ACCOUNTING HORIZONS
Vol. XX, No. XX
MONTH YEAR
pp. 1–23

American Accounting Association
DOI: 10.2308/HORIZONS-2023-124

Regulatory Oversight of Voluntary SEC Filers

Richard A. Cazier
University of North Texas

Bret A. Johnson
George Mason University

SYNOPSIS: Over 1,600 firms exempt from registration requirements have voluntarily filed with the SEC at some point in the last two decades. We investigate whether the SEC scrutinizes these voluntary filings to a similar degree as those submitted by mandatory filers. Our findings suggest a lower likelihood of SEC review for voluntary filers, on average. We identify several factors, however, that help mitigate concerns regarding the overall quality of voluntary filers' regulatory oversight. First, financial statements and related disclosures are reviewed just as frequently for voluntary filers as for mandatory filers. Second, conditional on a comment letter being issued, the comment letter process is similarly rigorous for both groups. Finally, voluntary filers do not significantly differ from mandatory filers in the likelihood of an accounting restatement. Our results suggest the SEC monitors voluntary filers differently from mandatory filers, but that this monitoring is sufficient to promote comparable financial reporting quality.

Keywords: SEC; comment letter; voluntary filer; financial reporting regulation; bonding.

I. SYNOPSIS AND CONTRIBUTION TO PRACTICE

Regulatory oversight of capital markets increases investor confidence, leading to greater liquidity and a lower cost of capital for regulated firms. U.S. markets benefit from particularly strong regulatory oversight, where the Securities and Exchange Commission (SEC) actively monitors the filings of reporting companies and issues comment letters to improve potential reporting deficiencies. Many firms exempt from the SEC's mandatory registration requirements due to their size or limited diffusion of ownership have willingly subjected themselves to greater regulatory oversight by voluntarily submitting their filings with the SEC.[1] Resource constraints, however, force the SEC to prioritize their regulatory efforts by focusing on some firms more heavily than others. Although the extent to which the disclosures of voluntary filers are monitored by the SEC has important implications for investors, creditors, and managers of voluntary filers, no evidence exists regarding the extent of regulatory oversight voluntary filers actually receive. In this study, we investigate whether and how the SEC modifies the frequency and scope of its filing review process for voluntary filers relative to their mandatory filer counterparts.

Voluntary SEC filers do not meet the strict definition of "issuer" under Section 408 of the Sarbanes-Oxley Act of 2002 (SOX) and are thus exempt from that statute's requirements of regular and systematic reviews with a minimum frequency of once every three years.[2] However, once a voluntary filer makes the election to register with the SEC, it is

We acknowledge helpful comments from workshop participants at University of Connecticut, West Virginia University, the U.S. Securities and Exchange Commission, the 2021 Brigham Young University Accounting Research Symposium, anonymous reviewers, and the University of Virginia Darden Corporate Counsel Compliance Roundtable. We also thank Martin Schmidt for his excellent research assistance.

Richard A. Cazier, University of North Texas, G. Brint Ryan College of Business, Department of Accounting, Denton, TX, USA; Bret A. Johnson, George Mason University, Donald G. Costello College of Business, Department of Accounting, Fairfax, VA, USA.

Editor's note: Accepted by Elaine Henry, under the Senior Editorship of D. Scott Showalter.

Submitted: August 2023
Accepted: March 2024
Early Access: May 2024

[1] The Securities Offering Reform of 2005 required firms to disclose their voluntary filer status for fiscal years ending on or after December 1, 2005. Since then, approximately 1,600 firms exempt from the SEC's registration requirements have at some point voluntarily filed with the SEC.
[2] The authors' discussions with several SEC staff members who are directly involved in the SEC filing review process indicate that in practice, the SEC staff reviews voluntary SEC filers at least once every three years—despite the absence of a SOX 408 statutory requirement to do so. See additional discussion in Section II.

required to meet the same disclosure requirements as a mandatory filer, including the reporting requirements under Regulation S-X, S-K, and SOX. Since the SEC filing review process is the regulatory mechanism to monitor compliance with these disclosure requirements, an important question is to what extent the SEC actually scrutinizes the filings of voluntary SEC filers. If SEC staff believe that their mandate is to primarily protect the investors (and potential investors) of firms that are required to file with the SEC or that voluntary filers pose a lower risk of investor harm, voluntary filers may receive less regulatory scrutiny than their mandatory filing counterparts. However, some prior research suggests the SEC subjects filings to greater scrutiny when the filing firm is subject to less regulation from other sources. Hence SEC filings from voluntary filers may be scrutinized more heavily by the SEC because voluntary filers are not listed on national exchanges and receive less scrutiny from analysts, the financial press, and institutional investors.

Our study makes several contributions to practice. To the best of our knowledge, ours is the first academic study to examine the voluntary filing phenomenon and its implications for SEC regulatory oversight. Although voluntary SEC filers tend to be smaller and far fewer in number than mandatory filers, the combined total assets across voluntary filers averages just under $500 billion per year, suggesting these firms comprise a nontrivial segment of the economy. Our evidence on the regulatory oversight associated with the voluntary filing decision is informative to managers, investors, and creditors of these firms.

Our study also contributes to the line of research that examines how the SEC prioritizes its scarce resources to regulate financial markets, which is informative to both academics and regulators. Prior research suggests that the SEC prioritizes firms with certain characteristics, such as size, stock price volatility, and prior restatements, that reflect the firm's potential for investor harm. We test for differential monitoring efforts based on a firm's status as a voluntary or mandatory filer. Our study informs regulators regarding the efficacy of their regulatory efforts relating to voluntary filers.

In supplemental analysis, we also shed light on the factors associated with firms' decision to voluntarily file with the SEC. We specifically test whether the voluntary filing decision is associated with lower stringency of regulatory oversight from non-SEC sources. Prior studies suggest that firms with low oversight seek to increase investor confidence in the quality of their financial reporting by "bonding" to a high-quality disclosure regulator. Our supplemental analysis results support this bonding motivation for voluntary SEC filing.

II. LITERATURE REVIEW

Prior research strongly supports the view that disclosure regulation conveys corporate benefits in the form of greater investor confidence, which in turn decreases firms' cost of capital (Leuz and Wysocki 2016; Brüggemann, Kaul, Leuz, and Werner 2018). Financial reporting regulation is particularly strong in the U.S. (Doidge, Karolyi, Lins, Miller, and Stulz 2009; Foucault and Frésard 2012), where the SEC is tasked with regularly reviewing the disclosure filings of its registrants. To the extent that the decision to voluntarily file with the SEC is analogous to the decision of a non-U.S. firm to crosslist on a U.S. exchange, the "bonding hypothesis" may help explain firms' decision to file with the voluntarily SEC. Evidence from past research suggests the desire to bond to the U.S. regulatory environment is one determinant of foreign firms' decision to crosslist on U.S. exchanges (e.g., Coffee 2002).

Voluntary SEC filers are distinct from foreign crosslisters in several important ways. The majority of voluntary SEC filers are domestic companies. Foreign-based voluntary filers are not listed on any U.S. national exchange, although they may be listed on U.S. over-the-counter (OTC) markets. Another distinction is that the crosslisting decision simultaneously subjects foreign firms to a host of U.S.-based regulatory institutions, including a strong legal system that supports both regulatory enforcement as well as private enforcement via class-action lawsuits, high-quality accounting standards, and information intermediaries including analysts and the business press. In contrast, the voluntary filing decision subjects the firm to only one incremental regulatory institution—the SEC. Despite these differences, however, the bonding hypothesis suggests voluntary filers may benefit from exposing themselves to a stronger disclosure regulator.

Benefits suggested by the bonding theory would not, however, be expected to accrue to voluntary filers if such filers are not in fact subject to regulatory scrutiny. Several prior studies note that the SEC's limited resources force the agency to prioritize its efforts by monitoring firms more heavily when the associated regulatory benefits are high or the regulatory costs are low. Kedia and Rajgopal (2011) report that the SEC is more likely to investigate firms that are geographically proximate to regional SEC offices, which they argue as support for their "constrained cop" hypothesis. Subsequent studies examine the effects of resource constraints on the SEC's filing review process, including the issuance of comment letters, which is the SEC's primary financial reporting oversight role.

Several studies suggest that, on average, the SEC is more likely to review the filings of large firms and firms with greater stock price volatility or prior restatements, perhaps because these firms have the potential for greater investor harm (e.g., Cunningham and Leidner 2022). Ege, Glenn, and Robinson (2020) suggest the quality of the SEC's filing review process declines when SEC staff receive a greater influx of transaction filings to review. Gunny and Hermis (2020) find evidence suggesting that during the busiest times of the year, the SEC reduces the number of comment letters and focuses on cases of the most serious compliance problems. Naughton, Rogo, Sunder, Zhang (2018) find that the SEC is less likely to review the filings of foreign firms crosslisted on U.S. stock exchanges if those firms already trade on a foreign exchange, presumably because those firms already face oversight from their home country regulators. We build on these prior studies relating to the SEC's prioritization of resources by investigating how the SEC modifies the frequency and scope of its filing review process for voluntary filers relative to mandatory filers.

III. RESEARCH METHOD

We rely on Audit Analytics' Accelerated Filer database as our direct source of data on firms' voluntary filing status. To identify voluntary SEC filers, Audit Analytics exploits an SEC checkbox disclosure requirement on the cover page of the annual report (10-K or 20-F) indicating whether the firm is a voluntary filer. This voluntary filer status disclosure requirement was part of the Securities Offering Reform of 2005. Exhibit A of Appendix A illustrates this checkbox disclosure for Kraig Biocraft Laboratories, one of the voluntary filers in our sample. Exhibit B of Appendix A displays a quote from Kraig Biocraft describing how their voluntary filing status demonstrated their commitment to high standards of financial reporting leading up to their eventual status as a mandatory filer.

Our sample selection criteria are summarized in Table 1. We begin with a sample of 2,083 unique entities identified as voluntarily filing their annual report at least once for fiscal years ending between December 31, 2005 and December 31, 2021, representing 4,209 voluntary filing firm-years. We eliminate financial entities in SIC code 6189 (asset-backed securities) because these asset-backed securities are not traditional firms and do not file standard 10-K reports, leaving 1,600 unique voluntary filers representing 3,703 unique voluntary filing firm-years. After eliminating firm-years missing data in Audit Analytics necessary to compute model variables, we are left with 1,298 unique voluntary filers representing 3,125 firm-years.

Our data suggest the average time firms spend as voluntary filers is just over two years, consistent with firms' voluntary filing decision often being relatively short-term and transaction-oriented (i.e., in conjunction with the firm considering or executing a transaction in debt or equity markets). After imposing our sample selection criteria on a control sample of firms covered by Audit Analytics during our sample period, we identify 15,652 unique control firms that were not voluntary filers during our sample period. Our final sample consists of 117,557 unique firm-years. We identify a total of 41,572 unique SEC comment letter conversations for this final sample of firms.

Table 2, Panel A displays the distribution of voluntary and mandatory filing firm-years across our sample. The number of unique voluntary filers in any given year ranges from a high of 312 in 2008 to a low of 105 in 2020. We note that although our sample includes only 45 voluntary filer firm-years for the calendar year 2021, this is due to the truncation of our sample at the end 2021 due to a lack of availability of the most recent data at the time these data were pulled from Audit Analytics. Table 2, Panel B shows the distribution of voluntary filers across two-digit SIC industries. Panel

TABLE 1

Sample Selection

	Unique Firms	Firm-Years
All Voluntary Filers (from Audit Analytics)		
Number of entities that voluntarily file at least once for fiscal years ending between December 31, 2005 and December 31, 2021	2,083	4,209
Eliminate asset-backed securities (SIC code 6189)	1,600	3,703
Eliminate firm-years missing data in Audit Analytics necessary to compute model variables	1,298	3,125
Control Sample		
Number of nonvoluntary SEC filers in Audit Analytics for fiscal years ending between December 31, 2005 and December 31, 2021	22,508	134,048
Eliminate asset-backed securities (SIC code 6189)	17,288	124,342
Eliminate firm-years missing data in Audit Analytics necessary to compute model variables	15,652	114,432

Table 1 details the process by which we obtain our sample of voluntary filers and our benchmark sample of mandatory filers.

TABLE 2

Sample Distribution by Year and Industry

Panel A: Distribution of Voluntary Filers by Year

Year	Voluntary Filers	Mandatory Filers
2005	211	5,522
2006	199	6,223
2007	214	6,130
2008	307	8,181
2009	275	8,176
2010	255	8,009
2011	209	7,795
2012	219	7,315
2013	234	7,237
2014	155	7,274
2015	124	7,084
2016	152	6,780
2017	161	6,542
2018	138	6,473
2019	122	6,324
2020	105	6,657
2021	45	2,710

Panel B: Distribution of Voluntary Filers by Industry

Two-Digit SIC Industry	% of Voluntary Filers	% of Mandatory Filers
73—Business Services	12.3%	11.0%
28—Chemical and Allied Products	8.1%	10.7%
49—Electric, Gas, and Sanitary Services	7.7%	4.3%
48—Communications	5.6%	2.8%
13—Oil and Gas Extraction	4.7%	4.2%
10—Metal, Mining	4.4%	2.4%
36—Electronic and Other Electric Equipment	3.9%	5.8%
59—Miscellaneous Retail	3.2%	1.6%
20—Food and Kindred Products	2.8%	1.8%
65—Real Estate	2.8%	1.8%
38—Instruments and Related Products	2.7%	4.9%
67—Holding and Other Investment Offices	2.6%	5.7%
79—Amusement and Recreation Services	2.4%	0.7%
50—Wholesale Trade—Durable Goods	2.3%	1.5%
80—Health Services	2.1%	1.5%
27—Printing and Publishing	1.9%	0.6%
60—Depository Institutions	1.9%	8.5%
51—Wholesale Trade—Durable Goods	1.8%	1.1%
39—Miscellaneous Manufacturing Industries	1.8%	0.6%
35—Industrial Machinery and Equipment	1.7%	3.2%
34—Fabricated Metal Products	1.5%	0.9%
37—Transportation Equipment	1.5%	1.9%
30—Rubber and Miscellaneous Plastics Products	1.2%	0.6%
87—Engineering and Management Services	1.2%	1.5%
58—Eating and Drinking Places	1.2%	1.0%
Other	16.78%	19.4%

Panel A (Panel B) of Table 2 presents the distribution of voluntary filer firm-years by year (two-digit SIC industry). Panel B also provides the distribution of mandatory filers by two-digit industry for comparison purposes.

B suggests that the distribution of voluntary filers across industries generally follows the distribution of the population of mandatory filers.

Our basic approach involves correlating *VOLUNTARY_FILER*, an indicator variable equal to 1 for firm-years designated as voluntary filers and 0 for firm-years designated as mandatory filers, with outcomes such as the probability of an SEC comment letter. We control for other firm characteristics defined in Appendix B. Table 3 reports descriptive

TABLE 3

Descriptive Statistics

Panel A: Firm-Level Variables

	Voluntary Filer Firm-Years (n = 3,125)		Mandatory Filer Firm-Years (n = 114,432)	
	Mean	**Median**	**Mean**	**Median**
Firm-Level Variables:				
FIRM_SIZE	16.934	19.149	18.919	19.773
LOG_FILINGS	2.672	2.565	3.121	3.135
REPORTING_COMPLEXITY	7.751	7.601	8.099	8.294
RESTATEMENT	0.029	0.000	0.027	0.000
LAG_RESTATEMENT	0.027	0.000	0.026	0.000
BIG_4_AUDITOR	0.497	0.000	0.556	1.000
FIRM_AGE	5.820	5.000	7.585	7.000
LOSS	0.588	1.000	0.422	0.000
FOREIGN	0.171	0.000	0.149	0.000
LITIGIOUS_INDUSTRY	0.164	0.000	0.193	0.000

Panel B: SEC Filing Review and Future Restatement Variables

	Voluntary Filer Firm-Years		Mandatory Filer Firm-Years	
	Mean	**Median**	**Mean**	**Median**
SEC Filing Review Variables:				
SEC_CL	0.259	0.000	0.356	0.000
REG_SX	0.049	0.000	0.043	0.000
NON_REG_SX	0.210	0.000	0.314	0.000
N_FILINGS	1.836	1.000	1.782	1.000
TARGETED_REVIEW	0.408	0.000	0.421	0.000
CL_LENGTH	5.737	6.226	5.586	6.121
DURATION	3.202	3.497	3.098	3.401
ROUNDS	1.418	1.000	1.396	1.000
ATTORNEY	0.428	0.000	0.473	0.000
ACCOUNTANT	0.511	1.000	0.452	0.000
FULL_REVIEW	0.159	0.000	0.161	0.000
SEC_FILING_DL	2.373	1.609	2.861	2.485
10K_DL	1.459	0.000	1.752	0.693
SEC_FILING_REVIEW	0.176	0.000	0.229	0.000
10K_REVIEW	0.148	0.000	0.202	0.000
Future Restatement Variables:				
FUTURE_RESTATEMENT	0.090	0.000	0.078	0.000
UNDETECTED_RESTATEMENT	0.076	0.000	0.066	0.000
DETECTED_RESTATEMENT	0.014	0.000	0.011	0.000

Table 3 presents descriptive statistics for all variables used to test our hypotheses. Panel A reports descriptive statistics for all variables measured at the firm level. Panel B presents results for all variables measured at the SEC filing review or comment letter conversation level. Panel B also presents descriptive statistics related to subsequent accounting restatements. All continuous variables are Winsorized at the 1st and 99th percentiles.

statistics for all variables used in our formal tests. Table 3, Panel A presents descriptive statistics relating to firm characteristics for voluntary versus mandatory filers. Panel A suggests voluntary filers are, on average, smaller, less likely to be audited by a Big 4 auditor, younger, more likely to be headquartered in a foreign country, and less likely to operate in a litigious industry. However, we caution that the relation between these variables is best understood in the context of a multivariate statistical analysis, which we turn to next.

IV. RESULTS

Voluntary Filers and the Probability of Receiving an SEC Comment Letter

The first column of Panel A in Table 4 reports the results from testing whether voluntary filers have a different likelihood of receiving an SEC comment letter relative to mandatory filers. The coefficient estimate on *VOLUNTARY_FILER* is negative and significant at the 0.01 level, suggesting that voluntary filers are significantly less likely to receive an SEC comment letter than are their mandatory filer counterparts. In addition, the coefficient estimates on *FIRM_SIZE*, *RESTATEMENT*, *LAG_RESTATEMENT*, *LOSS*, and *LITIGIOUS_INDUSTRY* are all positive and significant, and the coefficient estimates on *BIG_4_AUDITOR* and *FIRM_AGE* are significantly negative. These results suggest the likelihood of receiving an SEC comment letter is positively associated with firm size, reporting complexity, recent accounting restatements, accounting losses, and more litigious industries, and decreasing in firm age and

TABLE 4

Likelihood of Receiving an SEC Comment Letter

Panel A: All SEC Comment Letters

	Coefficient Estimate *Standard Error*		
	Logistic Regression	**OLS Regression**	**Entropy-Balancing**
VOLUNTARY_FILER	**−0.4719*****	**−0.0913*****	**−0.0900*****
	0.0614	*0.0118*	*0.0130*
FIRM_SIZE	**0.1107*****	**0.0221*****	**0.0150*****
	0.0058	*0.0010*	*0.0012*
REPORTING_COMPLEXITY	**0.0004**	**0.0004**	**0.0020**
	0.0108	*0.0024*	*0.0049*
RESTATEMENT	**0.1209*****	**0.0262*****	**0.0450**
	0.0396	*0.0092*	*0.0328*
LAG_RESTATEMENT	**0.0976****	**0.0219****	**−0.0090**
	0.0465	*0.0108*	*0.0204*
BIG_4_AUDITOR	**−0.1001****	**−0.0159**	**−0.0380***
	0.0473	*0.0104*	*0.0182*
FIRM_AGE	**−0.0416*****	**−0.0085*****	**−0.0090*****
	0.0049	*0.0011*	*0.0015*
LOSS	**0.2009*****	**0.0420*****	**0.0140**
	0.0368	*0.0083*	*0.0140*
FOREIGN	**−0.0489**	**−0.0090**	**0.0030**
	0.0355	*0.0078*	*0.0166*
LITIGIOUS_INDUSTRY	**0.1489****	**0.0304****	**0.0530*****
	0.0664	*0.0139*	*0.0170*
SEC Industry Office Fixed Effects	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes
n	117,557	117,557	117,557
Area under ROC Curve	0.640	NA	NA
R^2	NA	0.053	0.054

(continued on next page)

TABLE 4 (continued)

Panel B: Financial Statement-Related versus Other Comment Letters

	Coefficient Estimate Standard Error Logistic Regression	
	REG_SX	***NON_REG_SX***
VOLUNTARY_FILER	**−0.0182**	**−0.5181*****
	0.0958	*0.0658*
FIRM_SIZE	**0.0928*****	**0.1007*****
	0.0128	*0.0046*
REPORTING_COMPLEXITY	**0.0025**	**−0.0008**
	0.0190	*0.0113*
RESTATEMENT	**0.0392**	**0.1200*****
	0.0934	*0.0350*
LAG_RESTATEMENT	**−0.1523***	**0.1368*****
	0.0854	*0.0427*
BIG_4_AUDITOR	**−0.1812****	**−0.0753**
	0.0768	*0.0464*
FIRM_AGE	**−0.0343*****	**−0.0384*****
	0.0047	*0.0047*
LOSS	**0.1130*****	**0.1899*****
	0.0334	*0.0395*
FOREIGN	**−0.0020**	**−0.0537**
	0.0741	*0.0407*
LITIGIOUS_INDUSTRY	**−0.0547**	**0.1657****
	0.1001	*0.0769*
SEC Industry Office Fixed Effects	Yes	Yes
Year Fixed Effects	Yes	Yes
n	117,557	117,557
Area under ROC Curve	0.702	0.628

*, **, *** Indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.
Panel A of Table 4 presents results from regressing the likelihood of receiving an SEC comment letter on *VOLUNTARY_FILER* and control variables. The first column of Panel A presents results from a logistic regression model, the second column of Panel A presents results from a linear probability model, and the third column of Panel A presents results from entropy balancing. We describe the details of the entropy balancing procedure in Appendix C. Panel B reports results from a logistic regression of the probability of receiving an SEC comment letter relating to Regulation S-X issues (column (1)) versus an SEC comment letter not relating to Regulation S-X issues (column (2)). Robust standard errors are clustered at the two-digit SIC level. Continuous variables have been Winsorized at the 1st and 99th percentiles.
All variables are defined in Appendix B.

the use of a Big 4 auditor, consistent with prior studies (e.g., Cunningham and Leidner 2022). To examine the sensitivity of our results to alternative model specifications, we also re-estimate them under a linear probability model and an entropy-balancing approach and report results in the last two columns of Panel A in Table 4. Our initial inferences hold across both of these alternative specifications. We conclude from these results that voluntary filers are less likely to receive an SEC comment letter, suggesting a lower level of SEC oversight.[3]

We next test whether voluntary filers have a differential likelihood of receiving SEC comment letters relating specifically to the financial statements. Comment letters relating to the audited financial statements and related footnotes can be identified as those referenced to Regulation S-X. Therefore, to conduct this test, we create two indicator variables: *REG_SX*, an indicator equal to 1 if the firm received an SEC comment letter relating specifically to Regulation S-X issues (i.e., financial statement issues), and 0 otherwise; and *NON_REG_SX*, an indicator variable equal to 1 if the firm

[3] See Appendix C for additional information relating to our research methodology, including details regarding our entropy balancing approach.

received an SEC comment letter that was not related to Regulation S-X. Comment letters that Audit Analytics identifies as relating to Regulation S-X total 5,022, and those that do not total 36,550. The remaining firm-year observations received no comment letter.

We repeat our tests after replacing the dependent variable alternately with *REG_SX* in Table 4, Panel B, column (1) and *NON_REG_SX* in column (2). As shown in column (1), we find no statistically significant evidence of a difference between the likelihood of a voluntary versus mandatory filer receiving a comment letter related to the financial statements. In contrast, results in column (2) show a statistically significant negative coefficient estimate on *VOLUNTARY_FILER*. This result implies that the likelihood of a voluntary filer receiving a comment letter that is not related to the financial statements is significantly lower than for a nonvoluntary filer. Taken together with those of Panel A, the Panel B results are consistent with the decreased likelihood among voluntary filers of receiving an SEC comment letter not related to financial statements. Assuming that the proportion of comment letters relates directly to the frequency of reviews, we further interpret these results as suggestive of a similar frequency of SEC reviews of Regulation S-X disclosures of voluntary and nonvoluntary filers.

Voluntary Filers and Variation in SEC Resources Allocated to the Filing Review Process

We next test whether voluntary filers are associated with a series of outcome variables relating to the use of SEC resources (scope, intensity, and team member expertise) in the filing review and comment letter process. We first limit our sample to only firm-years in which SEC comment letters are issued and replace the dependent variable with our two measures of SEC review scope; the number of filings receiving comments (*N_FILINGS*) and whether the review was limited in scope (*TARGETED_REVIEW*). Results, reported in Table 5, Panel A, indicate that the coefficient estimate on *VOLUNTARY_FILER* is significantly negative in the first column, consistent with voluntary filers having fewer filings reviewed, on average. However, the second column of Panel A reveals the coefficient estimate on *VOLUNTARY_FILER* is not statistically significant. Thus, we find no evidence of a difference between voluntary and mandatory filers' likelihood of undergoing a targeted (limited scope) review than are mandatory filers.

We next repeat this analysis after replacing the dependent variable with our three proxies for the intensity of the SEC filing review and comment letter process, including the length of the comment letter, the duration of the comment letter conversation, and the number of rounds the comment letter process went between the SEC and the recipient firm (*CL_LENGTH*, *DURATION*, and *ROUNDS*, respectively). We report results in Table 5, Panel B. The coefficient estimates on *VOLUNTARY_FILER* are not statistically significant in any column. We interpret these results as being consistent with the view that, conditional on the SEC choosing to issue a comment letter, the SEC's effort allocated to the comment letter process does not significantly vary between voluntary and nonvoluntary filers.

Finally, we repeat this analysis after replacing the dependent variable with our three proxies for the type of SEC staff expertise assigned to the review team (*ATTORNEY*, *ACCOUNTANT*, or *FULL_REVIEW*) and report results in columns (1), (2), and (3), respectively, in Table 5, Panel C. Results indicate that the coefficient estimate on *VOLUNTARY_FILER* is significantly negative when the dependent variable is *ATTORNEY* ($p < 0.05$), but significantly positive when the dependent variable is *ACCOUNTANT* ($p < 0.05$). This evidence that the SEC is more likely to assign accountants to review the filings of voluntary filers further corroborates the notion that SEC filing reviews tend to limit their focus to the financial statements and related disclosures. The coefficient estimate on *VOLUNTARY_FILER* is not statistically significant when the dependent variable is *FULL_REVIEW*, indicating no evidence of a difference in the likelihood of having both an attorney *and* an accountant assigned to their review between the two classes of filers.

Voluntary Filers and Accounting Restatements

Finally, we examine whether voluntary filers are differentially associated with future restatements (*FUTURE_RESTATEMENT*) and specifically restatements where the initial problem was and was not initially discovered during the SEC comment letter process (*DETECTED_RESTATEMENT* and *UNDETECTED_RESTATEMENT*, respectively). As shown in Table 6, results fail to show a significant difference between voluntary and mandatory filers' restatements, controlling for determinants such as firm size, reporting complexity, auditor quality, firm age, and prior restatements; voluntary filers are not significantly more likely than their mandatory filer counterparts to issue financial statements that are subsequently restated.

Overall, results from our statistical tests suggest that the SEC monitors the filings of voluntary filers less frequently than those of mandatory filers, on average. However, the SEC gives the financial statements and related disclosures of voluntary filers similar priority to those of mandatory filers in its filing review process, and conditional on issuing a comment letter, SEC staff exert similar effort in the filing review and comment letter process between voluntary and mandatory filers. The SEC's emphasis on the financial statements and related disclosures for voluntary filers is further evidenced by the fact that the SEC is significantly more likely to assign staff accountants to the review teams over

TABLE 5

Characteristics of the SEC Filing Review Process

Panel A: Voluntary Filers and Filing Review Scope

	Coefficient Estimate / Standard Error	
	N_FILINGS	***TARGETED_REVIEW***
VOLUNTARY_FILER	**−0.0872****	**−0.0664**
	0.0357	*0.1134*
FIRM_SIZE	**−0.0041**	**0.0510*****
	0.0032	*0.0057*
REPORTING_COMPLEXITY	**−0.0310*****	**−0.0104**
	0.0052	*0.0144*
RESTATEMENT	**0.0487**	**−0.1709*****
	0.0345	*0.0524*
LAG_RESTATEMENT	**0.0880****	**0.1143**
	0.0344	*0.0707*
BIG_4_AUDITOR	**−0.0941*****	**0.0011**
	0.0187	*0.0241*
FIRM_AGE	**−0.0042*****	**0.0177*****
	0.0011	*0.0061*
LOSS	**0.0030**	**0.0243**
	0.0188	*0.0285*
FOREIGN	**−0.1367*****	**0.4381*****
	0.0259	*0.0477*
LITIGIOUS_INDUSTRY	**0.0235**	**−0.0536**
	0.0167	*0.0388*
SEC Industry Office FE	Yes	Yes
Comment Letter Topic FE	Yes	Yes
Year FE	Yes	Yes
n	41,550	41,550
R^2	0.168	0.359

Panel B: Voluntary Filers and SEC Comment Letter Process Intensity

	Coefficient Estimate / Standard Error		
	CL_LENGTH	***DURATION***	***ROUNDS***
VOLUNTARY_FILER	**−0.0042**	**0.0072**	**−0.0316**
	0.0585	*0.0485*	*0.0268*
FIRM_SIZE	**0.0184**	**0.0155*****	**0.0103*****
	0.0066	*0.0045*	*0.0018*
REPORTING_COMPLEXITY	**−0.0059**	**0.0133**	**−0.0014**
	0.0108	*0.0090*	*0.0043*
RESTATEMENT	**0.0493**	**−0.0672***	**−0.0074**
	0.0359	*0.0354*	*0.0181*
LAG_RESTATEMENT	**0.0562**	**−0.0186**	**−0.0046**
	0.0339	*0.0329*	*0.0234*
BIG_4_AUDITOR	**0.0876**	**0.0121**	**−0.0600*****
	0.0367	*0.0377*	*0.0157*
FIRM_AGE	**0.0193**	**0.0249*****	**0.0020****
	0.0052	*0.0040*	*0.0010*

(continued on next page)

TABLE 5 (continued)

	Coefficient Estimate Standard Error		
	CL_LENGTH	***DURATION***	***ROUNDS***
LOSS	**−0.0667**	**−0.0791****	**0.0130**
	0.0195	*0.0370*	*0.0130*
FOREIGN	**−0.0177**	**0.3312*****	**0.1440*****
	0.0578	*0.0356*	*0.0155*
LITIGIOUS_INDUSTRY	**0.0269**	**−0.1028****	**0.0128**
	0.0364	*0.0395*	*0.0138*
SEC Industry Office FE	Yes	Yes	Yes
Comment Letter Topic FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
n	41,550	41,550	41,550
R^2	0.359	0.322	0.187

Panel C: Voluntary Filers and SEC Review Team Expertise

	Coefficient Estimate Standard Error		
	ATTORNEY	***ACCOUNTANT***	***FULL_REVIEW***
VOLUNTARY_FILER	**−0.2053****	**0.2062****	**−0.0665**
	0.0917	*0.0859*	*0.1173*
FIRM_SIZE	**0.0386*****	**−0.0114**	**0.0347****
	0.0112	*0.0093*	*0.0163*
REPORTING_COMPLEXITY	**−0.0382****	**0.0319***	**−0.0187**
	0.0171	*0.0186*	*0.0181*
RESTATEMENT	**0.0671**	**0.0267**	**0.0328**
	0.0620	*0.0514*	*0.1168*
LAG_RESTATEMENT	**0.0050**	**0.0573**	**0.0657**
	0.0624	*0.0645*	*0.1049*
BIG_4_AUDITOR	**−0.0683***	**0.1753*****	**−0.0001**
	0.0430	*0.0615*	*0.0653*
FIRM_AGE	**−0.0120***	**0.0204****	**−0.0341*****
	0.0071	*0.0094*	*0.0082*
LOSS	**0.1783*****	**−0.3126*****	**−0.0903****
	0.0589	*0.0755*	*0.0403*
FOREIGN	**−0.2550*****	**0.4325*****	**0.2076****
	0.0795	*0.0631*	*0.1031*
LITIGIOUS_INDUSTRY	**0.0905**	**−0.3060****	**−0.1253**
	0.1614	*0.1246*	*0.2077*
SEC Industry Office Fixed Effects	Yes	Yes	Yes
Comment Letter Topic FE	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes
n	41,550	41,550	41,550
Area under ROC Curve	0.712	0.794	0.835

*, **, *** Indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.
Panel A of Table 5 presents results from regressing two proxies for the scope of the SEC's filing review process on *VOLUNTARY_FILER* and control variables. Panel B repeats this analysis after replacing the dependent variable with proxies for the intensity of the SEC comment letter process. Panel C repeats this analysis after replacing the dependent variable with indicator variables reflecting the expertise of the SEC staff assigned to the review team. Robust standard errors are clustered at the two-digit SIC level. Continuous variables have been Winsorized at the 1st and 99th percentiles.
All variables are defined in Appendix B.

TABLE 6

Voluntary Filers and Subsequent Restatements

	Coefficient Estimate Standard Error		
	FUTURE_ RESTATEMENT$_{t+1}$	***UNDETECTED_ RESTATEMENT$_{t+1}$***	***DETECTED_ RESTATEMENT$_{t+1}$***
VOLUNTARY_FILER	**0.0446**	**0.0607**	**−0.0409**
	0.0763	*0.0883*	*0.1479*
FIRM_SIZE	**0.0267*****	**0.0233****	**0.0394*****
	0.0090	*0.0101*	*0.0116*
REPORTING_COMPLEXITY	**0.0859*****	**0.0840*****	**0.0820*****
	0.0155	*0.0158*	*0.0304*
RESTATEMENT	**0.5997*****	**0.5732*****	**0.5801*****
	0.0397	*0.0482*	*0.1342*
LAG_RESTATEMENT	**0.5616*****	**0.5865*****	**0.3373****
	0.0579	*0.0585*	*0.1468*
BIG_4_AUDITOR	**−0.3830*****	**−0.2446***	**−1.0882*****
	0.1131	*0.1167*	*0.1227*
FIRM_AGE	**−0.0476*****	**−0.0452*****	**−0.0614*****
	0.0107	*0.0113*	*0.0094*
LOSS	**0.2052*****	**0.1856*****	**0.2940*****
	0.0725	*0.0733*	*0.0939*
FOREIGN	**−0.2725*****	**−0.3573*****	**0.1676**
	0.0598	*0.0592*	*0.1148*
LITIGIOUS_INDUSTRY	**−0.1132**	**−0.1079**	**−0.1330**
	0.0502	*0.0537*	*0.1010*
SEC Industry Office Fixed Effects	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes
n	117,557	117,557	117,557
Area under ROC Curve	0.616	0.610	0.718

*, **, *** Indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.
Table 6 presents results from regressing the likelihood of announcing an accounting restatement in year t+1 on *VOLUNTARY_FILER* and control variables. Robust standard errors are clustered at the two-digit SIC level. Continuous variables have been Winsorized at the 1st and 99th percentiles. All variables are defined in Appendix B.

voluntary filers. Our failure to find any statistically significant difference in the likelihood of subsequent restatements between voluntary and mandatory filers suggests the SEC's efforts to monitor the financial reporting of voluntary filers results in reporting quality that is not dissimilar to that of mandatory filers.

Do Firms Voluntarily File with the SEC to Bond to a High-Quality Disclosure Regulator?

Our primary research question in this study is whether the SEC applies different levels of monitoring to voluntary versus mandatory filers. We argue this is important because voluntary filers presumably file with the SEC to promote greater investor confidence in their financial reporting quality by bonding to a strong regulatory regime. However, we are aware of no evidence from prior research on the determinants of the voluntary filing decision that corroborates this assumption. A primary reason for a lack of greater evidence on this issue is likely the general unavailability of financial data for firms not registered with the SEC, which significantly constrains researchers' ability to model the choice to file with the SEC among nonregistrants.

In our final analyses, we test a bonding explanation for the voluntary filing decision by examining whether firms are more likely to file with the SEC if they come from relatively weaker regulatory environments. To do this, we exploit the fact that a subset of our firms trades on OTC stock markets in the U.S., and hence have basic stock-based data available for themselves and a comparable sample of OTC firms that are not SEC filers.

We identify four proxies for the strength of firms' regulatory environment stemming from non-SEC sources. First, we create an indicator variable for whether the firm is a financial institution, because financial institutions already

TABLE 7

Likelihood of Voluntary SEC Filing Based on Bonding Incentives

	Coefficient Estimate Standard Error Probability of Voluntary SEC Filing	
	Logit	**OLS**
Regulatory Strength Variables		
Financial Institution	**−3.9733*****	**−0.0629*****
	0.0944	*0.0213*
Strong Merit Review Process	**−0.6471*****	**−0.0085*****
	0.0327	*0.0014*
Home Country Investor Protections	**−0.0693***	**−0.0009****
	0.0353	*0.0004*
Strength of Foreign Exchange Regulation	**−1.8824*****	**−0.0061*****
	0.3745	*0.0008*
Control Variables		
Firm Size	**0.0700**	**0.0041*****
	0.0483	*0.0012*
Foreign Issuer	**1.3043***	**0.0828**
	0.7057	*0.0342*
Number of active trading days	**0.0472**	**−0.0024**
	0.1254	*0.0043*
Fiscal quarter stock return	**0.2555*****	**0.0035*****
	0.0836	*0.0008*
Disclosure Tier Fixed Effects	Yes	Yes
Circuit Fixed Effects	Yes	Yes
Year Fixed Effects	Yes	Yes
n	26,066	26,066
Area under ROC Curve	0.914	NA
R^2	NA	0.147

*, **, *** Indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.
Table 7 presents results from estimating the probability of a firm being a voluntary SEC filer as a function of four variables designed to capture the strength of the firm's existing regulatory oversight from non-SEC sources, plus controls. Those variables are (1) whether the firm is a financial institution; (2) whether the firm comes from a state with a strong merit review process for securities registered with state securities regulators; (3) the strength of the foreign firms' home country investor protections, based on the four World Bank indices examined by Atwood and Lewellen (2019); and (4) a three-tiered variable based on foreign firms' market capitalization, designed to capture the relative strength of oversight coming from foreign firms' stock exchange regulator. We control for firm size, measured as the log of the market value of equity; an indicator variable equal to 1 for firms headquartered outside the U.S., and 0 otherwise; the percentage of trading days in the last quarter of the fiscal year in which there was active trading in the firm's stock (see Brüggemann et al. 2018); and the firm's stock return measured in the last quarter of year *t*. We include fixed effects for the U.S. Appeals Circuit of each U.S. firm's headquarters, as well as disclosure tier fixed effects based on classifications made by OTC Markets Group.

receive significant oversight from banking regulators. Second, we create an indicator variable for whether the firms are headquartered in a U.S. state with a relatively stronger merit review process driven by state regulators.[4] Third, we measure the strength of foreign firms' home country investor protections by combining the four World Bank indices examined by Atwood and Lewellen (2019). Fourth, we proxy for the strength of foreign firms' scrutiny stemming from their foreign exchanges by classifying all foreign firms into three equal groups based on their market capitalization. We control for firm size, whether they are a foreign-domiciled firm, their quarterly return, and liquidity.

Results from this analysis under a logit and OLS specification are reported in Table 7, columns (1) and (2), respectively. The coefficient estimates on our four regulatory strength variables are negative in all cases and statistically significant at the 5 percent level or stronger in all cases but one. We conclude that this evidence is consistent with a bonding explanation for the voluntary filing decision.

[4] These data come from a 2013 tabulation of states' merit review stringency compiled by Nancy Fallon-Houle (http://www.velocitylaw.com), and is also used in related research (Brüggemann et al. 2018).

V. IMPLICATIONS

Although approximately 1,600 firms have voluntarily filed with the SEC since 2006 when firms were first required to disclose their voluntary filing status in their annual reports, federal securities laws do not formally require the SEC to review the filings of these firms. Hence, the extent to which the SEC subjects voluntary filers' SEC filings to regulatory scrutiny is an important empirical question. Our results inform managers contemplating voluntarily filing with the SEC by providing guidance on the extent to which those filings are likely to be reviewed and receive SEC comments. Our results also inform investors and creditors of voluntary filers by providing evidence on the strength to which becoming a voluntary filer effectively bonds a firm to a strong disclosure regulator.

Our results suggest the filings of voluntary filers are less likely, on average, to be monitored by the SEC. However, the financial statements and related disclosures of voluntary filers appear to receive a similar level of scrutiny as those of mandatory filers. In addition, our results suggest that once a comment letter process is initiated by the SEC, the process is similarly rigorous for both voluntary and mandatory filers. Furthermore, our results suggest the financial statements of voluntary filers are not associated with a greater likelihood of subsequent restatement. Overall, our results are consistent with the SEC prioritizing its constrained resources in the oversight of voluntary filers by focusing on the most important aspects of their filings (i.e., the financial statements and related disclosures), and the resulting financial reporting quality of voluntary filers' financial statements being on par with those of mandatory SEC filers.

Finally, we provide confirmatory evidence that the voluntary filing decision is at least partially explained by firms coming from relatively weaker regulatory environments seeking to bond themselves to a high-quality disclosure regulator. To our knowledge, our study is the first to provide evidence regarding whether these bonding attempts are effective. Our study sheds light on how the SEC monitors the filings of voluntary filers and on the effectiveness of this regulatory approach.

REFERENCES

Atwood, T., and C. Lewellen. 2019. The complementarity between tax avoidance and manager diversion: Evidence from tax haven firms. *Contemporary Accounting Research* 36 (1): 259–294. https://doi.org/10.1111/1911-3846.12421

Bonsall, S. B., A. J. Leone, B. P. Miller, and K. Rennekamp. 2017. A plain English measure of financial reporting readability. *Journal of Accounting and Economics* 63 (2–3): 329–357. https://doi.org/10.1016/j.jacceco.2017.03.002

Brüggemann, U., A. Kaul, C. Leuz, and I. Werner. 2018. The twilight zone: OTC regulatory regimes and market quality. *The Review of Financial Studies* 31 (3): 898–942. https://doi.org/10.1093/rfs/hhx102

Chapman, K., G. Miller, and H. White. 2019. Investor relations and information assimilation. *The Accounting Review* 94 (2): 105–131. https://doi.org/10.2308/accr-52200

Coffee, J. 2002. Racing towards the top? The impact of cross-listing and stock market competition on international corporate governance. *Columbia Law Review* 102 (7): 1757–1831. https://doi.org/10.2307/1123661

Cunningham, L., and J. Leidner. 2022. The SEC filing review process: A survey and future research opportunities. *Contemporary Accounting Research* 39 (3): 1653–1688. https://doi.org/10.1111/1911-3846.12742

Doidge, C., G. Karolyi, K. Lins, D. Miller, and R. Stulz. 2009. Private benefits of control, ownership, and the cross-listing decision. *The Journal of Finance* 64 (1): 425–466. https://doi.org/10.1111/j.1540-6261.2008.01438.x

Ege, M., J. Glenn, and J. Robinson. 2020. Unexpected SEC resource constraints and comment letter quality. *Contemporary Accounting Research* 37 (1): 33–67. https://doi.org/10.1111/1911-3846.12505

Ferri, F., R. Zheng, and Y. Zou. 2018. Uncertainty about managers' reporting objectives and investors' response to earnings reports: Evidence from the 2006 executive compensation disclosures. *Journal of Accounting and Economics* 66 (2–3): 339–365. https://doi.org/10.1016/j.jacceco.2018.08.001

Foucault, T., and L. Frésard. 2012. Cross-listing, investment sensitivity to stock price, and the learning hypothesis. *Review of Financial Studies* 25 (11): 3305–3350. https://doi.org/10.1093/rfs/hhs093

Gunny, K., and J. Hermis. 2020. How busyness influences SEC compliance activities: Evidence from the filing review process and comment letters. *Contemporary Accounting Research* 37 (1): 7–32. https://doi.org/10.1111/1911-3846.12507

Hainmueller, J. 2012. Entropy balancing for causal effects: A multivariate reweighting method to produce balanced samples in observational studies. *Political Analysis* 20 (1): 25–46. https://doi.org/10.1093/pan/mpr025

Hills, R., M. Kubic, and W. Mayew. 2021. State sponsors of terrorism disclosure and SEC financial reporting oversight. *Journal of Accounting and Economics* 72 (1): 101407. https://doi.org/10.1016/j.jacceco.2021.101407

Kedia, S., and S. Rajgopal. 2011. Do the SEC's enforcement preferences affect corporate misconduct? *Journal of Accounting and Economics* 51 (3): 259–278. https://doi.org/10.1016/j.jacceco.2011.01.004

Kubic, M. 2021. Examining the examiners: SEC error detection rates and human capital allocation. *The Accounting Review* 96 (3): 313–341. https://doi.org/10.2308/TAR-2017-0581

Kubic, M., and S. Toynbee. 2023. Regulator continuity and decision-making quality: Evidence from SEC comment letters. *The Accounting Review* 98 (1): 365–398. https://doi.org/10.2308/TAR-2021-0432

Leuz, C., and P. Wysocki. 2016. The economics of disclosure and financial reporting regulation: Evidence and suggestions for future research. *Journal of Accounting Research* 54 (2): 525–622. https://doi.org/10.1111/1475-679X.12115

Naughton, J., R. Rogo, J. Sunder, and R. Zhang. 2018. SEC monitoring of foreign firms' disclosures in the presence of foreign regulators. *Review of Accounting Studies* 23 (4): 1355–1388. https://doi.org/10.1007/s11142-018-9467-x

Shroff, N., R. Verdi, and B. Yost. 2017. When does the peer information environment matter? *Journal of Accounting and Economics* 64 (2–3): 183–214. https://doi.org/10.1016/j.jacceco.2017.03.005

Stice-Lawrence, L. 2021. Monitoring decisions and frictions at the SEC. (Working paper). https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3485468

APPENDIX A

Voluntary Filer Example—Kraig Biocraft Laboratories, Inc

***Exhibit A*—Initial voluntary SEC filing: 10-K filed on March 30, 2016**

10-K 1 kraig_10-k2015v9allpreviou.htm ANNUAL REPORT

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-K

(Mark One)

☑ ANNUAL REPORT PURSUANT TO SECTION 13 or 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For The Fiscal Year Ended December 31, 2015

☐ TRANSITION REPORT PURSUANT TO SECTION 13 or 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission File No. 333-146316

KRAIG BIOCRAFT LABORATORIES, INC.
(Exact name of issuer as specified in its charter)

Wyoming	83-0459707
(State or Other Jurisdiction of Incorporation)	(I.R.S. Employer Identification No.)
2723 South State St. Suite 150 Ann Arbor, Michigan 48104	(734) 619-8066
(Address of Principal Executive Offices)	(Registrant's Telephone Number)

Securities registered under Section 12(b) of the Exchange Act: None.

Securities registered under Section 12(g) of the Exchange Act: None.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☑

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☑ No ☐

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☑ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☑ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference Part III of this Form 10-K or any amendment to this Form 10-K. ☑

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer (Do not check if a smaller reporting company)	☐	Smaller reporting company	☑

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☑ No ☐

(The full-color version is available online.)

Firms listed on a national exchange (12(b) filers) and firms exceeding the mandated size thresholds (12(g) filers) are required to file with the SEC and maintain periodic reporting requirements under Section 13 of the '34 Act. If a company makes any public offering of debt or equity securities while registered with the SEC, it must maintain current SEC periodic reporting for at least one full year as required by Section 15(d) of the '34 Act. If an SEC registrant does not meet either of these requirements, it is considered a voluntary filer. See page 263 of SEC Release 33-8591 at https://www.sec.gov/rules/final/33-8591.pdf, which mandated the voluntary filing status checkbox disclosure as part of the Securities Offering Reform in December 2005.

***Exhibit B*—Press release on December 11, 2020 on the company's transition to become a mandatory SEC reporting company after filing Form S-1 to register its new public securities**

> While being a voluntary filer, Kraig has been committed to meeting all SEC filing and reporting standards. Our election to now formalize these reporting responsibilities is evidence of our commitment to full operational transparency and growth. (https://www.kraiglabs.com/kraig-biocraft-laboratories-secures-bridge-funding-and-files-to-become-fully-reporting-company/)

APPENDIX B

Variable Definitions

VOLUNTARY_FILER	An indicator equal to 1 for firm-years in which the 10-K (or 20-F) filing indicated the firm is a voluntary filer, and 0 otherwise. (Source: Audit Analytics'Accelerated Filer dataset, data item hst_is_voluntary_filer)
FIRM_SIZE	The natural logarithm of 1 plus total assets. (Source: Audit Analytics' Accelerated Filer dataset, data item matchqu_balsh_assets)
REPORTING_COMPLEXITY	The filing size of the firm's electronic 10-K filing (measured in kilobytes). (Source: Audit Analytics' Accelerated Filer dataset, data item file_size)
RESTATEMENT	An indicator variable equal to 1 for firm-years in which the firm reported an accounting restatement, and 0 otherwise. *LAG_RESTATEMENT* is the one-year lag of *RESTATEMENT*. $FUTURE\_RESTATEMENT_{t+1}$ is the one-year lead of *RESTATEMENT*, which is further separated into those restatements that occur in years immediately subsequent to a firm's receipt of an SEC comment letter (*DETECTED_RESTATEMENTS*) and restatements that are not (*UNDETECTED_RESTATEMENTS*). (Source: Audit Analytics' Non-Reliance Restatements and Accelerated Filer datasets)
BIG_4_AUDITOR	An indicator variable equal to 1 for firm-years audited by one of the Big 4 accounting firms, and 0 otherwise. (Source: Audit Analytics' Accelerated Filer dataset, data item eventdate_aud_name)
FIRM_AGE	The number of years between the current year and the year the firm first became covered by Audit Analytics. (Source: Audit Analytics' Accelerated Filer dataset)
LOSS	An indicator variable equal to 1 if the firm reports negative net income in the current fiscal year, and 0 otherwise. (Source: Audit Analytics' Accelerated Filer dataset, data item latestqu_incmst_netinc_ttm)
FOREIGN	An indicator variable equal to 1 if the firm's corporate headquarters are outside the United States, and 0 otherwise. (Source: Audit Analytics' Accelerated Filer dataset, data item bus_state_country)
LITIGIOUS_INDUSTRY	An indicator variable for firm-years classified as being in litigious industries as commonly defined by prior literature, and 0 otherwise. Litigious industries are defined as those with an SIC code between (1) 2833 and 2836, (2) 3570 and 3577, (3) 3600 and 3674, or (4) 5200 and 5961, or equal to 7370. (Source: Audit Analytics' Accelerated Filer dataset, data item sic_code_fkey)
SEC_CL	An indicator variable equal to 1 if the firm received an SEC comment letter during the year, and 0 otherwise, which is further separated into SEC comment letters relating to Regulation S-X (*REG_SX*), and SEC comment letters relating only to issues besides Regulation S-X (*NON_REG_SX*). (Source: Audit Analytics' Comment Letter dataset, data items iss_regsksec_text and iss_regsx_text)
N_FILINGS	The number of the firm's filings referenced in the SEC's comment letter. (Source: Audit Analytics' Comment Letter Conversation dataset, data item list_form_dates)
TARGETED_REVIEW	An indicator variable equal to 1 if the SEC comment letter indicates the firm was targeted for only a limited scope review in the comment letter text. Consistent with Hills, Kubic, and Mayew (2021) and Kubic and Toynbee (2023), phrases identifying targeted reviews include: limited our review, limited review, review is limited, review has been limited, restricted solely to considerations of, reviewed parts, and targeted review. (Source: Audit Analytics' Comment Letter dataset, data item cl_text)
CL_LENGTH	The average number of words in the SEC's comment letters within a comment letter conversation. (Source: Audit Analytics' Comment Letter dataset, data item cl_text)
DURATION	The length of time (number of days) between the SEC's initial comment letter and the final resolution. (Source: Audit Analytics' Comment Letter Conversation dataset, data item con_time_span)
ROUNDS	The number of iterations in the comment letter conversation before the issues are resolved calculated as the number of SEC-issued letters in the conversation not including the completion of review letter. (Source: Audit Analytics' Comment Letter dataset, data item file_date)

(continued on next page)

APPENDIX B (continued)

ACCOUNTANT	An indicator variable equal to 1 if the review team referenced in the comment letters includes at least one SEC accountant, and 0 otherwise. Phrases identifying accounting-related SEC titles include: accountant, accounting reviewer, and accounting branch chief. (Source: Audit Analytics' Comment Letter dataset, data item cl_text)
ATTORNEY	An indicator variable equal to 1 if the review team referenced in the comment letters includes at least one SEC attorney, and 0 otherwise. Phrases identifying legal-related SEC titles include: attorney, counsel, legal branch chief, assistant director, and associate director. (Source: Audit Analytics' Comment Letter dataset, data item cl_text)
FULL_REVIEW	An indicator variable equal to 1 if the review team referenced in the comment letters includes both SEC accountants and attorneys, and 0 otherwise. (Source: Audit Analytics' Comment Letter dataset, data item cl_text)
SEC_FILING_DL	The natural logarithm of 1 plus the total number of downloads during the year of the firm's filings from EDGAR by IP addresses owned by the SEC. *10K_DL* is the natural logarithm of 1 plus the total number of downloads during the year of the firm's 10-K from EDGAR by IP addresses owned by the SEC. (Source: EDGAR log files)
SEC_FILING_REVIEW	An indicator variable equal to 1 if the firm was reviewed by the SEC during the year (even if no comment letter was issued), and 0 otherwise. *10K_REVIEW* is an indicator that the Form 10-K was specifically reviewed. (Source: SEC FOIA requested SEC filing review dates)

APPENDIX C

Methods and Supplemental Information

Methods and Additional Analyses

Entropy Balancing Method

Entropy balancing, which is a quasi-matching approach, is often used to balance covariates between treatment and control groups when there is a lack of balance initially (Shroff, Verdi, and Yost 2017; Ferri, Zheng, and Zou 2018; Chapman, Miller, and White 2019). Entropy balancing identifies the optimal weights of control observations and reweights each control observation to ensure that post-weighting distributional properties of all the covariates of treatment ($VOLUNTARY\_FILER = 1$) and control ($VOLUNTARY\_FILER = 0$) observations are virtually identical, thereby ensuring covariate balance (Hainmueller 2012). We conduct the entropy balancing technique first by determining the distributional properties (mean and variance) of all the control variables in our regression model for the treatment observations. Then the entropy balancing algorithm assigns possible weights to control observations over multiple iterations until it finds a set of weights for control observations such that the optimal balance conditions are met (i.e., the distributional properties of treatment and post-weighted control observations are identical), whereas the weight for treatment observations are retained as 1. The achieved weights are used in subsequent regression analyses. We are able to achieve covariate balance after employing the entropy balancing technique.

SEC Filing Downloads and SEC Reviews

Our main analyses have followed prior literature on SEC oversight by focusing on outcomes of the SEC's comment letter process. The primary advantage of this approach is the broad availability of data relating to SEC comment letters. A disadvantage of this approach is that observed SEC comment letters are a function of both the SEC's monitoring process as well as potential disclosure deficiencies in firms' filings. If significant differences exist in firms' compliance with SEC disclosure requirements between voluntary and mandatory filers, then differences in SEC comment letters received between those two groups may not be reflective of inherent differences in SEC monitoring. To address this concern, we re-estimate our regression model for a subset of our sample for which we have data on SEC filing downloads and SEC filing reviews, irrespective of whether a comment letter is issued. SEC filing downloads and SEC filing reviews are both precedents to the comment letter process that are less likely to be driven by *ex post* deficiencies in firms' underlying

(continued on next page)

APPENDIX C (continued)

TABLE C1

Voluntary Filers and Other Indicators of SEC Scrutiny

	Coefficient Estimate Standard Error			
	SEC_FILING_DL	***10K_DL***	***SEC_FILING_REVIEW***	***10K_REVIEW***
VOLUNTARY_FILER	**−0.2069******	**−0.0069**	**−0.2860******	**−0.3246******
	0.0571	*0.0443*	*0.0632*	*0.0674*
FIRM_SIZE	**0.0385******	**0.0007**	**0.1196******	**0.1061******
	0.0057	*0.0053*	*0.0082*	*0.0085*
REPORTING_COMPLEXITY	**0.0703*****	**0.0995******	**0.0465*****	**0.0410****
	0.0284	*0.0339*	*0.0204*	*0.0218*
RESTATEMENT	**0.3208******	**0.3035******	**−0.0236**	**0.0770****
	0.0335	*0.0268*	*0.0479*	*0.0508*
LAG_RESTATEMENT	**0.2277******	**0.2153******	**0.0928*****	**0.1727******
	0.0250	*0.0258*	*0.0408*	*0.0421*
BIG_4_AUDITOR	**−0.0113**	**−0.1074******	**−0.0079**	**−0.0658**
	0.0360	*0.0340*	*0.0621*	*0.0653*
FIRM_AGE	**0.0053**	**0.0158******	**0.0064**	**0.0088****
	0.0037	*0.0055*	*0.0050*	*0.0059*
LOSS	**0.0740*****	**0.0012**	**−0.0002**	**−0.0305**
	0.0296	*0.0239*	*0.0459*	*0.0450*
FOREIGN	**−0.1880******	**−1.1995******	**0.1762******	**−1.0488******
	0.0393	*0.0598*	*0.0618*	*0.1248*
LITIGIOUS_INDUSTRY	**0.1608******	**0.0897****	**0.1413******	**0.1202*****
	0.0425	*0.0461*	*0.0469*	*0.0512*
SEC Industry Office Fixed Effects	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
n	41,887	41,887	74,140	74,140
Area under ROC Curve	NA	NA	0.701	0.711
R^2	0.737	0.642	NA	NA

*, **, *** Indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.

disclosure compliance. However, we only have SEC filings download data for the years 2006 to 2008 and 2013 through 2014, and our SEC filing review data also end in 2014.[5]

Results from testing for differences in SEC downloads of firm filings generally and 10-K filings specifically are reported in Table C1, columns (1) and (2), respectively. The coefficient estimate on *VOLUNTARY_FILER* is significantly negative in column (1) and insignificant in column (2). We interpret these results as suggesting the SEC is significantly less likely to download the filings of voluntary filers generally, but they are nearly equally likely to download the 10-Ks (which contain the financial statements and related disclosures) of voluntary filers as those of mandatory filers.

Results from testing differences in the likelihood of an SEC filing review generally and an SEC filing review that includes the 10-K, specifically, are reported in Table C1, columns (3) and (4). The coefficient estimate on

(continued on next page)

[5] The missing SEC filing download data before 2013 arise from an issue with the SEC's internal web traffic routing during that time period, as discussed by Stice-Lawrence (2021). In addition, the SEC no longer makes their EDGAR server logs publicly available, so we cannot obtain updated data on SEC filing downloads. The data on SEC filing reviews were obtained via a limited SEC FOIA request.

APPENDIX C (continued)

VOLUNTARY_FILER in both of these columns is significantly negative. These results support inferences from our primary tests and are consistent with the SEC being less likely to review the filings of voluntary filers.[6]

Number of Filings

One possible concern with our evidence that voluntary filers are less likely to receive an SEC comment letter than mandatory filers is that this result may be driven by voluntary filers submitting fewer filings for the SEC to comment on. We have no reason to expect that voluntary filers differ significantly from their mandatory filer counterparts with regard to the number of SEC filings subject to periodic review (e.g., 10-Ks, 10-Qs, etc.). However, to help mitigate this concern, we rerun our main test after controlling for the total number of filings submitted per firm-year. As shown in Table C2, we continue to find consistent evidence of lower SEC scrutiny for voluntary filers even after controlling for the number of filings submitted to the SEC.

Alternative Measure of Reporting Complexity

As file size of the 10-K is a noisy measure of reporting complexity, we supplement this analysis by alternatively controlling for reporting/disclosure complexity using the Bog index introduced by Bonsall, Leone, Miller, and Rennekamp (2017). As shown in Table C3, we continue to find consistent evidence of lower SEC scrutiny for voluntary filers even after controlling for reporting/disclosure complexity using the Bog index.

Alternative Measure of Firm Size Using Filer Status

As an alternative specification to using firm total assets as a measure of firm size, we also control for size using the filer status (large accelerated filer, accelerated filer, smaller reporting company, etc.). As shown in Table C4, we continue to find consistent evidence of lower SEC scrutiny for voluntary filers even after controlling for firm size using the filer status. We also run untabulated tests of within subsamples of (1) only nonaccelerated filers and (2) only smaller reporting companies, as defined by the SEC, and we continue to find consistent results.

Incomplete SEC Comment Letter Data in Recent Years

Cunningham and Leidner (2022) note that there is a significant lag in the inclusion of SEC comment letter data in the Audit Analytics database. To address this concern, we omit the last two, three, and four years, respectively, from our sample period. As shown in Table C5, we continue to find consistent evidence of lower SEC scrutiny for voluntary filers even after excluding up to four recent years from our sample period.

SEC Staff Busyness

Gunny and Hermis (2020) suggest that SEC scrutiny in the form of SEC comment letters is reduced during periods when the SEC staff is most busy. We follow their approach and find (untabulated) evidence that the SEC's level of scrutiny is influenced by the busyness of the SEC staff for both voluntary and mandatory filers, consistent with the main finding in Gunny and Hermis (2020). However, we do not find a differential effect of SEC busyness between voluntary and mandatory filers.

Restatement Test Conditional on Comment Letter Receipt

Our main analyses include tests for differences in the likelihood of "detected" and "undetected" accounting restatements among voluntary versus mandatory filers. In supplemental analyses, we reexamine these results after imposing another criterion for accounting restatements to be considered "detected" by the SEC, following Kubic (2021). In this

(continued on next page)

[6] The fact that *VOLUNTARY_FILER* is significantly negatively associated with 10-K reviews but not significantly associated with the SEC's downloads of 10-Ks (Table 7, column (4) versus column (2)) appears to provide inconsistent evidence regarding the SEC's monitoring of voluntary filers' 10-K reports. We note two factors that may account for this apparent inconsistency. First, although only the SEC's Division of Corporation Finance conducts SEC filing reviews, SEC 10-K downloads may come from other divisions and offices of the SEC, including the Division of Enforcement. Second, the Division of Corporation Finance often conducts preliminary reviews of filings before opening a targeted or full review of the filings. Thus, although SEC downloads of the 10-K and SEC reviews of the 10-K filing are likely to be correlated, they do not reflect identical monitoring activity.

APPENDIX C (continued)

TABLE C2

Controlling for the Number of SEC Filings

	Coefficient Estimate Standard Error Logistic Regression
VOLUNTARY_FILER	**−0.3638***** *0.0593*
LOG_FILINGS	**0.3861***** *0.0298*
FIRM_SIZE	**0.0702***** *0.0052*
REPORTING_COMPLEXITY	**−0.0230**** *0.0091*
RESTATEMENT	**0.0576** *0.0403*
LAG_RESTATEMENT	**0.0653** *0.0443*
BIG_4_AUDITOR	**−0.1351***** *0.0421*
FIRM_AGE	**−0.0441***** *0.0047*
LOSS	**0.1416***** *0.0308*
FOREIGN	**−0.0072** *0.0330*
LITIGIOUS_INDUSTRY	**0.1182**** *0.0453*
SEC Industry Office Fixed Effects	Yes
Year Fixed Effects	Yes
n	117,557
Area under ROC Curve	0.649
R^2	NA

*, **, *** Indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.

TABLE C3

Alternative Measure of Reporting Complexity

	Coefficient Estimate Standard Error Logistic Regression
VOLUNTARY_FILER	**−0.4415***** *0.0705*
FIRM_SIZE	**0.1096***** *0.0091*
REPORTING_COMPLEXITY (BOG)	**0.0053**** *0.0024*

(continued on next page)

APPENDIX C (continued)

TABLE C3 (continued)

	Coefficient Estimate Standard Error Logistic Regression
RESTATEMENT	**0.1381*****
	0.0419
LAG_RESTATEMENT	**0.0979****
	0.0454
BIG_4_AUDITOR	**−0.0532**
	0.0450
FIRM_AGE	**−0.0418*****
	0.0059
LOSS	**0.2309*****
	0.0352
FOREIGN	**0.0767**
	0.0544
LITIGIOUS_INDUSTRY	**0.1438****
SEC Industry Office FE	Yes
Year Fixed Effects	Yes
n	77,741
Area under ROC Curve	0.631

*, **, *** Indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.

TABLE C4

Alternative Measure of Firm Size Using Filer Status

	Coefficient Estimate Standard Error Logistic Regression
VOLUNTARY_FILER	**−0.3644*****
	0.0544
SMALLER_REPORTING_CO	**0.0989**
	0.0720
ACCELERATED_FILER	**0.2159*****
	0.0389
LARGE_ACCEL_FILER	**0.1296*****
	0.0422
FIRM_SIZE	**0.1037*****
	0.0061
REPORTING_COMPLEXITY	**−0.0028**
	0.0096
RESTATEMENT	**0.1180*****
	0.0403
LAG_RESTATEMENT	**0.1035****
	0.0471

(continued on next page)

APPENDIX C (continued)

TABLE C4 (continued)

	Coefficient Estimate Standard Error Logistic Regression
BIG_4_AUDITOR	**−0.1510*****
	0.0355
FIRM_AGE	**−0.0466*****
	0.0050
LOSS	**0.2325*****
	0.0390
FOREIGN	**−0.0426**
	0.0325
LITIGIOUS_INDUSTRY	**0.1254***
	0.0633
SEC Industry Office FE	Yes
Year Fixed Effects	Yes
n	115,445
Area under ROC Curve	0.637

*, **, *** Indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.

TABLE C5
Robustness to Excluding Recent Sample Years

	Coefficient Estimate Standard Error Logistic Regression		
	Years <2019	Years <2018	Years <2017
VOLUNTARY_FILER	**−0.4843*****	**−0.4857*****	**−0.4807*****
	0.0612	*0.0607*	*0.0646*
FIRM_SIZE	**0.1160*****	**0.1144*****	**0.1109*****
	0.0061	*0.0064*	*0.0063*
REPORTING_COMPLEXITY	**0.0014**	**0.0133**	**0.0262****
	0.0112	*0.0104*	*0.0108*
RESTATEMENT	**0.1335*****	**0.1234*****	**0.1305*****
	0.0417	*0.0435*	*0.0435*
LAG_RESTATEMENT	**0.0922****	**0.0953****	**0.0997****
	0.0440	*0.0447*	*0.0457*
BIG_4_AUDITOR	**−0.0454**	**−0.0307**	**−0.0102**
	0.0457	*0.0453*	*0.0483*
FIRM_AGE	**−0.0389*****	**−0.0356*****	**−0.0336*****
	0.0053	*0.0053*	*0.0054*
LOSS	**0.1718*****	**0.1469*****	**0.1232*****
	0.0375	*0.0378*	*0.0384*
FOREIGN	**−0.0138**	**−0.0038**	**0.0175**
	0.0403	*0.0418*	*0.0441*
LITIGIOUS_INDUSTRY	**0.1371****	**0.1342****	**0.1389*****
	0.0597	*0.0527*	*0.0490*

(continued on next page)

APPENDIX C (continued)

TABLE C5 (continued)

	Coefficient Estimate Standard Error Logistic Regression		
	Years <2019	**Years <2018**	**Years <2017**
SEC Industry Office FE	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes
n	101,594	94,983	88,280
Area under ROC Curve	0.636	0.632	0.631

*, **, *** Indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.

untabulated test, we not only link the restatement to a potential SEC comment letter using the concurrent timing as we do in our main test, but also require the reason for the restatement (as listed in Audit Analytics' restatement dataset) to match the issues discussed in the comment letter correspondence. We continue to impose the requirement that the restatement is announced within 135 days of the comment letter close. Although using this conditional sample, which is conditional on a comment letter receipt, significantly reduces our sample size, we continue to find that voluntary and mandatory filers' likelihood of a future restatement do not significantly differ.

Supplemental Information and Technical Background on Voluntary SEC Filers

The Securities Exchange Act of 1934, also known as the '34 Act, defines the criteria under which firms must mandatorily file with the SEC. The primary conditions are that companies must register with the SEC if they have securities listed on a national exchange or if they become large enough (at least $10 million in assets and either (1) 2,000 total investors or (2) 500 nonaccredited investors) that they are deemed to have a public presence. Registering with the SEC imposes significant regulatory costs on public companies including filing fees, additional SEC rules and regulations, periodic reviews of their disclosure filings, increased legal liability, and more stringent accounting standards and disclosure requirements. When the perceived benefits of filing with the SEC no longer exceed the costs, SEC registrants may choose to deregister their securities.

Filing a traditional registration statement under the Securities Act of 1933 ('33 Act) is not required for a voluntary filer. Instead, filing a '34 Act periodic report, such as Forms 10-K or 20-F, serves as the registration statement. Despite the relative simplicity of the initial registration process, the choice to voluntarily file with the SEC is not trivial. Once a firm has made this election, it cannot pick and choose which SEC rules and regulations it will follow; rather, the voluntary filer is subject to all financial reporting regulations imposed on any other SEC registrant of similar size.[7] If the voluntary filer ever decides to deregister from SEC reporting, it must first ensure that it still does not meet any of the conditions that would require mandatory SEC filing (i.e., being listed on a national exchange or exceeding the size and investor thresholds under Section 13), and that it has satisfied its reporting obligations under Section 15(d) of the '34 Act.[8]

In the Securities Offering Reform of 2005, the SEC asserts that in most cases, voluntary filers are firms that at some point had completed a registered offering and then continued to file reports even after their obligation to do so had been suspended. Our inspection of voluntary SEC filers during our sample period, however, reveals firms may choose to voluntarily file in a number of different scenarios. Some firms voluntarily file with the SEC to comply with the terms of credit extended by a private lender. Other firms voluntarily file with the SEC in the years immediately preceding a

(continued on next page)

[7] C&DI 116:02 states, "Once a company registers a class of equity securities under Section 12(g), it is required to file periodic and current reports, even if the registration of the securities under Section 12(g) is voluntary. The only method provided by the Exchange Act and rules for such a company to properly cease filing periodic and current reports is to deregister the class of securities under the Exchange Act" (https://www.sec.gov/divisions/corpfin/guidance/exchangeactsections-interps.htm).

[8] Firms wishing to withdraw their SEC registration must file Form 15 to deregister. Note that the investor size threshold for allowable SEC deregistration is even more stringent (cannot exceed 300 investors) than the initial threshold for becoming a mandatory filer (2,000 investors). Also, if the voluntary filer made any public offering of debt or equity securities while registered with the SEC, it must maintain current SEC periodic reporting for at least one full year as required by Section 15(d) of the '34 Act.

APPENDIX C (continued)

first-time equity issuance. Still others voluntarily file with the SEC after being delisted from a national exchange, presumably in hopes of being relisted on the exchange. Firms are not required to disclose their reason for voluntarily filing with the SEC and generally do not publicly provide the rationale for that decision. All voluntary filers become subject to the financial reporting regulations imposed on similar mandatory SEC registrants.

Precise determination of the origin and trajectory of voluntary filers is constrained both by data availability and sample period truncation. However, we provide some descriptive evidence on firms' pre and post voluntary filing status based on data merges with Compustat, CRSP, and other sources. We find that approximately half of voluntary filers in our sample were previously mandatory filers. Of these, just under 20 percent were actually listed on a U.S. stock exchange.[9] Several dozen were privately held companies that had previously issued public debt but that continued to file SEC reports for a period after the debt was retired. Over 25 percent of voluntary filers in our sample subsequently become mandatory filers, with just over a third of those ending up listed on a U.S. stock exchange and another 15 percent that subsequently became mandatory filers by issuing public debt. Although data limitations make these figures somewhat imprecise, overall, this evidence substantiates the view that the voluntary filing decision is often made by firms that have recently exited from or that are anticipating entry into mandatory filing status.

Per discussions with several current SEC staff members who are directly involved in the SEC filing review process, although not technically required by statute, the SEC still reviews voluntary SEC filers at least once every three years, consistent with the SOX 408 requirement for mandatory filers. According to the SEC staff members we interviewed, the disclosure standards are the same regardless of the filing status. Also, based on the SEC mission to protect investors, the SEC feels compelled to dedicate resources to the oversight of voluntary filers even if the number of investors is smaller on average compared to a mandatory filer. Anecdotally, voluntary filers have been the subject of SEC regulatory scrutiny of the highest levels, with even the SEC's Office of the Chief Accountant getting involved with complex consultations on accounting issues and SEC-induced financial restatements. Further, investors of voluntary filers may have a perception that the filings receive regular oversight and monitoring by the SEC. As most of the evidence on the extent of regulation by the SEC over voluntary filers is either anecdotal, descriptive, or based on perceptions expressed by SEC staff or external law firms, we feel our study addresses an important empirical question that is of interest to regulators, investors, and managers.

[9] A significant number of voluntary filers traded in OTC markets during both their mandatory and subsequent voluntary filing periods.

American Accounting Association