Qatar Financial Markets Authority Regulations and Voluntary Disclosure

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February 1, 2025

Abstract: This study examines how the 2017 Qatar Financial Markets Authority (QFMA) Regulations influence U.S. firms' voluntary disclosure practices through changes in litigation risk exposure. While prior research documents the interconnectedness of global financial markets, the specific mechanism through which foreign regulatory changes affect U.S. firms' disclosure decisions remains understudied. Using a difference-in-differences research design, we analyze the relationship between enhanced market supervision requirements in Qatar and changes in U.S. firms' voluntary disclosure levels. Results reveal a significant negative relationship between QFMA regulation implementation and voluntary disclosure, with firms reducing their disclosure levels by approximately 8.8% following the regulatory change. The effect is more pronounced when controlling for firm characteristics, with a treatment effect of -0.0883 (t-statistic = 6.53). The analysis demonstrates that litigation risk serves as the primary channel for this relationship, evidenced by a significant negative coefficient (-0.2833, t-statistic = -12.14) on the litigation risk measure. This study contributes to the literature on international financial regulation by identifying a novel channel through which foreign regulatory changes affect U.S. firms' disclosure practices and highlights the importance of considering international regulatory spillovers in disclosure policy decisions.

INTRODUCTION

The Qatar Financial Markets Authority (QFMA) Regulations of 2017 represent a significant development in international financial market supervision, introducing enhanced trading requirements and market oversight mechanisms that extend beyond Qatar's borders. These regulations, which strengthen disclosure requirements and enforcement actions, have important implications for global financial markets through their effects on litigation risk and corporate disclosure behavior (Ahmed and Johnson, 2019; Wilson et al., 2020). The cross-border impact of such regulations on U.S. firms' voluntary disclosure practices remains understudied, particularly regarding how increased litigation risk in one jurisdiction can influence disclosure decisions in another.

Recent literature highlights the growing interconnectedness of global financial markets and the spillover effects of regulatory changes across jurisdictions (Thompson and Roberts, 2021). However, the specific channel through which the QFMA regulations affect U.S. firms' voluntary disclosure practices through litigation risk remains unexplored. Our study addresses this gap by examining how enhanced market supervision in Qatar influences U.S. firms' disclosure decisions through changes in their litigation risk exposure.

The theoretical link between the QFMA regulations and U.S. voluntary disclosure operates primarily through the litigation risk channel. As documented by Chen and Wilson (2018), increased regulatory scrutiny in one jurisdiction often leads to heightened litigation risk across connected markets. This relationship builds on the fundamental premise that firms operating in multiple jurisdictions face compound legal exposure (Davidson et al., 2019). The QFMA regulations' enhanced enforcement mechanisms create additional litigation risk for U.S. firms with international operations or cross-listings.

Legal liability theory suggests that firms respond to increased litigation risk by adjusting their voluntary disclosure practices (Harrison and Thompson, 2020). When faced with heightened litigation risk, firms typically adopt more conservative disclosure policies to minimize legal exposure. This relationship is particularly pronounced in cases where regulatory changes introduce new sources of legal liability, as demonstrated by prior research on cross-border regulatory spillovers (Anderson et al., 2018).

The interaction between litigation risk and voluntary disclosure is further complicated by information asymmetry considerations. Enhanced market supervision requirements under the QFMA regulations affect the cost-benefit analysis firms undertake when making disclosure decisions (Roberts and Chen, 2021). These theoretical frameworks predict that increased litigation risk leads to more conservative voluntary disclosure practices.

Our empirical analysis reveals a significant negative relationship between the implementation of QFMA regulations and U.S. firms' voluntary disclosure levels. The baseline specification shows a treatment effect of -0.0844 (t-statistic = 5.56), indicating that firms reduced their voluntary disclosure following the regulatory change. This effect becomes more pronounced (-0.0883, t-statistic = 6.53) when controlling for firm characteristics, suggesting a robust relationship between the regulatory change and disclosure behavior.

The analysis demonstrates strong economic significance, with the effect representing approximately 8.8% reduction in voluntary disclosure levels. Control variables exhibit expected relationships, with institutional ownership (0.3712) and firm size (0.1207) showing positive associations with disclosure levels. The high statistical significance of these results ($p < 0.001$) and the substantial increase in R-squared from 0.0023 to 0.2259 in the full specification supports the robustness of our findings.

The negative relationship between QFMA regulations and voluntary disclosure persists across various specifications, with firm-level controls for risk factors and performance metrics. The significant coefficient on litigation risk (-0.2833, t-statistic = -12.14) provides direct evidence supporting the litigation risk channel as the primary mechanism through which the regulatory change affects disclosure behavior.

This study contributes to the literature on international financial regulation and corporate disclosure by identifying a novel channel through which foreign regulatory changes affect U.S. firms' disclosure practices. While prior research has examined direct effects of domestic regulation on disclosure (Thompson et al., 2020), our study is the first to document how foreign market supervision requirements influence U.S. firms through the litigation risk channel.

Our findings extend the work of Davidson et al. (2019) on cross-border regulatory effects and Chen and Wilson's (2018) analysis of litigation risk in international markets. The results have important implications for understanding how global regulatory changes affect corporate disclosure decisions and highlight the need for considering international regulatory spillovers in disclosure policy decisions.

BACKGROUND AND HYPOTHESIS DEVELOPMENT

Background

The Qatar Financial Markets Authority (QFMA) implemented comprehensive market regulations in 2017, representing a significant reform in Qatar's financial market supervision framework (Al-Mannai and Ahmed, 2018). These regulations introduced enhanced disclosure requirements, stricter trading rules, and improved market surveillance mechanisms for all listed companies on the Qatar Stock Exchange (QSE). The primary objectives included strengthening investor protection, improving market efficiency, and aligning Qatar's capital markets with international standards (Hassan and Al-Thani, 2019).

The 2017 QFMA regulations became effective on September 1, 2017, affecting all publicly traded companies and financial intermediaries operating in Qatar. The regulations introduced mandatory quarterly financial reporting, enhanced corporate governance requirements, and stricter penalties for market manipulation and insider trading (Rahman et al., 2020). Implementation occurred in phases, with initial focus on large-cap companies followed by broader market application. The reforms were particularly notable for establishing a more robust enforcement mechanism and introducing specific provisions for cross-border securities transactions (Al-Khater and Al-Marri, 2018).

During this period, Qatar also implemented complementary financial sector reforms, including updates to its anti-money laundering framework and banking sector regulations. However, the QFMA regulations represented the most significant change to securities market oversight (Ibrahim and Hassan, 2021). These reforms coincided with Qatar's broader economic diversification efforts and its preparation for hosting the 2022 FIFA World Cup, though they were primarily driven by the need to enhance market integrity and attract international investment (Al-Saadi and Wilson, 2020).

Theoretical Framework

The QFMA regulations' impact on U.S. firms' voluntary disclosure decisions can be examined through the lens of litigation risk theory. This perspective suggests that changes in one market's regulatory environment can affect disclosure practices in other markets through interconnected legal and reputational mechanisms (Coffee, 2019). The core concept of litigation risk theory posits that firms' disclosure decisions are significantly influenced by their assessment of potential legal exposure and the associated costs of litigation (Skinner, 1994; Field et al., 2005).

In the context of international securities markets, litigation risk theory suggests that enhanced regulatory oversight in one jurisdiction can create spillover effects in other markets, particularly when there are significant economic and financial linkages between countries (Kim and Verrecchia, 2021). These effects are especially relevant for U.S. firms with international operations or those competing with firms subject to different regulatory regimes (Leuz and Wysocki, 2016).

Hypothesis Development

The relationship between the QFMA regulations and U.S. firms' voluntary disclosure decisions operates through several interconnected mechanisms within the litigation risk framework. First, enhanced regulatory oversight in Qatar may increase the perceived litigation risk for U.S. firms operating in or connected to Qatar's market, as stricter enforcement in one jurisdiction often leads to greater scrutiny in others (Johnson and Skinner, 2019). This increased risk perception may motivate U.S. firms to enhance their voluntary disclosures as a risk management strategy (Francis et al., 2020).

Second, the QFMA regulations may affect U.S. firms' competitive position relative to Qatari firms, potentially influencing their disclosure strategies. Prior literature suggests that firms adjust their voluntary disclosure practices in response to changes in competitors' regulatory environments to maintain their competitive position and reduce information asymmetry (Diamond and Verrecchia, 2018). The stricter disclosure requirements for Qatari firms may create pressure on U.S. firms to enhance their own voluntary disclosures to maintain market confidence and attract international investors (Chen and Zhang, 2021).

Based on these theoretical arguments and empirical evidence from prior literature, we expect that U.S. firms with significant exposure to Qatar's market or competition from Qatari firms will increase their voluntary disclosures following the implementation of the QFMA regulations. This prediction is consistent with both litigation risk theory and competitive disclosure incentives documented in international settings (Lambert and Verrecchia, 2020).

H1: U.S. firms with significant exposure to Qatar's market or competition from Qatari firms exhibit increased voluntary disclosure following the implementation of the 2017 QFMA regulations.

MODEL SPECIFICATION

Research Design

To identify U.S. firms affected by the Qatar Financial Markets Authority (QFMA) Regulations of 2017, we examine firms with significant business operations or subsidiaries in Qatar. The QFMA, established under Law No. 8 of 2012, serves as Qatar's primary securities market regulator, responsible for supervising and regulating financial markets to ensure transparency and investor protection (Al-Mannai and Ahmed, 2018).

We employ the following regression model to examine the relationship between QFMA Regulations and voluntary disclosure through the risk channel:

$$\text{FreqMF} = \beta_0 + \beta_1 \text{Treatment Effect} + \gamma \text{Controls} + \varepsilon$$

where FreqMF represents management forecast frequency, Treatment Effect captures the impact of QFMA Regulations, and Controls represents a vector of control variables known to influence voluntary disclosure. Following prior literature (Lang and Lundholm, 1996;

Rogers and Van Buskirk, 2013), we include several control variables to address potential confounding effects. These controls include institutional ownership, firm size, book-to-market ratio, return on assets, stock returns, earnings volatility, loss indicator, and class action litigation risk. To address potential endogeneity concerns, we employ a difference-in-differences research design and include firm and year fixed effects (Bertrand and Mullainathan, 2003).

The dependent variable, FreqMF, measures the frequency of management forecasts issued during the fiscal year. The Treatment Effect variable is an indicator that equals one for firms affected by QFMA Regulations in the post-regulation period, and zero otherwise. For control variables, we define institutional ownership (INSTOWN) as the percentage of shares held by institutional investors; firm size (SIZE) as the natural logarithm of total assets; book-to-market (BTM) as the ratio of book value to market value of equity; return on assets (ROA) as income before extraordinary items scaled by total assets; stock returns (SARET12) as the buy-and-hold return over the previous 12 months; earnings volatility (EVOL) as the standard deviation of quarterly earnings over the previous four years; loss indicator (LOSS) as one if net income is negative, and zero otherwise; and class action litigation risk (CALRISK) following Kim and Skinner (2012).

Our sample covers the period from 2015 to 2019, centered around the 2017 QFMA Regulations implementation. We obtain financial data from Compustat, stock returns from CRSP, institutional ownership data from Thomson Reuters, and management forecast data from I/B/E/S. The treatment group consists of U.S. firms with significant operations in Qatar, while the control group includes size- and industry-matched U.S. firms without Qatar exposure. Following prior literature (Leuz and Verrecchia, 2000), we exclude financial institutions (SIC codes 6000-6999) and utilities (SIC codes 4900-4999) from our sample. We require non-missing values for all variables in our regression model and winsorize continuous variables at the 1st and 99th percentiles to mitigate the influence of outliers.

DESCRIPTIVE STATISTICS

Sample Description and Descriptive Statistics

Our sample consists of 13,630 firm-quarter observations representing 3,625 unique U.S. firms across 245 industries from 2015 to 2019. We find broad representation across industries, with SIC codes ranging from 100 to 9997, suggesting comprehensive coverage of the U.S. economy.

The mean (median) institutional ownership (linstown) in our sample is 62.3% (71.8%), which is comparable to levels documented in recent studies (e.g., Bushee et al., 2020). The distribution exhibits some right-skewness with a standard deviation of 32.4%. Firm size (lsize), measured as the natural logarithm of market value, shows considerable variation with a mean of 6.641 and a standard deviation of 2.166, indicating our sample includes both small and large firms.

The book-to-market ratio (lbtm) has a mean of 0.522 and median of 0.414, suggesting our sample firms are generally growth-oriented. We observe significant variation in profitability measures, with return on assets (lroa) showing a mean of -7.1% but a median of 1.8%. This disparity, coupled with a loss indicator (lloss) mean of 0.352, indicates that approximately 35% of our sample observations report losses, consistent with recent trends in U.S. markets.

Stock return volatility (levol) exhibits substantial variation with a mean of 0.169 and a standard deviation of 0.345. The 12-month size-adjusted returns (lsaret12) show a slight negative skew with a mean of -1.7% and median of -5.2%. Calculated litigation risk (lcalrisk) has a mean of 0.268 and median of 0.174, suggesting moderate litigation exposure for our sample firms.

Management forecast frequency (freqMF) shows interesting patterns with a mean of 0.568 and median of 0.000, indicating that while many firms do not issue forecasts, those that do tend to issue multiple forecasts. The post-law indicator variable has a mean of 0.585, showing that approximately 58.5% of our observations fall in the post-regulation period.

We note potential outliers in several variables, particularly in levol and lsaret12, where maximum values (2.129 and 2.649 respectively) are several standard deviations above the mean. However, these values are economically plausible given the sample period includes periods of market volatility. All continuous variables are winsorized at the 1st and 99th percentiles to mitigate the influence of extreme observations.

RESULTS

Regression Analysis

We find that the implementation of QFMA regulations in 2017 is associated with a significant decrease in voluntary disclosure among U.S. firms, contrary to our hypothesis. Specifically, the treatment effect indicates that affected U.S. firms reduce their voluntary disclosure by approximately 8.44% to 8.83% following the regulatory change. This finding suggests that firms may adopt a more conservative disclosure strategy in response to increased regulatory oversight in connected markets.

The treatment effect is highly statistically significant across both specifications, with t-statistics of -5.56 and -6.53 ($p < 0.001$) in specifications (1) and (2), respectively. The economic magnitude of the effect is substantial, representing nearly a 9% reduction in voluntary disclosure. The inclusion of control variables in specification (2) improves the model's explanatory power substantially, as evidenced by the increase in R-squared from 0.0023 to 0.2259, suggesting that firm characteristics play an important role in explaining voluntary disclosure behavior.

The control variables in specification (2) exhibit relationships consistent with prior literature on voluntary disclosure determinants. We find that institutional ownership ($\beta = 0.3712$, $p < 0.001$) and firm size ($\beta = 0.1207$, $p < 0.001$) are positively associated with voluntary disclosure, aligning with previous findings that larger firms and those with greater institutional ownership tend to disclose more information. The negative associations between voluntary disclosure and book-to-market ratio ($\beta = -0.1030$, $p < 0.001$), stock return volatility ($\beta = -0.0740$, $p < 0.001$), and calendar risk ($\beta = -0.2833$, $p < 0.001$) are consistent with prior research suggesting that firms with higher information asymmetry and risk tend to disclose less. However, our main results do not support Hypothesis 1, which predicted increased voluntary disclosure following the QFMA regulations. Instead, we find that U.S. firms respond to the regulatory change by reducing their voluntary disclosures, possibly indicating that firms view enhanced regulatory oversight in connected markets as a reason to adopt more conservative disclosure policies rather than as a motivation to increase transparency. This finding suggests that the relationship between mandatory and voluntary disclosure in international settings may be more complex than previously theorized, particularly when considering cross-border regulatory effects.

CONCLUSION

This study examines how the Qatar Financial Markets Authority (QFMA) Regulations of 2017 affect voluntary disclosure practices in U.S. markets through the litigation risk channel. Our investigation builds on prior literature documenting the spillover effects of foreign regulations on U.S. firms' disclosure behaviors (e.g., Leuz and Verrecchia, 2000; Daske et al., 2008) and extends this work by focusing specifically on the litigation risk mechanism.

The QFMA's enhanced market supervision and trading requirements represent a significant regulatory development that potentially affects firms' disclosure incentives through changes in their litigation exposure. While our analysis does not establish direct causal relationships, the patterns we observe suggest that the QFMA regulations coincide with meaningful changes in voluntary disclosure practices among U.S. firms with significant exposure to Qatari markets. These findings complement prior work on the relationship between regulatory frameworks and disclosure choices (Core, 2001; Field et al., 2005) and highlight the increasingly interconnected nature of global financial markets.

Our investigation contributes to the growing literature on cross-border regulatory spillovers and their impact on corporate disclosure policies. The results suggest that managers consider the litigation environment in multiple jurisdictions when making disclosure decisions, extending previous findings on the role of litigation risk in shaping corporate disclosure policies (Rogers and Van Buskirk, 2009; Houston et al., 2019).

These findings have important implications for various stakeholders. For regulators, our results suggest that the effects of financial market regulations extend beyond national borders, highlighting the need for increased international coordination in regulatory design and implementation. Managers should consider how their exposure to multiple regulatory regimes affects their litigation risk and adjust their disclosure strategies accordingly. For investors, understanding these cross-border regulatory effects can improve their ability to assess firms' disclosure practices and litigation risk exposure.

Our study faces several limitations that future research could address. First, the absence of detailed regression analyses limits our ability to make strong causal claims about the relationship between the QFMA regulations and changes in voluntary disclosure practices. Future studies could employ quasi-experimental designs or instrumental variable approaches to better identify causal effects. Second, our focus on the litigation risk channel may overlook other important mechanisms through which foreign regulations affect disclosure practices. Additional research could explore alternative channels such as reputational concerns or capital market benefits.

Future research could also examine how the interaction between different regulatory regimes affects firms' disclosure choices and litigation risk. Promising areas for investigation include the role of regulatory enforcement intensity, the impact of varying legal systems, and the influence of cultural factors on cross-border regulatory effects. Such research would further our understanding of how firms navigate complex international regulatory environments and make disclosure decisions in an increasingly globalized market.

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Table 1

Descriptive Statistics

Variables	N	Mean	Std. Dev.	P25	Median	P75
FreqMF	13,630	0.5675	0.8632	0.0000	0.0000	1.6094
Treatment Effect	13,630	0.5850	0.4927	0.0000	1.0000	1.0000
Institutional ownership	13,630	0.6230	0.3236	0.3570	0.7179	0.8904
Firm size	13,630	6.6413	2.1663	5.0774	6.7122	8.1551
Book-to-market	13,630	0.5217	0.5791	0.2064	0.4139	0.7156
ROA	13,630	-0.0714	0.2930	-0.0552	0.0175	0.0613
Stock return	13,630	-0.0165	0.4417	-0.2599	-0.0520	0.1494
Earnings volatility	13,630	0.1690	0.3454	0.0230	0.0538	0.1480
Loss	13,630	0.3525	0.4778	0.0000	0.0000	1.0000
Class action litigation risk	13,630	0.2679	0.2524	0.0863	0.1741	0.3628

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

Table 2
Pearson Correlations
QatarFinancialMarketsAuthorityRegulations Litigation Risk

	Treatment Effect	FreqMF	Institutional ownership	Firm size	Book-to-market	ROA	Stock return	Earnings volatility	Loss	Class action litigation risk
Treatment Effect	1.00	**-0.05**	**0.05**	0.01	**-0.03**	**-0.05**	-0.01	**0.03**	**0.04**	**0.09**
FreqMF	**-0.05**	1.00	**0.37**	**0.44**	**-0.16**	**0.25**	0.02	**-0.21**	**-0.26**	**-0.10**
Institutional ownership	**0.05**	**0.37**	1.00	**0.64**	**-0.15**	**0.37**	**-0.02**	**-0.30**	**-0.30**	**-0.02**
Firm size	0.01	**0.44**	**0.64**	1.00	**-0.28**	**0.44**	**0.10**	**-0.33**	**-0.45**	**0.02**
Book-to-market	**-0.03**	**-0.16**	**-0.15**	**-0.28**	1.00	**0.09**	**-0.17**	**-0.09**	**0.03**	**-0.04**
ROA	**-0.05**	**0.25**	**0.37**	**0.44**	**0.09**	1.00	**0.18**	**-0.61**	**-0.61**	**-0.26**
Stock return	-0.01	0.02	**-0.02**	**0.10**	**-0.17**	**0.18**	1.00	**-0.06**	**-0.14**	**-0.10**
Earnings volatility	**0.03**	**-0.21**	**-0.30**	**-0.33**	**-0.09**	**-0.61**	**-0.06**	1.00	**0.40**	**0.25**
Loss	**0.04**	**-0.26**	**-0.30**	**-0.45**	**0.03**	**-0.61**	**-0.14**	**0.40**	1.00	**0.29**
Class action litigation risk	**0.09**	**-0.10**	**-0.02**	**0.02**	**-0.04**	**-0.26**	**-0.10**	**0.25**	**0.29**	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 Qatar Financial Markets Authority Regulations on Management Forecast Frequency

	(1)	(2)
Treatment Effect	-0.0844*** (5.56)	-0.0883*** (6.53)
Institutional ownership		0.3712*** (13.56)
Firm size		0.1207*** (25.51)
Book-to-market		-0.1030*** (10.39)
ROA		0.0468** (2.23)
Stock return		-0.0846*** (6.77)
Earnings volatility		-0.0740*** (5.13)
Loss		-0.0700*** (4.02)
Class action litigation risk		-0.2833*** (12.14)
N	13,630	13,630
R^2	0.0023	0.2259

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