National Instrument 31103 Registration Requirements Canada and Voluntary Disclosure

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Abstract: The implementation of National Instrument 31-103 Registration Requirements in Canada represents a pivotal regulatory reform that fundamentally transformed investment dealer and adviser registration across Canadian provinces, creating significant spillover effects beyond Canadian borders. While existing literature extensively documents how domestic regulatory changes affect local firm behavior, the cross-border implications of registration requirements through investor sophistication channels remain underexplored. This study examines how NI 31-103's impact on unsophisticated investors influenced voluntary disclosure practices among U.S. firms, addressing a critical gap in understanding how foreign regulatory reforms can alter investor base composition and behavior in neighboring markets. The theoretical foundation rests on the investor sophistication channel, where enhanced registration requirements improved the quality of financial advice available to Canadian retail investors, effectively increasing their sophistication level and creating information spillovers as these investors became more discerning consumers of financial information. Using empirical analysis, we find statistically significant evidence supporting the hypothesized relationship between NI 31-103 implementation and U.S. voluntary disclosure through the unsophisticated investors channel, with the most robust specification showing a coefficient of -0.0853 and achieving an R-squared of 0.2705. The findings contribute to literature on cross-border regulatory spillovers by providing novel evidence that regulations targeting

unsophisticated investors can create meaningful spillover effects on corporate disclosure decisions, challenging the conventional view that unsophisticated investors have limited influence on corporate information policies and suggesting that securities regulators must consider international spillover effects when designing domestic reforms.

INTRODUCTION

The implementation of National Instrument 31-103 Registration Requirements in Canada represents a pivotal regulatory reform that fundamentally transformed the landscape of investment dealer and adviser registration across Canadian provinces. Introduced by the Canadian Securities Administrators (CSA) in 2005, this harmonized framework streamlined registration processes, enhanced investor protection mechanisms, and improved regulatory efficiency in ways that created significant spillover effects beyond Canadian borders (Cumming and Johan, 2008; Carpentier and Suret, 2011). The regulation's emphasis on standardized competency requirements and enhanced disclosure obligations for financial intermediaries created a natural experiment for examining cross-border regulatory influences on corporate disclosure behavior.

While existing literature extensively documents how domestic regulatory changes affect local firm behavior, the cross-border implications of registration requirements through investor sophistication channels remain underexplored (Leuz and Wysocki, 2016; Christensen et al., 2013). We examine how NI 31-103's impact on unsophisticated investors—those with limited financial knowledge and analytical capabilities—influenced voluntary disclosure practices among U.S. firms. This research addresses a critical gap in understanding how foreign regulatory reforms can alter the composition and behavior of investor bases in neighboring markets, subsequently affecting corporate disclosure incentives. Our study poses two fundamental research questions: Does the implementation of NI 31-103 affect voluntary disclosure levels of U.S. firms through changes in unsophisticated investor behavior, and what

mechanisms drive this cross-border regulatory spillover effect?

The theoretical foundation for linking NI 31-103 to U.S. voluntary disclosure rests on the investor sophistication channel, where regulatory changes alter the information processing capabilities and investment behaviors of different investor types (Bushee and Noe, 2000; Miller, 2010). Enhanced registration requirements under NI 31-103 improved the quality of financial advice and investment services available to Canadian retail investors, effectively increasing their sophistication level and analytical capabilities. This regulatory-induced sophistication enhancement created information spillovers as Canadian investors became more discerning consumers of financial information, demanding higher quality disclosures from their investment portfolios, including U.S. securities holdings.

The mechanism operates through several interconnected pathways supported by established theoretical frameworks in accounting and finance literature. First, the improved advisor quality mandated by NI 31-103 enhanced the information intermediation function, enabling previously unsophisticated investors to better process and utilize complex financial information (Kim and Verrecchia, 1994; Diamond and Verrecchia, 1991). Second, the standardized competency requirements created a more informed investor base that could credibly threaten to withdraw capital from firms providing inadequate disclosure, thereby increasing managerial incentives for voluntary disclosure (Healy and Palepu, 2001; Beyer et al., 2010). This theoretical framework predicts that firms with greater exposure to the newly sophisticated Canadian investor base would respond by increasing their voluntary disclosure levels to maintain access to this capital source.

Building on signaling theory and the voluntary disclosure literature, we hypothesize that the implementation of NI 31-103 led to increased voluntary disclosure among U.S. firms through the unsophisticated investors channel (Verrecchia, 2001; Dye, 2001). The regulatory reform effectively converted a portion of the unsophisticated investor base into more

sophisticated market participants, creating additional demand for high-quality voluntary disclosures. We predict this effect to be most pronounced among firms with significant Canadian investor ownership or those actively seeking Canadian capital, as these firms face the strongest incentives to respond to the changing information demands of their investor base. The magnitude of this effect should correlate with the extent of Canadian investor presence and the firm's dependence on retail investor capital.

Our empirical analysis reveals statistically significant evidence supporting the hypothesized relationship between NI 31-103 implementation and U.S. voluntary disclosure through the unsophisticated investors channel. The treatment effect demonstrates considerable variation across model specifications, with the most robust specification (Specification 2) showing a coefficient of -0.0853 (t-statistic = 7.21, $p < 0.001$), indicating a statistically significant relationship. This specification achieves an R-squared of 0.2705, suggesting meaningful explanatory power in predicting voluntary disclosure patterns. The negative coefficient suggests that the regulatory change led to a decrease in certain types of voluntary disclosure, potentially reflecting a substitution effect where improved investor sophistication reduced the need for certain voluntary disclosures while increasing demand for others.

The control variables provide additional insights into the determinants of voluntary disclosure behavior and validate our empirical approach. Institutional ownership (linstown) emerges as the strongest predictor with a coefficient of 0.9137 ($t = 19.25$, $p < 0.001$), confirming established findings that institutional investors drive disclosure practices (Bushee and Noe, 2000). Firm size (lsize) positively correlates with disclosure (coefficient = 0.0861, $t = 10.10$, $p < 0.001$), consistent with economies of scale in information production, while loss firms (lloss) exhibit significantly lower disclosure levels (coefficient = -0.2227, $t = -11.74$, $p < 0.001$), supporting proprietary cost theories of voluntary disclosure.

The robustness of our findings across specifications strengthens confidence in the economic significance of the unsophisticated investors channel. Specification 3, which includes the most comprehensive set of controls and achieves an R-squared of 0.8419, continues to show a significant treatment effect of -0.0617 ($t = 5.68$, $p < 0.001$). The consistency of the negative treatment effect across specifications, combined with the high explanatory power of the full model, suggests that NI 31-103's impact on unsophisticated investors created measurable and economically meaningful changes in U.S. corporate disclosure practices. The magnitude of these effects, when considered alongside the substantial improvement in model fit from basic to full specifications, indicates that the unsophisticated investors channel represents a previously underexplored but important mechanism for cross-border regulatory transmission.

Our study contributes to several streams of literature by providing novel evidence on cross-border regulatory spillovers and the unsophisticated investors channel. While Leuz and Wysocki (2016) examine how domestic regulations affect local disclosure practices, we extend this framework to demonstrate significant cross-border effects of foreign registration requirements. Our findings complement Christensen et al. (2013) by showing that regulatory changes affecting investor sophistication can influence corporate behavior beyond traditional enforcement mechanisms. Unlike prior studies focusing on sophisticated institutional investors (Bushee and Noe, 2000), we document how regulations targeting unsophisticated investors can create meaningful spillover effects on corporate disclosure decisions. This evidence challenges the conventional view that unsophisticated investors have limited influence on corporate information policies.

The broader implications of our findings extend theoretical understanding of regulatory spillovers and provide practical insights for policymakers and corporate managers. Our documentation of the unsophisticated investors channel as a mechanism for cross-border

regulatory transmission suggests that securities regulators must consider international spillover effects when designing domestic reforms. For corporate managers, these results highlight the importance of monitoring foreign regulatory developments that may affect investor sophistication levels, even when such regulations do not directly apply to their firms. The evidence that relatively unsophisticated investors, when aided by improved regulatory infrastructure, can influence corporate disclosure practices expands our understanding of market discipline mechanisms and suggests new avenues for enhancing market efficiency through targeted regulatory interventions.

BACKGROUND AND HYPOTHESIS DEVELOPMENT

Background

National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations represents a landmark harmonization effort by the Canadian Securities Administrators (CSA) that fundamentally transformed the regulatory landscape for investment dealers and advisers across Canada. Prior to 2005, Canada's securities regulation operated under a fragmented provincial system where investment professionals faced disparate registration requirements, creating significant compliance burdens and regulatory inefficiencies (Anand, 2011; MacIntosh, 2002). The CSA introduced NI 31-103 to address these systemic issues by establishing unified registration standards, standardized proficiency requirements, and consistent ongoing obligations for registrants operating across provincial boundaries (Johnston & Rockwell, 2006).

The regulation became effective on September 28, 2009, following extensive consultation periods that began in 2005, and applies to all investment dealers, portfolio managers, exempt market dealers, and investment fund managers operating in Canadian capital markets (Canadian Securities Administrators, 2009). The harmonized framework introduced

enhanced capital adequacy requirements, standardized know-your-client obligations, and strengthened suitability assessments designed to protect retail investors from unsuitable investment recommendations (Cumming & Johan, 2008; Rousseau, 2006). These provisions particularly impact firms serving unsophisticated investors by requiring more rigorous disclosure practices and enhanced due diligence procedures when recommending complex financial products.

The implementation of NI 31-103 occurred during a period of significant regulatory reform in North American capital markets, coinciding with enhanced disclosure requirements under the Sarbanes-Oxley Act in the United States and the adoption of International Financial Reporting Standards in Canada (Fortin & Pittman, 2007; Daske et al., 2008). This regulatory convergence created spillover effects across integrated North American capital markets, as institutional investors and financial intermediaries operating in both jurisdictions adapted their practices to meet heightened regulatory standards (Coffee, 2007). The enhanced investor protection measures in Canada particularly influenced cross-border investment flows and information intermediation, as improved regulatory credibility attracted greater participation from sophisticated institutional investors while simultaneously raising the bar for retail investor protection.

Theoretical Framework

The implementation of National Instrument 31-103 in Canada provides a unique setting to examine how regulatory changes affecting financial intermediaries influence corporate voluntary disclosure decisions through the unsophisticated investors channel. The theoretical foundation for this relationship rests on the premise that regulatory enhancements in financial intermediation create information spillover effects that alter the cost-benefit calculus of voluntary disclosure for firms seeking to attract and retain different investor clienteles (Merton, 1987; Hong & Huang, 2005).

The unsophisticated investors framework posits that retail investors possess limited information processing capabilities, rely heavily on financial intermediaries for investment guidance, and exhibit behavioral biases that affect their investment decisions (De Long et al., 1990; Barber & Odean, 2008). These investors typically lack the resources and expertise to conduct sophisticated financial analysis, making them particularly dependent on simplified information signals and intermediary recommendations when making investment choices. Consequently, firms targeting unsophisticated investor clienteles face distinct disclosure incentives compared to those primarily serving institutional investors, as they must balance the benefits of increased transparency against the costs of providing information that may be misinterpreted or inadequately processed by less sophisticated market participants (Miller, 2010; Blankespoor et al., 2014).

The connection between Canadian regulatory reforms and U.S. voluntary disclosure operates through cross-border information intermediation and investor clientele effects. Enhanced registration requirements for Canadian investment advisers create credibility signals that influence the information environment for firms operating in integrated North American capital markets, particularly affecting how unsophisticated investors perceive and process corporate disclosures (Bushman & Smith, 2001; Lambert et al., 2007). This theoretical framework suggests that regulatory improvements in financial intermediation can create incentives for voluntary disclosure adjustments as firms respond to changing investor sophistication and information processing capabilities in their target markets.

Hypothesis Development

The economic mechanisms linking National Instrument 31-103 to voluntary disclosure decisions in the U.S. operate through several interconnected channels that collectively influence how firms communicate with unsophisticated investors. Enhanced registration requirements for Canadian investment advisers create a credibility spillover effect that

influences cross-border investment flows and information intermediation practices (Khurana & Michas, 2011; Christensen et al., 2013). When Canadian financial intermediaries face stricter regulatory oversight and enhanced proficiency requirements, their investment recommendations carry greater credibility with unsophisticated investors who rely heavily on intermediary guidance for investment decisions. This increased credibility creates incentives for U.S. firms to adjust their voluntary disclosure practices to better serve the information needs of unsophisticated investors who may be influenced by these enhanced Canadian intermediary services.

The theoretical literature on investor sophistication suggests that regulatory improvements in financial intermediation can fundamentally alter the information processing environment in capital markets (Hirshleifer & Teoh, 2003; Lawrence, 2013). Unsophisticated investors typically exhibit limited attention, bounded rationality, and reliance on simplified heuristics when making investment decisions, making them particularly sensitive to changes in the quality and credibility of information intermediaries (Libby et al., 2002; Elliott et al., 2007). When Canadian regulatory reforms enhance the quality of investment advice available to retail investors, U.S. firms competing for similar investor clienteles face pressure to increase their voluntary disclosure to maintain competitive positioning. This competitive dynamic is particularly pronounced for firms with significant retail investor bases, as these companies must ensure their disclosure practices remain attractive relative to firms benefiting from enhanced Canadian intermediary services.

Prior literature provides mixed theoretical predictions regarding the directional impact of enhanced financial intermediation on voluntary disclosure. One stream suggests that improved intermediary quality reduces firms' incentives for voluntary disclosure, as sophisticated intermediaries can extract and process information more efficiently, reducing the marginal benefit of additional corporate communication (Bushman et al., 2004; Yu, 2008).

However, competing theoretical perspectives argue that enhanced intermediary credibility increases demand for high-quality voluntary disclosure, as credible intermediaries require more comprehensive information to maintain their reputational capital and serve their clients effectively (Diamond & Verrecchia, 1991; Kim & Verrecchia, 1994). In the context of unsophisticated investors, we expect the latter mechanism to dominate, as enhanced Canadian regulatory oversight creates demand for more accessible and comprehensive voluntary disclosure that can be effectively processed and communicated by credible intermediaries to their retail clients.

H1: The implementation of National Instrument 31-103 Registration Requirements in Canada is positively associated with increased voluntary disclosure by U.S. firms serving unsophisticated investor clienteles.

RESEARCH DESIGN

Sample Selection and Regulatory Context

Our sample comprises all firms in the Compustat universe during the period surrounding the implementation of National Instrument 31-103 Registration Requirements in Canada in 2005. The Canadian Securities Administrators (CSA) implemented this regulation to harmonize registration requirements for investment dealers and advisers across Canada, streamlining the registration process and enhancing investor protection. While National Instrument 31-103 directly targets investment dealers and advisers in Canada, our analysis examines all U.S. firms in the Compustat universe to capture potential spillover effects through cross-border investment channels. We employ a pre/post research design where the treatment variable affects all firms in our sample, reflecting the regulation's broad impact on North American capital markets through enhanced investor protection mechanisms and improved regulatory efficiency.

Model Specification

We examine the relationship between National Instrument 31-103 and voluntary disclosure in the U.S. through the investors channel using an ordinary least squares regression framework. Our empirical model builds on prior literature examining regulatory changes and voluntary disclosure (Healy and Palepu, 2001; Beyer et al., 2010). The regression model captures how the enhanced registration requirements and investor protection mechanisms in Canada influence U.S. firms' management forecast frequency through cross-border investor demand and capital market integration effects.

We include control variables established in prior voluntary disclosure literature to isolate the treatment effect. Following Ajinkya et al. (2005) and Rogers and Stocken (2005), we control for institutional ownership, firm size, book-to-market ratio, profitability, stock returns, earnings volatility, loss occurrence, and litigation risk. These variables capture firm-specific characteristics that influence managers' disclosure incentives and investors' information demands. We also include a time trend to control for secular changes in disclosure practices over our sample period.

A potential endogeneity concern arises from omitted variables that simultaneously affect both the regulatory environment and disclosure decisions. Our research design addresses this concern by exploiting the exogenous timing of National Instrument 31-103's implementation and examining all firms rather than a self-selected sample. The regulation's focus on Canadian investment intermediaries provides an identification strategy that minimizes concerns about reverse causality between U.S. firm disclosure and the regulatory change.

Mathematical Model

Our empirical specification is:

$$FreqMF = \beta_0 + \beta_1 Treatment\ Effect + \gamma_1 Institutional\ Ownership + \gamma_2 Firm\ Size + \gamma_3 Book\text{-}to\text{-}Market + \gamma_4 ROA + \gamma_5 Stock\ Return + \gamma_6 Earnings\ Volatility + \gamma_7 Loss + \gamma_8 Class\ Action\ Risk + \gamma_9 Time\ Trend + \varepsilon$$

Variable Definitions

The dependent variable, FreqMF, measures management forecast frequency, capturing the number of management earnings forecasts issued by each firm during the sample period. This variable reflects managers' voluntary disclosure decisions and their responsiveness to investor information demands (Hirst et al., 2008). The Treatment Effect variable is an indicator variable equal to one for the post-National Instrument 31-103 period from 2005 onwards, and zero otherwise, capturing the regulation's impact on all firms in our sample.

Our control variables follow established voluntary disclosure literature. Institutional Ownership represents the percentage of shares held by institutional investors, as institutional investors typically demand more frequent and detailed disclosures (Ajinkya et al., 2005). Firm Size is measured as the natural logarithm of market capitalization, with larger firms generally providing more voluntary disclosure due to greater analyst following and investor attention. Book-to-Market ratio captures growth opportunities and valuation uncertainty, with higher ratios potentially associated with increased disclosure to reduce information asymmetry. ROA measures firm profitability, as more profitable firms may have incentives to signal their performance through voluntary disclosure.

Stock Return captures recent stock performance, which may influence managers' disclosure incentives depending on whether returns reflect favorable or unfavorable information. Earnings Volatility measures the variability in firm performance, with higher volatility potentially increasing the value of management guidance. Loss is an indicator variable for firms reporting negative earnings, as loss firms may face different disclosure

incentives due to investor concerns about financial distress. Class Action Risk captures litigation exposure, as firms with higher litigation risk may reduce voluntary disclosure to avoid legal liability (Rogers and Stocken, 2005). These variables collectively capture the key determinants of voluntary disclosure through the investors channel, reflecting how firm characteristics influence both investor information demands and managers' disclosure incentives.

Sample Construction

We construct our sample using data from multiple sources over a five-year window surrounding the 2005 implementation of National Instrument 31-103, spanning two years before and two years after the regulation. The post-regulation period includes observations from 2005 onwards to capture the full impact of the regulatory change. We obtain financial statement data from Compustat, management forecast data from I/B/E/S, auditor information from Audit Analytics, and stock return data from CRSP. This comprehensive data collection allows us to construct our dependent variable and control variables while ensuring data quality and completeness.

Our sample construction process yields 19,402 firm-year observations of U.S. public companies. We apply standard filters to ensure data quality, including the availability of necessary financial statement items and stock price data. The treatment group consists of all firms in the post-2005 period, while the control group comprises the same firms in the pre-2005 period, creating a natural experiment framework. We exclude firms with missing data for key variables and apply winsorization procedures to control for the influence of extreme observations.

The research design treats all firms as potentially affected by National Instrument 31-103 through the investors channel, recognizing that enhanced registration requirements and

investor protection in Canada can influence cross-border investment flows and information demands. This approach captures both direct effects on firms with Canadian operations and indirect effects through integrated North American capital markets. Our sample restrictions ensure sufficient observations for robust statistical inference while maintaining the integrity of our identification strategy.

DESCRIPTIVE STATISTICS

Sample Description and Descriptive Statistics

Our sample comprises 19,402 firm-year observations from 5,097 unique U.S. firms spanning the period 2003 to 2007. This timeframe allows us to examine the effects of Canada's National Instrument 31-103 registration requirements on cross-border investment patterns and their implications for U.S. firms' institutional ownership structures.

We observe substantial variation in institutional ownership across our sample firms. The natural logarithm of institutional ownership (linstown) exhibits a mean of 0.475 with a standard deviation of 0.311, indicating considerable heterogeneity in institutional investor presence. The distribution spans from 0.001 to 1.110, with the interquartile range extending from 0.183 to 0.748, suggesting that institutional ownership varies significantly across firms in our sample.

Firm size, measured as the natural logarithm of market capitalization (lsize), shows a mean of 5.794 and standard deviation of 2.038, reflecting the inclusion of firms across the size spectrum. The book-to-market ratio (lbtm) displays a mean of 0.552 with substantial dispersion (standard deviation of 0.512), consistent with our sample encompassing both growth and value firms. Notably, the distribution exhibits a slight right skew, as evidenced by the mean exceeding the median (0.470).

Profitability measures reveal interesting patterns in our sample. Return on assets (lroa) shows a mean of -0.044, indicating that the average firm experienced modest losses during our sample period, which aligns with the challenging market conditions following the dot-com bubble. The median ROA of 0.021 suggests that while many firms remained profitable, a substantial portion reported losses. This observation is corroborated by our loss indicator (lloss), which shows that 30.9% of firm-year observations report negative earnings.

Stock return performance (lsaret12) exhibits high volatility, with a standard deviation of 0.514 and values ranging from -0.841 to 2.649. The negative mean return of -0.003 reflects the market conditions during our sample period. Earnings volatility (levol) shows considerable variation across firms, with a mean of 0.155 and standard deviation of 0.298, indicating substantial differences in earnings predictability.

The treatment variables reveal that our sample represents the treated group in our quasi-experimental design, with 57.3% of observations occurring in the post-treatment period. Mutual fund coverage (freqMF) shows substantial variation, with a mean of 0.684 and standard deviation of 0.913, suggesting heterogeneous analyst and institutional attention across sample firms. These descriptive statistics provide the foundation for examining how regulatory changes affecting sophisticated investors impact institutional ownership patterns among U.S. firms.

RESULTS

Regression Analysis

We examine the association between the implementation of National Instrument 31-103 Registration Requirements in Canada and voluntary disclosure by U.S. firms using three model specifications that progressively incorporate control variables and fixed effects. Our findings provide consistent evidence that contradicts our theoretical predictions. Across all

three specifications, we find a negative association between the Canadian regulatory change and U.S. firms' voluntary disclosure levels. In our most restrictive specification (3) that includes firm fixed effects and comprehensive controls, we find that the implementation of NI 31-103 is associated with a decrease of 0.0617 in voluntary disclosure (t-statistic = -5.68, $p < 0.001$). This result suggests that rather than increasing voluntary disclosure to compete with enhanced Canadian intermediary services, U.S. firms actually reduced their voluntary disclosure following the regulatory change. The negative coefficient remains statistically significant and economically meaningful across all specifications, indicating that our findings are robust to alternative model configurations and not driven by omitted variable bias or firm-specific unobservables.

The statistical significance of our treatment effect strengthens considerably as we move from the univariate specification to more comprehensive models. While specification (1) yields an insignificant coefficient of -0.0039 ($p = 0.6838$), the inclusion of control variables in specification (2) produces a highly significant treatment effect of -0.0853 ($p < 0.001$), and our preferred firm fixed effects specification (3) maintains strong statistical significance with a coefficient of -0.0617 ($p < 0.001$). The dramatic improvement in model fit, with R-squared increasing from effectively zero in specification (1) to 0.8419 in specification (3), demonstrates the importance of controlling for firm characteristics and unobserved heterogeneity. The economic magnitude of our findings is substantial, suggesting that the Canadian regulatory change is associated with approximately a 6.17 percentage point decrease in voluntary disclosure levels among U.S. firms. This effect size represents a meaningful reduction in corporate transparency that has important implications for information asymmetry and capital market efficiency.

Our control variables generally behave consistently with prior literature on voluntary disclosure determinants, lending credibility to our model specification. We find that firm size

(lsize) exhibits a positive and significant association with voluntary disclosure across specifications (2) and (3), consistent with economies of scale in information production and greater analyst following for larger firms (Lang & Lundholm, 1993). The negative coefficient on losses (lloss) aligns with managers' incentives to reduce disclosure when reporting unfavorable news (Verrecchia, 1983). Interestingly, institutional ownership (linstown) shows contrasting effects across specifications, positive in specification (2) but negative in specification (3) with firm fixed effects, suggesting that the cross-sectional relationship between institutional ownership and disclosure differs from within-firm variation over time. Stock return volatility (levol) and stock returns (lsaret12) also exhibit sign reversals between specifications (2) and (3), highlighting the importance of controlling for firm fixed effects when examining disclosure determinants. These results contradict our stated hypothesis (H1), which predicted a positive association between NI 31-103 implementation and U.S. voluntary disclosure. Rather than supporting the theoretical mechanism that enhanced Canadian intermediary credibility would increase demand for U.S. voluntary disclosure, our findings suggest an alternative economic channel may be operating, such as reduced competitive pressure for disclosure or substitution effects between mandatory and voluntary disclosure regimes.

CONCLUSION

This study examines how Canada's National Instrument 31-103 Registration Requirements, implemented in 2005 to harmonize registration requirements for investment dealers and advisers, affected voluntary disclosure practices among U.S. firms through the investor channel. We investigate whether enhanced regulatory harmonization and investor protection in Canada influenced U.S. firms' disclosure decisions as they competed for cross-border investment capital. Our empirical analysis reveals a statistically significant negative relationship between the implementation of NI 31-103 and voluntary disclosure levels

among U.S. firms, with treatment effects ranging from -0.0617 to -0.0853 depending on model specification.

The results demonstrate that the regulatory harmonization in Canada led to a measurable reduction in voluntary disclosure among U.S. firms, with the effect being both statistically and economically significant. In our most robust specification (Specification 3), we find a treatment effect of -0.0617 (t-statistic = 5.68, $p < 0.001$), indicating that U.S. firms reduced their voluntary disclosure following the implementation of NI 31-103. This finding suggests that as Canadian regulatory requirements became more streamlined and investor protection mechanisms strengthened, U.S. firms may have perceived reduced competitive pressure to engage in costly voluntary disclosure to attract Canadian institutional investors. The high R-squared of 0.8419 in our preferred specification indicates that our model explains a substantial portion of the variation in voluntary disclosure, lending credibility to our findings. The control variables perform as expected, with firm size positively associated with disclosure and loss-making firms exhibiting lower disclosure levels, consistent with prior literature (Healy and Palepu, 2001; Beyer et al., 2010).

Our findings carry important implications for regulators seeking to understand the cross-border effects of domestic regulatory reforms. The evidence suggests that regulatory harmonization initiatives, while beneficial for domestic market efficiency, can have unintended spillover effects on foreign firms' disclosure practices. U.S. regulators should consider these cross-border dynamics when evaluating the competitive position of domestic capital markets, as reduced voluntary disclosure may signal decreased transparency and potentially affect market quality (Diamond and Verrecchia, 1991; Verrecchia, 2001). For managers, our results indicate that regulatory changes in key investor jurisdictions can alter the cost-benefit calculus of voluntary disclosure decisions. The negative treatment effect suggests that managers perceived the enhanced Canadian regulatory environment as reducing the

marginal benefit of voluntary disclosure for attracting Canadian capital, leading to a strategic reduction in disclosure levels. This finding aligns with theoretical predictions that firms adjust disclosure policies in response to changes in the information environment and investor sophistication (Dye, 2001; Admati and Pfleiderer, 2000). For investors, particularly those engaged in cross-border investment activities, our results highlight how regulatory harmonization in one jurisdiction can affect information availability from firms in other jurisdictions, potentially influencing investment decision-making processes and portfolio allocation strategies.

The study contributes to the growing literature on the international spillover effects of domestic regulatory reforms and extends research on the determinants of voluntary disclosure in cross-border contexts (Christensen et al., 2013; Shroff et al., 2013). Our findings complement studies examining how regulatory competition and harmonization affect firm behavior and market outcomes, providing evidence that domestic regulatory improvements can reduce competitive pressures on foreign firms to engage in costly signaling through voluntary disclosure. This research also adds to the literature on the role of institutional investors in shaping corporate disclosure practices, suggesting that changes in investor protection regimes can alter the disclosure equilibrium across national boundaries.

Several limitations constrain the interpretation of our findings and suggest avenues for future research. First, our identification strategy relies on the assumption that the timing of NI 31-103 implementation was exogenous to U.S. firms' disclosure decisions, which may not hold if Canadian regulators considered cross-border competitive effects when designing the regulation. Second, we focus on a single regulatory reform in one jurisdiction, limiting the generalizability of our findings to other regulatory contexts or bilateral relationships. The investor channel mechanism, while theoretically motivated, represents one of several potential transmission channels through which foreign regulatory changes might affect domestic firm

behavior. Future research could explore alternative mechanisms, such as competitive effects in product markets or changes in analyst coverage patterns.

Future studies could extend this analysis by examining the heterogeneous effects across different types of firms, industries, or disclosure categories to better understand which firms are most sensitive to foreign regulatory changes. Additionally, researchers could investigate whether similar patterns emerge following other major regulatory harmonization initiatives, such as the implementation of International Financial Reporting Standards or changes in cross-listing requirements. Exploring the role of specific investor types, such as pension funds or sovereign wealth funds, in transmitting regulatory effects across borders would provide deeper insights into the mechanisms underlying our findings. Finally, examining whether the observed effects persist over longer time horizons or represent temporary adjustments to the new regulatory equilibrium would enhance our understanding of the dynamic nature of cross-border regulatory spillovers.

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Table 1

Descriptive Statistics

Variables	N	Mean	Std. Dev.	P25	Median	P75
FreqMF	19,402	0.6836	0.9134	0.0000	0.0000	1.6094
Treatment Effect	19,402	0.5734	0.4946	0.0000	1.0000	1.0000
Institutional ownership	19,402	0.4754	0.3107	0.1828	0.4805	0.7477
Firm size	19,402	5.7936	2.0384	4.3283	5.7292	7.1503
Book-to-market	19,402	0.5519	0.5121	0.2743	0.4701	0.7187
ROA	19,402	-0.0440	0.2543	-0.0264	0.0206	0.0646
Stock return	19,402	-0.0033	0.5142	-0.2887	-0.0943	0.1453
Earnings volatility	19,402	0.1550	0.2983	0.0223	0.0548	0.1512
Loss	19,402	0.3088	0.4620	0.0000	0.0000	1.0000
Class action litigation risk	19,402	0.3474	0.3155	0.0884	0.2243	0.5604
Time Trend	19,402	1.9147	1.4179	1.0000	2.0000	3.0000

This table shows the descriptive statistics. All continuous variables are winsorized at the 1st and 99th percentiles.

Table 2
Pearson Correlations
National Instrument 31103 Registration Requirements Canada Unsophisticated Investors

	Treatment Effect	FreqMF	Institutional ownership	Firm size	Book-to-market	ROA	Stock return	Earnings volatility	Loss	Class action litigation risk
Treatment Effect	1.00	-0.00	**0.15**	**0.15**	**-0.19**	**0.08**	-0.01	**-0.02**	**-0.09**	**-0.25**
FreqMF	-0.00	1.00	**0.46**	**0.45**	**-0.11**	**0.23**	-0.01	**-0.13**	**-0.25**	**0.04**
Institutional ownership	**0.15**	**0.46**	1.00	**0.68**	**-0.13**	**0.28**	**-0.12**	**-0.21**	**-0.23**	-0.01
Firm size	**0.15**	**0.45**	**0.68**	1.00	**-0.30**	**0.34**	-0.01	**-0.25**	**-0.37**	-0.01
Book-to-market	**-0.19**	**-0.11**	**-0.13**	**-0.30**	1.00	**0.06**	**-0.16**	**-0.15**	**0.06**	**-0.02**
ROA	**0.08**	**0.23**	**0.28**	**0.34**	**0.06**	1.00	**0.16**	**-0.52**	**-0.61**	**-0.24**
Stock return	-0.01	-0.01	**-0.12**	-0.01	**-0.16**	**0.16**	1.00	-0.01	**-0.15**	**-0.02**
Earnings volatility	**-0.02**	**-0.13**	**-0.21**	**-0.25**	**-0.15**	**-0.52**	-0.01	1.00	**0.38**	**0.27**
Loss	**-0.09**	**-0.25**	**-0.23**	**-0.37**	**0.06**	**-0.61**	**-0.15**	**0.38**	1.00	**0.30**
Class action litigation risk	**-0.25**	**0.04**	-0.01	-0.01	**-0.02**	**-0.24**	**-0.02**	**0.27**	**0.30**	1.00

This table shows the Pearson correlations for the sample. Correlations that are significant at the 0.05 level or better are highlighted in bold.

Table 3

The Impact of National Instrument 31103 Registration Requirements Canada on Management Forecast Frequency

	(1)	(2)	(3)
Treatment Effect	-0.0039 (0.41)	-0.0853*** (7.21)	-0.0617*** (5.68)
Institutional ownership		0.9137*** (19.25)	-0.0992* (1.68)
Firm size		0.0861*** (10.10)	0.1453*** (10.84)
Book-to-market		-0.0371** (2.46)	0.0178 (1.16)
ROA		0.2026*** (6.56)	0.0434 (1.53)
Stock return		-0.0003 (0.02)	-0.0258*** (3.09)
Earnings volatility		0.1200*** (3.74)	-0.1032** (2.40)
Loss		-0.2227*** (11.74)	-0.1086*** (7.10)
Class action litigation risk		0.1669*** (6.43)	-0.0197 (1.12)
Time Trend		-0.0273*** (5.14)	-0.0150*** (2.92)
Firm fixed effects	No	No	Yes
N	19,402	19,402	19,402
R^2	0.0000	0.2705	0.8419

Notes: t-statistics in parentheses. *, **, and *** represent significance at the 10%, 5%, and 1% level, respectively.