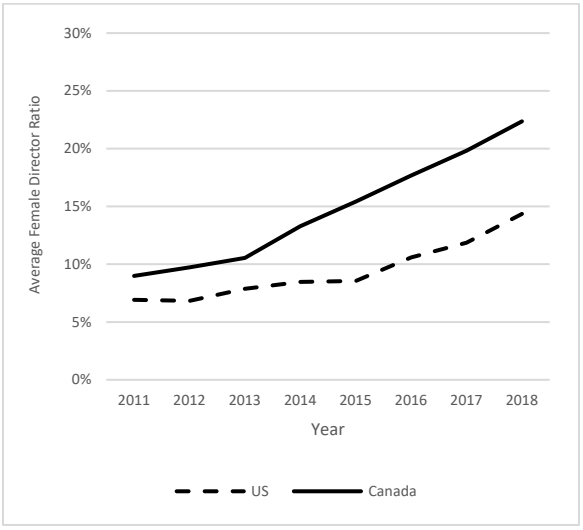
## Figure 2 – Comparison of Changes in Female Director Ratios in Canada and the U.S.

This figure presents data on female directorships for Canadian firms included in S&P TSX Composite Index and a comparison group of U.S. firms, with directorship data in BoardEx and financial data in Compustat, over the 2011-2018 period. The graphs plot the average fraction of firms' boards consisting of female directors each year. Panel A reports data for Canadian firms and U.S. firms that were included in the S&P 500 index. Panel B reports data for Canadian firms and a matched sample of U.S. firms, each selected from within the same 3-digit SIC industry as and are closest in total assets to the corresponding Canadian firm in 2013 (only Canadian firms with a match available are included). Panel C reports data for Canadian firms that are cross-listed on a U.S stock exchange and a matched sample of U.S. firms, each selected from within the same 3-digit SIC industry as and are closest in total assets to the corresponding Canadian firm in 2013 (only Canadian firms with a match available are included).

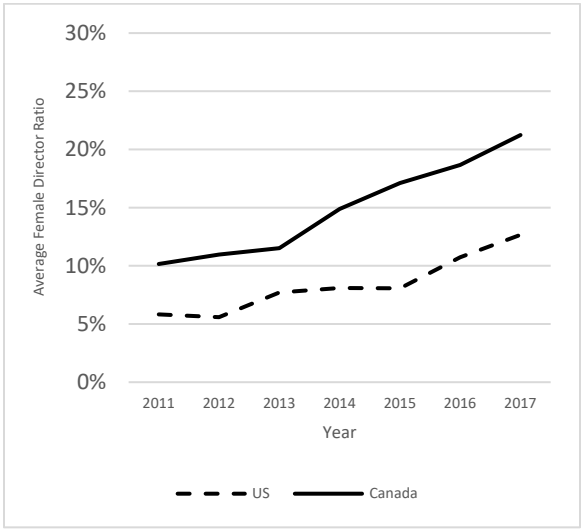
**Panel A. Comparison of Canadian S&P TSX Firms and U.S. S&P 500**




**Panel B. Comparison of Canadian S&P TSX and U.S. Matched Firms**




**Panel C. Comparison of Canadian S&P TSX ADRs and U.S. Matched Firms**



## Figure 3 – Dynamic Model of Year-on-Year Changes in the Female Director Ratios of Canadian Firms

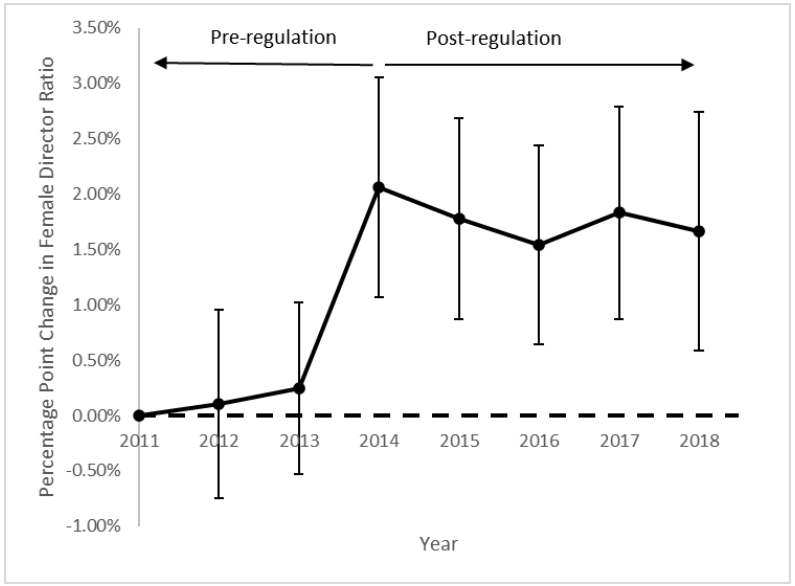
This figure plots coefficient estimates and the 95% confidence intervals from the following regression specifications:

$$\text{Panel A: } \Delta Female\ Director\ Ratio_{i,t} = \alpha + \sum_{j=2012}^{2018} \theta_j \cdot \times \mathbb{1}[Year = j] + \varphi_{i,t} \cdot Controls + \gamma_i + \varepsilon_{i,t}$$

$$\text{Panel B: } \Delta Female\ Director\ Ratio_{i,t} = \alpha + \sum_{j=2012}^{2018} \beta_j \cdot All\ Male\ Board_{i,2013} \times \mathbb{1}[Year = j] + \sum_{j=2012}^{2018} \theta_j \cdot \times \mathbb{1}[Year = j] + \varphi_{i,t} \cdot Controls + \gamma_i + \varepsilon_{i,t}$$

The sample consists of firms that are included in S&P TSX Composite Index, with directorship data in BoardEx and financial data in Compustat, over the 2011-2018 period. The observations are at the firm-year level with *i* indexing firms and *t* indexing calendar years. The dependent variable is the percentage point change in the fraction of a firm's board consisting of female directors between the current year, *t,* and the previous year, *t-1*. "All-Male Board$_{2013}$" is an indicator equal to 1 if a firm has no female directors in 2013. Control Variables consist of Log(Assets), Market-to-Book Assets, ROA and Debt/Assets. All variables are defined in Table A.1. Firm fixed effects ($\gamma_i$) are included. The omitted year in the specifications, and thus the benchmark year, is 2011. The graph in Panel A displays the coefficient estimates $\theta_j$ of the percentage point change in the female director ratio in each year, relative to 2011. The graph in Panel B displays the coefficient estimates $\beta_j$ of the difference between the change in the female director ratio for firms with all-male boards and firms with female directors, relative to 2011. The post-regulation period is years 2015 onward. The error bars indicate 95% confidence intervals for the coefficient estimates.

**Panel A. Year-on-Year Change in Female Director Ratio**




**Panel B. Difference in Year-on-Year Change in Female Director Ratio between Firms with All-Male Boards and Firms with Female Directors**

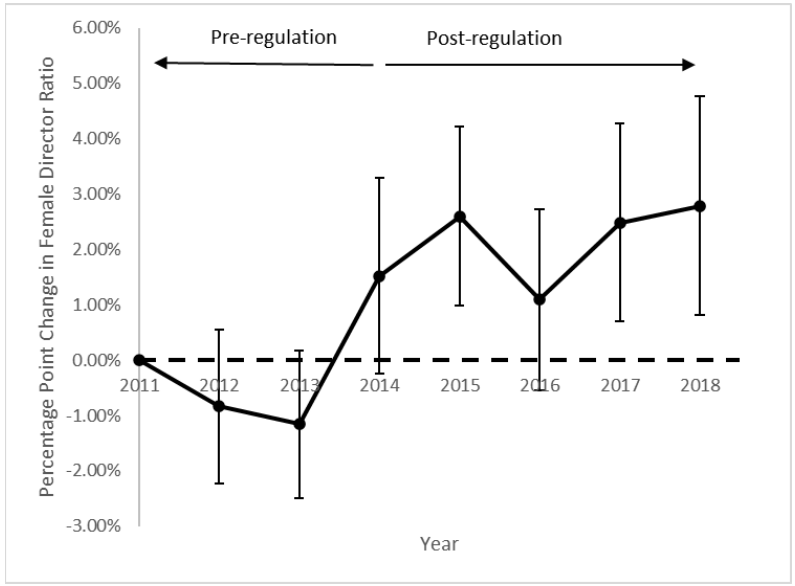


**Table 1 – Compliance with OSC's Director Gender Diversity Amendment (2011-2018)**

This table reports compliance with OSC's Director Gender Diversity Amendment. The sample consists of firms that are included in S&P TSX Composite Index, with directorship data in BoardEx and financial data in Compustat. Panel A describes the classification of compliance based upon Items 2, 3, and 5 of the OSC Amendment. Panel B reports the annual average of firms' compliance with the three key items of OSC's amendment that relate to director gender diversity, as well as the averages by compliance level. In the pre-regulation period, compliance with each item is defined as firms that voluntarily comply with the future amendment. Panel C provides the evolution of the usage of female director targets.

**Panel A: Classification of Compliance with the OSC Amendment**

| Classification | Item 2: Diversity Policy | Item 3: Consider women in director selection | Item 5: Set Target | Commitment Level |
|---|---|---|---|---|
| Full Complier | ✓ | ✓ | ✓ | High (policy + process + targets) |
| Partial Complier | ✓ | ✓ | X | Moderate (policy + process only) |
| Explainer | ✓ | X | X | Minimal (policy only) |

**Panel B: Time Series of Compliance with Key OSC Amendment Items**

| Items of OSC's Amendment: | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|
| Item 2: the details of any policies regarding the identification and nomination of women directors | 10.3% | 12.3% | 22.6% | 94.5% | 98.9% | 99.6% | 100% | 100% |
| Item 3: the board's or nominating committee's consideration of the representation of women in the director identification and selection process | 9.2% | 10.8% | 21.4% | 88.7% | 90.4% | 90.4% | 91.5% | 93.1% |
| Item 5: targets (number or percentage) adopted regarding the representation of women on the board | 0.7% | 1.5% | 2.8% | 14.6% | 18.4% | 21.6% | 29.6% | 40.7% |
| **By Compliance Level:** | **2011** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** |
| Full Complier (Items 2, 3 and 5) | 0.7% | 1.5% | 2.8% | 14.6% | 18.4% | 21.6% | 29.6% | 40.7% |
| Partial Complier (Items 2 and 3) | 8.5% | 9.3% | 18.6% | 74.1% | 72.0% | 68.9% | 62.3% | 53.0% |
| Explainer (Item 2, but not Items 3 nor 5) | 1.2% | 1.5% | 1.2% | 5.8% | 8.5% | 9.1% | 8.1% | 6.3% |

**Table 1 (continued)**

**Panel C: Time Series of Usage of Female Director Targets by Full Compliers**

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|
| Number of Firms with Female Director Target | 2 | 4 | 8 | 40 | 52 | 59 | 77 | 102 |
| For Firms with a Female Director Target ("Full Compliers"): | | | | | | | | |
| Mean Female Director Target (%) | 37.5% | 33.3% | 31.3% | 28.3% | 28.7% | 28.9% | 28.7% | 28.7% |
| Median Female Director Target (%) | N/A | 29.1% | 25% | 30% | 30% | 30% | 30% | 30% |
| Mode Female Director Target (%) | N/A | 25% | 25% | 30% | 30% | 30% | 30% | 30% |

**Table 2 – Timeline of Events Related to the Amendment for National Instrument 58-101: Disclosure of Corporate Governance Practices**

| Date | Action |
|---|---|
| April 5, 2013 | The Canadian government names a new committee to offer advice on gender diversity on Canada's corporate boards. |
| May 2, 2013 | Ontario budget document released, including the following statement: *"the government strongly supports broad gender diversity on boards…. the government will consider the best way for firms to disclose their approaches to gender diversity, with a view to increasing the participation of women on boards and in senior management*." |
| May 28, 2013 | The then Ontario's Minister responsible for Women's Issues, Laurel Broten, provides some remarks that foreshadow the regulation. |
| June 14, 2013 | Minister of Finance and Minister responsible for Women's Issues requests that the Ontario Securities Commission (OSC) undertake a consultation process regarding disclosure requirements for gender diversity. *(Not publicly announced)* |
| **July 30, 2013** | **OSC proposal released detailing proposed amendment to National Instrument Form 58-101, Disclosure of Corporate Governance Practices, to include disclosure of gender diversity on the Board and in Executive Officer positions. Comments invited. Proposal release covered by news media.** |
| Jan 16, 2014 | Modified proposal released, with addition of term limit disclosure. Comments invited. |
| Oct 15, 2014 | Notice of Implementation of Amendment to Form 58-101 released. |
| Dec 11, 2014 | OSC announces approval of amendment by Minister of Finance on Nov 28 and that amendment will come into effect on Dec 31, 2014 |
| Dec 31, 2014 | National Instrument 58-101, Disclosure of Corporate Governance Practices, is amended. |

## Table 3 – Comment Letters to the OSC about OSC's Board Gender Diversity Rule

This table reports a summary of comment letters submitted to the OSC related to the OSC's board gender diversity rule. In Panel A, the sample includes comments submitted to the OSC by September 2013 - after the initial proposed rule. In Panel B, the sample includes comments submitted to the OSC by April 2014 - after the revised proposal that included the inclusion of director temr limits. The sentiment analysis is conducted by TextBlob, a natural language processing (NLP) library in Python. The result is a Polarity Score for each article that is between -1.0 and +1.0. Articles with Polarity Scores > +0.1 are categorized as Positive , < -0.1 as Negative, and in between as Neutral. Column 1 indicates the entity type submitting the comment letter. Column 2 shows the total number of comment letters submitted to the OSC by entity type. Column 3 shows the percentage of comment letters that are categorized as having a negative sentiment. Column 4 shows the percentage of comment letters that are categorized as having a neutral sentiment. Column 5 shows the percentage of comment letters that are categorized as having a positive sentiment. Column 6 shows the average Polarity Score for comment letters by entity type.

**Panel A: Comment Letters due September 2013**

| Entity type | Total number of comment letters | % of comment letters which are: | | | Average Polarity Score |
|---|---|---|---|---|---|
| | | Negative | Neutral | Positive | |
| Academics and Think Tanks | 4 | 0% | 25% | 75% | 0.146 |
| Advocacy Groups | 22 | 0% | 5% | 95% | 0.147 |
| Government and Public Bodies | 3 | 0% | 33% | 67% | 0.103 |
| Individuals | 17 | 0% | 24% | 76% | 0.153 |
| Investment Firms | 7 | 0% | 14% | 86% | 0.147 |
| Professional Associations | 13 | 0% | 15% | 85% | 0.141 |
| Corporations | 23 | 0% | 26% | 74% | 0.133 |
| Total | 89 | 0% | 18% | 82% | 0.142 |

**Panel B: Comment Letters due April 2014**

| Entity type | Total number of comment letters | % of comment letters which are: | | | Average Polarity Score |
|---|---|---|---|---|---|
| | | Negative | Neutral | Positive | |
| Academics and Think Tanks | 1 | 0% | 0% | 100% | 0.107 |
| Advocacy Groups | 7 | 0% | 14% | 86% | 0.163 |
| Individuals | 9 | 11% | 11% | 78% | 0.128 |
| Investment Firms | 10 | 0% | 50% | 50% | 0.113 |
| Professional Associations | 18 | 0% | 6% | 94% | 0.160 |
| Corporations | 7 | 0% | 43% | 57% | 0.088 |
| Total | 52 | 2% | 21% | 77% | 0.135 |

## Table 4 – Media Coverage about Board Gender Diversity and OSC's Rule

This table reports a summary of media coverage related to board gender diversity and the OSC's rule. The sample includes any article in Globe and Mail, Financial Post and Toronto Star that pertains to gender diversity in the boardroom and the OSC's regulation. The articles are retrieved from Nexis. The sample period is from 2012 to 2016. Panel A reports statistics for all articles including news, analysis, opinions, editorials and invited pieces. Panel B excludes opinions, editorials and invited pieces. The sentiment analysis is conducted by TextBlob, a natural language processing (NLP) library in Python. The result is a Polarity Score for each article that is between -1.0 and +1.0. Articles with Polarity Scores > +0.1 are categorized as Positive , < -0.1 as Negative, and in between as Neutral. Column 2 shows the total number of new articles about gender diversity in the boardroom and the OSC's regulation in a given year. Column 3 shows the percentage of news articles that are categorized as having a negative sentiment. Column 4 shows the percentage of news articles that are categorized as having a neutral sentiment. Column 5 shows the percentage of news articles that are categorized as having a positive sentiment. Column 6 shows the average Polarity Score for articles in a given year.

| Year | Total number of news articles in the press | % of news articles in the press which are: | | | Average Polarity Score |
|---|---|---|---|---|---|
| | | Negative | Neutral | Positive | |
| 2012 | 6 | 0% | 33% | 67% | 0.111 |
| 2013 | 35 | 0% | 37% | 63% | 0.107 |
| 2014 | 52 | 0% | 29% | 71% | 0.113 |
| 2015 | 57 | 0% | 28% | 72% | 0.127 |
| 2016 | 61 | 0% | 57% | 43% | 0.094 |
| Total | 211 | 0% | 38% | 62% | 0.110 |

## Table 5 – Univariate Analysis of CARs around the OSC's Announcement

This table reports summary statistics for cumulative abnormal returns (CARs) around July 30, 2013, when the Ontario Securities Commission announced proposed rules requiring the disclosure of policies promoting the representation of females on boards of directors. The sample consists of firms that are included in S&P TSX Composite Index at any point in our sample period, with directorship data in BoardEx and financial data in Compustat. CARs are computed using standard event study methodology with a 4-factor return model (Fama and French, 1993, Carhart, 1997) and a 250-day estimation window ending on day -30, with at least 60 observations. Data on firms' daily stock returns are obtained from Datastream. Data on Canadian factor returns are obtained from AQR Capital Management. "[No] Female Director Policy in 2013" indicates firms that do [not] disclose that they have a policy regarding the representation of females on the board in 2013. "All-Male Board in 2013" [">0 Female Directors in 2013]" indicates firms that have no [>0] female directors in 2013. *t*-statistics for CARs are computed following Kolari and Pynnönen (2010). Panel A reports mean CARs and Panel B reports the percentage of positive CARs for each group.

**Panel A: Mean CAR**

| Window | Mean CAR | *t*-stat | *p*-value |
|---|---|---|---|
| All Firms (N=274) | | | |
| (0,0) | 0.688% | 1.194 | 0.233 |
| (0,+1) | 1.016% | 0.923 | 0.357 |
| (-1,+1) | 0.543% | 0.634 | 0.527 |
| No Female Director Policy in 2013 (N=213) | | | |
| (0,0) | 0.786% | 2.020 | 0.045 |
| (0,+1) | 1.387% | 2.092 | 0.038 |
| (-1,+1) | 0.813% | 1.345 | 0.180 |
| Female Director Policy in 2013 (N=61) | | | |
| (0,0) | 0.346% | 0.078 | 0.938 |
| (0,+1) | -0.277% | -0.607 | 0.546 |
| (-1,+1) | -0.401% | -0.517 | 0.607 |
| All-Male Board in 2013 (N=127) | | | |
| (0,0) | 1.115% | 2.792 | 0.006 |
| (0,+1) | 2.001% | 3.021 | 0.003 |
| (-1,+1) | 1.290% | 2.188 | 0.031 |
| >0 Female Directors in 2013 (N=147) | | | |
| (0,0) | 0.319% | 0.227 | 0.821 |
| (0,+1) | 0.165% | -0.325 | 0.745 |
| (-1,+1) | -0.103% | -0.381 | 0.704 |

**Panel B: Percentage of Firms with Positive CARs**

| Window | All Firms | No Female Director Policy in 2013 | Female Director Policy in 2013 | All-Male Board in 2013 | >0 Female Directors in 2013 |
|---|---|---|---|---|---|
| (0,+1) | 58% | 63% | 43% | 72% | 47% |

## Table 6 – Regression Analysis of CARs around the OSC's Announcement

This table reports estimates examining cross-sectional differences in the cumulative abnormal returns (CARs) around July 30, 2013, when the Ontario Securities Commission announced proposed rules requiring the disclosure of policies promoting the representation of females on boards. The dependent variable is the (0,+1) window CAR. CARs are computed using standard event study methodology with a 4-factor return model (Fama and French, 1993, Carhart, 1997) and a 250-day estimation window ending on day -30, with at least 60 observations. "No Female Director Policy$_{2013}$" is an indicator equal to 1 if a firm does not disclose that they have a policy regarding the representation of females on the board in 2013. "All-Male Board$_{2013}$" is an indicator equal to 1 if a firm has no female directors in 2013. "Male Director Ratio$_{2013}$" is the fraction of the board consisting of male directors in 2013. "All-Male Board through 2017" is an indicator equal to 1 if a firm has no female directors at any point between 2013 and 2017. Industry FE at the 1-digit SIC level are included. Variables defined in Table A.1. Heteroscedasticity-consistent SEs reported in parentheses. $^{***}$, $^{**}$ and $^{*}$ are significant at the 1%, 5% and 10% levels.

| ***Dependent Variable:*** | **CAR(0,+1)** | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| No Female Director Policy$_{2013}$ | 0.012$^{**}$ | 0.013$^{***}$ | | | | | | |
| | (0.005) | (0.005) | | | | | | |
| All-Male Board$_{2013}$ | | | 0.012$^{**}$ | 0.015$^{***}$ | | | 0.014$^{***}$ | 0.014$^{***}$ |
| | | | (0.005) | (0.005) | | | (0.005) | (0.005) |
| Male Director Ratio$_{2013}$ | | | | | 0.055$^{**}$ | 0.065$^{***}$ | | |
| | | | | | (0.022) | (0.024) | | |
| All-Male Board through 2017 | | | | | | | -0.011 | -0.007 |
| | | | | | | | (0.008) | (0.008) |
| Institutional Ownership | | 0.031$^{*}$ | | 0.033$^{*}$ | | 0.032$^{*}$ | | 0.026$^{**}$ |
| | | (0.018) | | (0.018) | | (0.018) | | (0.013) |
| Media Coverage | | -0.002 | | -0.002 | | -0.002 | | -0.002 |
| | | (0.002) | | (0.002) | | (0.002) | | (0.002) |
| Log(Assets) | -0.002 | -0.002 | -0.001 | -0.001 | -0.001 | -0.001 | -0.001 | -0.000 |
| | (0.001) | (0.002) | (0.001) | (0.002) | (0.001) | (0.002) | (0.001) | (0.001) |
| Market-to-Book Assets | | -0.001 | | -0.003 | | -0.002 | | -0.001 |
| | | (0.004) | | (0.004) | | (0.004) | | (0.003) |
| ROA | | -0.011 | | -0.023 | | -0.022 | | -0.015 |
| | | (0.019) | | (0.020) | | (0.020) | | (0.019) |
| Debt/Assets | | -0.013 | | -0.007 | | -0.010 | | -0.001 |
| | | (0.011) | | (0.011) | | (0.011) | | (0.012) |
| Constant | -0.000 | -0.017 | -0.003 | -0.019 | -0.045$^{*}$ | -0.069$^{**}$ | -0.009 | -0.023 |
| | (0.010) | (0.016) | (0.011) | (0.016) | (0.023) | (0.028) | (0.012) | (0.017) |
| Industry Fixed Effects | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 274 | 268 | 274 | 268 | 274 | 268 | 238 | 234 |
| Adjusted R-squared | 0.078 | 0.099 | 0.079 | 0.106 | 0.078 | 0.105 | 0.122 | 0.127 |

## Table 7 – Regression Analysis of Gender Diversity Polices

This table reports estimates examining cross-sectional differences in gender diversity policies following the implementation of the Ontario Securities Commission rules requiring the disclosure of policies promoting the representation of females on boards of directors. The sample consists of Canadian S&P TSX Composite Index firms at any point in our sample period, with directorship data in BoardEx and financial data in Compustat and ownership data in Factset. The sample period is 2014 to 2018. Observations are at the firm-year level. The dependent variable in models 1 and 2 equals one if a firm fully complies with the OSC regulation (in the board representation context being fully compliant is defined as complying with items 2, 3 and 5 of the OSC regulation); the dependent variable in model 3 equals one if a firm indicates partial compliance with the OSC regulation (partial compliance is if the firm considers gender diversity in its director nomination but does not adopt a female director target – i.e., complies with items 2 and 3 but not item 5 of the OSC regulation); the dependent variable in model 4 is target magnitude (%). All models are linear probability models. In model 1, the sample includes all firms. In model 2, the sample is restricted to only firms that fully comply and those with partial compliance. In model 3, the sample is restricted to only firms that partially comply or explain their lack of compliance. (i.e., only firms that do not have a female director target). In model 4, the sample includes only full compliers. Year and one-digit-SIC industry fixed effects are included in all specifications. Other Firm Controls include log(assets), market-to-book assets, return on assets, debt/assets, board size, board degree centrality, board tenure, and board age. Variables are defined in Table A.1. Standard errors are reported in parentheses and are clustered at the firm-level. $^{***}$, $^{**}$ and $^{*}$ indicate statistical significance at the 1%, 5% and 10% levels.

| ***Dependent Variable:*** | **Full Compliance** | **Full Compliance** | **Partial Compliance** | **Target Magnitude (%)** |
|---|---|---|---|---|
| *Sample:* | *Full Compliers vs Partial Compliers and Explainers* | *Full Compliers vs Partial Compliers* | *Partial Compliers vs Explainers* | *Full Compliers* |
| | 1 | 2 | 3 | 4 |
| Number of Local Female Industry Directors | 0.003$^{*}$ | 0.002$^{*}$ | 0.0001 | -0.0001 |
| | (0.001) | (0.001) | (0.001) | (0.0002) |
| Interlock with Female Directors | 0.039$^{**}$ | 0.046$^{**}$ | 0.017 | -0.005 |
| | (0.019) | (0.022) | (0.020) | (0.004) |
| Interlock with Partial Compliance | 0.066 | 0.086 | -0.083 | -0.019 |
| | (0.084) | (0.097) | (0.098) | (0.027) |
| Interlock with Full Compliance | 0.606$^{***}$ | 0.645$^{***}$ | 0.102 | 0.011 |
| | (0.113) | (0.115) | (0.164) | (0.031) |
| Controlled Corporation | -0.118$^{***}$ | -0.112$^{**}$ | -0.037 | -0.002 |
| | (0.041) | (0.043) | (0.042) | (0.011) |
| Independent Board | 0.012 | 0.050 | 0.058 | -0.093 |
| | (0.221) | (0.238) | (0.206) | (0.076) |
| Institutional Ownership | 0.042 | 0.051 | 0.091 | 0.0006$^{**}$ |
| | (0.103) | (0.110) | (0.101) | (0.0003) |
| Media Coverage | 0.062$^{***}$ | 0.061$^{***}$ | 0.016 | -0.0000 |
| | (0.020) | (0.020) | (0.017) | (0.0002) |
| Other Firm Controls | Yes | Yes | Yes | Yes |
| Constant | -1.168$^{*}$ | -1.208$^{*}$ | 0.535 | 0.438$^{**}$ |
| | (0.609) | (0.682) | (0.678) | (0.178) |
| Year Fixed Effects | Yes | Yes | Yes | Yes |
| Industry Fixed Effects | Yes | Yes | Yes | Yes |
| Observations | 1269 | 1151 | 959 | 309 |
| Adj. $R^2$ | 0.309 | 0.310 | 0.074 | 0.317 |

## Table 8 – Regression Analysis of Changes in Female Directorships in Canada

This table reports estimates from OLS regressions examining changes in female directorships for firms that are included in S&P TSX Composite Index at any point in our sample period, with directorship data in BoardEx and financial data in Compustat. The sample period is 2011 to 2018. The observations are at the firm-year level. The dependent variable is the fraction of a firm's board consisting of female directors, which is based on data from the proxy statement filed during the current calendar year. The sample consists of only Canadian firms. Post-2014 is an indicator equal to 1 in years 2015 onward. Partial Compliance and Full compliance are lagged variables, obtained from the proxy statement filed during the prior calendar year. All other variables are contemporaneous. Year fixed effects are included only in model 3. Firm fixed effects are included in all specifications. All other variables are defined in Table A.1. Standard errors are reported in parentheses and are clustered at the firm-level. $^{***}$, $^{**}$ and $^{*}$ indicate statistical significance at the 1%, 5% and 10% levels.

| ***Dependent Variable:*** | **Female Director Ratio** | | |
|---|---|---|---|
| | 1 | 2 | 3 |
| Post-2014 | 0.074*** | 0.047*** | |
| | (0.004) | (0.007) | |
| Partial Compliance$_{t-1}$ | | 0.028*** | 0.020** |
| | | (0.008) | (0.008) |
| Full Compliance$_{t-1}$ | | 0.061*** | 0.038*** |
| | | (0.012) | (0.013) |
| Institutional Ownership | | 0.021 | 0.030 |
| | | (0.023) | (0.021) |
| Media Coverage | | -0.001 | -0.002 |
| | | (0.022) | (0.041) |
| Log(Assets) | 0.017** | 0.014** | 0.0001 |
| | (0.007) | (0.007) | (0.007) |
| Market-to-Book Assets | 0.0005 | 0.0001 | 0.0002 |
| | (0.002) | (0.0001) | (0.0005) |
| Return-on-Assets | 0.009 | 0.009 | 0.006 |
| | (0.006) | (0.006) | (0.004) |
| Debt/Assets | 0.034** | 0.033** | 0.012 |
| | (0.012) | (0.013) | (0.015) |
| Constant | -0.042 | -0.030 | -0.008 |
| | (0.055) | (0.58) | (0.062) |
| Year Fixed Effects | No | No | Yes |
| Firm Fixed Effects | Yes | Yes | Yes |
| Observations | 2254 | 2030 | 2030 |
| Adjusted R-squared | 0.747 | 0.767 | 0.798 |

## Table 9 – Difference-in Differences Analysis of Changes in Female Directorships

This table reports estimates from OLS regressions examining changes in female directorships for firms that are included in S&P TSX Composite Index at any point in our sample period, with directorship data in BoardEx and financial data in Compustat. The sample period is 2011 to 2018. The observations are at the firm-year level. The dependent variable is the fraction of a firm's board consisting of female directors. In model 1, the sample consists of Canadian firms and U.S. firms that were included in the S&P 500 index at any point in our sample period. In model 2, the sample consists of Canadian firms and a matched sample of U.S. firms, each selected from within the same 3-digit SIC industry as and are closest in total assets to the corresponding Canadian firm in 2013 (only Canadian firms with a match available are included). In model 3, the sample consists of Canadian firms that are cross-listed on a U.S. stock exchange and a matched sample of U.S. firms, each selected from within the same 3-digit SIC industry as and are closest in total assets to the corresponding Canadian firm in 2013 (only Canadian firms with a match available are included). Post-2014 is an indicator equal to 1 in years 2015 onward. Year and firm fixed effects are included in all specifications. All other variables are defined in Table A.1. Standard errors are reported in parentheses and are clustered at the firm-level. $^{***}$, $^{**}$ and $^{*}$ indicate statistical significance at the 1%, 5% and 10% levels.

| ***Dependent Variable:*** | **Female Director Ratio** | | |
|---|---|---|---|
| **Sample:** | **Canada & U.S. S&P 500** | **Canada & U.S. Matched** | **Canada ADR & U.S. Matched** |
| | 1 | 2 | 3 |
| Canadian Firm × Post-2014 | 0.033*** | 0.043*** | 0.038*** |
| | (0.006) | (0.008) | (0.011) |
| Institutional Ownership | 0.031** | 0.048*** | 0.026 |
| | (0.013) | (0.016) | (0.022) |
| Log(Assets) | 0.002 | 0.006 | 0.008 |
| | (0.005) | (0.002) | (0.008) |
| Market-to-Book Assets | 0.001 | 0.003** | 0.002 |
| | (0.002) | (0.001) | (0.001) |
| Return-on-Assets | 0.001** | 0.000 | 0.002 |
| | (0.001) | (0.001) | (0.004) |
| Debt/Assets | 0.002 | 0.034** | 0.097*** |
| | (0.011) | (0.016) | (0.031) |
| Constant | 0.033*** | 0.020 | 0.013 |
| | (0.006) | (0.050) | (0.067) |
| Year Fixed Effects | Yes | Yes | Yes |
| Firm Fixed Effects | Yes | Yes | Yes |
| Observations | 5819 | 2787 | 1071 |
| Adjusted R-squared | 0.756 | 0.802 | 0.828 |

## Table 10 – Engagements by Canadian Coalition for Good Governance (CCGG)

This table utilizes proprietary engagement data obtained from CCGG. Panel A of this table reports a summary of CCGG's private engagements related to gender diversity. Column 2 shows the total number of annual CCGG engagements on any subject. Column 3 shows the percentage of engagements with a discussion including board gender diversity. Column 4 shows engagements where the firm initiates discussion of gender diversity during engagement. Column 5 shows engagements where CCGG commends the firm for actions related to board gender diversity. Column 6 shows engagements where CCGG critiques or questions board gender diversity. Panel B reports estimates of changes in female director ratio following CCGG engagements on gender. The dependent variable is the ratio of female directors. "CCGG Post-Engagement" is an indicator that equals 1 if the firm has been engaged previously by CCGG on board gender diversity. "CCGG Engagement Fixed Effect" is an indicator equal to 1 if a firm is engaged by CCGG on director gender diversity in any year of the sample. In Panel B, "engagement" refers to only cases where CCGG critiques or questions board gender diversity. "Other Controls" include institutional ownership, media coverage, controlled corporation, independent board, log(assets), market-to-book assets, return on assets, board size, board degree centrality, board tenure and board age. Standard errors are reported in parentheses and are clustered at the firm-level. $^{***}$, $^{**}$ and $^{*}$ indicate statistical significance at the 1%, 5% and 10% levels.

### Panel A: Summary of CCGG Engagements

| Year | Total number of CCGG engagements on any subject | Percentage of engagements with discussion of board gender diversity | Number of gender diversity engagements in which: | | |
|---|---|---|---|---|---|
| | | | Firm initiates discussion of board gender diversity | CCGG commends firm on board gender diversity | CCGG questions firm about board gender diversity |
| 2008 | 5 | 0% | 0 | 0 | 0 |
| 2009 | 19 | 0% | 0 | 0 | 0 |
| 2010 | 26 | 0% | 0 | 0 | 0 |
| 2011 | 41 | 0% | 0 | 0 | 0 |
| 2012 | 40 | 5% | 1 | 0 | 1 |
| 2013 | 48 | 29% | 6 | 0 | 8 |
| 2014 | 36 | 75% | 15 | 5 | 7 |
| 2015 | 41 | 59% | 15 | 3 | 6 |
| 2016 | 45 | 40% | 11 | 5 | 2 |
| 2017 | 44 | 41% | 8 | 6 | 4 |
| 2018 | 36 | 31% | 9 | 0 | 2 |

### Panel B: Regressions of Changes in Female Directorships Following CCGG Engagements

| | *Dependent Variable:* **Female Director Ratio** | | | |
|---|---|---|---|---|
| CCGG Post-Engagement | 0.051$^{***}$ | 0.033$^{*}$ | 0.032$^{*}$ | 0.025 |
| | (0.019) | (0.18) | (0.018) | (0.105) |
| CCGG Engagement Fixed Effect | -0.0385$^{*}$ | -0.033$^{**}$ | | |
| | (0.019) | (0.015) | | |
| CCGG Ownership | | 0.0009 | | 0.0007 |
| | | (0.0006) | | (0.0005) |
| Other Controls | No | Yes | No | Yes |
| Constant | 0.008$^{**}$ | -0.385$^{**}$ | 0.086$^{***}$ | -1.506 |
| | (0.003) | (0.116) | (0.004) | (1.482) |
| Year Fixed Effects | Yes | Yes | Yes | Yes |
| Industry Fixed Effects | Yes | Yes | No | No |
| Firm Fixed Effect | No | No | Yes | Yes |
| Observations | 2239 | 2155 | 2239 | 2155 |

| | | | | |
|---|---|---|---|---|
| Adj. $R^2$ | 0.313 | 0.455 | 0.779 | 0.784 |

**Table 11 – Gender Diversity and Changes in Chair of Nominating Committee Voting Support**

This table reports estimates of OLS regressions examining the changes in the effect of gender diversity in the boardroom on voting support for the chair of nominating committee following the implementation of the Ontario Securities Commission rules requiring the disclosure of policies promoting the representation of females on boards of directors. The sample covers 2013-2018 and consists of Canadian firms that are included in S&P TSX Composite Index, with directorship data in BoardEx and financial data in Compustat and ownership data in Factset and shareholder voting data from the ISS voting analytics data and from Johnston Centre for Corporate Governance Innovation at the University of Toronto. "Post-2014"is an indicator variable that equals 1 if the observation is after 2014 and zero if the observation is in 2013 or 2014. The dependent variable is one minus the voting support as a percentage of the voting base for the chair of the nominating committee. Variables defined in Table A.1. Standard errors are reported in parentheses and are clustered at the firm-level. $^{***}$, $^{**}$ and $^{*}$ indicate statistical significance at the 1%, 5% and 10% levels.

| ***Dependent Variable:*** | **Chair of Nominating Committee Voting: Withheld and Against** | | | | | |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| Female Director Ratio | -16.580$^{***}$ | | -8.591 | -12.817$^{**}$ | 5.689 | -1.742 |
| | (4.195) | | (5.419) | (5.879) | (10.110) | (8.879) |
| Female Director Target | | -1.560 | -0.607 | 0.025 | -0.0989 | 0.057 |
| | | (1.019) | (1.067) | (1.154) | (1.840) | (1.928) |
| Post-2014 × Female | -19.420$^{**}$ | | -19.610$^{**}$ | | -30.128$^{***}$ | |
| Director Ratio | (9.115) | | (9.681) | | (10.208) | |
| Post-2014 × Female | | -5.586$^{***}$ | | -4.469$^{**}$ | | -5.163$^{***}$ |
| Director Target | | (1.992) | | (1.920) | | (1.895) |
| Institutional Ownership | | | -2.310 | -2.304 | 18.205$^{*}$ | 18.211$^{*}$ |
| | | | (2.903) | (2.833) | (8.911) | (9.421) |
| Media Coverage | | | 0.813 | 0.911 | 1.212 | 1.041 |
| | | | (0.510) | (0.621) | (1.133) | (1.062) |
| Controlled Corporation | | | 0.435 | 0.436 | 1.110 | 1.198 |
| | | | (1.222) | (1.223) | (1.516) | (1.473) |
| Independent Board | | | 12.030 | 11.875 | 19.264 | 17.740 |
| | | | (6.942) | (6.988) | (12.043) | (10.954) |
| Log(Assets) | | | -0.902$^{*}$ | -0.891$^{*}$ | -4.049$^{**}$ | -3.524$^{*}$ |
| | | | (0.500) | (0.497) | (1.941) | (1.879) |
| Market-to-Book Assets | | | -0.004 | -0.003 | -0.009 | -0.008 |
| | | | (0.007) | (0.007) | (0.009) | (0.009) |
| Return-on-Assets | | | 7.056$^{*}$ | -7.173$^{*}$ | -2.695 | -3.141 |
| | | | (4.222) | (4.223) | (3.428) | (3.524) |
| Debt/Assets | | | 2.589 | 2.357 | 5.393 | 4.563 |
| | | | (4.126) | (4.142) | (12.814) | (12.805) |
| Board Size | | | -0.313 | -0.330 | -0.681 | -0.817$^{*}$ |
| | | | (0.244) | (0.246) | (0.431) | (0.421) |
| Board Degree | | | 0.099 | 0.093 | -0.189 | -0.239 |
| Centrality | | | (0.174) | (0.174) | (0.660) | (0.670) |
| Board Tenure | | | -0.0313 | -0.045 | -0.788 | -0.786 |
| | | | (0.283) | (0.281) | (0.537) | (0.544) |
| Board Age | | | -0.164 | -0.172 | -0.778 | -0.732 |
| | | | (0.296) | (0.296) | (0.472) | (0.472) |
| Constant | -94.481$^{***}$ | -94.035$^{***}$ | -82.264$^{***}$ | -79.122$^{***}$ | -15.707 | -19.264 |
| | (2.115) | (1.559) | (24.533) | (24.537) | (44.921) | (45.430) |

| | | | | | | |
|---|---|---|---|---|---|---|
| Year Fixed Effects | Yes | Yes | Yes | Yes | Yes | Yes |
| Industry Fixed Effects | Yes | Yes | Yes | Yes | No | No |
| Firm Fixed Effects | No | No | No | No | Yes | Yes |
| Observations | 1187 | 1187 | 1120 | 1120 | 1120 | 1120 |
| Adj. $R^2$ | 0.072 | 0.050 | 0.099 | 0.096 | 0.318 | 0.308 |

## Table 12 – Quality of Explanations and Changes in Chair of Nominating Committee Voting Support

This table reports estimates of OLS regressions examining the changes in the effect of the type of explanation provided by firms on voting support for the chair of nominating committee following the implementation of the OSC rules requiring the disclosure of policies promoting director gender diversity. The sample covers 2014-2018 and consists of Canadian firms that either explain or partially comply with the OSC's rule which are included in S&P TSX Composite Index, with directorship data in BoardEx, financial data in Compustat, ownership data in Factset and shareholder voting data from the ISS voting analytics and from Johnston Centre for Corporate Governance Innovation at University of Toronto. The dependent variable is one minus the voting support as a percentage of the voting base for the chair of the nominating committee. "Other Controls" include institutional ownership, media coverage, controlled corporation, independent board, log(assets), market-to-book assets, return on assets, board size, board degree centrality, board tenure and board age. Variables defined in Table A.1. Standard errors are reported in parentheses and are clustered at the firm-level. $^{***}$, $^{**}$ and $^{*}$ indicate statistical significance at the 1%, 5% and 10% levels.

| ***Dependent Variable:*** | **Chair of Nominating Committee Voting: Withheld and Against** | | | | | |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| All-Male Board | 3.164 | 3.722$^{*}$ | 4.000$^{***}$ | 3.543$^{*}$ | 3.377 | 3.731$^{*}$ |
| | (3.588) | (2.070) | (2.096) | (2.092) | (2.381) | (2.088) |
| Appointments Based on Merit/ Skills | -0.755 | | | | | |
| | (1.135) | | | | | |
| Appointments Based on Merit/ Skills × All-Male Board | 0.883 | | | | | |
| | (4.188) | | | | | |
| Targets Not Necessary or Advisable | | 1.504 | | | | |
| | | (1.904) | | | | |
| Targets Not Necessary or Advisable × All-Male Board | | 7.030$^{**}$ | | | | |
| | | (3.297) | | | | |
| Too Small for Target | | | 2.340 | | | |
| | | | (4.625) | | | |
| Too Small for Target × All-Male Board | | | -5.174 | | | |
| | | | (5.304) | | | |
| Targets Not Appropriate Method to Increase Diversity | | | | 0.235 | | |
| | | | | (2.001) | | |
| Targets Not Appropriate × All-Male Board | | | | 8.440$^{**}$ | | |
| | | | | (3.370) | | |
| Targets Do Not Result in Best Candidate | | | | | -0.983 | |
| | | | | | (1.363) | |
| Targets Do Not Result in Best Candidate × All-Male Board | | | | | 1.438 | |
| | | | | | (4.175) | |
| Turnover too Infrequent for Target | | | | | | 0.002 |
| | | | | | | (6.476) |
| Turnover too Infrequent for Target × All-Male Board | | | | | | 4.460 |
| | | | | | | (7.191) |
| Other Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Constant | -0.696 | -2.111 | -2.074 | -3.017 | 0.555 | -0.850 |
| | (26.430) | (26.523) | (26.481) | (26.580) | (26.904) | (26.401) |
| Year Fixed Effects | Yes | Yes | Yes | Yes | Yes | Yes |
| Industry Fixed Effects | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 707 | 707 | 707 | 707 | 707 | 707 |
| Adj. $R^2$ | 0.092 | 0.095 | 0.093 | 0.094 | 0.092 | 0.092 |

Appendix A – Variable Definitions

**Table A.1 – Variable Definitions.**

This table lists the definitions of the variables used in the paper (in alphabetical order).

| Variable | Definition |
|---|---|
| All-Male Board$_{2013}$ | Equals 1 if a firm has no female directors on its board in 2013, and zero otherwise (source: BoardEx). |
| Board Age | The mean age of the directors on a firm's board (source: BoardEx). |
| Board Degree Centrality | The number of other directorships ever held by the firm's directors until and including the current year (source: BoardEx). |
| Board Size | The number of directors on a firm's board (source: BoardEx). |
| Board Tenure | The mean tenure of the directors on a firm's board (source: BoardEx). |
| Board Too Small for Targets | Equals 1 if a firm states that its board is too small to consider a female director target (source: SEDAR). |
| Canadian Firm | Equals 1 if firm is listed on the Toronto Stock Exchange (source: Worldscope). |
| CAR(i,j) | The cumulative abnormal return from day i to j around to the Ontario Security Commission's announcement on July 30, 2013 of a proposed rule amendment regarding a policy relating to the representation of women in boards and in executive officer positions. The cumulative abnormal returns are computed using a 4-factor return model (Fama and French, 1993, Carhart, 1997) with a 250-day estimation window ending 30 days before the announcement with at least 60 observations (Source: Datastream). |
| CCGG Engagement Fixed Effect | Equals 1 if a firm is engaged by Canadian Coalition for Good Governance (CCGG) on director gender diversity in any year in our sample (between 2011 and 2018) (Source: Canadian Coalition for Good Governance) |
| CCGG Ownership | The percentage of a firms shares owned by institutional investors who are members of the CCGG (source: CCGG, Factset). |
| Log(1+CCGG $ Ownership) | Natural logarithm of one plus the total dollar value of CCGG members' holdings in a firm in a given year. (Source: CCGG, FactSet) |
| CCGG Post-Engagement | Equals 1 if a firm is engaged on director gender diversity by CCGG in the previous year(s) in our sample (Source: Canadian Coalition for Good Governance) |
| Chair of Nominating Committee Voting Withheld and Against | Equals 1 minus the voting support as a percentage of the voting base for the chair of the nominating committee (Source: ISS voting analytics data and Johnston Centre for Corporate Governance Innovation). |
| Controlled Corporation | Equals 1 if a firm has multiple voting share classes and/or it has closely held shares exceeding 30% of its shares outstanding and zero otherwise (source: SEDAR, Worldscope). |
| Debt/Assets | Long term debt plus debt in current liabilities divided by total assets (source: Compustat). |
| Female CEO Indicator | Equals 1 if the firm has a female CEO (source: SEDAR). |

| | |
|---|---|
| Female Executive Ratio | The fraction of a firm's top five named executive officers disclosed in their proxy circular who are female (source: SEDAR). |
| Full Compliance | Equals 1 if a firm meets all three criteria of OSC's board gender diversity regulation, complying with items 2, 3, and 5 (source: SEDAR). |
| Independent Board | The fraction of a firm's board consisting of Non-executive directors (source: BoardEx). |
| Infrequent Turnover to Have Targets | Equals 1 if a firm states that its board has infrequent director turnover to be able to consider a female director target (source: SEDAR). |
| Interlock with Partial Compliance | The mean number of board interlocks that directors of a firm that is a Partial Complier. Partial Compliers adhere to items 2 and 3 of the regulation but fall short of implementing a female director target (i.e., they do not comply with 5). (source: BoardEx, SEDAR). |
| Institutional Ownership | The percentage of a firms shares owned by institutional investors (source: Factset). |
| Interlock with Female Directors | The mean number of board interlocks that directors of a firm have with female directors, excluding the female directors of the firm itself (source: SEDAR). |
| Interlock with Full Compliance | The mean number of board interlocks that directors of a firm that is a Full Complier. Full Compliers meet all three criteria of the regulation, complying with items 2, 3, and 5 (source: BoardEx, SEDAR). |
| Lagged Change in Votes | Lagged change (from t-1 to t-2) in votes withheld or against the chair of the nominating committee as a percentage of the voting base. (Source: ISS voting analytics data and Johnston Centre for Corporate Governance Innovation). |
| Log(Assets) | Natural logarithm of total assets (source: Compustat). |
| Male Director Ratio | The fraction of the firm's directors consisting of male directors (source: BoardEx) in 2018. |
| Market-to-Book Assets | Fiscal year-end market capitalization plus book value of preferred stock (liquidation value or redemption value if liquidation value is missing) plus deferred taxes and investment tax credit plus long term debt plus debt in current liabilities all divided by total assets (source: Compustat). |
| Media Coverage | Number of times a firm is cited in Financial Times, Financial Post and Toronto Star divided by 100 (source: Nexis). |
| No Female Director Policy$_{2013}$ | Equals 1 if a firm does not voluntarily include a gender diversity policy in its proxy circular in 2013, and zero otherwise (source: SEDAR). |
| No Term Limit | Equals 1 if a firm does not impose a limit on the duration a director may serve on the board, and zero otherwise (source: SEDAR). |
| Number of Local Female Industry Directors | The number of female directors on corporate boards for all firms headquartered within 100 km of the firm's headquarter that are from the same 1-digit SIC industry (source: BoardEx, Worldscope). |
| Partial Compliance | Equals 1 if a firm adheres to items 2 and 3 of OSC's board gender diversity regulation but falls short of implementing a female director target (i.e., they do not comply with 5). (source: SEDAR). |

| | |
|---|---|
| Return-on-Assets | Operating income before depreciation divided by total assets (source: Compustat). |
| Selects Directors Based on Skill and Merit | Equals 1 if a firm states that it nominates directors based on skill, merit and experience. (source: SEDAR). |
| Targets Do not Result in Best Directors | Equals 1 if a firm states that a female director target does not result in best directors (source: SEDAR). |
| Targets Not Necessary or Advisable | Equals 1 if a firm states that a female director target is not necessary or advisable or it is arbitrary (source: SEDAR). |
| Targets are not Needed to Increase Diversity | Equals 1 if a firm states that a female director target is not needed to increase board gender diversity (source: SEDAR). |

# Internet Appendices B and C for
# The Impact of a Principles-Based Approach to
# Director Gender Diversity

**Abstract**

These Internet appendices contain supplementary analysis and material for our study titled *The Impact of a Principles-Based Approach to Director Gender Diversity*.

Appendix B – Examples of Diversity Policies from Proxy Circulars

In this appendix, we provide excerpts of proxy statements to demonstrate our categorization of firms as Explainers, Partial Compliers, and Full Compliers.

**Exhibit B.1: Example of "Explainer" – Birchcliff Energy Excerpt from 2015 Proxy Circular**

*"The Board has not adopted a written policy relating to the identification and nomination of women directors. The directors of the Corporation have a fiduciary duty to act in the best interests of the Corporation. As part of that duty, the Board believes that it should be able to select and nominate for election or appointment as directors those individuals who will best serve the interests of the Corporation, regardless of gender. The Board believes that implementing such a policy will potentially restrict the Board's ability to select those individuals that will best serve the interests of the Corporation....*

*"...The Corporation has not adopted specific targets for gender or other dimensions of diversity at the Board or executive officer level due to the relatively small size of these groups. In addition, the Corporation believes that it is important that each appointment to the Board and at the executive officer level be made, and be perceived as being made, based on the merits of the individual and the needs of the Corporation at the relevant time. If specific targets were adopted based on specific criteria, including gender, this could limit the Corporation's ability to ensure that the overall composition of the Board and its team of executive officers meets the needs of the Corporation.*

*"As at the date hereof, the number of women on the Board is zero and the number of women in executive officer positions is zero..."*[1]

**Exhibit B.2: Example of "Explainer" – Fortuna Silver Mines Excerpt from 2016 Proxy Circular**

*"The Board adopted in early 2015 a Diversity Policy which promotes diversity in the workplace by respecting and appreciating differences in gender, age, ethnic origin, religion, education, sexual orientation, political belief or disability. At Fortuna, we respect and value the perspectives, experiences, cultures and essential differences that our Board, management and employees possess… The Company does not support the adoption of quotas to support its Diversity Policy and therefore does not generally consider the level of representation of women on the Board…. For the same reason, the Company has not adopted a target number or percentage of women for representation on the Board…. The Board and management, however, actively consider all qualified female and diverse candidates in the selection criteria for all positions throughout the Company. The Company does not currently have any directors or executive officers who are women."*

**Exhibit B.3: Example of "Partial Complier" – The Northwest Co. Excerpt from 2017 Proxy Circular**

*"While neither a written policy nor targets relating to the identification of women and nomination of women directors have been adopted to date, the Board has emphasized its commitment to the recruitment of women in recent years by making the identification of candidates who are women a key search criterion in the director selection and nomination process it has undertaken. Currently, as to gender, the Board is comprised of three female directors (27%) and eight (73%) male directors…"*

[1] Proxy circulars are obtained from https://www.sedar.com/.

**Exhibit B.4: Example of "Explainer" to "Full Complier" – Osisko Mining Excerpts from 2017 and 2018 Proxy Circulars**

**2017 Circular – "Explainer":**

*"While the Board and the CG&N Committee recognize the potential benefits from new perspectives that could manifest through greater gender diversity and recognizes that diversity can enhance culture and create value for the Corporation and its stakeholders, the Corporation has not formally adopted a written diversity policy and, given the size and stage of development of the Corporation, the Board and the CG&N Committee do not at this time formally consider the level of representation of women on the board or in senior management when identifying candidates for such positions."*

**2018 Circular – "Full Complier":**

*"On November 9, 2018, the Board adopted a Diversity Policy (the "Diversity Policy"). The purpose of the Diversity Policy is to communicate the importance that the Corporation places on the diversity of its Board.*

*"The Corporation has set an objective of reaching 40% representation of women on the Board by December 31, 2021. In this regard, the CG&N Committee is guided by the following principals:*

- *maintain an evergreen list of potential candidates for election to the Board of Directors which list includes parity between men and women candidates; this list shall take into account that qualified candidates may be found in a broad array of organizations;*
- *periodically assess the effectiveness of the nomination process at achieving the Corporation's diversity objectives outlined in this Policy; and*
- *in order to support the specific objective of gender diversity, considers the level of representation of women on the Board and ensures that women are included in the short list of candidates being considered for a Board position.*

*"When identifying potential candidates for the Board of Directors, the Corporate Governance and Nominating Committee considers the selection criteria approved by the Board, as well as its analysis of the Board's needs based on the above criteria. These selection criteria are reviewed periodically.*

*"The Diversity Policy will be reviewed by the CG&N Committee annually to ensure that it is effective in achieving its objectives. Any changes to the Diversity Policy as well as any changes to the diversity achievements will be reported annually in the Corporation's management information circular.*

*"The Corporation currently has one female director, Amy Satov, representing 14% of all seven board members, or 20% of the five independent directors.*

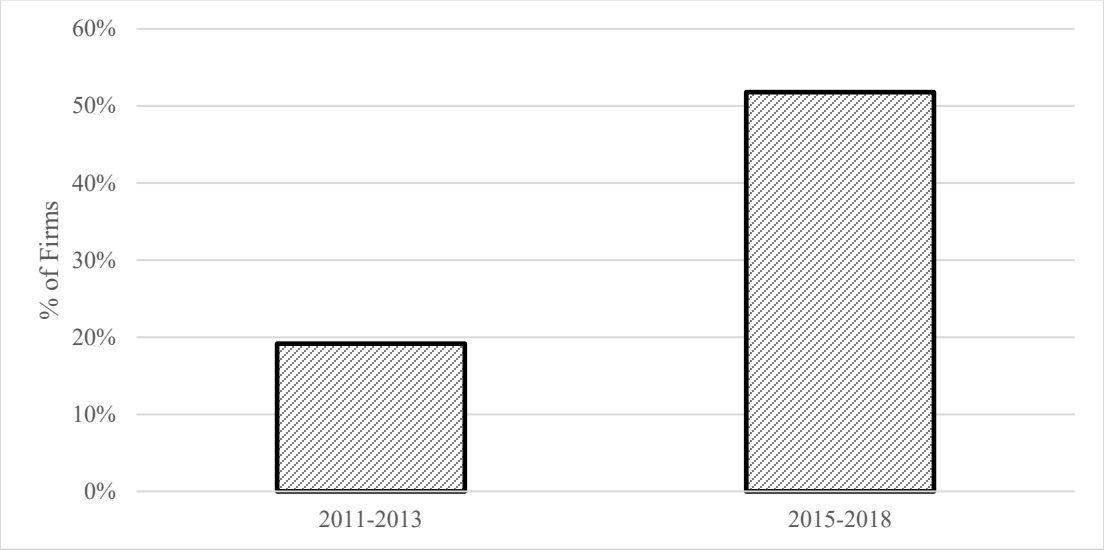
*"The CG&N Committee and Board actively continue to recruit female representation on the Board."*

Appendix C – Additional Analysis

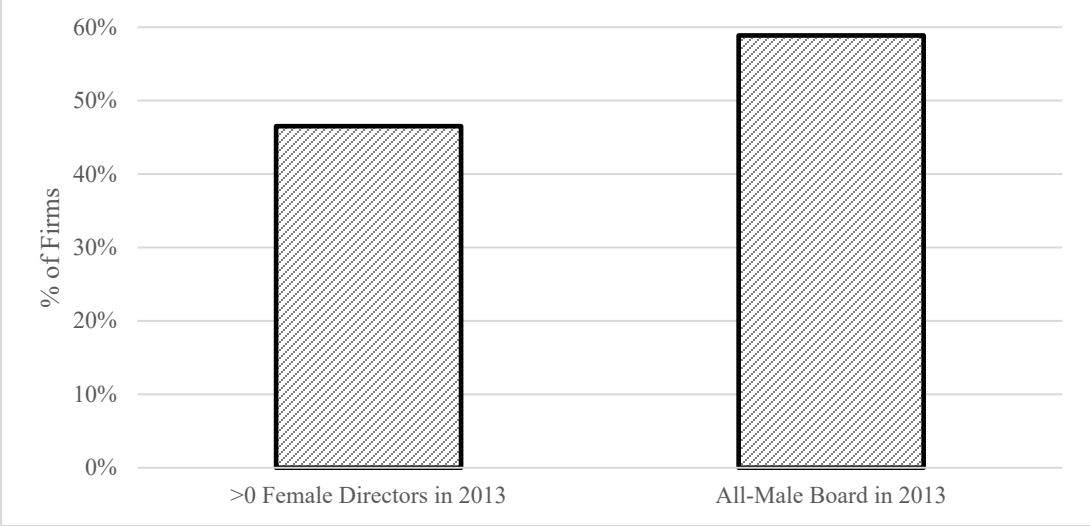
## Figure C.1 – Changes in Female Directorships

This figure presents data on female directorships for Canadian firms included in S&P TSX Composite Index, with directorship data in BoardEx and financial data in Compustat. Panel A reports the fractions of firms in the sample that added female directors during the 2011-2013 and 2015-2018 periods. Panel B reports the fraction of firms that added female directors during the 2015-2018 period, for firms that had at least 1 female director in 2013 and firms that no female directors in 2013.

### Panel A. Percentage of Firms Adding Female Directors



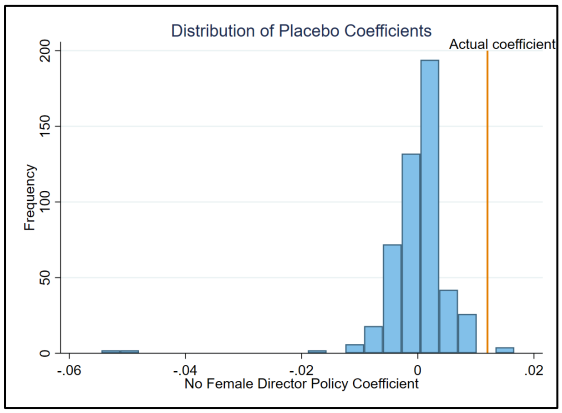

### Panel B. Percentage of Firms Adding Female Directors During 2015-2018, by Presence of Female Directors in 2013



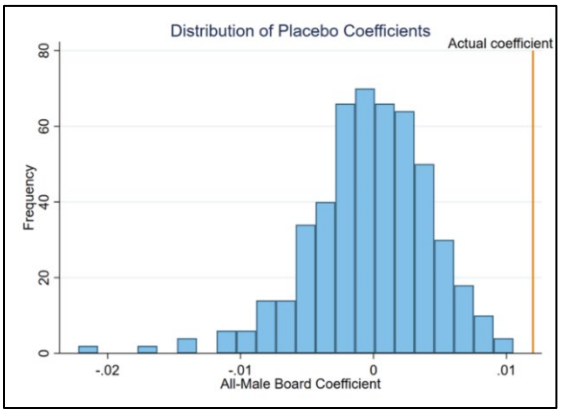
## Figure C.2 – Distribution of Placebo Regression Coefficients for CARs around the OSC's Announcement

This figure presents the distribution of placebo OLS regression coefficients examining cross-sectional differences in the cumulative abnormal returns (CARs) around July 30, 2013 – when the Ontario Securities Commission announced proposed rules requiring the disclosure of policies promoting the representation of females on boards of directors. The sample consists of firms that are included in S&P TSX Composite Index, with directorship data in BoardEx and financial data in Compustat. The observations are at the firm-level. The dependent variable is the (0,+1) window CAR. CARs are computed using standard event study methodology with a 4-factor return model (Fama and French, 1993, Carhart, 1997) and a 250-day estimation window ending on day -30, with at least 60 observations. Data on firms' daily stock returns are obtained from Datastream. Data on Canadian factor returns are obtained from AQR Capital Management. "No Female Director Policy$_{2013}$" (Panel A) is an indicator equal to 1 if a firm discloses that they have a policy regarding the representation of females on the board in 2013. "All-Male Board$_{2013}$" (Panel B) is an indicator equal to 1 if a firm has no female directors in 2013. "Male Director Ratio$_{2013}$" (Panel C) is the fraction of the board consisting of male directors in 2013. Industry fixed effects at the 1-digit SIC level are included. Each day in the period between days -300 and +300 relative to the OSC's announcement on July 30, 2013, excluding days -50 to +50 is considered as a placebo announcement date (500 placebo dates in total). For each placebo date, we compute the CARs using the same methodology above with the same estimation window relative to the placebo date (e.g. for the placebo announcement on day -300, the estimation window used is -580 to -231). Models (1), (3) and (5) from Table 10 are then estimated with the CAR for each placebo date used as the dependent variable in place of the CAR for the actual announcement to obtain 500 placebo coefficients for each model. *t*-statistics are computed using heteroscedasticity-consistent standard errors. The actual event date coefficients are from models (1), (3) and (5) of Table 10.

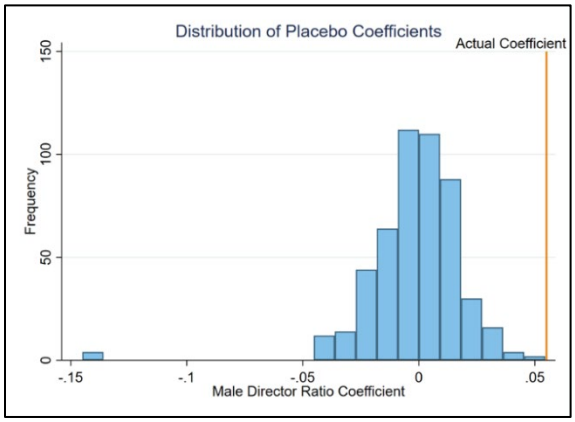
### Panel A. Placebo Coefficients for Firms with No Female Director Policy




### Panel B. Placebo Coefficients for Firms with All-Male Boards

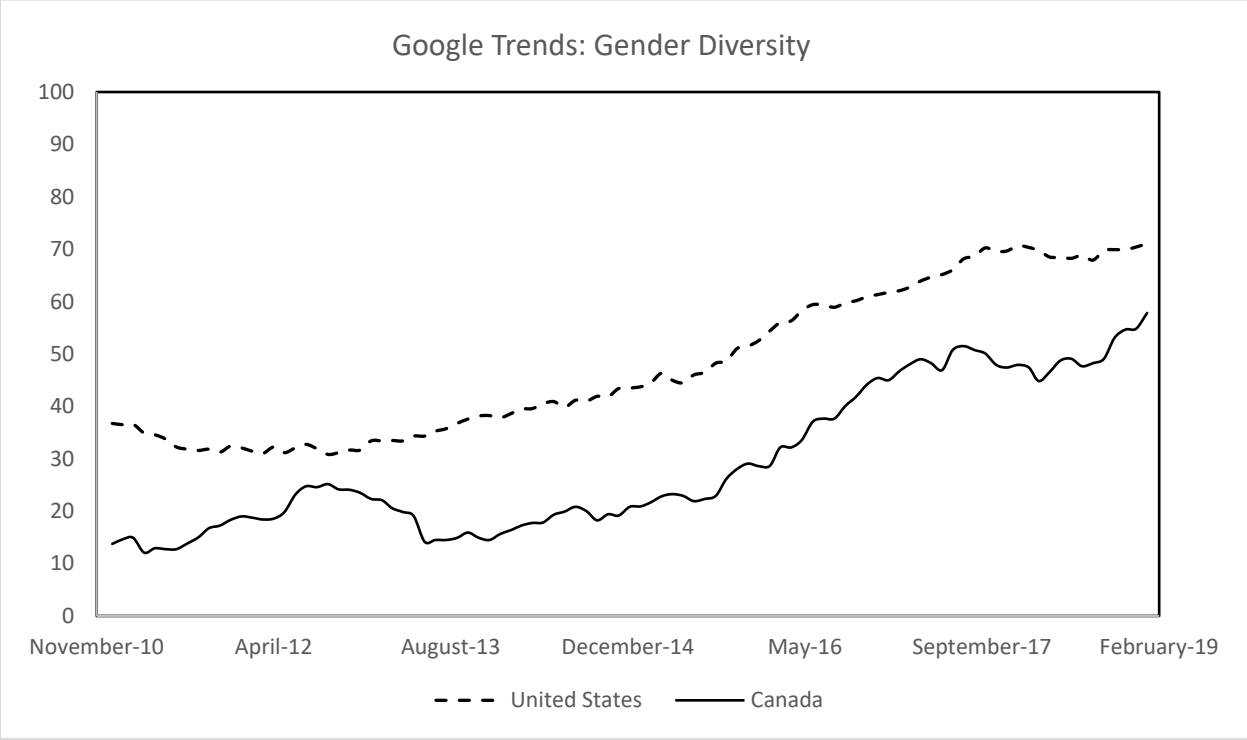



### Panel C. Placebo Coefficients for Fraction of the Board



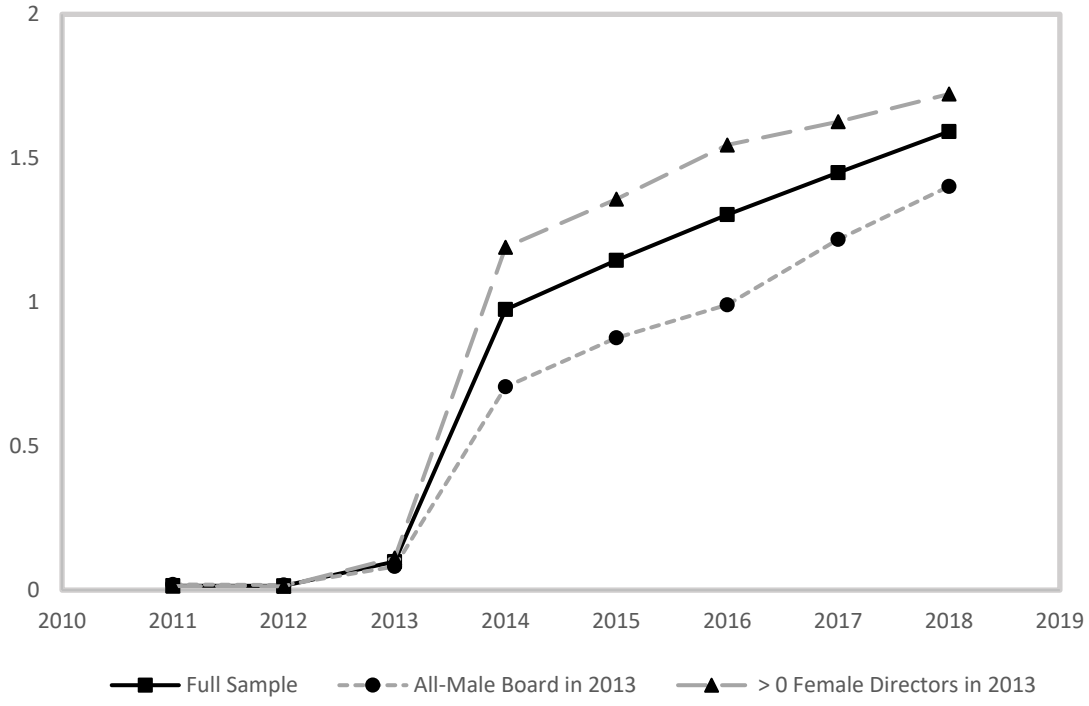
## Figure C.3 – Public Attention to Gender Diversity

This figure plots the 12-months moving average of the monthly Google search volume index for the term "Gender Diversity" between January 2011 and December 2018 in Canada and in the US.



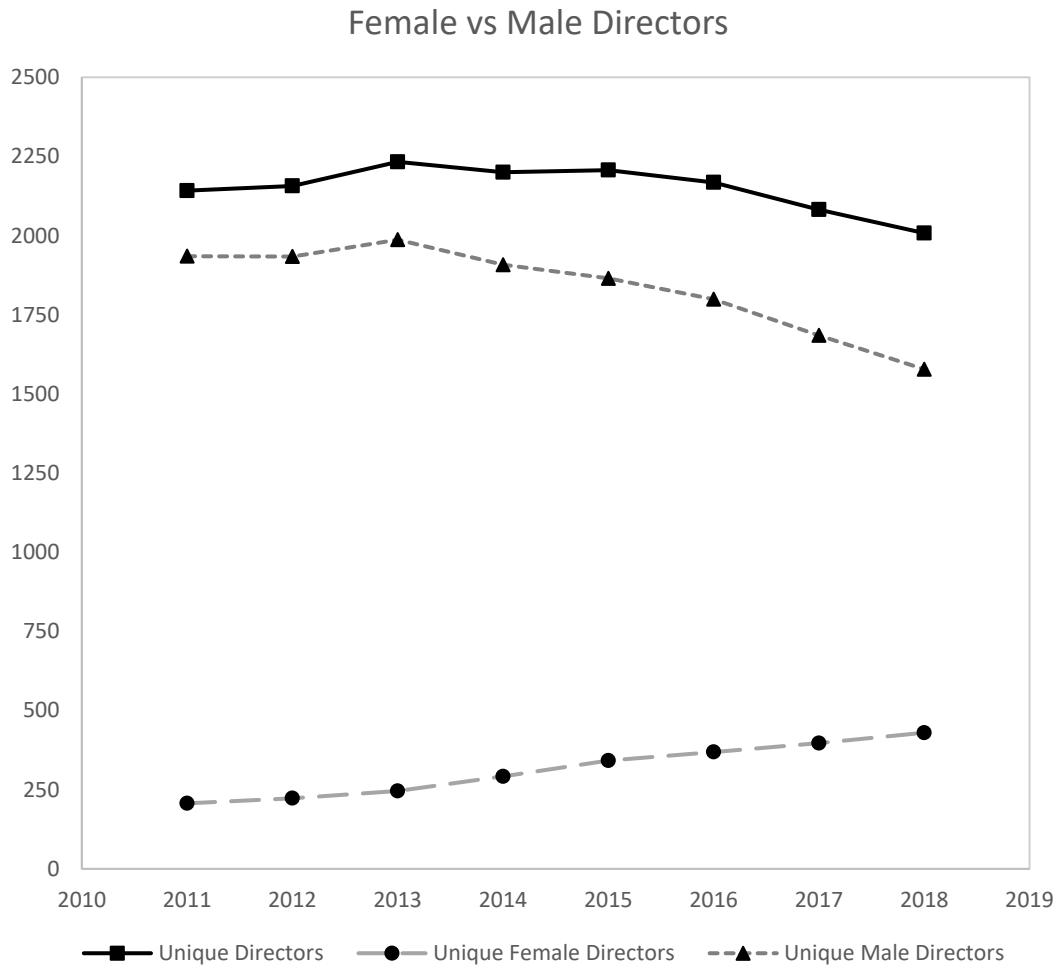
## Figure C.4 – Diversity Sentiment Index around the OSC's Amendment

This figure presents data on Diversity Sentiment Index for Canadian firms included in S&P TSX Composite Index, with directorship data in BoardEx and financial data in Compustat, over the 2011-2018 period. The graph plots the Diversity Sentiment Index (see Table C7 for the definition of the index). The index is based on six common statements found in firms' proxy statements that express support for director gender diversity and are used increasingly over time.



## Figure C.5 – Unique Directors in the Sample

This figure presents data on unique directors for Canadian firms included in the S&P TSX Composite Index, with directorship data in BoardEx and financial data in Compustat, over the 2011–2018 period. The figure plots the number of unique directors, unique female directors, and unique male directors in the sample each year.



## Table C.1 – Regression Analysis of CARs around the OSC's Announcement using Sefcik and Thompson (1986) Methodology

This table reports estimates examining cross-sectional differences in the cumulative abnormal returns (CARs) around July 30, 2013, when the Ontario Securities Commission announced proposed rules requiring the disclosure of policies promoting the representation of females on boards of directors. The sample consists of firms that are included in S&P TSX Composite Index, with directorship data in BoardEx and financial data in Compustat. The observations are at the firm-level. The dependent variable is the (0,+1) window CAR. CARs are computed using following Sefcik and Thompson (1986) using a 4-factor return model (Fama and French, 1993, Carhart, 1997). Data on firms' daily stock returns are obtained from Datastream. Data on Canadian factor returns are obtained from AQR Capital Management. "No Female Director Policy$_{2013}$" is an indicator equal to 1 if a firm does not disclose that they have a policy regarding the representation of females on the board in 2013. "All-Male Board$_{2013}$" is an indicator equal to 1 if a firm has no female directors in 2013. "Male Director Ratio$_{2013}$" is the fraction of the board consisting of male directors in 2013. The specifications and control variables are the same as Models (1)-(6) of Table 11. Industry fixed effects at the 1-digit SIC level are included. All variables are defined in the Table A.1. Only coefficients for our main variables of interest are reported and coefficients of control variables are omitted. $^{***}$, $^{**}$ and $^{*}$ indicate statistical significance at the 1%, 5% and 10% levels.

| ***Dependent Variable:*** | **CAR(0,+1)** | | | | | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| No Female Director Policy$_{2013}$ | 0.012*** | 0.013*** | | | | |
| All-Male Board$_{2013}$ | | | 0.012** | 0.014*** | | |
| Male Director Ratio$_{2013}$ | | | | | 0.053*** | 0.064*** |
| Industry Fixed Effects | Yes | Yes | Yes | Yes | Yes | Yes |
| Other Controls | No | Yes | No | Yes | No | Yes |
| Industry Fixed Effects | Yes | Yes | Yes | Yes | Yes | Yes |

## Table C.2 – Sample Summary Statistics

This table reports summary statistics for firm characteristics in 2013 – the fiscal year prior to the Ontario Securities Commission implemented rules requiring the disclosure of policies promoting the representation of females on boards of directors. The sample consists of firms that are included in S&P TSX Composite Index, with directorship data in BoardEx and financial data in Compustat. "[No] Female Director Policy in 2013" indicates firms that do [not] disclose that they have a policy regarding the representation of females on the board in 2013. "All-Male Board in 2013 [>0 Female Directors in 2013]" indicates firms that have no [>0] female directors in 2013. All other variables are defined in Table A.1. Panel A reports data for the sample split based on All-Male Board in 2013 and Panel B reports data based on whether the firm had a Female Director Policy in 2013. $^{*}$, $^{**}$ and $^{***}$ indicate statistical significance at the 10%, 5% and 1% levels respectively in the differences in means and medians of the variables in the two groups using the t-test for means and Wilcoxon signed rank-sum test for medians.

**Panel A: Summary Statistics for Firms with All-Male Boards and Boards with at Least One Female in 2013**

| | All-Male Board in 2013 (N=127) | | > 0 Female Directors in 2013 (N=147) | | Difference | |
|---|---|---|---|---|---|---|
| **Variable** | **Mean** | **Median** | **Mean** | **Median** | **Mean** | **Median** |
| Log(Assets) | 7.037 | 6.927 | 8.613 | 8.254 | 1.567$^{**}$ | 1.327$^{***}$ |
| Market-to-Book Assets | 1.967 | 1.228 | 1.227 | 1.541 | -0.740 | 0.313 |
| Debt/Assets | 0.207 | 0.189 | 0.268 | 0.249 | 0.061$^{**}$ | 0.060$^{**}$ |
| Return-on-Assets | 0.054 | 0.084 | 0.079 | 0.086 | 0.025 | 0.002 |
| No Term Limit | 0.815 | 1.000 | 0.730 | 1.000 | -0.085 | 0.000 |
| Female Executive Ratio | 0.066 | 0.000 | 0.068 | 0.000 | 0.002 | 0.000 |
| Controlled Corporation | 0.163 | 0.000 | 0.314 | 0.000 | 0.151$^{**}$ | 0.000$^{*}$ |

**Panel B: Summary Statistics for Firms without and with a Board Diversity Policy in 2013**

| | No Female Director Policy in 2013 (N=213) | | Female Director Policy in 2013 (N=61) | | Difference | |
|---|---|---|---|---|---|---|
| **Variable** | **Mean** | **Median** | **Mean** | **Median** | **Mean** | **Median** |
| Log(Assets) | 8.097 | 7.900 | 9.126 | 8.948 | 1.029$^{***}$ | 1.048$^{***}$ |
| Market-to-Book Assets | 1.740 | 1.285 | 1.926 | 1.607 | 0.186 | 0.322 |
| Debt/Assets | 0.227 | 0.215 | 0.271 | 0.257 | 0.044$^{*}$ | 0.042$^{*}$ |
| Return-on-Assets | 0.073 | 0.091 | 0.077 | 0.083 | 0.004 | -0.008 |
| No Term Limit | 0.857 | 1.000 | 0.654 | 1.000 | -0.203$^{*}$ | -0.000$^{*}$ |
| Female Executive Ratio | 0.067 | 0.000 | 0.068 | 0.000 | 0.001 | 0.000 |
| Controlled Corporation | 0.304 | 0.000 | 0.204 | 0.000 | -0.100 | 0.000 |

## Table C.3 – Summary Statistics for Placebo Regression Analysis of CARs around the OSC's Announcement

This table reports summary statistics for placebo OLS regression coefficients examining cross-sectional differences in the cumulative abnormal returns (CARs) around July 30, 2013 – when the Ontario Securities Commission announced proposed rules requiring the disclosure of policies promoting the representation of females on boards of directors. The sample consists of firms that are included in S&P TSX Composite Index, with directorship data in BoardEx and financial data in Compustat. The observations are at the firm-level. The dependent variable is the (0,+1) window CAR. CARs are computed using standard event study methodology with a 4-factor return model (Fama and French, 1993, Carhart, 1997) and a 250-day estimation window ending on day -30, with at least 60 observations. Data on firms' daily stock returns are obtained from Datastream. Data on Canadian factor returns are obtained from AQR Capital Management. "No Female Director Policy$_{2013}$" is an indicator equal to 1 if a firm does not disclose that they have a policy regarding the representation of females on the board in 2013. "All-Male Board$_{2013}$" is an indicator equal to 1 if a firm has no female directors in 2013. "Male Director Ratio$_{2013}$" is the fraction of the board consisting of male directors in 2013. Industry fixed effects at the 1-digit SIC level are included. Each day in the period between days -300 and +300 relative to the OSC's announcement on July 30, 2013, excluding days -50 to +50 is considered as a placebo announcement date (500 placebo dates in total). For each placebo date, we compute the CARs using the same methodology above with the same estimation window relative to the placebo date (e.g., for the placebo announcement on day -300, the estimation window used is -580 to -231). Models (1), (3) and (5) from Table 10 are then estimated with the CAR for each placebo date used as the dependent variable in place of the CAR for the actual announcement to obtain 500 placebo coefficients for each model. *t*-statistics are computed using heteroscedasticity-consistent standard errors. The actual event date coefficients are from models (1), (3) and (5) of Table 10. 5% sig. indicates the fraction of coefficients that are statistically significant at the 5% level. Statistical significance is evaluated using heteroscedasticity-consistent standard errors. This table adds further context to Figure 7.

| | | **Placebo Event Dates** | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Coefficient (Model)** | **Actual Event Date** | **Mean** | **Median** | **SD** | **5th** | **95th** | **5% sig.** | **>0 & 5% sig.** | **>Actual & 5% sig.** |
| No Female Director Policy$_{2013}$ (model 1) | 0.012 | 0.000 | 0.001 | 0.006 | -0.007 | 0.007 | 6% | 4% | 0% |
| All-Male Board$_{2013}$ (model 3) | 0.012 | 0.000 | 0.000 | 0.005 | -0.008 | 0.006 | 5% | 1% | 0% |
| Male Director Ratio$_{2013}$ (model 5) | 0.055 | -0.001 | 0.000 | 0.020 | -0.029 | 0.025 | 3% | 1% | 0% |

## Table C.4 – Analyses of CARs around Other Announcements

This table reports summary statistics for cumulative abnormal returns (CARs) around other dates related to the OSC's regulation requiring the disclosure of policies promoting the representation of females on boards of directors. CARs are estimated using the (0,+1) window around the announcement dates. The sample consists of firms that are included in S&P TSX Composite Index, with directorship data in BoardEx and financial data in Compustat. CARs are computed using standard event study methodology with a 4-factor return model (Fama and French, 1993, Carhart, 1997) and a 250-day estimation window ending on day -30, with at least 60 observations. Data on firms' daily stock returns are obtained from Datastream. Data on Canadian factor returns are obtained from AQR Capital Management. The event dates are as follows: April 5, 2013 – The Canadian government names a new committee to offer advice on gender diversity on Canada's corporate boards. May 2, 2013 – The release of Ontario budget statement discussing its support for gender diversity on boards and in senior management of corporations. May 28, 2013 – The then Ontario's Minister Responsible for Women's Issues, Laurel Broten, provides some remarks that foreshadow the regulation. June 14, 2013 – Minister of Finance, Charles Sousa, and the then Minister Responsible for Women's Issues, Laurel Broten, request that the OSC undertake a public consultation process regarding disclosure requirements for gender diversity. January 16, 2014 – OSC releases the Proposed Amendment to Form 58-101 which now includes the addition of disclosure related to director term limits. October 15, 2014 – OSC releases the Notice of Implementation of Amendments to Form 58-101. Panel A reports the results for the entire sample. Panels B, C and D report the results for different subsamples. "[No] Female Director Policy in 2013" indicates firms that do [not] disclose that they have a policy regarding the representation of females on the board in 2013. "All-Male Board in 2013 [>0 Female Directors in 2013]" indicates firms that have no [>0] female directors in 2013. "[No] Term Limits in 2013" indicates firms that do [not] disclose that they have a policy regarding director term limits in 2013. *t*-statistics for CARs are computed following Kolari and Pynnönen (2010). $^{***}$, $^{**}$ and $^{*}$ indicate statistical significance at the 1%, 5% and 10% levels.

| **Event Date** | **Mean CAR** | ***t*-stat** | ***p*-value** | **Mean CAR** | ***t*-stat** | ***p*-value** |
|---|---|---|---|---|---|---|
| Panel A: | All Firms | | | | | |
| April 5, 2013 | 0.00490 | 1.342 | 0.181 | | | |
| May 2, 2013 | 0.00377 | 1.053 | 0.293 | | | |
| May 28, 2013 | 0.00233 | 0.022 | 0.983 | | | |
| June 14, 2013 | 0.00475 | 1.407 | 0.161 | | | |
| January 16, 2014 | -0.00065 | 0.238 | 0.812 | | | |
| October 15, 2014 | 0.01155 | 0.687 | 0.493 | | | |
| Panel B: | No Female Director Policy in 2013 | | | Female Director Policy in 2013 | | |
| April 5, 2013 | 0.00437 | 1.257 | 0.21 | 0.00675 | 1.221 | 0.227 |
| May 2, 2013 | 0.00488 | 1.395 | 0.164 | -0.0001 | -0.051 | 0.96 |
| May 28, 2013 | 0.00213 | -0.136 | 0.892 | 0.00303 | 0.411 | 0.683 |
| June 14, 2013 | 0.00495 | 1.444 | 0.15 | -0.0001 | 0.952 | 0.345 |
| January 16, 2014 | -0.0022 | -0.118 | 0.906 | 0.00473 | 1.418 | 0.161 |
| October 15, 2014 | 0.01414 | 0.953 | 0.342 | 0.00256 | -0.047 | 0.963 |
| Panel C: | All-Male Board in 2013 | | | >0 Female Directors in 2013 | | |
| April 5, 2013 | 0.00600 | 1.36 | 0.176 | 0.00395 | 1.025 | 0.307 |
| May 2, 2013 | 0.00540 | 1.147 | 0.254 | 0.00236 | 0.76 | 0.448 |
| May 28, 2013 | 0.00273 | -0.219 | 0.827 | 0.00200 | 0.222 | 0.825 |
| June 14, 2013 | 0.00547 | 1.646 | 0.102 | 0.00413 | 0.949 | 0.344 |
| January 16, 2014 | -0.00038 | 0.379 | 0.705 | -0.00085 | 0.045 | 0.964 |
| October 15, 2014 | 0.01976 | 1.544 | 0.125 | 0.00550 | -0.036 | 0.971 |
| Panel D: | No Term Limits in 2013 | | | Term Limits in 2013 | | |
| January 16, 2014 | -0.00073 | 0.149 | 0.882 | -0.00019 | 0.573 | 0.57 |
| October 15, 2014 | 0.01263 | 1.045 | 0.297 | 0.00582 | -0.446 | 0.658 |

## Table C.5 – Univariate Analysis of CARs around the OSC's Announcement and Executive Positions

This table reports summary statistics for cumulative abnormal returns (CARs) around July 30, 2013, when the Ontario Securities Commission announced proposed rules requiring the disclosure of policies promoting the representation of females on boards of directors. The sample consists of firms that are included in S&P TSX Composite Index, with directorship data in BoardEx and financial data in Compustat, for which data on executives' identities were available in SEDAR. CARs are computed using standard event study methodology with a 4-factor return model (Fama and French, 1993, Carhart, 1997) and a 250-day estimation window ending on day -30, with at least 60 observations. Data on firms' daily stock returns are obtained from Datastream. Data on Canadian factor returns are obtained from AQR Capital Management. . "All-Male Top 5 Executives in 2013" [">0 Female Top 5 Executives in 2013]" indicates firms that have no [>0] top 5 named executive officers in 2013. "Male CEO in 2013" ["Female CEO in 2013]" indicates firms that have a male [female] CEO in 2013. *t*-statistics for CARs are computed following Kolari and Pynnönen (2010).

| **Window** | **Mean CAR** | ***t*-stat** | ***p*-value** |
|---|---|---|---|
| All (N=269) | | | |
| (0,0) | 0.00688 | 1.18 | 0.239 |
| (0,+1) | 0.01028 | 0.918 | 0.359 |
| (-1,+1) | 0.00573 | 0.659 | 0.511 |
| All-Male Top 5 Executives in 2013 (N=190) | | | |
| (0,0) | 0.00799 | 1.317 | 0.189 |
| (0,+1) | 0.01155 | 0.989 | 0.324 |
| (-1,+1) | 0.00676 | 0.785 | 0.434 |
| >0 Female Top 5 Executives in 2013 (N=79) | | | |
| (0,0) | 0.0042 | 0.653 | 0.516 |
| (0,+1) | 0.00722 | 0.599 | 0.551 |
| (-1,+1) | 0.00323 | 0.267 | 0.79 |
| Male CEO in 2013 (N=261) | | | |
| (0,0) | 0.0071 | 1.267 | 0.206 |
| (0,+1) | 0.01024 | 0.918 | 0.359 |
| (-1,+1) | 0.00598 | 0.692 | 0.489 |
| Female CEO in 2013 (N=8) | | | |
| (0,0) | -0.0006 | -0.444 | 0.67 |
| (0,+1) | 0.01154 | 0.326 | 0.754 |
| (-1,+1) | -0.00263 | 0.043 | 0.967 |

## Table C.6 – Regression Analysis of CARs around the OSC's Announcement and Executive Positions

This table reports estimates examining cross-sectional differences in the cumulative abnormal returns (CARs) around July 30, 2013, when the Ontario Securities Commission announced proposed rules requiring the disclosure of policies promoting the representation of females on boards of directors. The sample consists of firms that are included in S&P TSX Composite Index, with directorship data in BoardEx and financial data in Compustat. The observations are at the firm-level. The dependent variable is the (0,+1) window CAR. CARs are computed using standard event study methodology with a 4-factor return model (Fama and French, 1993, Carhart, 1997) and a 250-day estimation window ending on day -30, with at least 60 observations. Data on firms' daily stock returns are obtained from Datastream. Data on Canadian factor returns are obtained from AQR Capital Management. "All-Male Top 5 Executives$_{2013}$" is an indicator equal to 1 if a firm has no female top 5 named executive officers in 2013. "Male Top 5 executive Ratio$_{2013}$" is the fraction of the top 5 named executive officers who are consisting of male directors in 2013. "Male CEO$_{2013}$" is an indicator equal to 1 if a firm has a male CEO in 2013. Industry fixed effects at the 1-digit SIC level are included. All variables are defined in the Table A.1. Heteroscedasticity-consistent standard errors are reported in parentheses. $^{***}$, $^{**}$ and $^{*}$ indicate statistical significance at the 1%, 5% and 10% levels.

| ***Dependent Variable:*** | **CAR(0,+1)** | | | | | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| All-Male Top 5 Executives$_{2013}$ | 0.001 | 0.001 | | | | |
| | (0.004) | (0.004) | | | | |
| Male Top 5 Executive Ratio$_{2013}$ | | | 0.008 | 0.005 | | |
| | | | (0.015) | (0.016) | | |
| Male CEO$_{2013}$ | | | | | -0.001 | -0.005 |
| | | | | | (0.010) | (0.011) |
| Institutional Ownership | | 0.030 | | 0.030 | | 0.031 |
| | | (0.019) | | (0.019) | | (0.019) |
| Media Coverage | | -0.002 | | -0.002 | | -0.002 |
| | | (0.002) | | (0.002) | | (0.002) |
| Log(Assets) | -0.003* | -0.003 | -0.003* | -0.003 | -0.003* | -0.003 |
| | (0.001) | (0.002) | (0.001) | (0.002) | (0.001) | (0.002) |
| Market-to-Book Assets | | -0.002 | | -0.002 | | -0.002 |
| | | (0.004) | | (0.004) | | (0.004) |
| ROA | | -0.015 | | -0.015 | | -0.015 |
| | | (0.021) | | (0.021) | | (0.020) |
| Debt/Assets | | -0.011 | | -0.011 | | -0.011 |
| | | (0.011) | | (0.011) | | (0.011) |
| Constant | 0.018* | 0.007 | 0.011 | 0.002 | 0.021 | 0.012 |
| | (0.010) | (0.015) | (0.018) | (0.022) | (0.014) | (0.017) |
| Industry Fixed Effects | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 269 | 263 | 269 | 263 | 269 | 263 |
| Adjusted R-squared | 0.060 | 0.076 | 0.061 | 0.076 | 0.060 | 0.076 |

## Table C.7 – Diversity Sentiment Index (2011-2018)

This table reports the components of the Diversity Sentiment Index following the OSC's diversity regulation. The sample consists of firms that are included in S&P TSX Composite Index, with directorship data in BoardEx and financial data in Compustat. The index is based on six common statements found in firms' proxy statements that express support for director gender diversity and are used increasingly over time. The index is the sum of the indicator variables for each of the six statements where each indicator variable equals one if the proxy statement includes the specific statement and zero otherwise. The annual mean of each indicator variable (i.e., the percent of firms indicating each statement for proxy statements issued each year) and the sum of the indicator variables (i.e., the Diversity Sentiment Index) during the period of 2011 and 2018 are reported.

| Diversity Sentiment Index Statement | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|
| 1. The company has an inclusive culture/ encourages diversity | 0.3% | 0.3% | 1.1% | 19.1% | 20.4% | 28.0% | 31.7% | 35.4% |
| 2. The Corporate Governance committee considers gender diversity in board nominations | 1.1% | 1.1% | 7.0% | 32.1% | 36.7% | 40.3% | 42.7% | 43.8% |
| 3. The Corporate Governance committee reviews the diversity policy annually | 0% | 0% | 0.3% | 22.3% | 26.5% | 30.5% | 34.7% | 38.6% |
| 4. The Corporate Governance committee oversees/ evaluates the diversity policy | 0% | 0% | 0% | 10.5% | 12.0% | 12.7% | 13.3% | 14.3% |
| 5. The Corporate Governance committee is committed to identifying a diverse pool | 0% | 0% | 0.7% | 5.4% | 6.3% | 8.7% | 7.6% | 9.6% |
| 6. The search is directed to include a diverse set of candidates. | 0% | 0% | 0.7% | 7.5% | 9.1% | 10.9% | 14.9% | 17.1% |
| Diversity Sentiment Index | 0.01 | 0.01 | 0.10 | 0.97 | 1.11 | 1.31 | 1.45 | 1.59 |

## Table C.8 – Regression Analysis of Gender Diversity Polices – Firms Headquartered in Calgary

This table reports estimates examining cross-sectional differences in gender diversity policies following the implementation of the Ontario Securities Commission rules requiring the disclosure of policies promoting the representation of females on boards of directors. The sample consists of Canadian firms that are included in S&P TSX Composite Index, with directorship data in BoardEx and financial data in Compustat and ownership data in Factset. The sample period is 2014 to 2018. The observations are at the firm level. The dependent variable in models (1) and (2) equals one if a firm fully complies with the OSC regulation (in the board representation context being fully compliant is defined as complying with items 2, 3 and 5 of the OSC regulation); the dependent variable in model (3) equals one if a firm indicates partial compliance with the OSC regulation (partial compliance is if the firm considers gender diversity in its director nomination but does not adopt a female director target – i.e., complies with items 2 and 3 but not item 5 of the OSC regulation). The models in Panel A (Panel B) are identical to Table 4, except that a dummy variable for firms headquartered in the city of Calgary (Province Female Ratio) replaces the Number of Local Female Industry Directors. All models are linear probability models. In model (1), the sample includes all firms. In model (2), the sample is restricted to only firms that fully comply and those with partial compliance. In model (3), the sample is restricted to only firms that partially comply or explain their lack of compliance. (i.e., only firms that do not have a female director target). Year and one-digit-SIC industry fixed effects are included in all specifications. Other Firm Controls include log(assets), market-to-book assets, return on assets, debt/assets, board size, board degree centrality, board tenure, and board age. All other variables are defined in Table A.1. Standard errors are reported in parentheses and are clustered at the firm-level. $^{***}$, $^{**}$ and $^{*}$ indicate statistical significance at the 1%, 5% and 10% levels.

**Panel A: Firms Headquartered in Calgary**

| ***Dependent Variable:*** | **Full Compliance** | **Full Compliance** | **Partial Compliance** |
|---|---|---|---|
| | (1) | (2) | (3) |
| Calgary Firm | -0.096$^{**}$ | -0.097$^{**}$ | -0.185$^{***}$ |
| | (0.041) | (0.046) | (0.051) |
| Interlock with Female Directors | 0.044$^{**}$ | 0.049$^{**}$ | 0.015 |
| | (0.020) | (0.022) | (0.019) |
| Interlock with Partial Compliance | 0.037 | 0.046 | -0.104 |
| | (0.087) | (0.102) | (0.096) |
| Interlock with Full Compliance | 0.625$^{***}$ | 0.659$^{***}$ | 0.085 |
| | (0.114) | (0.116) | (0.164) |
| Controlled Corporation | -0.114$^{***}$ | -0.115$^{***}$ | -0.038 |
| | (0.042) | (0.044) | (0.041) |
| Independent Board | 0.018 | 0.053 | 0.175 |
| | (0.231) | (0.252) | (0.197) |
| Institutional Ownership | 0.062 | 0.051 | 0.042 |
| | (0.104) | (0.121) | (0.091) |
| Media Coverage | 0.063$^{**}$ | 0.054$^{**}$ | 0.013 |
| | (0.023) | (0.022) | (0.012) |
| Other Firm Controls | Yes | Yes | Yes |
| Constant | -0.510 | -0.407 | 0.324 |
| | (0.533) | (0.602) | (0.662) |
| Year Fixed Effects | Yes | Yes | Yes |
| Industry Fixed Effects | Yes | Yes | Yes |
| Observations | 1276 | 1152 | 959 |
| Adj. $R^2$ | 0.308 | 0.312 | 0.131 |

| **Panel B: Province Female Director Ratio** | | | |
|---|---|---|---|
| ***Dependent Variable:*** | **Full Compliance** | **Full Compliance** | **Partial Compliance** |
| | (1) | (2) | (3) |
| Province Female Director Ratio | 1.507*** | 1.523*** | 0.784* |
| | (0.512) | (0.538) | (0.422) |
| Interlock with Female Directors | 0.049** | 0.054** | 0.011 |
| | (0.020) | (0.022) | (0.019) |
| Interlock with Partial Compliance | 0.052 | 0.067 | -0.075 |
| | (0.085) | (0.099) | (0.101) |
| Interlock with Full Compliance | 0.617*** | 0.651*** | 0.092 |
| | (0.114) | (0.116) | (0.159) |
| Controlled Corporation | -0.112*** | -0.114*** | -0.039 |
| | (0.041) | (0.042) | (0.041) |
| Independent Board | 0.054 | 0.082 | 0.095 |
| | (0.225) | (0.243) | (0.204) |
| Institutional Ownership | 0.061 | 0.072 | 0.083 |
| | (0.110) | (0.131) | (0.132) |
| Media Coverage | 0.064** | 0.061** | 0.011 |
| | (0.023) | (0.020) | (0.023) |
| Other Firm Controls | Yes | Yes | Yes |
| Constant | -0.623 | -0.524 | 0.428 |
| | (0.515) | (0.578) | (0.665) |
| Year Fixed Effects | Yes | Yes | Yes |
| Industry Fixed Effects | Yes | Yes | Yes |
| Observations | 1276 | 1152 | 959 |
| Adj. $R^2$ | 0.317 | 0.322 | 0.081 |

## Table C.9 – Comparison of Canadian Firms and Matched Samples of U.S. Firms.

This table reports comparisons of firm characteristics between Canadian and U.S. firms in 2013. The sample of Canadian firms consists of firms in S&P TSX Composite Index at any point in our sample period, with directorship data in BoardEx and financial data in Compustat. In Panel A, the sample consists of Canadian firms and a matched sample of U.S. firms, each selected from within the same 1-digit SIC industry as and are closest in total assets to the corresponding Canadian firm in 2013 (only Canadian firms with a match available are included). In Panel B, the sample consists of Canadian firms that are cross-listed on a U.S. stock exchange and a matched sample of U.S. firms, each selected from within the same 1-digit SIC industry as and are closest in total assets to the corresponding Canadian firm in 2013 (only Canadian firms with a match available are included). *, ** and *** indicate statistical significance at the 10%, 5% and 1% levels respectively in the differences in means and medians of the variables in the two groups using the t-test for means and Wilcoxon signed rank-sum test for medians.

**Panel A: Canada & U.S. Matched Sample (N=450)**

| | Canada | | US | | Difference | |
|---|---|---|---|---|---|---|
| | Mean | Median | Mean | Median | Mean | Median |
| Log(Assets) | 8.250 | 7.940 | 8.245 | 7.943 | 0.006 | -0.003 |
| Market-to-Book Assets | 1.186 | 1.041 | 1.279 | 1.067 | -0.093 | -0.027 |
| Debt/Assets | 0.230 | 0.218 | 0.242 | 0.230 | -0.012 | -0.012 |
| Return-on-Assets | 0.067 | 0.085 | 0.107 | 0.102 | -0.040*** | -0.018*** |
| Institutional Ownership | 0.464 | 0.458 | 0.726 | 0.817 | -0.262*** | -0.359*** |
| Female Director Ratio | 0.107 | 0.100 | 0.105 | 0.100 | 0.001 | 0.000 |
| Female Director Ratio Change | 0.009 | 0.000 | 0.009 | 0.000 | 0.001 | 0.000 |

**Panel B: Canada ADR & U.S. Matched Sample (N=162)**

| | Canada | | US | | Difference | |
|---|---|---|---|---|---|---|
| | Mean | Median | Mean | Median | Mean | Median |
| Log(Assets) | 8.648 | 8.405 | 8.639 | 8.414 | 0.009 | -0.010 |
| Market-to-Book Assets | 1.150 | 1.069 | 1.338 | 1.126 | -0.188 | -0.057 |
| Debt/Assets | 0.203 | 0.200 | 0.242 | 0.235 | -0.038 | -0.035 |
| Return-on-Assets | 0.041 | 0.070 | 0.103 | 0.100 | -0.062*** | -0.030*** |
| Institutional Ownership | 0.548 | 0.536 | 0.702 | 0.791 | -0.154*** | -0.255*** |
| Female Director Ratio | 0.119 | 0.111 | 0.095 | 0.100 | 0.024 | 0.011 |
| Female Director Ratio Change | 0.008 | 0.000 | 0.005 | 0.000 | 0.004 | 0.000 |

## Table C.10 – Regression Analysis of Changes in Female Executive Positions

This table reports estimates from OLS regressions examining changes in female named executive officer positions for firms that are included in S&P TSX Composite Index, with directorship data in BoardEx and financial data in Compustat. The sample period is 2011 to 2017. The observations are at the firm-year level. The dependent variable in Panel A is the fraction of top 5 named executive officers, listed in the proxy circular for the relevant fiscal year, who are female. The dependent variable in Panel B is an indicator for whether a firm's CEO is female. In model (1), the sample consists only of Canadian firms. In model (2), the sample consists of Canadian firms and U.S. firms that were included in the S&P 500 index at any point between 2010 and 2016. In model (2), the sample consists of Canadian firms and a matched sample of U.S. firms, each selected from within the same 1-digit SIC industry as and are closest in total assets to the corresponding Canadian firm in 2013 (only Canadian firms with a match available are included). In model (4), the sample consists of Canadian firms that are cross-listed on a U.S. stock exchange and a matched sample of U.S. firms, each selected from within the same 1-digit SIC industry as and are closest in total assets to the corresponding Canadian firm in 2013 (only Canadian firms with a match available are included). Post-2014 is an indicator equal to 1 in years 2015 onward. Year fixed effects are included in all specifications except for model (1). Firm fixed effects are included in all specifications. All other variables are defined in Table A.1. Standard errors are reported in parentheses and are clustered at the firm-level. $^{***}$, $^{**}$ and $^{*}$ indicate statistical significance at the 1%, 5% and 10% levels.

**Panel A:**

| ***Dependent Variable:*** | **Female Executive Ratio** | | | |
|---|---|---|---|---|
| **Sample:** | **Canada Only** | **Canada & U.S. S&P 500** | **Canada & U.S. Matched** | **Canada ADR & U.S. Matched** |
| | (1) | (2) | (3) | (4) |
| Post-2014 | 0.027*** | | | |
| | (0.007) | | | |
| Canadian Firm × Post-2014 | | 0.003 | 0.019* | 0.009 |
| | | (0.008) | (0.011) | (0.010) |
| Log(Assets) | -0.008 | 0.002 | 0.018 | -0.005 |
| | (0.010) | (0.008) | (0.011) | (0.004) |
| Market-to-Book Assets | 0.004 | -0.000 | -0.001 | -0.004 |
| | (0.004) | (0.003) | (0.007) | (0.003) |
| ROA | 0.001 | -0.000 | -0.003 | 0.001 |
| | (0.003) | (0.003) | (0.004) | (0.002) |
| Debt/Assets | -0.021 | -0.006 | 0.019 | 0.001 |
| | (0.029) | (0.023) | (0.016) | (0.007) |
| Constant | 0.137* | 0.068 | -0.083 | 0.078** |
| | (0.080) | (0.071) | (0.098) | (0.036) |
| Year FE | No | Yes | Yes | Yes |
| Firm FE | Yes | Yes | Yes | Yes |
| Observations | 1866 | 5478 | 3045 | 1111 |
| Adjusted R-squared | 0.026 | 0.022 | 0.023 | 0.030 |

**Table C.10 – Regression Analysis of Changes in Female Executive Positions (continued)**

| **Panel B:** | | | | |
|---|---|---|---|---|
| ***Dependent Variable:*** | **Female CEO Indicator** | | | |
| **Sample:** | **Canada Only** | **Canada & U.S. S&P 500** | **Canada & U.S. Matched** | **Canada ADR & U.S. Matched** |
| | (1) | (2) | (3) | (4) |
| Post-2014 | 0.008 | | | |
| | (0.006) | | | |
| Canadian Firm × Post-2014 | | -0.006 | 0.009 | -0.009 |
| | | (0.008) | (0.010) | (0.012) |
| Log(Assets) | -0.013* | -0.004 | -0.005 | -0.005 |
| | (0.007) | (0.009) | (0.004) | (0.004) |
| Market-to-Book Assets | -0.006 | -0.000 | -0.004 | -0.012 |
| | (0.004) | (0.004) | (0.003) | (0.011) |
| ROA | 0.004 | 0.000 | 0.001 | 0.007 |
| | (0.003) | (0.003) | (0.002) | (0.010) |
| Debt/Assets | -0.003 | -0.003 | 0.001 | 0.000 |
| | (0.017) | (0.022) | (0.007) | (0.015) |
| Constant | 0.140** | 0.085 | 0.078** | 0.077 |
| | (0.058) | (0.084) | (0.036) | (0.050) |
| Year FE | No | Yes | Yes | Yes |
| Firm FE | Yes | Yes | Yes | Yes |
| Observations | 1866 | 5478 | 3045 | 1111 |
| Adjusted R-squared | 0.006 | 0.003 | 0.000 | 0.004 |

## Table C.11 – Female Director Targets and Chair of Nominating Committee Voting Support

This table reports estimates of OLS regressions examining the effect of female director targets on voting support for the chair of the nominating committee. The sample covers 2014-2019 and consists of Canadian firms that fully comply with the OSC's amendment by adopting female director targets, which are included in the S&P/TSX Composite Index, with directorship data in BoardEx, financial data in Compustat, ownership data in FactSet and shareholder voting data from the ISS voting analytics and from Johnston Centre for Corporate Governance Innovation at University of Toronto. The dependent variable is one minus the voting support as a percentage of the voting base for the chair of the nominating committee. Female Director Target is the adopted female director target. "Other Controls" include institutional ownership, media coverage, controlled corporation, independent board, log(assets), market-to-book assets, return-on-assets, debt/assets, board size, board degree centrality, board tenure and board age. Variables defined in Table A.1. Standard errors are reported in parentheses and are clustered at the firm-level. ***, ** and * indicate statistical significance at the 1%, 5% and 10% levels.

| ***Dependent Variable:*** | **Chair of Nominating Committee Voting: Withheld and Against** | | |
|---|---|---|---|
| | (1) | (2) | (3) |
| Female Director Target (%) | -40.41** | -43.28** | -27.16* |
| | (17.56) | (20.46) | (13.87) |
| All-Male Board | | | 22.80 |
| | | | (17.37) |
| Female Director Target | | | -69.18 |
| × All-Male Board | | | (67.31) |
| Constant | 15.17*** | 33.63 | 17.56 |
| | (5.31) | (24.23) | (26.34) |
| Other Controls | No | Yes | Yes |
| Year Fixed Effects | Yes | Yes | Yes |
| Industry Fixed Effects | Yes | Yes | Yes |
| Observations | 277 | 269 | 269 |
| Adj. $R^2$ | 0.080 | 0.158 | 0.185 |