Insights into the Nexus of Accounting, Politics, and Academia

Dissertation

zur Erlangung des Grades eines Doktors der Wirtschaftswissenschaft

der Rechts- und Wirtschaftswissenschaftlichen Fakultät

der Universität Bayreuth

Vorgelegt von

Jan Seitz

aus Forchheim

Dekan:	Prof. Dr. André Meyer
Erstberichterstatter:	Prof. Dr. Rolf Uwe Fülbier
Zweitberichterstatter:	Prof. Dr. Klaus Schäfer
Tag der mündlichen Prüfung:	16. August 2024

Danksagung

Diese Dissertation entstand während meiner Tätigkeit als wissenschaftliche Mitarbeiter am Lehrstuhl für Internationale Rechnungslegung unter der Betreuung von Prof. Dr. Rolf Uwe Fülbier an der Universität Bayreuth. Sie wurde im Sommersemester 2024 von der Rechts- und Wirtschaftswissenschaftlichen Fakultät der Universität Bayreuth angenommen. Allen, die mich auf diesem Weg begleitet und durch ihre Unterstützung, Anregungen und Ermutigungen maßgeblich zum Erfolg dieser Arbeit beigetragen haben, gilt meine tiefe Wertschätzung.

Mein ganz besonderer Dank gilt meinem Doktorvater, Herrn Prof. Dr. Rolf Uwe Fülbier, der mir nicht nur die Möglichkeit zur Promotion eröffnet hat, sondern mich auch während der gesamten Zeit mit großer Unterstützung und Vertrauen begleitet hat. Seine inspirierende Art, seine fundierten Ratschläge und die Freiheit, eigene Ideen zu entwickeln, haben meine fachliche und persönliche Entwicklung nachhaltig geprägt. Für diese wertvolle Erfahrung bin ich ihm sehr dankbar. Herrn Prof. Dr. Klaus Schäfer danke ich für die Übernahme des Zweitgutachtens und seine Bereitschaft, diese Arbeit zu begleiten. Ebenso danke ich Herrn Prof. Dr. Niklas Kühl für die Übernahme des Vorsitzes der Prüfungskommission.

Meine Zeit an der Universität Bayreuth wurde besonders durch das Miteinander mit großartigen Kolleginnen und Kollegen bereichert. Hendrik Rupertus, Christian Wittmann, Sebastian Wenk, Sven Hörner, Hanno Hoch und Manuel Brinkmann haben mit ihrem fachlichen Austausch und den vielen gemeinsamen Erlebnissen abseits der Arbeit wesentlich dazu beigetragen, dass diese Zeit unvergesslich bleibt. Besonders hervorheben möchte ich die jüngere Generation – Emil Gehrt, Lena Riedl und Florian Federsel – die mit ihrer frischen Perspektive und ihrem Engagement das Team bereichert haben. Sie haben immer wieder neue Ideen eingebracht und das Arbeitsumfeld auf eine

Weise mitgestaltet, die den Alltag inspirierend und spannend gemacht hat. Eine besondere Rolle spielten Klara Lösse und Lorenz Piering, die im Laufe der Zeit zu engen Freunden wurden. Ihre Unterstützung, ihr ehrliches Feedback und ihre Ermutigung haben mir sowohl beruflich als auch privat viel bedeutet. Ob bei intensiven Diskussionen während der (Ski-)Seminare, auf Konferenzen oder bei einer gemütlichen Tasse Kaffee – die gemeinsamen Erlebnisse mit ihnen haben diese Zeit nicht nur bereichert, sondern auch zu einer tiefen Freundschaft geführt, die ich sehr schätze.

Ein wichtiger Dank gilt auch den vielen studentischen Hilfskräften, die mich im Laufe der Jahre unterstützt haben. Stellvertretend möchte ich einige namentlich erwähnen: Simon Birk, Sarah Grüner, Ryan Marett, Hannah Mohr und Robin Spira. Ihr Einsatz war für den Erfolg dieser Arbeit von großem Wert, und ich bin ihnen dafür sehr dankbar.

Mein tiefster Dank gilt meiner Familie – meinem Bruder Julian und besonders meinen Eltern Edeltraud und Stefan. Ihr beständiger Rückhalt und ihre großzügige Unterstützung haben meinen bisherigen Werdegang entscheidend geprägt. Mit ihrer ständigen Hilfsbereitschaft und ihrem Vertrauen haben sie es mir ermöglicht, meinen Weg erfolgreich zu gehen. Mein letzter und ganz besonderer Dank gilt meiner Freundin Sophie-Juliane. Ihre ständige Unterstützung, ihre Geduld und ihr Vertrauen in mich haben mich während dieser ganzen Zeit begleitet. Sie war immer an meiner Seite und hat mir sowohl in den Höhen als auch in den Herausforderungen Kraft gegeben – ohne sie wäre dieser Weg nicht derselbe gewesen.

Bayreuth, im September 2024 *Jan Seitz*

Table of Contents

Table of Contents **VII**

List of Tables **XI**

List of Figures **XIII**

List of Abbreviations **XIV**

Introductory Summary **1**

1 Motivation and Research Objective 1

2 Research Conceptualization 3

2.1 Accounting, Politics, and Academia 3

2.2 Research Concept and Method 6

3 Summaries of Research Papers 7

I Research-Practice Gap in Accounting Journals? A Topic Modeling Approach **13**

1 Introduction 15

2 Theoretical Background of the Research-Practice Gap in Accounting 19

2.1 Research-Practice Gap in Prior Literature and Measurement Attempts . . . 19

2.2 Systematization of the Research-Practice Gap 23

2.3 Research Questions 27

2.3.1 Research-Practice Gap in Accounting Literature 27

2.3.2 Research Community Differences in Accounting Literature . . . 28

3 Sample, Research Method, and Research Design . . . 30
3.1 Sample . . . 30
3.2 Research Method: Topic Modeling with Latent Dirichlet Allocation (LDA) 32
3.3 Research Design . . . 34
4 Results . . . 37
4.1 Descriptive Statistics . . . 37
4.2 Main Findings . . . 41
5 Additional Analyses . . . 48
5.1 Bridging Journals . . . 48
5.2 Psychology of Music . . . 51
5.3 Time Series Analyses . . . 53
5.4 Elimination of Methodological Topics . . . 55
6 Discussion . . . 55
7 Conclusion and Limitations . . . 59
Appendix I.A: Sensitivity Analysis for Different Numbers of Topics . . . 61
Appendix I.B: MANOVA for RQ 1—Robustness Check with PoM . . . 62
Appendix I.C: MANOVA for RQ 2—Robustness Check with PoM . . . 63
Appendix I.D: MANOVA for RQ 1—Robustness Check restricted Model . . . 64
Appendix I.E: MANOVA for RQ 2—Robustness Check restricted Model . . . 65
Appendix I.F: MANOVA for Analysis of Bridging Journals—Robustness Check . . 66

II Capital Market Effects of SEC Rules under Academic Influence 67

1 Introduction . . . 68
2 Institutional Setting, Prior Literature, and Hypotheses . . . 74
2.1 SEC Rulemaking . . . 74
2.2 Role of Academia in (SEC) Regulation . . . 77
2.3 Hypotheses Development . . . 79
3 Empirical Strategy . . . 84
3.1 Research Design . . . 84
3.2 Identification Strategy . . . 88

3.3 SEC Rulemaking Data . . . 90
4 Descriptive Statistics and Main Results . . . 95
4.1 Sample and Descriptive Statistics . . . 95
4.2 Main Results . . . 100
4.3 Analyses by Rule Type . . . 105
4.4 *Business Roundtable v. SEC* . . . 107
5 Additional Analyses . . . 109
5.1 Temporal Analyses . . . 110
5.2 Instrumental Variable Approach: Google Scholar Hits . . . 113
5.3 Analyses by Affected Firms: Event Study Approach . . . 115
6 Conclusion . . . 118
Appendix II.A: Variable Definitions . . . 120
Appendix II.B: Collection and Identification of Academic Comment Letter . . . 122
Appendix II.C: Alternative Research Designs for Main Analyses . . . 124
Appendix II.D: Analyses by Rule Type . . . 127
Appendix II.E: Identification of Affected Firms via Event Study Approach . . . 128

III Political Connenctions and SEC Attention **131**
1 Introduction . . . 132
2 Background . . . 136
2.1 SEC Oversight and Attention . . . 136
2.2 Regulatory Capture and Political Connections . . . 139
2.3 Research Questions . . . 140
2.4 Research Design . . . 145
3 Data . . . 148
3.1 SEC Attention . . . 148
3.1.1 Measure . . . 148
3.1.2 Potential Noise and Bias . . . 150
3.2 Political Connections . . . 151
3.3 Sample . . . 153

3.4 Descriptive Statistics 154
4 Political Connections and SEC Attention 159
4.1 Main Findings 159
4.2 Robustness Checks 164
5 The Role of Political Connections and SEC Attention in Financial Oversight 171
6 Conclusion 176
Appendix III.A: Variable Definitions 179
Appendix III.B: Fixed Effects Evaluation 182
Appendix III.C: Robustness Checks 185
Appendix III.D: Mediation Analysis in the Style of Baron & Kenny (1986) 186

References **188**

Declaration of Own Contribution **208**

List of Tables

I.1 Systematization of Research-Practice Gap 24
I.2 Mean Topic Distributions per Journal 39
I.3 Top Five Words per Topic 40
I.4 Main Findings and Robustness Check 43
I.5 MANOVA for RQ 1 46
I.6 MANOVA for RQ 2 47
I.7 MANOVA for Additional Analysis of Bridging Journals 50

II.1 Rules Selection Procedure 91
II.2 Descriptive Statistics of SEC Rulemaking Data 93
II.3 Sample Breakdown by Year 96
II.4 Descriptive Statistics 98
II.5 Main Analyses: Dependent Variable Bid–Ask Spread 101
II.6 Main Analyses: Dependent Variables Price Impact and Zero Returns 103
II.7 Analyses by Rule Type: Dependent Variable Bid–Ask Spread 106
II.8 *Business Roundtable v. SEC*—Analyses: Dependent Variable Bid–Ask Spread . . . 108
II.9 Instrumental Variable Approach: 2SLS Estimation 114
II.10 Main Analyses with Differentiation between Positively and Negatively Affected Firms 117

III.1 Summary Statistics—SEC_Attention (Downloads) and Political Connections 152
III.2 Sample Selection 154
III.3 Summary Statistics 155
III.4 Correlation Tables 156

III.5 SEC Attention and Lobbying 161
III.6 SEC Attention and Lobbying (cont.) 162
III.7 SEC Attention and PAC Contributions 163
III.8 Summary Statistics Instruments 165
III.9 SEC Attention and Lobbying: Instrumental Variables Approach 167
III.10 SEC Attention and PAC: Instrumental Variables Approach 168
III.11 Entropy Balancing 170
III.12 Mediation Analyses: PC, SEC Attention, and Oversight 173

List of Figures

1 Structure of this Thesis 5

I.1 Research Design 35
I.2 Hellinger distances 42
I.3 Principal Component Analysis with Psychology of Music 52
I.4 Time Series Analyses 54

II.1 Timeline 75
II.2 Visualization of the Main Research Design 86
II.3 Temporal Analysis: Estimates for Ln_Bid_Ask on 15-day bins × Ln_Cite_N 111
II.4 Temporal Analysis: Estimates for Ln_Bid_Ask on 15-day bins × Ln_Academic_CL 111

III.1 Total SEC Attention per Year 149
III.2 Weekly SEC Attention around Comment Letter Receipt 158
III.3 Mediation Analyses 174

List of Abbreviations

AAA American Accounting Association

AAER Accounting and Auditing Enforcement Release

AcE Accountancy Europe

AHo Accounting Horizons

AiE Accounting in Europe

CAR cumulative abnormal return

CFR Code of Federal Regulations

CRP Center for Responsive Politics

CL comment letter

DCF Division of Corporation Finance

DERA Division of Economic and Risk Analysis

DoE Division of Enforcement

DoJ Department of Justice

EAA European Accounting Association

EAR European Accounting Review

EDGAR Electronic Data Gathering, Analysis, and Retrieval

FASB Financial Accounting Standards Board

GAAP Generally Accepted Accounting Principles

GSEM generalized structural equation modeling

IASB International Accounting Standards Board

IFRS International Financial Reporting Standards

IP Internet Protocol

IPO initial public offering

IRS Internal Revenue Service

JoA Journal of Accountancy

JOBS Act Jumpstart Our Business Startups Act

LDA Latent Dirichlet Allocation

MANOVA multivariate analysis of variance

OLS ordinary least squares

PAC Political Action Committee

PC political connections

PoM Psychology of Music

SEC U.S. Securities and Exchange Commission

SEM structural equation modeling

SOPR Senate's Office of Public Records

SOX Sarbanes-Oxley Act of 2002

TAR The Accounting Review

U.K. United Kingdom

U.S. United States

Introductory Summary

> *"The use and end of reason is not the finding of the sum and truth of one, or a few consequences [...]; but to begin at these, and proceed from one consequence to another. [...]*
>
> *And whereas sense and memory are but knowledge of fact, [...] science is the knowledge of consequences, and dependence of one fact upon another;"*
>
> Hobbes (1651, chap. V, pp. 27–30), *Leviathan*

1 Motivation and Research Objective

The aforementioned definitions of reason and science found in Hobbes's Leviathan, arguably one of the key writings of political philosophy, constitute, in a sense, the building blocks of a political theory that can be summarized by the well-known Latin aphorism "Scientia, Potentia est" (Hobbes, 1668, chap. X, p. 44).[1] The underlying idea of this theoretical notion is that science, or precisely the acquisition, production and application of scientific knowledge, is capable of influencing political processes and ultimately the 'real' world. Even the small sub-area of science known as accounting research, which is the focus of this dissertation, is, in theory, able to exert its influence on political decisions. Accounting research derives its relevance from the gravitas and potency of the underlying

[1] This aphorism is commonly but erroneous attributed to Sir Francis Bacon. The closest quote someone can attribute to Bacon is "ipsa scientia potestas est" (in engl. "Knowledge itself is power") in his Meditationes Sacrae (Rodrígez García, 2001; Vickers, 1992). Nevertheless, it must be noted that the first edition of Hobbes's (1651, chap. X, p. 54) Leviathan states, "The sciences are small powers; because not eminent, and therefore, not acknowledged in any man"—and therefore does not correspond exactly to the wording in the later, Hobbes (1668), Latin edition.

research objects—accounting and accountability. The relevance of accounting and accountability can be understood through a historical perspective; for instance, Soll (2014, p. xvi) illustrates in different historical examples (e.g., the Medici family in Florence during the 15th century) the gravitas and importance of accounting as the "delicate interplay between accounting and accountability decide the fate of a company, or, indeed, a nation", or in short, that accounting and accountability can determine over the "Rise or Fall of Nations".

Not surprisingly, a wide range of accounting scholars have addressed and questioned the relevance and scope of accounting research from a conceptual perspective (e.g., Demski et al., 1991; Dyckman & Zeff, 2015; Fülbier & Sellhorn, 2023; Hopwood, 2007; Rajgopal, 2021). A particular criticism raised here is that accounting research "has become insufficiently innovative and increasingly detached from the practice of the craft" (Hopwood, 2007, p. 1365). Having said that, in the highly politicized field of regulation, be it accounting standard-setting or rulemaking, there are indications that academic accounting research (can) play an influential role (Ewert & Wagenhofer, 2012; Fülbier et al., 2009; Fülbier & Sellhorn, 2023; Geoffroy & Lee, 2021; Leuz, 2018; Trombetta et al., 2012).

From this role follows the main research objective of this dissertation: namely, to examine the nexus of accounting, politics, and academia. During the course of this dissertation, I provide several contributions and empirical insights into the complex interplay of accounting research, practice, and the involved (research) policy and regulatory processes. Before presenting these contributions, which are the outcome of my three research papers, I first take a look at the underlying research conceptualization.

2 Research Conceptualization

2.1 Accounting, Politics, and Academia

I begin by looking at the link between *Accounting & Academia* (see, Figure 1). The term *accounting* itself refers to all systems and processes within an organization that record, evaluate, control, and monitor its operations (Coenenberg et al., 2018, p. 3). The term *academia* originates from Latin and is derived from the Greek "$Akadēmeia$", referring to a public garden near Athens where Plato opened a school (Peck, 1896). In modern usage, *academia* refers to the part of society connected with studying and thinking (Cambridge Dictionary, 2024). Therefore, linking *accounting* and *academia* can be described as the study or research of the processes and systems used to record, evaluate, control, and monitor the operations of organizations; or, in short, accounting research. Based on this, the question arises whether accounting can rather be described as a science or as an art (e.g., Fülbier & Weller, 2009; Wolk et al., 2017, p. 34). And closely related to this, the question of which role accounting research itself takes and what it can actually contribute to accounting practice. These questions sparked an intensive debate on how accounting research can play a more important role for accounting practice and accounting regulators. Thus, a considerable number of accounting scholars have bemoaned the existence of a research-practice gap in accounting (e.g., Basu, 2012; Dyckman, 1989; Ferry et al., 2019; Hopwood, 2007; Kaplan, 2011; Jansen, 2018; Tucker & Schaltegger, 2016). Investigating the existence and extent of this gap is the first sub-research objective of this dissertation (see Research Paper I).

The second link refers to the relationship between *Politics & Academia*. According to the Cambridge Dictionary, the term *politics* describes "the activities of the government, members of law-making organizations, or people who try to influence the way a country is governed". This

link between politics and academia, and more specifically the collaboration between them in the quest towards suitable regulation, offers a highly effective way for researchers to gain societal relevance—but also helps politics to improve its regulatory decision-making (Ahmed et al., 2023; Cairney & Oliver, 2020; McGuire & Perna, 2023; Fülbier & Sellhorn, 2023). Particularly when it comes to accounting research, there are various channels through which such a collaboration can be realized. Primarily, academic accounting research can help to ensure that stakeholders' information needs are better understood and are integrated into regulatory processes in a more balanced way (Fülbier & Sellhorn, 2023). Not only can this achieved through an ex-ante cost-benefit analysis (e.g., Geoffroy & Lee, 2021; Fülbier et al., 2009; Schipper, 2010; Trombetta et al., 2012); but furthermore, ex-post regulatory assessment can contribute to this goal (e.g., Ewert & Wagenhofer, 2012; Leuz, 2018; Trombetta et al., 2012). It should be noted that there are a multitude of effective avenues in which researchers can become involved in these political processes. For example, there is the "passive" way, characterized primarily by the fact that regulators refer to academic research and its publications in order to justify certain regulations (Geoffroy & Lee, 2021). Or more actively, for example, by scholars submitting comment letters on new regulations, or participating in joint conferences with regulators (Ahmed et al., 2023; e.g., IFRS Foundation, 2023). Whether these types of collaboration make a real contribution—or not—towards "better" regulation remains an unanswered empirical question. Providing initial evidence in this regard is my second sub-research objective (see Research Paper II).

Lastly, I analyze the link between *Accounting & Politics*. A reflection on the aforementioned definitions of *accounting* and *politics* reveal that accounting is inherently political (Baudot & Wallace, 2023; Cooper & Sherer, 1984; Fogarty et al., 1994; Gipper et al., 2013; Watts, 1977). This can be exemplified by looking at the Financial Accounting Standards Board (FASB), the International

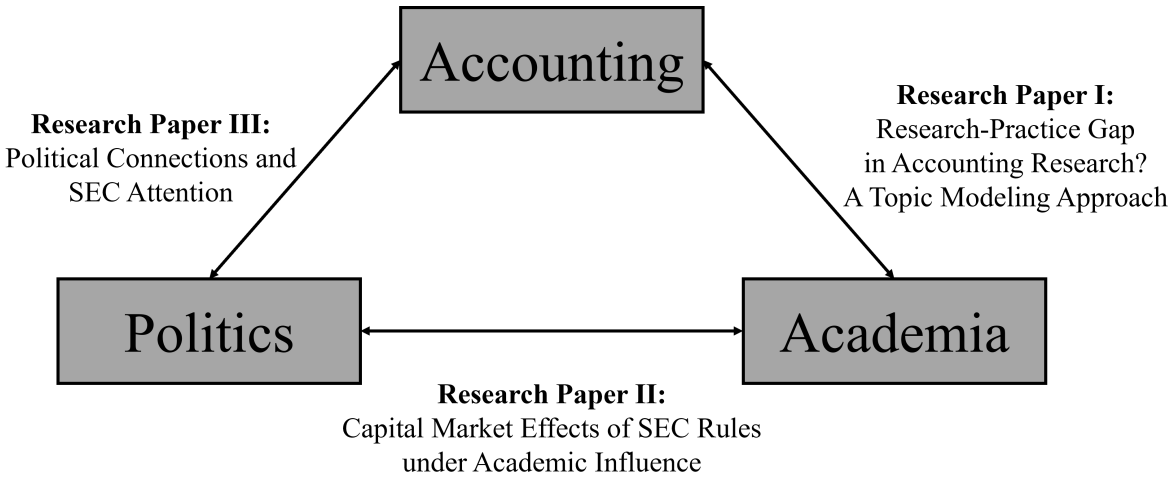


Figure 1: Structure of this Thesis

Accounting Standards Board (IASB), or the U.S. Securities and Exchange Commission (SEC) as the bodies responsible for accounting standard-setting or rulemaking, which thereby fulfill a policy function. The execution of such a policy function requires the integration of economic conditions and political factors conveyed to the regulator by various stakeholders (Wolk et al., 2017, p. 4). In recent decades, several economic theories of regulation have been developed to explain the influence of political powers on standard-setting and rulemaking (Gipper et al., 2013). Among the most important of these are the public interest theory (e.g., Posner, 1974), the capture theory (e.g., Peltzman, 1976; Posner, 1974; Stigler, 1971), and ideology (e.g., Bischof et al., 2020; Kalt & Zupan, 1984; Kau & Rubin, 1979). More recent studies go a step further and apply these theories to explore how political influences (through lobbying, for example) affect regulators' decision-making regarding the firms they oversee (Correia, 2014; Heese et al., 2017). Subsequently, in my third sub-research objective, I draw upon these partly contradictory studies and try to shed fuller light on alternative explanations for regulators' decision-making under political influences (see Research Paper III).

2.2 Research Concept and Method

In accordance with my thesis' main objective, this research is oriented towards providing empirical insights. Viewed from the perspective of Chmielewicz's (1994) research concepts, such an approach enables me to formulate statements on cause-effect relationships. Correspondingly, I follow here a so-called "theoretical research objective"(Chmielewicz, 1994). By testing theoretical propositions and thereby developing theory further, my research approach thus belongs to positive-empirical accounting research (Fülbier & Weller, 2009). Methodologically, I implement this research approach by applying classical methods of empirical research, primarily applied regression analyses, but also more modern techniques from the field of machine learning. Moreover, I apply (in Research Paper II and III) current research designs in combination with statistical methods (e.g., difference-in-differences and instrumental variable approaches) to ensure that my identified cause-effect relationships are based on quasi-causal evidence.

However, such a positive-empirical approach comes with some limitations. Notably, this approach is criticized for being inherently normative and value-laden due to its immanent (and for the social sciences allegedly unsuitable) epistemology of realism (Tinker et al., 1982). Closely related to this, criticism stems from the premise that such positivistic research only deals with the "what is" and cannot address the "what ought", and is therefore rarely able to provide results directly applicable in practice (Friedman, 1966; Fülbier & Weller, 2009; Keynes, 1890; Tinker et al., 1982; Weber, 1964).

This philosophical argument is not only a limitation of my own research; but, at the same time, served as a starting point for my first research paper.

3 Summaries of Research Papers

In Research Paper I ("Research-Practice Gap in Accounting Journals? A Topic Modeling Approach"), a joint project with Florian Philipp Federsel and Rolf Uwe Fülbier, we address the commonly perceived phenomenon that accounting research has become detached from practical application.[2] However, this diagnosis of the so-called research-practice gap is often merely based on a subjective assessment, partly underpinned by anecdotal evidence (e.g., Dyckman, 1989; Hopwood, 2007; Kaplan, 2011; Mitchell, 2002; Parker et al., 2011; Rajgopal, 2021). There are few studies that seek to substantiate this research-practice gap with hard evidence; often survey-based (Fraser & Sheehy, 2020; Quagli et al., 2016; Ratnatunga, 2012; Tucker & Parker, 2014; Tucker & Schaltegger, 2016). Some studies include journal publications as an object of analysis in their investigation (Ratnatunga, 2012; Ratzinger-Sakel & Gray, 2015; Orchard et al., 2020).

Building on the idea of using journal articles as the object of study to "measure" the research-practice gap, we apply an unsupervised machine-learning approach, the so-called topic modeling using LDA, to investigate possible topic-related differences between accounting research and practice.[3]

By following this topic modeling approach, we are able to investigate the research-practice gap quantitatively. In order to approximate research and practice, we utilize research-oriented journals (The Accounting Review (TAR) and European Accounting Review (EAR)) as well as practice-oriented journals (Journal of Accountancy (JoA) and Accountancy Europe (AcE)). Before that, we provide a systematization that explains the research-practice gap in accounting and illustrates why

[2] This research paper is an accepted publication ahead-of-print in the Journal of Accounting Literature (Federsel et al., 2023).

[3] See Walker et al. (2019) and Wang & Zhang (2022) for the use of topic modeling to examine the research-practice gap in other disciplines (public administration and public relations).

its "measurement" is challenging given its definitional difficulties. We conclude therefrom that our approach can only focus on a topic-based and thus on the content-wise research-practice gap (in contrast, for example, to a research-practice gap that originates from communicative considerations (Bricker & Previts, 1990; Inanga & Schneider, 2005; Singleton-Green, 2010; van Helden & Northcott, 2010). We draw on institutional isomorphism as a theoretical foundation for explaining the research-practice gap in accounting (DiMaggio & Powell, 1983; Tuttle & Dillard, 2007). The rationale behind this is that insitutional factors in accounting academia lead to a loss of topic-based diversity in accounting research, and thus result in a loss of practical relevance (Tuttle & Dillard, 2007). In addition, we argue that there are differences between the research communities regarding their research-practice gap. Comparing United States (U.S.) and European accounting academia, we assume that the higher institutional heterogeneity in Europe contributes to a less pronounced research-practice gap. Just like the existence of a research-practice gap, the question of the difference in the research-practice gap between the U.S. and Europe is an empirical one. In our analysis, we examine 2,251 articles from accounting journals for the years 2009 to 2019. Using topic modeling, we achieve a dimension reduction to 25 topics, enabling us to examine the divergence between research-oriented and practice-oriented accounting journals. Therefore, we find that this topic-based gap between research and practice is substantial, and multivariate analyses of variances (MANOVA) reveal that these differences are statistically significant. Similarly, we find a wider topic-based research-practice gap in the U.S. compared to Europe.

Thus, this research paper contributes to the research objective of my thesis by providing an empirical contribution to the link between accounting and academia (see Figure 1). As such, this paper adds to the debate on the role of accounting research in practice by providing empirical evidence for a topic-based research-practice gap in accounting journals.

Research Paper II ("Capital Market Effects of SEC Rules under Academic Influence") follows on academia's role in practice (see Research Paper I, here with a focus on regulatory practice) and links this to the influence of academic research on the outcomes of political processes. The main objective of this research paper is to exploit the observable channels of academic influence on SEC rulemaking to provide empirical evidence on the capital market effects of rules depending on academic influence. For this purpose, I point out that SEC rulemaking is a particularly suitable setting to explore whether academic research can have real-world consequences through its influence on regulation. An advantage of this setting is the clear mandate of the SEC "to protect investors, maintain fair, orderly, and efficient markets, and facilitate capital formation"(SEC, 2022), which leads to a focus on capital market outcomes as an obvious choice. Furthermore, Geoffroy & Lee (2021) showed that academic research plays a considerable role in SEC rulemaking and that the relatively standardized and transparent structure of the SEC rulemaking process is well suited for empirical research.

Using standard liquidity measures as outcome variables, I analyze the effect of academic participation in SEC rules on the capital market in a difference-in-differences research design around the effective dates of these SEC final rules. Moreover, I consider the academic influence from two theoretical perspectives:

The first perspective centers on the SEC as a consumer of academic research. Hereby, the classical theories of economic regulation—in particular public interest and capture theory—allow to explain the SEC's behavior regarding the citation of academic research (Geoffroy & Lee, 2021; Posner, 1974; Stigler, 1971). The public interest theory argues that a benevolent regulator incorporates academic research into its rulemaking decision in such a way that the rules increase market liquidity through a better assessment of the economic consequences. Under the capture theory, the opposite

effect would be expected. Consequently, I use academic citations as a metric for academic influence to operationalize this first perspective.

The second theoretical perspective focuses on scholars as representatives of academia. Again, there are two conflicting theories. The first theory argues that scholars are incentivized to participate in rulemaking due to the pursuit of societal relevance (Fülbier & Sellhorn, 2023). As a result, the regulator, i.e., the SEC, would be enabled to issue rules that lead to higher market efficiency. The opposing theory reasons that scholars participate in rulemaking because they act as facilitators of regulatory capture (Zingales, 2014). I operationalize this second perspective by measuring academic participation through the number of comment letters in the SEC rulemaking process.

My results suggest, in general, that SEC rules under academic influence have negative firm-level liquidity effects. However, the results are more nuanced when looking at specific rule sub-types, such as financial reporting rules. In addition, there are some indications that the participation of finance, accounting, and economic scholars in rulemaking can positively affect firm-level liquidity under certain circumstances.

Based on these findings, Paper II contributes to the main research objective of my thesis by shedding light on the link between academia and politics by revealing real effects of academic research on the capital market in the setting of the political SEC rulemaking process.

Research Paper III ("Political Connections and SEC Attention") is a joint project with Lorenz Piering and builds on Research Paper II in terms of its theoretical basis and its reference to political processes.[4] Similar to Research Paper II, the setting of the SEC is revisited in Research Paper III. In contrast, though, we focus on SEC oversight—i.e., all the activities of the SEC that take place in

[4] A working paper version exists, which I cite in another research papers of this dissertation as Seitz & Piering (2024). Additionally, a preliminary version of this research project is part of the doctoral thesis by Piering (2024).

the course of a filing review and enforcement actions—rather than rulemaking. Therefore, a link to accounting is established by the fact that SEC oversight is directed at financial reporting—and thus at firms' accounting.

In this context, we examine the effects of firms' political connections on SEC oversight. Building on a theoretical foundation (mainly capture theory (e.g., Stigler, 1971; Peltzman, 1976)) and indistinct empirical results (Correia, 2014; Heese et al., 2017), we raise the question of how SEC attention is affected by firms' political connections (i.e., lobbying and contributions to Political Action Committee (PAC)). Consequently, we use the relatively new measure of SEC attention based on observing the SEC's own downloads in the Electronic Data Gathering, Analysis, and Retrieval (EDGAR) system as a variable for SEC oversight. This measure has the advantage of covering the overall and cross-divisional activities of SEC's rank-and-file employees. We find a positive relation between politically connected firms and SEC attention. This finding substantiates a previously just hypothesized attention-grabbing effect of firms' political connections (Heese et al., 2017). In an additional mediation analysis, we can show that the higher likelihood for politically connected firms to receive comment letters (CLs) (as a form of SEC oversight), as previously reported in the literature (Heese et al., 2017), can be at least partly explained by this attention-grabbing effect.

Thus, this research paper contributes to the main research objective by investigating the relationships between the political processes of lobbying and PAC contributions on the behavior of an agency that is highly relevant for the reliability of accounting, the SEC.

In summary, my three research papers provide a more comprehensive picture of the nexus of accounting, politics, and academia.

Research Paper I

Research-Practice Gap in Accounting Journals?

A Topic Modeling Approach

This research paper is a joint project with Florian Philipp Federsel and Rolf Uwe Fülbier. An ahead-of-print paper version is available as Federsel et al. (2023) in the Journal of Accounting Literature.

Acknowledgements: We gratefully acknowledge the helpful comments and suggestions received from Tom Smith (Editor-in-Chief), Bruce Vanstone (Associate Editor), and an anonymous reviewer. We also thank the attendants of the European Accounting Association (EAA) Annual Congress 2022 in Bergen, Norway, as well as the participants of the Doctoral Seminar on Accounting at the Humboldt University of Berlin in October 2021, especially Thorsten Sellhorn, Joachim Gassen, Bernhard Pellens, Nils Crasselt, Sven Hörner, Ulf Brüggemann, and Maximilian A. Müller for their valuable feedback.

STRUCTURED ABSTRACT

Purpose

A gap between research and practice is commonly perceived throughout accounting academia. However, empirical evidence on the magnitude of this detachment remains scarce. We provide new evidence to the ongoing debate by introducing a novel topic-based approach to capture the research-practice gap and quantify its extent. We also explore regional differences in the research-practice gap.

Design/methodology/approach

We apply the unsupervised machine learning approach Latent Dirichlet Allocation (LDA) to compare the topical composition of 2,251 articles from six premier research, practice, and bridging journals from the United States (U.S.) and Europe between 2009 and 2019. We extend the existing methods of summarizing literature and develop metrics that allow us to evaluate the research-practice gap. We conduct a plethora of additional analyses to corroborate our findings.

Findings

Our results substantiate a pronounced topic-related research-practice gap in accounting literature and document its statistical significance. Moreover, we uncover that this gap is more pronounced in the U.S. than in Europe, highlighting the importance of institutional differences between academic communities.

Practical implications

We objectify the debate about the extent of a research-practice gap and stimulate further discussions about explanations and consequences.

Originality/value

To the best of the authors' knowledge, this is the first paper to deploy a rigorous machine learning approach to measure a topic-based research-practice gap in the accounting literature. Additionally, we provide theoretical rationales for the extent and regional differences in the research-practice gap.

Keywords: Research-Practice Gap; Accounting Research; Practice-Relevant Research; Topic Modeling; Accounting Journals

JEL-Classification: M41; M40; C40

1 Introduction

Hopwood (2007, p. 1365) once expressed "a growing sense of unease about the state and direction of accounting research" in his plenary address delivered during the American Accounting Association (AAA) Annual Meeting in 2006. He explained that "accounting research has become insufficiently innovative and increasingly detached from the practice of the craft." The divergence between accounting research and practice was an issue even earlier perceived in an unpublished but publicly distributed "statement on the state of academic accounting" by other prominent research community representatives. According to their statement, research lags behind the practice and does not lead it; therefore, there is no demand for accounting researchers and their work by practitioners (Demski et al., 1991). In the aftermath of the empirical turn and the rise of positive accounting theory in the 1970s, the attempt of mainstream accounting research (Chua, 1986) to convert an applied discipline into a positive science, with a possible overemphasis on rigor over relevance, might be one explanation (Mattessich, 1995, p. 9; Dyckman & Zeff, 2015). In more recent times, Rajgopal (2021) argues that academic accounting suffers from an often irrelevant research focus and has strayed from addressing practical problems of importance. He identifies a problematic contrast between applied and "pure" or scholarly work, in which only the latter seems to qualify for the top-tier academic job market.

Various authors also lament the perception of a research-practice gap in the U.S. community (Baxter, 1988; Dyckman, 1989; Lee, 1989; Bricker & Previts, 1990; Kaplan, 2011; Basu, 2012; Zeff & Dyckman, 2018) and elsewhere (Hopwood, 2002; Mitchell, 2002; Hopwood, 2007; Parker et al., 2011; Parker & Guthrie, 2013). On European grounds, Sellhorn (2020), former president of the EAA, argued along the same lines in a newsletter to his members during COVID-19. He complains

that accounting researchers, unlike, i.a., virologists, were not consulted by politicians or regulators amid the pandemic. He admonishes that accounting research should address the "big questions" and prove its relevance to society. He emphasizes that researchers consider the needs of practitioners and society at large, and in turn, they will acknowledge research as relevant. This perception aligns with the earlier research assessments in countries like Australia and the United Kingdom (U.K.) to move research closer to practice again (Parker et al., 2011).

In this regard, Tuttle & Dillard (2007) provide a theoretical explanation of why accounting academia's research topics do not meet practitioners' needs. They show that institutional isomorphism (DiMaggio & Powell, 1983) leads to the loss of topic-based diversity in accounting research and, thus, to a loss of practical relevance (Tuttle & Dillard, 2007). In addition to the (empirical) question of to what extent a topic-related research-practice gap exists, it is of great interest whether this gap exhibits differences between the research communities, for example, due to remaining institutional and cultural differences, especially between the U.S. and Europe (e.g., Lukka & Kasanen, 1996; Panozzo, 1997; Raffounier & Schatt, 2010).

In contrast to the perceptions and theoretical analyses of a research-practice gap in accounting, there are far fewer attempts in the accounting literature to measure this gap and obtain a quantified and evidence-based picture. Most of the literature covers conceptual considerations, personal impressions, and anecdotal evidence from several senior academics, often combined with some advice on bridging the gap (Moehrle et al., 2009; e.g., Basu, 2012; Rajgopal, 2021). Scarcely provided are quantitative or qualitative empirical studies based on broader datasets. The few studies in this regard are predominantly survey-based, focusing on academics and practitioners (Tucker & Parker, 2014; Quagli et al., 2016; Tucker & Schaltegger, 2016; Fraser & Sheehy, 2020). Their assessments support the notion of an existing and seemingly increasing research-practice gap. Other

studies complementarily or exclusively use journals and journal publications to approximate the research as well as the practice sphere (Ratnatunga, 2012; Ratzinger-Sakel & Gray, 2015; Orchard et al., 2020). From these studies, no consistent conclusion can be drawn about the existence (Ratnatunga, 2012; Ratzinger-Sakel & Gray, 2015) or non-existence (Orchard et al., 2020) of a research-practice gap in the accounting literature. More advanced methods of evaluating the research-practice gap have rarely been applied. Walker et al. (2019) use an unsupervised machine learning technique from computational social science in the domain of public administration. In their article, Latent Dirichlet Allocation (LDA) examines topic-based differences between one research and one practice-oriented journal. Wang & Zhang (2022) analyze a topic-based research-practice gap in the same manner for the field of public relations.

In our study, we quantitatively analyze the research-practice gap in accounting. We approximate research and practice via accounting journal literature and use machine learning techniques rooted in the basic approaches of Walker et al. (2019) and Wang & Zhang (2022), albeit in a more sophisticated version. Thereby, we follow the growing literature in accounting that exploits the merits of LDA (i.a., Fang et al., 2018; Ferri et al., 2018; Huang et al., 2018; Brown et al., 2020). These advantages include automated evaluation of entire documents, a low degree of subjectivity compared to other approaches, and transparent implementation of dimensionality reduction. To our knowledge, our study is the first in accounting to measure the gap's existence and magnitude with a machine-learning approach. Accordingly, our initial research question calls into question to what extent a research-practice gap exists in the accounting journal literature. Therefore, we analyze 2,251 articles from six premier research, practice, and bridging journals of European and U.S. origin from 2009 to 2019. In the process, we consider the topics resulting from LDA and compare the mean weights of each topic per journal to uncover divergences. As the results show, an actual, topic-related gap between

research and practice exists in the accounting literature with a Hellinger distance of 0.61574. Since the generated Hellinger distances do not test for statistical significance, we additionally conduct multivariate analyses of variances (MANOVA) to corroborate our findings.

Based on these findings, we further investigate to what extent the research-practice gap is of a different magnitude in the U.S. than in Europe as our second research question. Several circumstances, such as the different institutional settings at the universities, their implications for the publication landscape, methodological tolerance, and diversity in research, point to a disparity in the research-practice gap. Our results also reflect these differences, with a larger research-practice gap in the U.S. than in Europe. The difference in the Hellinger distances amounts to 0.08999. Moreover, bridging journal articles in the U.S. are topic-wise more distant to practice than their European counterparts, with a difference in Hellinger distances of 0.13261, even surpassing the difference in the research-practice gap.

Our study contributes to the literature in several ways. First, we provide new evidence on the existence and extent of the research-practice gap in accounting literature. Second, this evidence supports Tuttle & Dillard (2007) theoretical notion of topic-related conformity with only little practical relevance in the accounting research literature. Third, we support the perception of heterogeneous research communities by identifying differences in the research-practice gap between the U.S. and European literature. Fourth, we are the first to introduce topic modeling in the investigation of the research-practice gap in accounting literature. Last, we extend the literature with a novel and rigorous methodological approach to analyze the outputs of a topic model that allows us to measure the magnitude and determine the statistical significance of the research-practice gap.

The remainder of the paper is structured as follows. Section 2 reviews the accounting literature on the gap between research and practice and derives our research questions. Section 3 describes

our sample, research design, and introduces topic modeling as a method. In Section 4, we present our main results and validate them in Section 5 against various robustness concerns. We discuss the main findings in Section 6 before Section 7 concludes.

2 Theoretical Background of the Research-Practice Gap in Accounting

2.1 Research-Practice Gap in Prior Literature and Measurement Attempts

A perception of a research-practice gap has been part of the literature since the late 1980s (e.g., Baxter, 1988; Dyckman, 1989; Bricker & Previts, 1990; Demski et al., 1991). In most cases, senior academics use thought pieces and conceptual papers to describe the loosening connections between research and practice. They express their concern about the state of the academic accounting discipline, identify possible explanations for this alienation, and provide suggestions to bridge the gap better (e.g., Hopwood, 2002, 2007; Basu, 2012; Rajgopal, 2021). Tuttle & Dillard (2007) also present some theoretical underpinnings by applying institutional theory in the tradition of Meyer & Rowan (1977) and DiMaggio & Powell (1983). They identify alignment mechanisms (institutional isomorphism) that reduce the diversity of research topics within accounting literature. The eclipse of research relevance and practical applicability is one important manifestation of the identified loss in topic-related research diversity.

The measurement of the research-practice gap has been much less in focus in the literature. Most thought pieces rest upon conceptual considerations, personal impressions, and anecdotal evidence. However, quantitative or qualitative empirical studies based on broader datasets are scarce. Some of

the studies analyze publication trends in general or in particular accounting journals and observe, as a by-product, the drifting apart of research and practice (e.g., Dyckman & Zeff, 1984; Oler et al., 2010; Zeff & Dyckman, 2018). For example, Zeff & Dyckman (2018) focus on the first 30 years of Accounting Horizons (AHo), which the AAA initially established in the U.S. to link academia and practice (bridging journal). However, according to the authors, it seems to have lost its function during the last decades.

In essence, only a few studies concentrate on a specific metric to capture the research-practice gap. Most of them are survey studies of more recent origin questioning academics and practitioners. With regard to management accounting, Tucker & Parker (2014) survey 64 senior management accounting academics from 55 universities in 14 countries about the extent to which research does and should inform practice. They identify two groups. On the one hand, the majority identifies a widening research-practice gap, which is of considerable concern for an applied discipline (similar Ratnatunga, 2012). On the other hand, the minority, closely linked to the advocates of a pure positive-descriptive research approach (e.g., Kinney Jr., 1989), sees a natural and appropriate gap between these two fields without the need to bridge it better.

Tucker & Parker (2014) as well as Tucker & Schaltegger (2016), complement the picture of a research-practice gap through questionnaire surveys with follow-up interviews of representatives of professional accounting bodies in Australia and Germany. With comparable results, Quagli et al. (2016) analyze the questionnaires from 447 EAA members about their motivations and incentives to focus on practical issues. They prove academics' top-tier publication-based incentive structure, earlier characterized by Hopwood (2002, p. 780) as a "careerist-oriented rather than curiosity-oriented research" strategy. Similar survey approaches are used in other business disciplines,

especially management science, which seems to suffer likewise from such a gap (e.g., Banks et al., 2016).

A different survey approach to capture the research-practice gap is applied by Ratnatunga (2012). In a series of surveys of accounting academics in the U.S., U.K., and Australia, as well as accounting professionals in 16 countries, Ratnatunga (2012) identifies an ever-growing gap, especially in financial accounting and auditing. Ratnatunga asks practitioners, among other aspects, to assess accounting journals in terms of awareness and relevance. The result that the 2,988 respondents know the practice and transfer journals much better and recognize a higher relevance seems unsurprising—contrary to the findings for his control study in medicine. Notably, however, is his approximation of research and practice via journals. In this regard, he also investigates the references to specific academic journals in standard practitioner handbooks. In a similar cross-disciplinary approach, Fraser & Sheehy (2020) compare the relevance of academic research to the accounting, medicine, and engineering profession. In particular, they note that although accountants read other professional journals, the major difference is the low frequency of reading academic journals compared to the other two disciplines (Fraser & Sheehy, 2020). A comparable procedure to proxy journal awareness in practice was earlier used by Dyckman & Zeff (1984), who count journal article citations in Financial Accounting Standards Board (FASB) Discussion Memorandums and the Journal of Accountancy (JoA). Similar "awareness studies" have been conducted in other business disciplines to challenge existing journal rankings (e.g., Oesterle, 2006; Förster & Schönenberg, 2013).

More recently, a pure publication-based approach has emerged. Orchard et al. (2020) compare the content of the articles from U.S. academic journals with practice journals to evaluate their relevance. They identify keywords from 122 papers of one volume (2018) for two academic journals

(The Accounting Review (TAR), AHo) and search for these keywords in three U.S. practice journals (JoA, The Tax Adviser, Strategic Finance) over more than thirty years (1987–2019). They show that almost all keywords could be identified in the practice journals, and more than 40 % of the scholarly papers could be matched to a practitioner paper with the exact keywords. Orchard et al. (2020) conclude that recent research has addressed issues relevant to practitioners. In contrast, van Helden & Northcott (2010) unveil that leading journals in public sector management accounting rarely include articles of immediate relevance for practice. Concurringly, Ratzinger-Sakel & Gray (2015) document an extensive gap between 3,606 auditing-related research articles in the U.S. and its auditing practice community.

Walker et al. (2019) provide a major methodological step forward. They combine the publication-based approach in public administration with an unsupervised machine learning technique from computational social science, LDA. Using one journal as a proxy for research and practice, respectively, they collect 3,796 published articles from Public Administration Review and PA Times. To grasp the gap, they calculate a separate LDA model for each journal and subsequently manually compare the topics. They find common topics and convincing evidence of a clear divergence in other topics that speak to the gap perception. In a similar vein, Wang & Zhang (2022) compare two research journals and a practitioner journal in public relations with LDA. They also uncover substantial divergences between research and practice journals while they also note commonalities on some crucial topics.

In summary, the literature has attempted to quantify the research-practice gap in relatively few cases, but notably, no standard has been established for this purpose. The topic modeling approach has not yet been used in accounting research to address the gap phenomenon, especially not in

our more sophisticated methodological variant or on this temporal scope, nor across countries and research communities.

2.2 Systematization of the Research-Practice Gap

Although the research-practice gap is a widely discussed awareness in accounting research, the term remains vague without an unified definition. Given its inherent complexity, the research-practice gap is in danger of being understood in entirely different ways. Thus, before attempting to capture the research-practice gap empirically, we provide more systematic coverage of the gap phenomenon (see Table I.1) and describe the specific focus of our study.

Even though prior literature has already discussed the research-practice gap from a more theoretical viewpoint (Tuttle & Dillard, 2007; Bartunek & Rynes, 2014; Tucker & Lawson, 2015), we are unaware of any explicit in-depth systematization in this regard. By reviewing the literature, we are able to find two main perspectives that help approach the research-practice gap more systematically. First, there is the question of how to define the research-practice gap, specifically how to identify it. Since we need to answer this particular question to operationalize our measurement, this is also the focus of our systematization. Second, material parts of the literature connect their awareness of such a gap with possible explanations for its existence. These explanations help to better understand the research-practice gap without being necessary for pure measurement purposes.

Table I.1: Systematization of Research-Practice Gap

Content (van Helden & Northcott, 2010)	**Communication** (Bricker & Previts, 1990; van Helden & Northcott, 2010; Singleton-Green, 2010)		**Time** (Bartunek & Rynes, 2014)	**Person / Culture** (Bloch et al., 2017)
• Questions (Tucker, 2013) • Methodology (Singleton-Green, 2010) • Topics (Ratzinger-Sakel & Gray, 2015; Walker et al., 2019; Orchard et al., 2020) • Metric / Data • Theory (Form and Existence)	• Transmission (e.g., Education, Publication, Knowledge Transfer, Media) (Beaver, 1966; Donovan, 2005) • Language / Tone / Style (Evans et al., 2011)		• Time Horizon (Bartunek & Rynes, 2014; Ratzinger-Sakel & Gray, 2015) • Time Lag (Inanga & Schneider, 2005; Grosu et al., 2015; de Man et al., 2020)	• Career (Mitchell, 2002) • Qualification (Bloch et al., 2017) • Incentives (Merchant, 2012; Bartunek & Rynes, 2014) • Perceived Relevance (Singleton-Green, 2010) • Interests / Expectations (Inanga & Schneider, 2005; Kieser & Leiner, 2009) • Unfamiliarity (Ratnatunga, 2012) • Accessibility (Tucker, 2013; Tucker & Lowe, 2014; Tucker & Schaltegger, 2016; Tucker & Parker, 2020)
Evaluation criterion: • *Relevance* • *Rigor* • *Sense* • *Applicability*	Evaluation criterion: • *Understanding* • *Visibility*			
Gap Definition / Identification			**Gap Explanation**	

Note: The literature on the research-practice gap can be split into two streams. One direction is committed to defining and identifying the research-practice gap, while the other part of the literature tries to identify reasons for the existence of a gap.

On the individual level of the persons involved, explanations for the existence of a research-practice gap concern their respective cultures, institutional backgrounds, and career-related aspects (Mitchell, 2002; Bloch et al., 2017), but also differences in terms of incentives, interests, expectations, and qualifications between researchers and practitioners (Inanga & Schneider, 2005; Kieser & Leiner, 2009; Merchant, 2012; Ratnatunga, 2012; Bartunek & Rynes, 2014). Additionally, the accessibility of research contributions to practitioners constitutes another barrier between research and practice (Tucker, 2013; Tucker & Lowe, 2014; Tucker & Parker, 2014; Tucker & Schaltegger, 2016). Last but not least, institutional (Tuttle & Dillard, 2007) as well as time-related aspects, including different time horizons (Inanga & Schneider, 2005; Grosu et al., 2015; de Man et al., 2020; Ratzinger-Sakel & Gray, 2015) or a time lag between research and practice (Bartunek & Rynes, 2014), help to explain the research-practice gap.

Regarding the first perspective of defining and identifying the research-practice gap, we distinguish two aspects: On the one hand, a research-practice gap can refer to the content (van Helden & Northcott, 2010), mainly when a published accounting research contribution differs from discussions in practice. On the other hand, such a gap might arise in terms of communication (Bricker & Previts, 1990; Inanga & Schneider, 2005; Singleton-Green, 2010; van Helden & Northcott, 2010). Here, research does not properly reach practice, et vice versa, due to non-existent or non-appropriate media channels (a question of visibility) or differences between the communities in terms of language, tone, or style (a question of understanding).

Our study focuses on the content, i.e., content differences and the related question of whether the content of the research is relevant for practice. To better capture the content concept, we distinguish five content categories in line with the literature: (research) questions, methodologies, topics, metrics/data, and theories. Differences in these categories contribute to the perception of a research-

practice gap in terms of content. Through these categories, it is possible to evaluate a research contribution concerning the practical relevance and, thus, identify it empirically. Possible—rather qualitative—criteria for an evaluation could be, for example, the relevance of the research question, the sense, applicability, and rigor of the methodology, the identified metrics, and the data used. Another category refers to the theoretical foundation of a research contribution, whether and in what form it exists. The research topic is the central aspect regarding the content of a research contribution. Hence, it is the focus of our study, and we use it to measure the research-practice gap. The topic concept corresponds to a condensed and, therefore, necessarily simplified representation of the content of a research contribution. From this, it is apparent that the concept topic possesses various interdependencies with the other non-disjoint categories of the content we discussed before.

Some of these content categories have been examined in research articles on the research-practice gap. For instance, in his study of academics' and practitioners' perceptions of the research-practice gap in management accounting, Tucker (2013) found that a significant problem in creating knowledge through research is that practitioners face challenges on a day-to-day basis that are generally disconnected from research questions being investigated by academics. His finding mainly manifests the relevance of research questions to practice. Research methodology is another content-related category that defines—to a certain extent—a rather natural driver of the research-practice gap because research naturally approaches problems differently than practice. More rigorous and complex methods lead to lower comprehensibility to outsiders (Singleton-Green, 2010). Therefore, it is related to the communicational aspect of the research-practice gap identification and the issue of gap explanation through the unfamiliarity and lack of practitioners' qualifications (Singleton-Green, 2010). However, the content-related gap is amplified if the general sense of the applied methods is questioned in practice or if, additionally, the metrics and data used are unsuitable from a practical

point of view. Thus, the property of methodology (connected with metrics and data used) is in part inherently linked to the content of a research contribution but not in its entirety. Disentangling these two subparts, the inherent and the additional discretionary subpart of methodology is an empirical problem we address in our additional analyses.

2.3 Research Questions

2.3.1 Research-Practice Gap in Accounting Literature

The literature dealing with the research-practice gap in accounting literature does not provide conclusive empirical evidence for (Unerman & O'Dwyer, 2010; Ratzinger-Sakel & Gray, 2015; Fraser & Sheehy, 2020) or against (Orchard et al., 2020) the existence and extent of such a gap (with mixed evidence by van Helden & Northcott, 2010).

We contribute to this debate by using an objectifiable metric to identify a research-practice gap in the accounting literature. With our focus on the content of accounting publications, especially on the topic category, we abstain from measuring a "general" research-practice gap in accounting. However, we suppose that the topic-related focus of our publication-based analysis empirically illuminates material aspects of this gap phenomenon. Another related advantage of such a topic-based analysis is that this enables us to investigate, at least to some extent, the rationale behind the research-practice gap. We presume that the mismatch between the topics in accounting research and practice is mainly due to the differences in their respective institutional characteristics. Relating to this, Tuttle & Dillard (2007) have pointed out that so-called institutional isomorphisms (DiMaggio & Powell, 1983) have led to a low degree of diversity reflected in, among other things, a low variability of research topics in academic accounting research. Moreover, they demonstrate that topically diverse

academic accounting research is crucial for the accounting practice and its challenges. Accordingly, normative isomorphisms (DiMaggio & Powell, 1983), i.e., the development of a shared worldview and its accompanying homogeneity within the accounting academia, cause that accounting academia drifts away from accounting practice and impede the objective of practical relevance in accounting research.

The institutional rationale for the existence of a pronounced research-practice gap is countered by the argument that it is merely a perception issue caused by practitioners' lack of understanding of specific jargon or methodologies (Orchard et al., 2020; Tucker & Lowe, 2014). Our focus on the topics in the literature is advantageous compared to, e.g., surveys of practitioners as we can rule out the biasing influence of practitioners' lacking understanding.

In summary, the extent of a research-practice gap in the accounting literature remains an empirical question. Thus, our first research question is as follows:

RQ 1: To what extent is there a topic-based research-practice gap in the accounting literature?

2.3.2 Research Community Differences in Accounting Literature

The institutional perspective of Tuttle & Dillard (2007) focuses on U.S. academia. However, parallels to the global research community will likely exist when institutional isomorphism justifies global alignment processes and increasing global homogeneity. Some of these processes have been identified in the literature: The hegemony of the U.S. capital market and U.S. Generally Accepted Accounting Principles (GAAP) led to the development and adoption of International Financial Reporting Standards (IFRS) with global acceptance (Kavame Eroglu, 2017). With its publication outlets, reputational system, and databases, the U.S. research community takes a key role in global academia (e.g., Lukka & Kasanen, 1996; Gendron, 2008; Locke & Lowe, 2008). The attractiveness

and preeminence of the U.S. "elite" accounting research on the individual and institutional level (Lee, 1999; Lee & Williams, 1999; Lohmann & Eulerich, 2017; Endenich & Trapp, 2018) resulted in the respective imitation processes of non-U.S. counterparts (e.g., Khalifa & Quattrone, 2008; Qu et al., 2009; Merchant, 2010). The dissemination of the U.S.-led accounting mainstream to the global communities (Chua, 1986; Merchant, 2010; Palea, 2017) indicates a research-practice gap of similar magnitude on the global level.

In contrast, accounting research communities' institutional, language, and cultural differences suggest certain heterogeneity. Based on their analysis of six leading U.S., European, and Australian research journals, Lukka & Kasanen (1996) indicate that accounting research is "a rather local discipline" where a global community does not seem to exist. According to this view, accounting research and research communities seem fragmented (see also Lukka & Mouritsen, 2002; Lukka & Granlund, 2002). Moreover, the European research tradition is said to use a more general, anti-dogmatic, and methodologically more diverse approach which seems to be distinct from the relatively narrow and even more mainstream-driven U.S. "elite" approach (Lukka & Kasanen, 1996; Panozzo, 1997; Cooper, 2002; Qu et al., 2009; Merchant, 2010; Raffounier & Schatt, 2010; Basu, 2012; Dyckman & Zeff, 2015; Lohmann & Eulerich, 2017; Endenich & Trapp, 2018). These aspects might impact the research-practice gap as well. A less pluralistic, self-referential research culture (Hopwood, 2007) with a lower degree of openness might foster research projects that are comparatively more disconnected from practice.

Opposed to the first research question, where there is inconclusive empirical evidence of a research-practice gap, we are unaware of an empirical investigation regarding our second research question concerning the two lines of arguments in favor of and against differences between the communities. However, it is of great interest to analyze the research-practice gap in different

communities in more depth and contribute to the above debate by providing new empirical insights. In line with prior literature that contrasts the European research community with its U.S. counterpart in particular, we focus on these two accounting research communities with their respective literature and formulate our second question as follows:

RQ 2: To what extent is the magnitude of the topic-based research-practice gap in the U.S. accounting literature different from the European one?

3 Sample, Research Method, and Research Design

3.1 Sample

Our exploration of a potential research-practice gap in the accounting literature contemplates academic journals representing the research perspective and practice journals characterizing the practice dimension. In between these two manifestations, a few journals aim to bridge the various interests of research and practice.

Since we analyze the U.S. and European research-practice gap, both geographic regions are considered through corresponding journals. To ensure the highest possible comparability, we analyze journals published by the AAA and its European counterpart, the EAA. Consequently, we utilize the renowned TAR as the research journal for the U.S. setting. As a result, other prestigious U.S. journals, such as the Journal of Accounting and Economics and the Journal of Accounting Research, will not be subject to our analysis. Besides, the AAA also publishes AHo. Its mission statement sets out to “bridge academic and professional audiences”. Therefore, we include it as the U.S. bridging journal between research and practice.

In Europe, the European Accounting Review (EAR) constitutes the premier outlet for research articles and, thus, represents the European research journal for our analyses. Apart from its flagship journal, the EAA also publishes Accounting in Europe (AiE), which exhibits a broader scope. Due to its more inclusive aims and scope, according to which articles should "provide new insights for research, practice, policy, and regulation", we use it as the bridging journal for Europe.

Furthermore, the JoA is considered the practice journal of choice for the U.S. Published by the American Institute of Certified Public Accountants, it tackles current issues of the practice in concise articles. Finally, articles by Accountancy Europe (AcE; formerly Fédération des Experts Comptables Européens, FEE) are considered the European practice journal. Issued mainly through professional bodies of auditors, it marks the best approximation of an English-speaking journal with a practitioner focus and Europe-wide acceptance. Besides, the similar focus and constituents ensure comparability with JoA in the U.S. The common language of English in all journals is essential for methodological reasons. We cannot rule out some biases at the European level because probably not all European researchers and practitioners publish or read in English—but most likely at an increasing rate over the years.

We compile all articles published between 2009 and 2019 for the six previously described journals. Further, we apply content-wise filters to exclude technical and formal information from the journals, such as calls for papers, closing notes, and corrigenda/errata. Additionally, for comparability of research and practice journals, we eliminate articles with fewer than five pages since practice journals' articles tend to have shorter lengths. This procedure also strengthens the robustness of the results, as it can be assumed that the more research-oriented articles in practice journals tend to be longer. Lastly, the final sample consists of 2,251 articles from 2009 to 2019.

TAR makes up most research papers in the final sample, with 856, followed by AHo (425), EAR (355), and JoA (318). AiE accounts for 184 articles, and 113 articles are attributed to AcE.

For further use of the articles, we perform several preprocessing steps. We exclude abstracts for comparability between the various journals since practice journals' articles do not include these. We remove the reference section at the end of articles for similar reasons. Besides, numbers, special characters, monosyllabic words, and stop words are also not considered. With the remaining terms, we construct unigrams and bigrams. Moreover, we exclude terms that occur in more than 99 % of all articles to eliminate boilerplate terms. Lastly, we do not consider terms appearing in less than two articles to rule out sporadic terms.

3.2 Research Method: Topic Modeling with LDA

In order to analyze and measure a potential research-practice gap in the accounting literature, we employ LDA (Blei et al., 2003). As one instance of a probabilistic topic modeling approach, it allows to automatically examine large datasets which would otherwise be intractable for humans. For this reason, LDA has been increasingly applied in accounting research in recent years to analyze, i.a., 10-Ks (Brown et al., 2020), 8-Ks (Feuerriegel & Pröllochs, 2021), and analyst reports (Huang et al., 2018). LDA has also been utilized to uncover research topics in research journals over time (Fang et al., 2018; Ferri et al., 2018; Aziz et al., 2022). Walker et al. (2019) and Wang & Zhang (2022) choose a slightly different approach for their studies on public administration and public relations, respectively, as they identify topics and compare the topics of one respectively two research journals with the topics of a practice journal. Our approach extends that of Walker et al. (2019) and Wang & Zhang (2022) by considering the topic distributions for multiple journals of the same topic model and examining journals of different origins. Besides, we add to the insights of Dyer et al. (2017),

who also consider topic weights as they analyze the driving topics of 10-K length increases over time.

LDA discovers and summarizes the main themes of extensive (unstructured) data (Blei, 2012). Thus, it can be thought of as a way of dimensionality reduction (Loughran & McDonald, 2016). The technique identifies various topics in an article, even if the topics are dispersed and entangled throughout the document (Dyer et al., 2017). Furthermore, the modus operandi of LDA is more transparent and replicable than manual or taxonomy-based categorizations because, apart from predetermining a few hyperparameters, the model automatically discovers all topics and topic distributions (Walker et al., 2019). The intuition behind LDA is a generative process that follows the way how humans would write a document. At first, the document's author decides which topics should be addressed and subsequently chooses adequate words to elaborate on each selected topic (Huang et al., 2018). While only the final journal articles are observable, LDA's stipulated generative process allows inferring these latent (i.e., hidden) topics.

Since no prior labeling or annotation of articles is necessary, LDA is part of the unsupervised machine learning algorithms. However, a few hyperparameters have to be predefined. Initially, the Dirichlet parameters have to be set to determine how many topics receive high weights in documents—i.e., the sparsity of the distribution—and how many words exhibit high weights in a topic. The Dirichlet parameters (α) are automatically learned from the data for the former. For the latter, the Dirichlet parameters (β) are specified at 0.01, following Steyvers & Griffiths (2014). We determine the most notable hyperparameter—the number of topics—after conducting a plethora of tests to ensure the quality of the model. These tests include visualizations with pyLDAvis, coherence scores according to Röder et al. (2015), perplexity scores (see, Blei et al., 2003; Dyer et al., 2017) as well as the word intrusion task by Chang et al. (2009). We infer that the model with 25 topics

has the highest level of interpretability. Given the ambiguous nature of determining the optimal number of topics, we conduct sensitivity analyses and find that differing specifications do not lead to different results (see Appendix I.A).

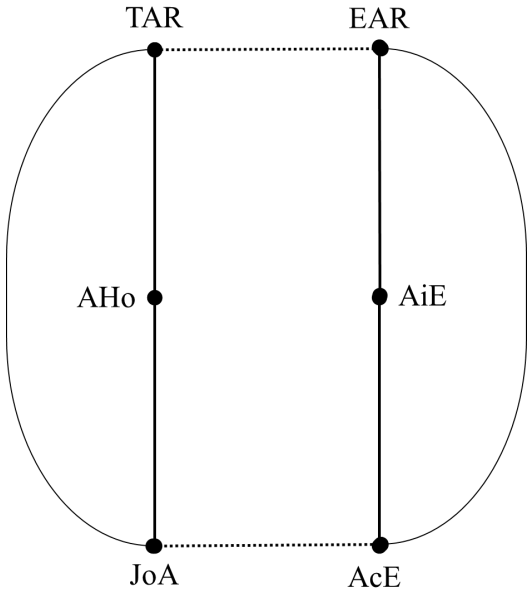
The outcome of LDA comprises the topic distributions, i.e., how much each of the 25 topics makes up a journal article with all topic distributions summing to one. These topic distributions are aggregated by calculating the mean topic distributions for each journal. As the following subsection outlines, our research design focuses on the topic distributions generated by our LDA model.

3.3 Research Design

In order to answer the research questions, we build on a theoretical framework based on the comparison of distances between the examined accounting journals. The distances correspond to the extent of divergence in topic distributions between the journals. According to the first research question, a large distance between research-oriented and practice-oriented journals would indicate a topic-based research-practice gap in accounting literature, reflecting a substantially different (topic-based) orientation. In contrast to the large distances between research and practice journals, the distances within the group of research-oriented or practice-oriented journals should be relatively small. In Figure I.1, a typifying graph, this is illustrated by the more considerable distances between research journals (TAR and EAR) and practice-oriented journals (JoA and AcE) than between research and practice journals among themselves. With reference to one of our additional analyses, we include bridging journals (AHo and AiE) in Figure I.1 to illustrate their role as journals that link research and practice.

Figure I.1: Research Design

RQ 1:	To what extent is there a topic-based research-practice gap in the accounting literature?	$TAR \ \& \ EAR \neq JoA \ \& \ AcE$
RQ 2:	To what extent is the magnitude of the topic-based research-practice gap in the U.S. accounting literature different from the European one?	$TAR - JoA \neq EAR - AcE$
Additional Analysis:	Is the topic-based gap between bridging journals and practice journals of different magnitude for the U.S. than for Europe?	$AHo - JoA \neq AiE - AcE$



Note: We analyze the magnitude of the research-practice gap (RQ 1) by first calculating the mean topic distributions for all research journals' articles combined (TAR & EAR) and for all practice journals' articles combined (JoA & AcE). Subsequently, we compile the Hellinger distance between these pooled topic distributions. To compare the research-practice gap between the U.S. and Europe (RQ 2) we measure the regional Hellinger distances between research and practice (TAR & JoA and EAR & AcE) and compare these distances. In an additional analysis, we apply a similar approach for the two bridging journals (AHo and AiE). For these, we again calculate the Hellinger distance to the regionally assigned practice journals and then compare the distance between the U.S. and Europe.

To examine if the research-practice gap is of different magnitude in the U.S. than in Europe, we compare the distance between TAR and JoA with the distance between EAR and AcE. We use so-called Hellinger distances, a measure for the divergence of (discrete) probability distributions, to operationalize our distances. Hellinger distances are defined between zero and one. A score of zero signifies that the probability distributions are the same, and one indicates that the probability distributions are singular, i.e., entirely different. With regard to our study, the Hellinger distance measures how far apart the respective mean topic distributions—generated by our LDA topic modeling approach—are from each other per journal. The mean topic distribution is equal to the vector of the mean values of the 25 topics for all articles within a journal.

In order to verify that the differences between the journals are statistically significant, i.e., that the measured differences are not due to random error, we also apply MANOVA. The advantage of running a MANOVA is that we consider correlations between the dependent variables, i.e., the 25 topics. For the first research question, we set up an one-way MANOVA with the following equation:

$$Topics\ (k = 25) = Intercept + ResearchJournal \tag{I.1}$$

The equation contains 25 dependent variables, one for each topic. The research variable Research Journal is coded into two categories: research journal (TAR and EAR) and practice journal (JoA and AcE). The number of observed articles for these four journals adds up to 1,642. However, the described sample of 2,251 articles, including bridging journals, is used to calculate the topic model to comprehensively overview the accounting literature landscape and provide more means of comparison. The result of the MANOVA can be interpreted as the discriminatory power of the study

variable. The equation for RQ 2 is defined similarly to the first, but a two-way MANOVA design is used to examine the interaction effect between research journals and regions:

$$Topics = Intercept + ResearchJournal + Region + ResearchJournal \times Region \tag{I.2}$$

Thus, there are also 25 dependent variables, and the analysis contains 1,642 observations as well. The variable Region is defined in the following categories: U.S. for the journals TAR and JoA and Europe for EAR and AcE. The interaction term (Research Journal × Region) is particularly interesting in this research design, measuring the difference in discriminatory power between the U.S. research journal and the U.S. practice journal compared to this relationship in Europe.

We conduct a series of additional analyses in section 5 to address endogeneity concerns. For example, the language and format of scientific articles could drive our inferences on the different topical distributions between research and practice journals. On the one side, we already addressed this in our sample selection (e.g., by excluding short articles in practice journals or our journal selection). On the other side, we conduct an analysis eliminating technical topics which are often characteristic of the scientific writing style.

4 Results

4.1 Descriptive Statistics

Our LDA model yields a mean distribution over the 25 topics for each journal, as depicted with the respective standard deviations in Table I.2. The results show heterogeneous and distinct distributions over topics for all journals, indicating a diverging topical focus.

Notably, topic 12, concerning earnings and accruals, is predominantly used in research journals, while topic 10, on taxation, exhibits higher weights in practice journals.[1] In the process, the taxation topic has the largest proportion of any topic in any journal, with 51 % for JoA. At the same time, it is also most frequently the most prominent topic in the articles (283 of all 2,251 research papers). The top five words for each topic and the total number of times each topic exhibits the highest share in an article are illustrated in Table I.3.

The different weights for research and practice journals of topic 12 are also of great concern since it is the most prominent topic in 228 of all 2,251 papers and, thus, a potential driving force behind a research-practice gap. Furthermore, technology-related topic 1 is primarily subject to practice journals. Topic 4 about analysts is mainly relevant to research journals. These differentiations reinforce the importance of our first research question to what extent a gap between research and practice exists in the literature.

[1] We deliberately label only selected ones of the 25 topics as our research approach does not require a topic label and because the labeling of topics entails high degrees of subjectivity.

Table I.2: Mean Topic Distributions per Journal

Topic	The Accounting Review	European Accounting Review	Accounting Horizons	Accounting in Europe	Journal of Accountancy	Accountancy Europe
1	1 % (0.04)	2 % (0.06)	4 % (0.11)	1 % (0.04)	**15 % (0.25)**	4 % (0.11)
2	4 % (0.11)	7 % (0.13)	5 % (0.12)	**15 % (0.16)**	0 % (0.01)	4 % (0.07)
3	2 % (0.06)	1 % (0.03)	3 % (0.09)	4 % (0.10)	1 % (0.02)	0 % (0.01)
4	**13 % (0.20)**	5 % (0.12)	5 % (0.11)	1 % (0.05)	0 % (0.01)	0 % (0.01)
5	2 % (0.06)	2 % (0.06)	1 % (0.05)	1 % (0.05)	2 % (0.11)	0 % (0.02)
6	2 % (0.07)	3 % (0.08)	2 % (0.07)	1 % (0.05)	0 % (0.01)	1 % (0.02)
7	5 % (0.14)	2 % (0.07)	6 % (0.13)	2 % (0.07)	2 % (0.05)	2 % (0.05)
8	0 % (0.01)	1 % (0.04)	1 % (0.04)	5 % (0.08)	1 % (0.03)	**24 % (0.18)**
9	5 % (0.13)	3 % (0.10)	6 % (0.12)	2 % (0.09)	0 % (0.01)	2 % (0.05)
10	4 % (0.12)	3 % (0.07)	7 % (0.15)	3 % (0.06)	**51 % (0.31)**	**11 % (0.16)**
11	1 % (0.06)	1 % (0.03)	2 % (0.07)	0 % (0.01)	1 % (0.03)	1 % (0.06)
12	**16 % (0.21)**	**12 % (0.18)**	**9 % (0.16)**	2 % (0.06)	0 % (0.02)	0 % (0.01)
13	4 % (0.12)	3 % (0.09)	1 % (0.03)	2 % (0.09)	1 % (0.02)	0 % (0.01)
14	2 % (0.06)	2 % (0.07)	4 % (0.10)	2 % (0.06)	1 % (0.04)	0 % (0.01)
15	2 % (0.07)	1 % (0.05)	2 % (0.06)	4 % (0.11)	1 % (0.05)	2 % (0.08)
16	2 % (0.07)	1 % (0.04)	2 % (0.08)	0 % (0.02)	1 % (0.03)	0 % (0.00)
17	1 % (0.02)	1 % (0.04)	3 % (0.06)	13 % (0.16)	12 % (0.24)	8 % (0.11)
18	6 % (0.13)	3 % (0.08)	2 % (0.06)	1 % (0.03)	0 % (0.02)	0 % (0.01)
19	5 % (0.10)	5 % (0.12)	7 % (0.14)	3 % (0.09)	0 % (0.02)	0 % (0.01)
20	2 % (0.06)	7 % (0.16)	7 % (0.13)	4 % (0.09)	1 % (0.03)	0 % (0.01)
21	4 % (0.09)	2 % (0.06)	3 % (0.09)	0 % (0.01)	0 % (0.01)	0 % (0.01)
22	6 % (0.15)	**14 % (0.18)**	8 % (0.13)	**27 % (0.20)**	4 % (0.05)	**12 % (0.15)**
23	2 % (0.09)	3 % (0.14)	3 % (0.10)	0 % (0.03)	0 % (0.02)	1 % (0.04)
24	0 % (0.02)	3 % (0.08)	2 % (0.06)	4 % (0.07)	2 % (0.07)	24 % (0.17)
25	7 % (0.15)	13 % (0.22)	5 % (0.12)	3 % (0.06)	3 % (0.05)	2 % (0.05)

Note: Mean topic distributions and standard deviations (in parentheses) are depicted for all 25 topics and the six analyzed journals. The most notable topics are highlighted.

Table I.3: Top Five Words per Topic

Topic	1	2	3	4	5	Count of most prominent topic
1	data	process	technology	information	research	86
2	ifrs	countries	reporting	adoption	standards	108
3	income	financial	database	forecasts	revenue	28
4	information	analyst	forecast	analysts	earnings	182
5	ties	group	management	seo	percent	32
6	csr	performance	family	disclosure	ownership	31
7	audit	auditor	auditors	participants	risk	92
8	member	fee	european	article	professional	36
9	audit	auditor	auditors	clients	quality	93
10	tax	income	business	taxpayer	new	**283**
11	internal	audit	committee	audit committee	iaf	19
12	earnings	year	stock	accruals	returns	**228**
13	tax	income	cash	avoidance	tax avoidance	71
14	assets	goodwill	value	depreciation	method	40
15	loan	credit	financial	banks	value	33
16	ceo	compensation	ceos	turnover	agent	28
17	financial	auditor	statements	fin. statements	audit	73
18	information	value	risk	assets	banks	63
19	audit	control	fees	year	companies	89
20	research	board	directors	tournament	number	83
21	restatement	risk	restatements	sample	auditor	45
22	information	reporting	financial	manager	value	**256**
23	sales	insider	university	target	short	37
24	audit	statutory	independence	auditor	code	61
25	performance	management	participants	managers	cost	152

Note: The five words with the highest probabilities in each of the 25 topics are presented in descending order. The most prominent topic refers to the topic in an article that exhibits the highest proportion of all 25 topics. Accordingly, the number of most prominent topics counts how often the respective topics have the largest proportion in the total 2,251 articles of our sample.

In addition, related to our second research question, the topic distributions reveal that the topics covered in U.S. journals differ from those in European journals. Most remarkably, topic 22 on financial reporting possesses double-digit percentages for all European journals, while U.S. journals only achieve a maximum of eight percentage points. Therefore, topic 22 is highly influential since it is the most prominent topic in 256 of the 2,251 articles. In addition, there is vast conspicuousness for topic 8, as only European journals surpass the one percentage point threshold. This comes as no surprise since the topic distinctively involves Europe. Lastly, topic 2, specifically concerning the IFRS standards, is also of more concern for European than U.S. journals, further underpinning research question two.

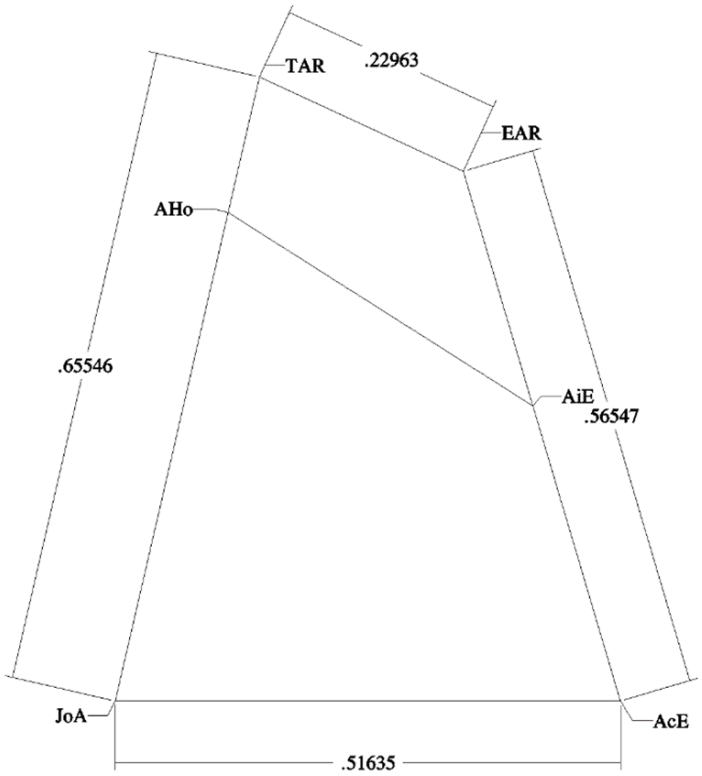
4.2 Main Findings

For the first research question, we first consider the results of the Hellinger distances. Figure I.2 illustrates that the distances between the research and practice journals are relatively large compared to the distances between the two research journals (TAR and EAR) and, to a lesser extent, between the two practice journals (JoA and AcE).

The pooled distance between the two research journals (TAR and EAR) and the practice journals (JoA and AcE) is equal to 0.61573 (see Table I.4). More precisely, the distance between TAR and JoA is the second largest (0.65546), and the distance between EAR and AcE (0.56547) is the fifth largest of all 15 possible distances.[2] The most considerable distance is the distance between TAR and AcE, not depicted, at 0.66924, which is also a distance between research and practice. In contrast, the distance between the two research journals, TAR and EAR (0.22963), is the second smallest of the 15 distances. Only the distance between AHo and EAR (0.21428) is even smaller.

[2] The binomial coefficient $\binom{6}{2}$ calculates the number of possible combinations of distances.

Figure I.2: Hellinger distances



Note: The figure shows the Hellinger distances between research and practice journals for the U.S. (TAR & JoA) and Europe (EAR & AcE). Besides, the regional differences in terms of Hellinger distances between the research journals (TAR & EAR) and the practice journals (JoA & AcE) are considered. For reasons of clarity, we have not displayed the distances to the bridging journals. It should be noted, however, that this is a top-down view. The bridging journals are not on the same layer as the other four journals. Therefore, the distances to the other journals cannot be taken exactly from the figure.

Table I.4: Main Findings and Robustness Check

Panel A: To what extent is there a topic-based research-practice gap in the accounting literature? (RQ 1)		
TAR & EAR ≠ JoA & AcE		
	Full Model (1)	**Restricted Model (2)**
Research Journals vs. Practice Journals	0.61573	0.60116
Panel B: To what extent is the magnitude of the topic-based research-practice gap in the U.S. accounting literature different from the European one? (RQ 2)		
TAR – JoA ≠ EAR – AcE		
	Full Model (1)	**Restricted Model (2)**
TAR vs. JoA	0.65546	0.65643
EAR vs. AcE	0.56547	0.56424
TAR vs. EAR	0.22963	0.23358
JoA vs. AcE	0.51635	0.51833
Gap U.S. vs. Gap Europe	0.08999	0.09119
Panel C: To what extent is the magnitude of the topic-based gap between bridging journals and practice journals in the U.S. accounting literature different from the European one? (Additional Analysis)		
AHo – JoA ≠ AiE – AcE		
	Full Model (1)	**Restricted Model (2)**
AHo vs. JoA	0.54721	0.54432
AiE vs. AcE	0.41460	0.41223
AHo vs. AiE	0.37750	0.37105
JoA vs. AcE	0.51635	0.51833
Gap U.S. vs. Gap Europe	0.13261	0.13209

Note: In the first column of Panel A we illustrate the Hellinger distances between the combined research journals (TAR & EAR) and the combined practice journals (JoA & AcE) for RQ 1. In Panel B we present the Hellinger distance for RQ 2. First, we show the regional Hellinger distances between research and practice that sum up to the Hellinger distance of RQ 2. Moreover, we depict the Hellinger distances between research journals (TAR & EAR) and practice journals (JoA & AcE) of different origins. Panel C presents the results for the additional analysis of bridging journals. Column two describes the Hellinger distances for a robustness check where we exclude the methodological topics 12, 19, and 21 to rule out possible distortions for all three research questions.

However, the distance between JoA and AcE (0.51635) is the eighth largest distance, thus larger than between the research journals. In summary, however, at the descriptive level of the Hellinger distances, our findings support the notion of a (topic-related) gap between research and practice in the accounting literature as well as differences in the magnitude of such a gap between the U.S. and Europe.[3]

The one-way MANOVA results in Table I.5 strengthen this finding and show that random variations in the output of our topic model cannot explain the differences between research and practice journals. This is reflected in the test statistics indicating significant differences in the group means between the research and practice journals for the 25 topics (i.e., Wilks' lambda = 0.1754, Pillai's trace = 0.8335, Hotelling-Lawley trace = 4.6499, and Roy's greatest root = 4.6390).[4] Similarly, for the sub-analyses that examine the research-practice gap in the U.S. and Europe separately, the test statistics yield high values for discriminatory power. The differences in the test statistics between the U.S. (e.g., Pillai's trace = 0.8605) and Europe (e.g., Pillai's trace = 0.7780) suggest a more pronounced research-practice gap in the U.S. journals compared to the European journals (RQ 2). For comparability and to validate our results, we also report test statistics within research journals (TAR vs. EAR) and practice journals (JoA vs. AcE) in Table I.5. Within these two journal groups of research and practice journals, we find lower values for discriminatory power. For example, Pillai's trace for the difference between TAR and EAR only reports a value of 0.2442. However, Pillai's trace between JoA and AcE of 0.7735 is comparable to the discriminatory power

[3] The results are virtually unchanged if we use the Hellinger distances based on median topic distributions, which we have scaled for comparability such that the sum of the median topic distribution components for each journal equals one.

[4] Since all four test statistics usually lead to the same qualitative result, we do not interpret all the different test statistics individually in the following for parsimony reasons. Values of Wilk's lambda close to zero indicate high discriminatory power. A value close to one for Pillai's trace—defined between 0 and 1—indicates a high ability to separate the group differences and is particularly robust against assumption violations. The discrimination power increases with higher values according to the Hotelling-Lawley trace and Roy's greatest root (see, Tabachnick & Fidell, 2007, p. 269)

between EAR and AcE with Pillai's trace of 0.7780. This suggests a relatively low topical diversity within the research journals, while in contrast, the practice journals show greater variability in this regard.[5] In summary, it can be stated that there is a significant topic-based gap between research and practice in the accounting literature.

As set out above, the second research question addresses whether the research-practice gap varies in magnitude between U.S. and European accounting literature. Hellinger distances between TAR and JoA (0.65546) and between EAR and AcE (0.56547) provide initial evidence of regional differences in the research-practice gap between the U.S. and Europe (0.08999).

To exclude possible biases due to interdependencies of the journal category and the category of the Region (the U.S. or Europe), we perform a two-way MANOVA (see Table I.6). For this purpose, we include—in addition to the two categorical variables, Research Journal and Region—the interaction term of these two categorical variables. The test statistics for the interaction term (e.g., Pillai's trace = 0.5566), which are consistently significant at the one percent level, indicate that the differences in the research-practice gap between the U.S. and Europe are not due to random variations in the sample. In summary, the results for the second research question show that the topic-based research-practice gap is different and more pronounced in the U.S. than in Europe.

[5] When interpreting the MANOVAs, it should be taken into account that all differences between journals or groups of journals are significant at the one percent level due to the high statistical power caused by the sample size. In untabulated analyses, we do not find significant differences for randomized within-journal comparisons.

Table I.5: MANOVA for RQ 1

To what extent is there a topic-based research-practice gap in the accounting literature? (RQ 1)

TAR & EAR $\neq$ JoA & AcE

Research Design: Topics (k=25) = Intercept + Research Journal + ε

	Research Journals vs. Practice Journals	**TAR vs. JoA**	**EAR vs. AcE**	**TAR vs. EAR**	**JoA vs. AcE**
	(1)	**(2)**	**(3)**	**(4)**	**(5)**
Wilks' lambda	0.1754***	0.1436***	0.2258***	0.7558***	0.2270***
Pillai's trace	0.8335***	0.8605***	0.7780***	0.2442***	0.7735***
Hotelling-Lawley trace	4.6499***	5.9342***	3.4113***	0.3230***	3.4029***
Roy's greatest root	4.6390***	5.9294***	3.4063***	0.3230***	3.4022***

Note: We illustrate the results of the MANOVA for RQ 1 in column 1. We display the other relevant journal combinations in columns 2 to 5. *** $p < 0.01$.

Table I.6: MANOVA for RQ 2

To what extent is the magnitude of the topic-based research-practice gap in the U.S. accounting literature different from the European one? (RQ 2)

$$TAR - JoA \neq EAR - AcE$$

$$\textit{Research Design: Topics (k=25)} = \textit{Intercept} + \textit{Research Journal} + \textit{Region} + \textit{Research Journal} \times \textit{Region} + \varepsilon$$

	Research Journal (TAR & EAR) or (JoA & AcE)	**Region (U.S. or Europe)**	**Research Journal × Region**
Wilks' lambda	0.3627***	0.3613***	0.4461***
Pillai's trace	0.6373***	0.6404***	0.5566***
Hotelling-Lawley trace	1.7573***	1.7635***	1.2354***
Roy's greatest root	1.7573***	1.7609***	1.2305***

Note: We show the results of a MANOVA for RQ 2. Research Journal, Region, and the interaction term are the independent categorical variables of our model. *** $p < 0.01$.

5 Additional Analyses

5.1 Bridging Journals

In the following, we conduct several additional analyses to validate our results regarding the extent and regional differences of a research-practice gap in the accounting literature. In line with our second research question, another aspect is of interest. Both research communities have established so-called bridging journals between "pure" research and respective research journals on the one hand and practice with corresponding practice journals on the other. Apart from the open question of whether these bridging journals actually bridge these two fields, there might also be a difference between the U.S. and its European counterpart. According to Zeff & Dyckman (2018), AHo, the bridging journal in the U.S., is increasingly approaching pure research journals (TAR, in particular) in content and methodology. For the European bridging journal (AiE), however, we are unaware of any a priori evidence of such a development. Thus, it is an empirical question whether the gap between the U.S. bridging and practice journal is more pronounced than for the European counterparts, i.e., whether it exhibits an analogous relation like the research-practice gap discussed above. To examine the relationship, we employ a two-way MANOVA design similar to RQ 2, only differing by analyzing bridging journals instead of research journals.

$$Topics = Intercept + BridgingJournal + Region + BridgingJournal \times Region \quad \text{(I.3)}$$

The descriptive results in Table I.4 show initial evidence that the gap between U.S. bridging and practice journals is more pronounced than in Europe. Hence, the Hellinger distance between AHo and JoA—i.e., the measure of the gap between U.S. bridging and U.S. practice journals—is 0.54721

(within Europe: 0.41460). The regional gap difference (0.13261) is even more pronounced than the regional gap between pure research journals and practice journals (0.08999). Similar to our previous analyses, the MANOVA in Table I.7 also reveals that the difference in the regional gap between bridging and practice journals is unlikely due to random variation. Thus, the results from this additional analysis align with our results for the second research question, illustrating that the gap between bridging and practice journals is of greater magnitude in the U.S. than in Europe.

Table I.7: MANOVA for Additional Analysis of Bridging Journals

To what extent is the magnitude of the topic-based gap between bridging journals and practice journals in the U.S. accounting literature different from the European one? (Additional Analysis)

$$AHo - JoA \neq AiE - AcE$$

Research Design: Topics (k=25) = Intercept + Bridging Journal + Region + Bridging Journal × Region + ε

	Bridging Journal (AHo & AiE) or (JoA & AcE)	**Region (U.S. or Europe)**	**Bridging Journal × Region**
Wilks' lambda	0.5086***	0.5772***	0.5178***
Pillai's trace	0.4914***	0.4228***	0.4822***
Hotelling-Lawley trace	0.9662***	0.7324***	0.9312***
Roy's greatest root	0.9662***	0.7324***	0.9312***

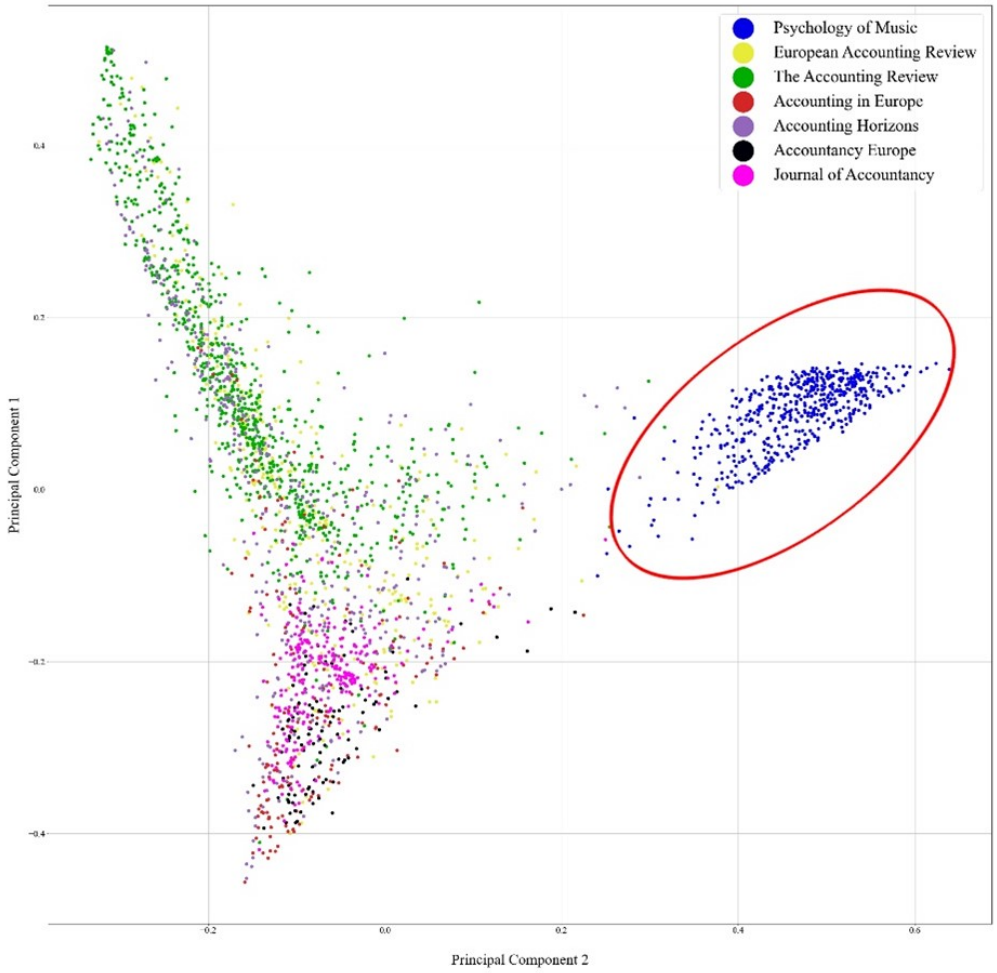
Note: We show the results of a MANOVA for the additional analysis. Bridging Journal, Region, and the interaction term are the independent categorical variables of our model. *** $p < 0.01$.

5.2 Psychology of Music

We include Psychology of Music (PoM) as an additional journal in our topic modeling analyses to further validate whether our main measure of the research-practice gap, the Hellinger distances, can correctly recognize an obviously distant journal. A principal component analysis reveals substantial differences between the journals of our primary analyses and PoM (see Figure I.3). The distinctive character of PoM (with 603 articles over the eleven years) also resembles that the (untabulated) Hellinger distances of PoM to another journal exceed any other distance between accounting journals of our main analyses.

Building upon the newly calculated LDA model, we reevaluate our main findings. Our results based on untabulated Hellinger distances and MANOVA (see Appendices I.B and I.C) remain virtually unchanged. Altogether, the additional PoM analyses demonstrate the validity of our constructs regarding the existence and regional variations of the research-practice gap and their robustness to entirely different themes.

Figure I.3: Principal Component Analysis with Psychology of Music



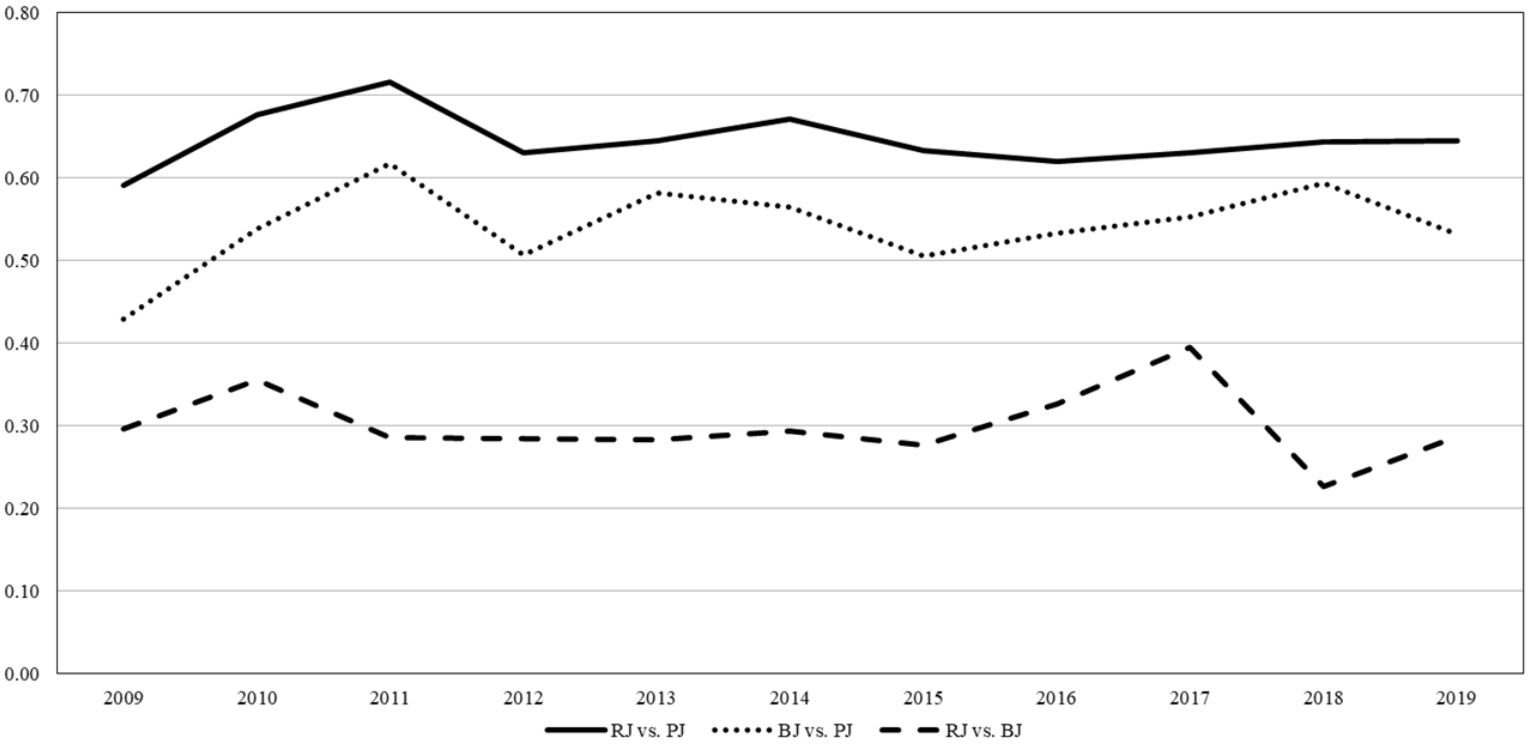
Note: The results of a Principal Component Analysis with the six accounting journals and Psychology of Music are depicted, whereas each dot represents an article. The outlying papers of Psychology of Music are circled.

5.3 Time Series Analyses

In order to analyze whether the research-practice gap changes over time or whether it is time-invariant, we explore time trends over the sample period of 2009–2019. Therefore, we evaluate the Hellinger distances between our three categories, research, practice, and bridging journals, on a yearly basis. Each category consists of the U.S. journal and its European counterpart. For instance, research journals, therefore, comprise TAR and EAR. The results in Figure I.4 show that the topic-based gap, measured as Hellinger distances, between all three categories, research and practice, research and bridging, and bridging and practice journals, remain stable over time.

Moreover, the most pronounced gap over time is observed between research and practice journals, underpinning the findings of our primary analyses. The Hellinger distances of the research-practice gap vary between 0.59141 and 0.71582. In addition, the research-practice gap dominates the other two gaps over the entire study period. Besides, the Hellinger distances indicate that bridging journals are closer to research than practice journals. In summary, the time series analyses show that the research-practice gap and the other gaps are robust over time. Further, we cannot identify a distinct time trend for the gaps.

Figure I.4: Time Series Analyses



Note: We show the topic-based Hellinger distances between the three categories of research, bridging, and practice journals. Thereby, each category is calculated on an aggregated basis of the U.S. journal and its European counterpart. Accordingly, research journals consist of TAR and EAR, bridging journals of AHo and AiE, and practice journals comprise JoA and AcE.

5.4 Elimination of Methodological Topics

For the last robustness check, we control for the concern that our measurement of the research-practice gap is not only based on differences in research topics but is instead driven by inherent differences in methodologies (and metrics/data). Here, we take advantage of the fact that we can manually analyze particular topics in more depth. Therefore, we first identify three topics, which in our view, are methodological or data-driven, from the main topic model (i.e., with 25 topics and without PoM). We select topics 12 and 19, as already mentioned above, and topic 21. In selecting these three topics, we also analyzed the distributions beyond the five most weighted words.[6] As Table I.4 illustrates, the Hellinger distances of the restricted model (22 topics) are virtually unchanged compared to the entire model. Likewise, the results of the MANOVA are essentially the same as the primary model (see Appendices I.D to I.F). Consequently, we can conclude that methodological aspects have not influenced our results substantially.

6 Discussion

Our findings support the notion of a research-practice gap in accounting literature and corroborate senior accounting scholars' frequently noted but rarely substantiated perception that accounting research is detached from accounting practice (e.g., Hopwood, 2007). With our topic-based measurement approach, we capture the extent of this gap between research, practice, and bridging journals and uncover an even wider gap in the U.S. journals compared to their European counterparts. In this respect, we support the expectations and arguments gathered before in the systematization

[6] We exclude topic 12 because of the words model (7), results (8), table (9), sample (10), and variables (13); topic 19 because of the words sample (6), variables (7), results (9), and model (10); and topic 21 because of sample (4), variable (6), control (7), and table (8). The rank for the word in the respective topic is in parentheses.

of the research-practice gap and the research questions (esp. in sections 2.2 and 2.3). We find a topic-related gap between research and practice, e.g., topics concerning earnings and accruals appear prominently in research journals,[7] while topics on technology and taxation are predominantly discussed in practice journals. Moreover, we identify a lower topic diversity in research journals than in practice outlets. This thematic narrowing in academic accounting research corresponds to the rationale of Tuttle & Dillard (2007) that institutional isomorphism leads to homogenization in accounting research (towards the mainstream), where universities have been identified as particular drivers (DiMaggio & Powell, 1983). The formal knowledge base formed at universities and the formation of professional networks facilitated by universities contribute to an unified view and promote what is considered legitimate research. However, institutional isomorphism does not explain why the research-practice gap is especially prevalent in accounting, as this mechanism also applies to other disciplines. For instance, Ratnatunga (2012) finds that the medical profession presents a substantively smaller research-practice gap than accounting academia (similar to Kaplan, 2011; Fraser & Sheehy, 2020). Here, further research seems necessary to identify the accounting-specific drivers for this development.

Moreover, the difference between the U.S. and Europe illustrates that the institutional theory does not provide a sufficient explanation on its own. Despite the key global role and preeminence of U.S. accounting research (e.g., Lee, 1999; Lee & Williams, 1999; Gendron, 2008; Locke & Lowe, 2008), differences between the communities seem to remain. Further research could illuminate the reasons for this divergence and would have to re-examine the previous notion of accounting as a rather local discipline (Lukka & Kasanen, 1996). Even if the European community remains more

[7] Non-tabulated post hoc tests revealed that relatively few and diverging topics are particularly popular among accounting academics and practitioners, explaining the bulk of the research-practice gap.

anti-dogmatic and methodologically more diverse (e.g., Panozzo, 1997; Raffounier & Schatt, 2010), the question of why this should positively affect the research-practice gap still needs to be examined. This analysis might consider other research traditions within Europe and beyond, especially outside the English-speaking world, which could be even more heterogeneous.

On an individual level, our findings raise further questions. Against the background of rational choice theory, rational researchers and practitioners perform cost-benefit analyses and determine their actions accordingly (Scott, 2000). Consequently, different incentive structures between academic accounting and accounting practice play a decisive role in the occurrence of a pronounced research-practice gap (Bartunek & Rynes, 2014). The incentive structure of academics is determined, in particular, by promotion and tenure decisions. Essentially, these decisions are based on journal metrics and the publication process, which is supposed to ensure high-quality publications. Thus, it is apparent that those who participate in the publication process, e.g., authors, reviewers, and editors, play a central role in the formation of incentive structures and are able to shape them (Moizer, 2009; Merchant, 2012; Tucker & Vesty, 2014; Rajgopal, 2021). The institutional tendency of accounting research to converge thematically is an expression of rational behavior: To reduce uncertainty, researchers are led to focus on prevailing research topics that promise higher chances of publication compared to novel issues. Similarly, editors and reviewers, in the sense of a path dependency, might also cling to what already exists. As a result, researchers exhaust themselves in over-studying the very same topics, triggering repetitiveness and irrelevancy (McCarthy, 2012; see also Gendron, 2008; Kaplan, 2011; Basu, 2012; Kaplan, 2019). Further research could help to understand why there is constrained competition among editors and journals for substantial innovations and why applied research often scores so poorly in research rankings, although attempts exist to integrate research impact into research assessment (e.g., Morton, 2015). This debate might be extended by

proposals to rethink academic evaluation processes (Kaplan, 2019) and abandon commercial science publishing in order to use less distorted, cheaper alternatives such as open-access-science networks (Winter, 2012). Further research could include the incentive structures of practitioners to analyze their contribution to the gap. It seems questionable if and why those individuals seem to be less interested in accounting research, although the constraints of daily routine and time pressure should be comparable to practitioners in other disciplines, such as medicine or engineering.

Furthermore, the difficult question of how to evaluate a research-practice gap remains open. Whether a more applied discipline, such as accounting, is similarly entitled to conduct pure science might be discussed. Autonomy and independence of research choices might be valuable; however, the discrimination of more applied types of research in the research evaluation seems questionable at the same time. It also seems justified to discuss the role and societal relevance of accounting research (Fülbier & Sellhorn, 2023), especially if the research is publicly funded. Much harder to answer is the connected question of whether we can really assess the relevance and impact of research papers, even if the related topics are far from practice. It remains possible that research influences practice and society in the long run or via many intermediation steps or both. The consideration of bridging journals in our analysis touches on the last aspect, as we can show that there might be a transmission process with several outlets in between. Further research could identify and illuminate this process in more depth—regarding the chain links themselves and the time aspect, i.e., if there is a substantial time lag between research and practice (topics).

7 Conclusion and Limitations

This study introduces a novel approach to explicitly measure the often-cited but rarely analyzed research-practice gap in the accounting literature (Unerman & O'Dwyer, 2010; van Helden & Northcott, 2010; Ratzinger-Sakel & Gray, 2015; Fraser & Sheehy, 2020; Orchard et al., 2020). By applying LDA to accounting journals, we are able to quantify the topic-related gap with minimal subjectivity. The results indeed document a pronounced and significant gap between research and practice journals, indicating an influence of institutional isomorphism towards homogenization in accounting research. Furthermore, our approach to measuring the gap enables us to uncover regional variations of the research-practice gap. The disparity between research and practice is more considerable in the U.S. than in Europe. Therefore, we reinforce the prior literature highlighting differential research environments and traditions. Consequently, the research-practice gap should always be considered in the respective context.

Our findings are robust to various adaptations and alternative specifications. However, certain limitations apply. We only consider journals and articles written in English for our study due to methodological necessities and to ensure comparability across our sample of the U.S. and Europe. Consequently, we might not capture the entire European research and practice. In contrast, we might overemphasize British research since a language barrier is at least less of a concern here than in other countries. However, as British research is rooted in the Anglo-American tradition, overstating British research would lead to a smaller gap between the U.S. and Europe, indicating an even larger actual gap between the two regions. Besides, we base our analyses mainly on six (four in our main analyses) journals, while the choice of the journals and the number of journals involve levels of subjectivity. Though by exploring journals published by the AAA and its European

counterpart, the EAA, as well as professional bodies in the U.S. and Europe, we ensure a high level of comparability. Moreover, our approach does not capture the importance of accounting research for regulators and standard setters as we only explore the topical differences between accounting and practice journals. However, part of the literature specifically investigates the use of research in standard setting (Fülbier et al., 2009; Rutherford, 2011; Ewert & Wagenhofer, 2012; Sinclair & Cordery, 2016; Leuz, 2018; Becker et al., 2021; Geoffroy & Lee, 2021, i.a.,).

Appendix I.A: Sensitivity Analysis for Different Numbers of Topics

Sensitivity Analysis for Different Numbers of Topics

RQ1:	To what extent is there a topic-based research-practice gap in the accounting literature?
RQ2:	To what extent is the magnitude of the topic-based research-practice gap in the U.S. accounting literature different from the European one?
Additional Analysis:	To what extent is the magnitude of the topic-based gap between bridging journals and practice journals in the U.S. accounting literature different from the European one?

No. of topics	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**	**50**	**60**	**70**	**80**	**90**	**100**
RQ 1	0.51	0.58	0.57	0.59	0.62	0.60	0.60	0.60	0.60	0.60	0.62	0.60	0.62	0.63	0.62
RQ 2	−0.03	0.02	0.01	0.04	0.09	0.07	0.06	0.05	0.05	0.04	0.08	0.08	0.07	0.06	0.08
Additional Analysis	0.07	0.08	0.09	0.14	0.13	0.18	0.15	0.14	0.13	0.12	0.15	0.12	0.12	0.12	0.13

Note: For robustness we calculate the Hellinger distances of RQ 1, RQ 2, and the additional analysis of bridging journals for alternative specifications of the number of topics in our LDA model.

Appendix I.B: MANOVA for RQ 1—Robustness Check with PoM

MANOVA for RQ 1—Robustness Check with PoM

To what extent is there a topic-based research-practice gap in the accounting literature? (RQ 1)

TAR & EAR $\neq$ *JoA & AcE*

Research Design: Topics (k=25) = Intercept + Research Journal + ε

	Research Journals vs. Practice Journals	**TAR vs. JoA**	**EAR vs. AcE**	**TAR vs. EAR**	**JoA vs. AcE**
	(1)	**(2)**	**(3)**	**(4)**	**(5)**
Wilks' lambda	0.2187***	0.1549***	0.2940***	0.7148***	0.4162***
Pillai's trace	0.7813***	0.8451***	0.7060***	0.2853***	0.5857***
Hotelling-Lawley trace	3.5721***	5.4677***	2.4008***	0.3990***	1.3983***
Roy's greatest root	3.5721***	5.4677***	2.4008***	0.3989***	1.3951***

Note: We recalculate the MANOVAs for RQ 1 and between relevant journal combinations for a modified sample that includes Psychology of Music. *** $p < 0.01$.

Appendix I.C: MANOVA for RQ 2—Robustness Check with PoM

MANOVA for RQ 2—Robustness Check with PoM

To what extent is the magnitude of the topic-based research-practice gap in the U.S. accounting literature different from the European one? (RQ 2)

$$TAR - JoA \neq EAR - AcE$$

Research Design: Topics (k=22) = Intercept + Research Journal + Region + Research Journal × Region + ε

	Research Journal (TAR & EAR) or (JoA & AcE)	**Region U.S. or Europe**	**Research Journal × Region**
Wilks' lambda	0.5056***	0.6826***	0.7597***
Pillai's trace	0.4944***	0.3174***	0.2403***
Hotelling-Lawley trace	0.9779***	0.4560***	0.3164***
Roy's greatest root	0.9779***	0.4650***	0.3164***

Note: We show the results of a MANOVA for RQ 2 with a modified sample that includes Psychology of Music. Research Journal, Region and the interaction term are the independent categorical variables of our model. *** $p < 0.01$.

Appendix I.D: MANOVA for RQ 1—Robustness Check restricted Model

MANOVA for RQ 1—Robustness Check restricted Model

To what extent is there a topic-based research-practice gap in the accounting literature? (RQ 1)

TAR & EAR ≠ JoA & AcE

Research Design: Topics (k=22) = Intercept + Research Journal + ε

	Research Journals vs. Practice Journals	**TAR vs. JoA**	**EAR vs. AcE**	**TAR vs. EAR**	**JoA vs. AcE**
	(1)	**(2)**	**(3)**	**(4)**	**(5)**
Wilks' lambda	0.1789***	0.1456***	0.2299***	0.7647***	0.2306***
Pillai's trace	0.8211***	0.8544***	0.7701***	0.2353***	0.7694***
Hotelling-Lawley trace	4.5901***	5.8697***	3.3499***	0.3076***	3.3372***
Roy's greatest root	4.5901***	5.8697***	3.3499***	0.3076***	3.3372***

Note: We recalculate the MANOVAs for RQ 1 and between relevant journal combinations and thereby exclude three methodological topics. *** $p < 0.01$.

Appendix I.E: MANOVA for RQ 2—Robustness Check restricted Model

MANOVA for RQ—Robustness Check restricted Model

To what extent is the magnitude of the topic-based research-practice gap in the U.S. accounting literature different from the European one? (RQ 2)

$$TAR - JoA \neq EAR - AcE$$

$$\textit{Research Design: Topics (k=22)} = \textit{Intercept} + \textit{Research Journal} + \textit{Region} + \textit{Research Journal} \times \textit{Region} + \varepsilon$$

	Research Journal (TAR & EAR) or (JoA & AcE)	**Region U.S. or Europe**	**Research Journal × Region**
Wilks' lambda	0.3628***	0.3567***	0.4445***
Pillai's trace	0.6372***	0.6433***	0.5555***
Hotelling-Lawley trace	1.7561***	1.8037***	1.2498***
Roy's greatest root	1.7561***	1.8037***	1.2498***

Note: We show the results of a MANOVA for RQ 2 while excluding three methodological topics. Research Journal, Region, and the interaction term are the independent categorical variables of our model. *** $p < 0.01$.

Appendix I.F: MANOVA for Additional Analysis of Bridging Journals—Robustness Check restricted Model

MANOVA for Additional Analysis of Bridging Journals—Robustness Check restricted Model

To what extent is the magnitude of the topic-based gap between bridging journals and practice journals in the U.S. accounting literature different from the European one? (Additional Analysis)

$$AHo - JoA \neq AiE - AcE$$

Research Design: Topics (k=22) = Intercept + Bridging Journal + Region + Bridging Journal × Region + ε

	Bridging Journal (AHo & AiE) or (JoA & AcE)	**Region U.S. or Europe**	**Bridging Journal × Region**
Wilks' lambda	0.5084***	0.5775***	0.5127***
Pillai's trace	0.4916***	0.4225***	0.4873***
Hotelling-Lawley trace	0.9668***	0.7316***	0.9504***
Roy's greatest root	0.9668***	0.7316***	0.9504***

Note: We show the results of a MANOVA for our additional analysis of bridging journals while excluding three methodological topics. Bridging Journal, Region, and the interaction term are the independent categorical variables of our model. *** $p < 0.01$.

Research Paper II

Capital Market Effects of SEC Rules under Academic Influence

ABSTRACT

Under the Securities and Exchange Commission's (SEC) mission to promote efficient capital markets, I examine how the academic influences on SEC rules shape their capital market effects. I show that, in general, and somewhat counter-intuitively, some evidence exists that SEC rules under academic influence have negative firm-level liquidity effects. This applies both to the academic influence originating from the SEC itself, e.g., by citing research, as well as to scholars' influence in the rulemaking process by writing comment letters. This suggests that academia is to some extent a facilitator of regulatory capture. However, the results are more nuanced on a closer look. For the SEC's financial reporting rules sub-type, for instance, there are positive links between rules under academic influence and liquidity. In addition, I find to some extent indications that the participation of finance, accounting, and economic scholars in SEC rulemaking leads to rules with positive liquidity effects. These findings contribute to the literature by revealing real effects of academic research in policy processes as exemplified by SEC rulemaking.

Keywords: SEC, Capital Market Effects, Academia, Regulation
JEL-Classification: M48; K23; G18; A11

Acknowledgements: I thank Rolf Uwe Fülbier, Thorsten Sellhorn, Sven Hörner, the workshop participants at the University of Bayreuth Seminar on Accounting Research, the participants of the Doctoral Seminar on Accounting at the University of Wuppertal in September 2023, and the attendants of the Bayreuth Young Economists Research Seminar in May 2024 for their valuable feedback. I thank Rachel M. Geoffroy for providing data on citations in U.S. Securities and Exchange Commission (SEC) rulemaking.

1 Introduction

The U.S. Securities and Exchange Commission (SEC) mission "to protect investors, maintain fair, orderly, and efficient markets, and facilitate capital formation" represents the heart of the United States (U.S.) capital market regulation (SEC, 2022). At the same time, the regulation of the SEC, like any other regulation, is part of a political process. As researchers, we should ask ourselves: How can academia improve regulation? This question remains largely unresolved, but its underlying challenge is well summarized by Geoffroy & Lee (2021) as follows: "A paper's contribution is difficult to measure. [...] creating real-world changes could be their ultimate goal." The question how regulation, or policy-making in general, can be improved by academic research is admittedly difficult to answer due to its highly normative nature. Consequently, there is an intense debate about how accounting and corporate reporting research must develop in order to contribute in solving societal problems (Fülbier & Sellhorn, 2023). However, the limited setting of SEC rulemaking, with its clear mandate, provides a suitable setting to address this issue. Rulemaking is the process by which a federal agency, such as the SEC, implements rules as part of its regulatory activities (SEC, 2023). SEC rulemaking is characterized as an inherently political process that can be influenced by academia in various ways. A main channel here is through SEC's academically trained economists and lawyers using scientific rationales to justify rules (Geoffroy & Lee, 2021; Khademian, 1992, p. 9). Another channel is through scholars' participation in the commenting period of rules, a SEC-administered and highly formalized process.

In this study, I exploit the observability of these channels of academic influence on SEC rulemaking to provide empirical evidence on the capital market effects of rules under academic influence.

The SEC rulemaking setting offers several unique advantages. First, SEC regulation has a well-defined objective with their aforementioned mission—namely, to contribute to fair, orderly, and, in particular, efficient capital markets. This allows me to draw on well-established capital market effects metrics to evaluate SEC's objective outcomes. A broad body of research exists that deals with these capital market effects of individual SEC regulations (e.g., Chakrabarty et al., 2021; Chung & Chuwonganant, 2012; Coates, 2007; Diether et al., 2009; Haslag & Ringgenberg, 2023; Jain et al., 2008; O'Hara & Ye, 2011). This is accompanied by a number of very influential studies focusing on the capital market effects of regulation in an international setting (e.g., Christensen et al., 2016; Cumming et al., 2011); and accounting studies that focus especially on disclosure and accounting-related rules (e.g., Bushee & Leuz, 2005; Brüggemann et al., 2018; Chen et al., 2010; Eleswarapu et al., 2004; Kim et al., 2012; Sidhu et al., 2008). Second, the large number of SEC rules (145 rules in total for my study) and the wide range of topics regulated, provide an unique opportunity to examine academic influences in the regulatory process. This large number of rules makes it possible to draw generalizable inferences about the mechanisms of academic influence in rulemaking. It is, therefore, advantageous compared to small-scale approaches such as case studies. Several more recent studies have already utilized this large-scale approach to SEC rule setting (e.g., Campbell et al., 2023; Geoffroy & Lee, 2021; Wu, 2020). In addition, the heterogeneity of rule topics enables sub-analyses for different regulatory aspects which can further deepen the understanding of the regulatory-academia nexus. Third, despite the high level of content heterogeneity among the rules, they reveal a high level of homogeneity and transparency from a procedural perspective. This is particularly evident in the standardization of the rulemaking process, and in regard to the involved steps, which are also published in their entirety. Another aspect of homogeneity in SEC rulemaking is that the rules follow a largely uniform structure and, for instance, always include a cost-benefit

analysis. In addition, the SEC publishes all comment letters from stakeholders during the public commenting phase, which adds to the high level of transparency in this process. Fourthly and lastly, the SEC as such and especially in the rulemaking process has a very high level of expertise, also when it comes to dealing and interacting with academic research (Geoffroy & Lee, 2021; Khademian, 1992, p. 9). This academic focus—on capital market research—is apparent from the SEC's internal guideline the so-called "Current Guidance on Economic Analyses for SEC Rulemakings", which explicitly refers to the economic consequences arising from market failures, such as market power, principal-agent conflicts, and asymmetric information, and thus, addresses capital market effects (SEC, 2012). Moreover, the SEC's expertise in exploring capital market effects of its regulation is manifested in numerous SEC working papers (e.g., Barardehi et al., 2022; Gerig & Michayluk, 2014; Hu, 2018; Ivanov et al., 2020), journal publications (e.g., Bessembinder et al., 2016; Loon & Zhong, 2016), and academic reports to the Congress (e.g., DERA, 2017).

Specifically, I examine the effects of academic participation in SEC rules on the capital market by using various liquidity proxies as outcome variables in a difference-in-differences research design around the effective dates of these rules. I use the *bid–ask spread*, which is frequently used in the empirical literature, as a construct for liquidity (e.g., Christensen et al., 2016; Jain et al., 2008; Muller et al., 2011). In this context, the literature provides well-established theoretical links between liquidity and the magnitude of information asymmetries and adverse selection in capital markets (e.g., Christensen et al., 2016; Glosten & Milgrom, 1985; Glosten & Harris, 1988; Venkatesh & Chiang, 1986). As further constructs for liquidity, I apply the *price impact* and *zero returns*. In my research design, I estimate a regression model using firm-level observations, which are aggregated for each of the 145 rules in the sample for the period of 90 days before and after the effective date. I use as study variables various measures of academic influence and interact them with the $Post$

variable; indicating the effectiveness of the rule. This allows me to isolate the impact of academic influences on the capital market effect of the rules' implementation.

The metrics for academic influence can be subdivided according to two different theoretical perspectives—which are reflected in my two hypotheses. The first set refers to the SEC as a consumer of academic research. Here, I use academic citations in SEC rules as proxies for SEC's use of academic research (Geoffroy & Lee, 2021). As a theoretical underpinning for this construct serve the classical theories of economic regulation; in particular regulatory capture and public interest theory (Geoffroy & Lee, 2021; Posner, 1974; Stigler, 1971). However, the adoption of these theories to the setting of academic influence in rulemaking requires specific (market) mechanisms for academic ideas. The associated market mechanism on behalf of the regualtory capture theory is the market for excuses by Watts & Zimmerman (1979). Under this theory, the SEC uses academic research as an argument to fulfill the interests of a particular lobby group. The other market mechanism is described by Trombetta et al. (2012) as a competitive market for academic research on regulation. This mechanism ensures that the regulator, acting in the public interest, has sufficient academic evidence to justify its regulatory interventions. These two market mechanisms thus link the public interest (public interest theory—related to higher liquidity) or the interest of an influential group (capture theory—related to lower liquidity, due to advantages for potential insiders) with the possible behavior of the SEC concerning the design of the rules and, ultimately, their intended capital market effects.

The second set of metrics focuses on scholars as agents in the rulemaking process. These can be gathered via the number of academic comment letters in the rulemaking process for each rule. Again, there are two opposing theories. On the one hand, positive incentives due to the scholars' pursuit of societal relevance (on this, Fülbier & Sellhorn, 2023) should enable the SEC to issue rules

that improve the efficiency of the capital market. On the other hand, scholars themselves could facilitate regulatory capture (Zingales, 2014). Thereby scholars serve the interest of certain interest groups, which in turn tend to favor less transparent and illiquid markets.

Furthermore, my research design includes a number of rule-level and firm-level controls as well as year and firm fixed effects. To improve the identification of my research design, I use an exogenous shock from the *Business Roundtable v. SEC* decision. My sample consists of 145 rules for the years 2006 to 2022, for which I collected capital market data of all U.S. firms in Datastream EIKON for a 90-day pre and post period.

In the general setting, i.e., considering all 145 SEC rules, I find a negative effect of academic-influenced rules on firm-level liquidity—measured as *bid–ask spreads*. With a few notable exceptions, these findings hold for the other two dependent variables, *price impact* and *zero return days*. Therefore, these results support the rationale that academic research helps to shape regulartory activities, here by the SEC, in the interests of individual groups and at the expense of the general public. For the SEC-centric view, this is in line with the capture theory argument that academic research provides a market for excuses to the SEC. By focusing on scholars, these findings point to the notion that scholars themselves could be captured as facilitators within the policy process. Opposite to that, there are some initial hints, particularly in the results for the *price impact*, that finance, accounting, and economic scholars are acting in the spirit of societal relevance. And thus contribute to improve the rules in terms of capital market efficiency.

A closer look at the SEC rules reveals some further insights. By only considering SEC rules on financial reporting issues, I notice a tendency towards an increase in firm-level liquidity. In contrast, for rules on market & trading issues, I find some evidence that academic research rather harms the quality of SEC rules in terms of liquidity. In further analyses, I find that after the *Business*

Roundtable v. SEC decision, rules under more academic influence experienced incremental liquidity improvement. Thus, influence by academic research had a more positive effect on firm-level liquidity after *Business Roundtable v. SEC* compared to before. In additional analyses, I test the robustness of my findings regarding the temporal structure of rulemaking, potential endogeneity concerns, and the underlying assumption of my research design that all firms are affected by the rule.

My paper contributes to the literature in several ways. First, I provide evidence on the real-effects of academic research in the political process of rulemaking. In doing so, I build on the literature on the real-effects of academic research (Jaffe, 1989). This strand of accounting and finance research, till now, mainly implies that market anomalies disappear after publication in scientific journals (e.g., McQueen & Thorley, 1997; Schwert, 2003; Marquering et al., 2006; Green et al., 2011; McLean & Pontiff, 2016; Jones & Pomorski, 2017; Calluzzo et al., 2019; Wang et al., 2024). Closely related to this, I provide a logical continuation of the study by Geoffroy & Lee (2021), looking at the citation behavior of the SEC—but not linking this to the real capital market effects of SEC rules. Thus, I add empirical evidence to a possible avenue by which the research-practice gap can be bridged (e.g., Federsel et al., 2023).

Second, I contribute to the evidence-based policymaking literature by examining a comprehensive set of SEC rules (Campbell et al., 2023; Leuz, 2018). Here, for example, Campbell et al. (2023) analyzes SEC disclosure rules from a shareholder value perspective through short-term event studies. I complement this approach by taking the liquidity perspective, or more generally, the capital market efficiency perspective, which is widely used in the literature on the effects of regulation (e.g., Brüggemann et al., 2018; Bushee & Leuz, 2005; Christensen et al., 2016; Daske et al., 2008; Jain et al., 2008; Muller et al., 2011; O'Hara & Ye, 2011; Steffen, 2022). The unique setting of SEC

rulemaking allows me to focus my study not solely on the regulation itself, but on its characteristics in terms of regulator-academia interaction.

Third, I contribute to the literature on the theoretical level by translating the conceptual explanations of Fülbier & Sellhorn (2023) and Zingales (2014) into testable theoretical propositions. In doing so, I link the arguments—societal relevance vs. economists' capture—about scholars' incentives to participate in a rulemaking process with measurable metrics as the number of academic comment letters.

The remainder of the paper is structured as follows: In Section 2, I discuss the institutional setting of SEC rulemaking with a focus on the cost-benefit analysis and the role of academia. In addition, I derive my hypotheses. In Section 3, I describe my empirical strategy. I present my main results in Section 4 and complement them with additional analyses in Section 5. Section 6 concludes.

2 Institutional Setting, Prior Literature, and Hypotheses

2.1 SEC Rulemaking

According to the SEC (2023) itself, rulemaking refers to the process that federal agencies such as the SEC undertake to implement rules. This political process falls within SEC's quasi-legislative authority (Scalia, 1982). The SEC rulemaking is designed in a way that the general public can participate in the process (Khademian, 1992, p. 107; SEC, 2023). The rulemaking process usually starts with the publication of a proposed rule also called proposing release.[1] The proposed rule is

[1] In some cases, the SEC requests input from the public through a so-called concept release before it publishes a proposed rule (SEC, 2023).

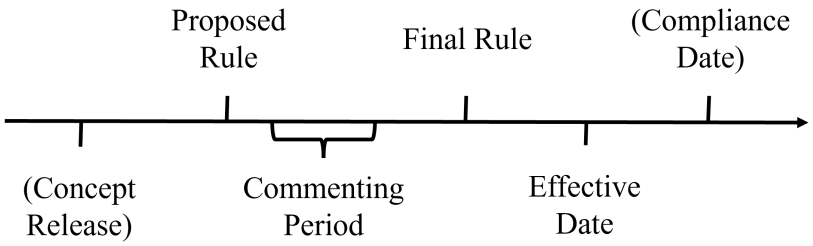


Figure II.1: SEC rulemaking timeline

followed by a public comment period, and ends with the publication of a final rule, which is published on the Federal Register and added to the Code of Federal Regulations (CFR) (see Figure II.1). Rules can originate directly from laws that have been passed by Congress and signed by the President. However, the majority of the rules are updates to existing laws or are created within the agency's own authority. Less common ways are regulatory initiatives by other government agencies or by the general public (Campbell et al., 2023). Furthermore, SEC rules cover a wide scope of capital market regulations: From specific financial reporting rules, to rules governing stock exchanges, to technical or organizational rules just applicable to the SEC itself. Another characteristic of SEC rules is that they are written in collaboration between SEC lawyers and Ph.D. economists (Geoffroy & Lee, 2021; Khademian, 1992, p. 9).

Typically, a final rule consists of the following parts: A cover page with various details about the rule (e.g., name of the rule, summary, effective date, contact information); a table of content; an introduction or executive summary; background information on the rule; detailed elaborations of the rule's content; a discussion under the Paperwork Reduction Act; a cost-benefit analysis; considerations on competitive issues and the promotion of efficiency, competition and capital formation; a regulatory flexibility analysis; and finally the changes to the CFR. The cost-benefit analysis part of the final rules is of particular importance for my study, as it often includes a discussion of the academic literature in addition to the evaluation of the public comments. A key

feature of the SEC's cost-benefit analyses is that they evaluate the rules according to its statutory mandate of 'efficiency, competition, and capital formation'; as opposed to analyses of the total surplus for the society at large (Lee, 2015).

Following the *Business Roundtable v. SEC* decision in 2011[2], the cost-benefit analysis has become the focus of accounting and legal scholars but has also risen in priority within the SEC itself. From a legal perspective, Hayden & Bodie (2012) outline the economic and legal background of the case in a detailed analysis. In particular, they point out how the lack of academic studies (especially the omission of the studies by Borstadt & Zwirlein (1992), Fleming (1995), and Ikenberry & Lakonishok (1993)) contributed to the fall of the rule (Hayden & Bodie, 2012). As a consequence of this case, the SEC published a new guidance on economic analysis in SEC rulemaking.[3] In his analysis, White (2017) shows the changes of this new guidance on the economic analysis of the SEC, for example the increase of Ph.D. financial economists from about 30 in 2011 to more than 70 in 2015. From an accounting research perspective, Geoffroy & Lee (2021) analyze the role of academic research in SEC rulemaking and, in particular, in the cost-benefit analysis. They find increased attention to academic research after *Business Roundtable v. SEC*. Taking the SEC as an example, Baudot & Wallace (2023) illustrate how a financial regulator justifies its rulemaking decisions on a disclosure rule through evidence-based policymaking. They show that the SEC uses public, natural, and realist grammars. The SEC applies these grammars in such a way that they combine justifications so that they lead to legitimized SEC decisions. Their concept of evidence-based policymaking originates from Leuz (2018). In contrast, a somewhat unorthodox conception of

[2] The case *Business Roundtable v. SEC* before the U.S. Court of Appeals for the D.C. Circuit concerned a proxy access rule (Rule 14a-11) initiated by the Dodd-Frank Act, i.e., the possibility for shareholders to gain access to the corporate proxy ballot (Geoffroy & Lee, 2021; Hayden & Bodie, 2012). The rule was struck down because of the poor quality of the cost-benefit analysis and the lack of attention paid to the economic consequences (Geoffroy & Lee, 2021).

[3] https://www.sec.gov/divisions/riskfin/rsfi_guidance_econ_analy_secrulemaking.pdf

cost-benefit analysis in rulemaking originates from Lee (2021). In the absence of other empirical evidence, he suggests using an event study design of market reactions to rule proposals to provide the regulator with data for the economic assessment. More recent studies on SEC rulemaking include Campbell et al. (2023), who look at whether SEC's disclosure rules affect shareholder value; and Wu (2020), who examines how SEC regulations affect company valuation and corporate policies (e.g., demand for compliance staff).

2.2 Role of Academia in (SEC) Regulation

As an independent agency, the SEC is subject to political influence whilst its decision-making is shaped by various lobbying and other political mechanisms (see, for example, the literature on the influence of political connections on regulatory oversight outcomes by Correia, 2014; Heese et al., 2017; Seitz & Piering, 2024). Notably, SEC rulemaking itself is a political process which, as aforementioned, is shaped by the participation of the public (Khademian, 1992, p. 107). Their participation comes into play because, as Lee (2015) shows, alongside investors, other stakeholders such as managers, employees, consumers, taxpayers, and vendors could be affected by spillover effects of SEC regulations. Academics represent another—but special—stakeholder group. Historically, they have been ascribed a 'second-class citizenship' in the rulemaking process (Khademian, 1992, p. 107); however, more recent research shows their non-negligible influence on SEC rulemaking, which has even increased due to the greater standardization and elaboration of the cost-benefit analysis (Geoffroy & Lee, 2021).

Related to this role in regulation, a broad strand of literature has shown that (academic) research has "real" consequences in general (see, for example, the seminal paper by Jaffe, 1989). A well documented real-effect of academic finance and accounting research is, for example, the disappear-

ance of market anomalies after publication of research (e.g., McQueen & Thorley, 1997; Schwert, 2003; Marquering et al., 2006; Green et al., 2011; McLean & Pontiff, 2016; Jones & Pomorski, 2017; Calluzzo et al., 2019; Wang et al., 2024). From a conceptual perspective on the influence of academia on regulation, Leuz (2018) highlights the major role which evidence-based policymaking can play in accounting and financial market research—but also shows that this comes with some challenges (such as data availability and the importance of causal inference). A further crucial aspect is that evidence-based policymaking could strengthen the political influence—since policymaking is inherently political—on the research process. A subsequent concern of this is, that it could lead to researchers looking for particular results for the regulation in question (Leuz, 2018).

Regarding academic and political collaboration, an ongoing debate takes place on how exactly this can be fruitful and how opportunities for participation can be shaped and utilized (Cairney & Oliver, 2020; McGuire & Perna, 2023; Ahmed et al., 2023). In this respect, however, there is a long-lasting discussion about the relevance of accounting research and, more specifically, its criteria for the relevance to accounting standard-setting (Schipper, 1994; Fülbier et al., 2009). McLeay et al. (2000) demonstrate the multifaceted role of academia as a political actor in their remarkable study. They find that the academic community has little influence on the development of financial reporting regulation in a German setting but can exert significant influence through interaction with the industry (McLeay et al., 2000). From a conceptual perspective, Trombetta et al. (2012) outline why academic research should be part of the accounting standard-setting process and, in particular, the effects analysis of new standards. According to them, the key reasons for the benefit of academic participation are the theory-based nature, the rigor of the methodologies, the existing breadth and depth of expertise, and the existence of a competitive market for academic research. A slightly different perspective on the role of academia in the standard setting process is suggested by Ewert &

Wagenhofer (2012), who point out that academia and in particular its empirical studies can be useful for a post-implementation review.

2.3 Hypotheses Development

There is an intense debate about the meaning and purpose of the cost-benefit analysis of financial regulation—especially in the context of SEC rulemaking. As I have just shown before, there is a wide range of studies that could potentially support cost-benefit analyses. However, critics point out a number of barriers. They accuse the cost-benefit analysis of merely providing "guesstimates" through its alleged quantification and providing a means to camouflage transparency, e.g., through empirical studies with little external validity, in the rulemaking process (Bishop & Coffee, 2013; Coates, 2015). Proponents counter these critics by pointing to the merits of academic research and the special attributes of financial markets as a regulatory object, primarily their richness of data in financial market research and, therefore, its evaluability (Kraus, 2015; Posner & Weyl, 2015). Nevertheless, there is a broad consensus that rulemaking, and the cost-benefit analysis, is a political process (Baudot & Wallace, 2023; Bozanic et al., 2012). Furthermore, there is empirical and anecdotal evidence that academia can play a significant part in this political process (Geoffroy & Lee, 2021; Leuz, 2018). It, therefore, seems reasonable to apply the main theories of regulation—public interest theory and capture theory—to the effects of academic participation in SEC rulemaking, as already stated in the pioneering study by Geoffroy & Lee (2021). Less clear, however, is what the (economic) baseline is for judging a rulemaking outcome (SEC, 2012; White, 2017).

The most intuitive starting point for quantitatively determining the quality of SEC rules (against a baseline) is to refer to the SEC's mission of promoting capital markets efficiency (Khademian, 1992, p. 212; Stigler, 1964). This approach is supported in a large number of the previously mentioned

studies on the evaluation of SEC rules which made use of proxies for market efficiency and quality (e.g., liquidity mostly, but also trading costs and cost of capital); which are also theoretically linked to capital markets efficiency (Posner & Weyl, 2013). The underlying assumption is that the SEC's market rules or disclosure requirements reduce information asymmetries. This leads to investors having a better ability to price stocks. Hence, the capital market becomes more liquid, resulting in a decrease in the *bid–ask spread* (e.g., Copeland & Galai, 1983; Diamond & Verrecchia, 1991; Glosten & Milgrom, 1985; Hirshleifer, 1971; Stigler, 1964).[4]

Under the public interest theory, the regulator is assumed to counter inefficient and unequal market practices (Posner, 1974). Following this theory, academic research could be a powerful way for the regulator to understand these (inefficient) market practices and, thus, the effects of its regulatory actions (Geoffroy & Lee, 2021). At this point, it should be noted that the regulator acts as a consumer of academic research. The consumption of academic research is usually reflected in the fact that the regulator, in this case the SEC, cites the relevant academic literature in the rule.[5] Nevertheless, this is conditional on an adequate body of academic literature being available to the regulator. According to Trombetta et al. (2012), however, this should be assumed by the existence of a competitive market for academic research, since scholars have an incentive to conduct innovative research to explore potential effects of regulation. Ceteris paribus, I would expect that better-informed rulemaking through academic research would lead to rules that lead to lower market liquidity after becoming effective.

[4] Nevertheless, this shareholder-focused view can also be criticized as it leaves possible externalities for other stakeholders largely unconsidered (Lee, 2015).

[5] It should also be mentioned here that there are other ways in which the SEC interacts with academia. For example, the SEC has its own Division of Economic and Risk Analysis (DERA) Working Paper Series, and the SEC rules are prepared with academically trained SEC economists. Moreover, there is also a lively exchange with academia through conferences. However, when justifying a final rule, it is quite plausible that all these interchange formats shape and influence citation behavior to a certain extent, ultimately leaving the citations themselves as the most plausible measure of the SEC's academic consumption.

However, a less benevolent perspective on the regulator is taken by the capture theory. It emphasizes the importance of interest groups that are able to influence the political process and, consequently, the regulation itself (Posner, 1974; Stigler, 1971). Under this theory, one would expect academic research to be used to justify or promote regulation that is in the interests of a powerful interest group. This could even lead to a captured regulator intentionally citing academic research in a biased way (Geoffroy & Lee, 2021). Rules influenced in this way are, therefore, more likely to serve the objectives of an interest group and less likely to serve the SEC's primary objective of ensuring a high level of capital market efficiency. Thus, from this perspective, the use of academic research by a regulator (e.g., the SEC) can be described as a 'market for excuses' in the sense of Watts & Zimmerman (1979). This means that academic research papers act as an instrument for influencing the regulator, or even more so, the regulator itself relies on certain academic research to favor the interests of a particular group in the process. Accordingly, I expect adverse effects on the capital market efficiency (and the corresponding liquidity measures).

Given the two different theoretical explanations of how the consumption of academic research by the SEC can influence the rulemaking process, it remains an empirical question whether SEC rules shaped more by academic research lead to more or less capital market efficiency. The SEC also considers other aspects besides market efficiency (e.g., sustainability issues) in its rulemaking; for this reason, it is possible that the SEC's academic consumption is not only driven by the aim of improving capital market efficiency. It may, therefore, be possible that the consumption of academic research has no influence on the quality of the rules and, thus, ultimately on capital market efficiency. Based on these considerations, I state my first hypothesis as follows, without explicitly indicating a direction:

Hypothesis 1: *The SEC's use of academic research in rulemaking influences SEC rules and thereby significantly affects capital market liquidity.*

A different perspective on the issue pivots from the regulator, in this case, the SEC, to the academic community itself (i.e., the producer of research). This is based on the assumption that academia can influence rulemaking (Geoffroy & Lee, 2021; Leuz, 2018). The focus on academia and its representatives, however, shifts to the incentives and motivation of academia to participate in this political process. In the context of SEC rulemaking, the opportunity for academics to participate in the commenting process represents the main option for exerting influence in this process.

A motivating factor, perhaps even the main one, for academics to participate in this process is the pursuit of societal relevance (Fülbier & Sellhorn, 2023).[6] Studies on the extent to which the pursuit of societal relevance influences decision-making in academia are comparatively scarce. One exception is Rosenlund et al. (2017), who find for a certainly very specific group of environmental scientists that reflection on societal relevance influences the choices and dissemination of research. A broader perspective on the attitude of academia to its societal relevance is embedded in the debate on the concept of 'Mode 2' knowledge production (Gibbons, 1994; Hessels & van Lente, 2008; Nowotny, 2001). According to this concept, in contrast to the traditional 'Mode 1', knowledge production is characterized by stronger application, transdisciplinary, and social accountability (Hessels & van Lente, 2008). However, it seems highly questionable to what extent this conceptualization can be applied to SEC-relevant research from the fields of accounting, finance and economics. For instance, Federsel et al. (2023) show empirically, for the field of accounting, a substantial topic-related

[6] Along with the societal relevance motive for participating in rulemaking, there are other associated incentives such as prestige or potential academic career advantages (Fülbier et al., 2009). In particular, however, a prestige incentive is, to some extent, an element of the pursuit of societal relevance. Furthermore, the incentive to participate in regulatory research as a benefit in the academic career system is certainly debatable, given the signs of disincentives here (Beresford, 1991; Fülbier et al., 2009).

distance between research and practice. Nevertheless, pursuing societal relevance might encourage academics to participate in SEC rulemaking (e.g., by writing comment letters) and thereby improve the quality of the rules. However, different professions such as economics (as well as the subfields of finance and accounting, which are especially relevant here) or law scholars may work under different premises regarding this societal relevance. Although these underlying epistemological differences between economics and law are manifold. The core element of this differentiation can be well summarized in the words of Stigler (1992): "If efficiency is the fundamental problem of economists, justice is the guiding beacon of law professors." This leads to the argument that economics research and the involvement of economists in rulemaking may tend to focus more on market efficiency. In contrast, academic-legal expertise may tend to address aspects of distributive justice.

A countervailing theory to the societal relevance theory described above could be that academia serves as a facilitator for regulatory capture; potentially under the premise of private utility maximization. Zingales (2014) describes the forces and incentives that can contribute to academic economists themselves being captured—and how this process is part of the overall regulatory capture problem. Zingales (2014) identifies that, besides monetary incentives, other factors such as career concerns, information needs, non-monetary pressure from the environment, and asymmetries in the influence of the potential profiteers of regulatory capture are also involved. Such a form of capture via the route of academic research is particularly severe if the theoretical or empirical propositions are contrary to industry interests. For example, the market efficiency theory is not very congenial to the financial industry (Zingales, 2014). Comparable forms of capture or exertion of influence on academic research have been described for medical research (Leuz et al., 2023) and for research on natural disasters and the insurance industry (Weinkle, 2020).

As with the first hypothesis, the second hypothesis—with the focus on academia as actors in the rulemaking process—has arguments for both directions on rules' market effects, i.e., positive and negative; I also formulate this hypothesis without explicitly stating a direction:

Hypothesis 2: *The academic participation in SEC rulemaking influences SEC rules and thereby significantly affects capital market liquidity.*

3 Empirical Strategy

3.1 Research Design

To examine the capital market effects of SEC rules under academic influence, I use a regression based difference-in-differences research design to examine the changes in capital market liquidity at the firm-level around the effective dates of SEC final rules—while considering the properties of these rules. All U.S. firms covered by the EIKON Datastream are included in the sample. I estimate the following model:

$$
\begin{aligned}
Liq_{irt} = \quad & \beta_1 Post_{rt} \times Acad_r + \beta_2 Acad_r \\
& + \beta_3 Post_{rt} \times Ln\_Word\_Count_r + \beta_4 Ln\_Word\_Count_r \\
& + \beta_5 Post_{rt} \times Ln\_No\_CL_r + \beta_6 Ln\_No\_CL_r + \beta_7 Post_{rt} \\
& + \beta_8 Ln\_Share\_Turn_{irt} + \beta_9 Ln\_Std\_Ret_{irt} + \beta_{10} Ln\_MV\_1_{irt} \\
& + FirmFixedEffects + YearFixedEffects + \epsilon
\end{aligned}
$$

where subscripts i,r, and t represent firms, rules, and time (in the sense of before or after the effective date of each rule), respectively. The measurement period, i.e., the interval over which the dependent variable for liquidity and the firm-specific control variables are aggregated, equals 90 days. Here, I follow the quarterly measurement period commonly used in studies focusing on liquidity effects

(e.g., Bushee & Leuz, 2005; Christensen et al., 2013, 2016; O'Hara & Ye, 2011). Moreover, my measurement period is similar to that used by Chakrabarty et al. (2021) in their study on market liquidity, analyzing a 4-month window around SEC Rule 15c3-5.

The dependent variable Liq_{irt} measures firm-level capital market liquidity over 90 days. From the perspective of my research design, liquidity has the desirable characteristic that it can be determined over comparatively short periods (e.g., 90 days here) and is less anticipatory compared to other measures such as firm value or cost of capital (Christensen et al., 2016). The main variable for Liq_{irt} is Ln_Bid_Ask, which is the log of the firm's daily quoted *bid–ask spread* in percentage, calculated as the difference of ask and bid price divided by their average (e.g., Christensen et al., 2016; Jain et al., 2008; Muller et al., 2011). The daily values are averaged over the 90-day periods. The data on bid and ask prices, like all capital market data, originates from Datastream.[7] The *bid–ask spread* is commonly used as an empirical construct to capture information asymmetry; therefore, a high *bid–ask spread* indicates a less liquid and thus less efficient market with higher transaction costs for investors (Glosten & Milgrom, 1985; Glosten & Harris, 1988; Venkatesh & Chiang, 1986).[8]

The independent variables in my research design can be classified into two groups: The rule-level variables—which include the measures of academia as the variable of main interest—and

[7] The raw capital market data comes from a comprehensive panel data set at the daily level, which consists of a total of 21,796,065 observations from 2005 to 2023. Within the dataset are 8,991 unique U.S. firms. I construct the +/-90-day windows for the empirical analyses for each individual final rule.

[8] In further analysis, I consider the *price impact* and the proportion of *zero returns* as dependent variables, and aggregate them again for 90 days before and after the effective date of the final rules. *Price impact*, as defined by Amihud (2002), measures illiquidity. I follow Daske et al. (2008) by calculating the *price impact* from the median of the daily *price impacts*. The daily *price impact* is calculated by dividing the absolute price change in percent by the U.S.-$ trading volume (in thousands) (Amihud, 2002; Daske et al., 2008). To avoid misclassifications, I omit days with zero-returns or zero trading volume (Christensen et al., 2016; Daske et al., 2008). I also take the *price impact* as the natural logarithm in the regression estimates (Ln_Price_Impact). The final proxy for market efficiency is $Zero\_Returns$. It is calculated as the proportion of trading days with a stock return of zero, relative to all potential trading days in percent (Christensen et al., 2016). The rationale for $Zero\_Returns$ being a suitable measure of capital market liquidity and efficiency follows Lesmond et al. (1999) who argue that *zero return days* occur when transaction costs outweigh the potential benefits of trading. Here too, higher values of $Zero\_Returns$ can be interpreted as lower market liquidity.

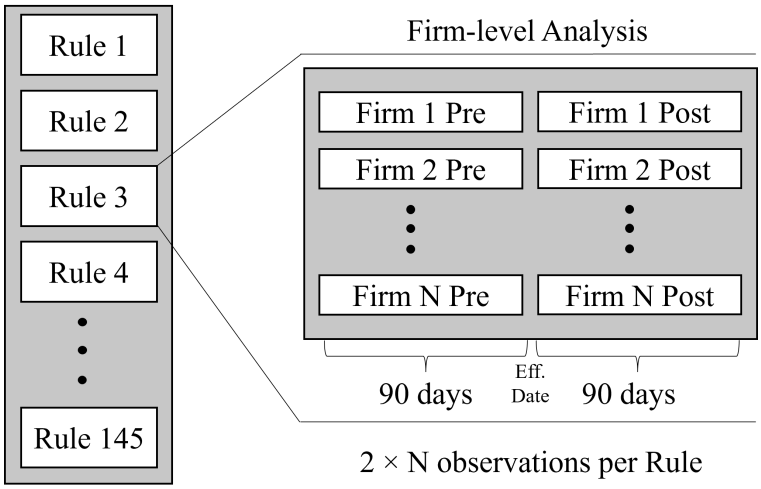


Figure II.2: Visualization of the Main Research Design

additional firm-level control variables. First, regarding the rule-level variables: Crucial for my difference-in-differences research design is the $Post_{rt}$ variable, which indicates the 90-days period after the effective date of the final rule (see Figure II.2). In my research design, each rule-level variable captures the characteristics of the respective rule. Therefore it occurs as an interaction with $Post_{rt}$ and non-interacted serving as a baseline. The focus lies on the coefficients of the interactions, as these reflect the change caused by the respective final rule becoming effective.[9] The main research variables include five different measures for the rules' academic character ($Acad_r$). The first two variables ($Cite\_N$ and $Cite\_Cost$) refer to hypothesis 1 and thus focus on the SEC's use of academic research. I follow Geoffroy & Lee (2021), who define $Cite\_N$ as the total number of paper citations in a final rule document and $Cite\_Cost$ as the total number of paper citations in a rule document that relates to costs or reductions of benefits of the regulation. In contrast to Geoffroy & Lee (2021), I only examine final rules, as these are the applicable rules when they become effective. In terms of interpretation, $Cite\_N$ represents a measure of the general use of

[9] The underlying assumption of my main specification is that the capital market effects take place at the effective date. In additional analyses, I provide further insights into possible dynamic effects (e.g., that the rule already has some effects when it is published).

research in SEC rulemaking; in contrast, $Cite\_Cost$ is more specific, as it refers to potential costs and thus represents particularly critical arguments in the rulemaking process.

For the second hypothesis, three variables related to academic participation are analyzed in my study. These variables are based on the idea of counting the number of academic comment letters. I divide the origin of the academic comment letters into two categories. Firstly, comment letters from law academia (including a few political science comment letters) and secondly, comment letters from economics-related fields (especially finance and accounting scholars). Justification for this division lies in the different research paradigms that shape law and economics-related academic research. I create a study variable for each of the two subsets, i.e., one that measures the number of comment letters from legal scholars (Law_CL) and one that measures the number of comment letters from economics, finance, or accounting-related scholars (Fin_CL). A third variable for the second hypothesis is the number of all academic comment letters ($Academic\_CL$), which is simply the sum of Law_CL and Fin_CL.

Additionally, I control for the number of words ($Word\_Count$) in the respective final rule, as this captures how comprehensive and complex the regulation is (Geoffroy & Lee, 2021), and I control for the number of total comment letters received (No_of_CL) for the respective rule, which represents the general public interest in the regulation. For the regression analyses, all rule-level variables are calculated by adding one and then taking the natural logarithm. A detailed description of the data collection procedure for the rules-level variables can be found in section 3.3.

To control for firm-level differences, I use the share turnover (Ln_Share_Turn), the return variability (Ln_Std_Ret), and the market value of equity (Ln_MV_1), following the prior literature Christensen et al. (2016); Daske et al. (2008). I calculate the share turnover as the mean value of the daily turnovers in percentage and the return variability as the standard deviation of the daily returns

over the 90-day intervals. The market value of equity is recorded on the first day of the 90-day period. In the regression analyses, the firm-level controls are expressed as the natural logarithm. The dependent variables, as well as the firm-level controls, are winsorized at the 1^{th} and 99^{th} percentile. In order to control for possible time effects as well as unobserved firm characteristics, both year and firm-fixed effects are included in the research design. Standard errors are robust and clustered by firm.

3.2 Identification Strategy

I apply two strategies to enhance the identification of my research design by addressing potential endogeneity problems. A main endogeneity problem arises potentially from omitted variables that affect both the dependent and the independent variables (as well as less critical simultaneity issues that are mitigated by the temporal structure of the research design). For example, rules may be implemented when the regulator's attention is directed to an underlying market issue (e.g., a known inefficiency due to asymmetric information), which at the same time may trigger the attention of the academic world. As these factors are not known or at least not measurable, they cannot be added to the model. This could lead to biased results.

To address this concern, I first use an exogenous variation resulting from the change in the SEC's approach regarding cost-benefit analyses after the *Business Roundtable v. SEC* decision, as documented by Geoffroy & Lee (2021). For this purpose, I use a difference-in-difference-in-differences approach, which extends my initial research design by an indicator variable (BR) that indicates whether the rule became effective after March 16, 2012, which is the date of the SEC's new guidance on economic analysis in SEC rulemakings (SEC, 2012). Therefore, the new indicator variable is fully interacted with the academic impact variables (including the $Post$-interacted terms)

that are already present in the original model. Based on the assumption that the decision *Business Roundtable v. SEC* and the following guidance have improved the procedural quality in SEC rulemaking and thus also the increased capital market efficiency, a negative coefficient would be expected for the three-way interaction ($Post \times Acad. \times BR$). This approach, therefore, serves as an additional validation of the original research design.

In an additional analysis, I apply an instrumental variable approach to mitigate possible endogeneity problems. Besides the above-mentioned omitted variables, a measurement error in the study variable of academic influence is also possible. The idea behind my instrumental variable approach is that both SEC's use of academic research and the participation of academia in the rulemaking process depend on the overall body of research on the corresponding topic of the rule in question. In contrast, it seems less plausible that the total body of research directly affects the change in capital market efficiency resulting from the rule. Accordingly, only the indirect path via the main research variables seems plausible for an effect of the instrument that grasps the complete body of research on the rules content. I measure the overall state of research by the Google Scholar hits for research articles published up to the year before the final rule's effective date. To retrieve the Google Scholar hits, I search for the topic of the final rule using the title of the final rule as the search string. To address the issue of extreme outliers in the Google Scholar hits, I calculate my instrumental variable ($Google\_Scholar$) as deciles of the Google Scholar hits. Since the variable of interest occurs in an interaction term with $Post$, I use the interaction of the main instrument ($Google\_Scholar$) with $Post$ as an instrument for the interaction term, following Balli & Sørensen (2013) and Wooldridge (2010, chapters 6.2 and 9.5.3). Consequently, I estimate two first-stage regressions to operationalize this instrumental variable approach. One regression with the variables for $Acad.$ as the dependent variable and one with the variable $Post \times Acad.$ as the dependent variable, whose estimates are

inserted in the second stage. The instruments used in each first-stage regression are $Google\_Scholar$ and $Post \times Google\_Scholar$.

3.3 SEC Rulemaking Data

As stated above, I rely primarily on two groups of data sets: SEC rulemaking data and capital markets data. For the former, I hand-collected all final rules published on the SEC website for the years 2006 to 2022 (four final rules are effective in 2023) that relate to the core regulations of the SEC—the Securities Act of 1933 and the Securities Exchange Act of 1934 (i.e., rule releases beginning with '33' and '34')—and manually enriched them with content information and rules' metadata. In total, I identified 356 final rules. From those, I extracted all rules that had undergone a regular rulemaking procedure. To do so, I excluded all final rules that were merely an amendment and/or for which no proposed rule exists. These rules are less interesting for my analysis, as they generally concern secondary issues (e.g., in total 56 updates to the Electronic Data Gathering, Analysis, and Retrieval (EDGAR) Filer Manual).

For the remaining 160 final rules, I identified 182 proposed rules. However, these add up to 191 assignable proposed rules, as in nine cases two final rules can be assigned to one proposed rule. Conversely, one final rule can be assigned to several proposed rules (up to four). In summary, this means that there are cases in which several proposed rules resulted in one final rule and also cases in which one proposed rule was the basis for several final rules. Therefore, to obtain a consistent data set, I selected the proposed rule based on the shortest time span between the publication date of the proposed rule and the effective date of the final rule.[10] Some of these rules have the same or nearly

[10] This approach resulted in one case of two closely related final rules sharing a proposed rule. However, as one of these two final rules (33-10233) is removed in the subsequent cleaning step, this does not pose a problem. The final sample comprises one proposed rule for each final rule.

identical effective dates. Since this would lead to issues regarding the assignability of the capital market effects to the respective rules; and since this would also result in an econometric problem due to perfect collinearity, I apply an additional cleaning step. By this step, I further remove 15 final rules from the sample. Two of the 15 final rules are eliminated due to collinearity caused by year fixed effects at the year-end, and one, as this rule does not become effective until 2024. For the remaining 12 rules, I remove the presumingly less important rule(s) in each case (essentially determined by the length of the rule but also by the number of comment letters). Finally, 145 final rules remain in the sample. For each final rule, I hand-collected the effective dates, the published dates, and the published dates of the associated proposed rules. Table II.1 depicts the selection procedure.

Table II.1: Rules Selection Procedure

		Final Rules	Proposed Rules
SEC final rules releated to the Securities Act of 1933		195	
SEC final rules releated to the Securities Exchange Act of 1934		161	
	Sum:	356	
Less: Amendments		(40)	
Less: No proposed rule available		(156)	
	Sum:	160	191
Less: Duplicates in proposed rules			(9)
Selecting the closest proposed rule			(22)
	Sum:	160	160
Less: Collinearity issues		(15)	(15)
	Sum:	145	145

Table II.1 describes the selection process for SEC rules published on the SEC website during the period of 2006 to 2022.

As indicated in the research design, I collected the total number of academic citations ($Cite\_N$) and the number of these academic citations concerning costs ($Cite\_Cost$) for each final rule. For 83 of these final rules, I was able to draw on the citation data of Geoffroy & Lee (2021). For

the remaining 62 final rules, I collected the citations from academic research by hand. To ensure consistency, I first familiarized my approach with that of Geoffroy & Lee (2021) by counting citations in rules already examined by them on a trial basis.[11] In total, there are 1,370 academic citations, including 304 cost citations. The vast majority of academic citations can be found in the cost-benefit analysis section of the final rule.

Additionally, I web-scraped a total of 44,684 comment letters for all proposed rules, respectively 29,879 comment letters after removing duplicates. I then coded these comment letters into law or policy comment letters (Law_CL) and finance, accounting or economics comment letters (Fin_CL). The assignment is based on the affiliation of the scholar. For a detailed description of how I proceeded, see Appendix II.B. For each final rule, I obtain the number of law comment letters (Law_CL), the number of finance comment letters (Fin_CL), and the total amount of comment letters (No_of_CL). In addition, the number of academic comment letters ($Academic\_CL$) is the sum of Law_CL and Fin_CL. I get the number of words ($Word\_Count$) in a final rule by web-scraping their PDF documents and using a Python script to count the number of words in each document.

I present the descriptive statistics of all rulemaking variables in Table II.2. The summary statistics in Panel A show that the variables relating to academic and other characteristics of the rules vary widely compared to the mean. Therefore, these variables are included in the regression analysis in logarithmic form. Panel B containing the correlation table shows that all variables relating to the rules are highly correlated with each other. This is not surprising, considering the plausibility that, for example, the SEC's citation behavior of academic literature may be related to how many scholars

[11] The necessary raw data was kindly made available to me by Geoffroy & Lee (2021) upon request.

Table II.2: Descriptive Statistics of SEC Rulemaking Data

Panel A—Summary Statistics:

	Obs.	Mean	Std. Dev.	Min	Q1	Median	Q3	Max
Cite_N	145	9.448	17.396	0	0	1	12	108
Cite_Cost	145	2.097	5.650	0	0	0	2	55
Academic_CL	145	2.766	5.211	0	0	1	3	36
Law_CL	145	1.145	2.638	0	0	0	1	22
Fin_CL	145	1.621	3.279	0	0	0	2	24
No_of_CL	145	236.1	907.5	1	17	51	103	9,954
Word_Count	145	71,374	69,811	1,011	20,130	45,322	94,767	319,815

Panel B—Correlation Table:

		(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	Cite_N		**0.780**	**0.212**	**0.299**	0.129	**0.259**	**0.535**
(2)	Cite_Cost	**0.774**		**0.195**	**0.299**	0.094	**0.233**	**0.464**
(3)	Academic_CL	**0.204**	0.153		**0.794**	**0.898**	**0.713**	**0.249**
(4)	Law_CL	**0.246**	**0.186**	**0.850**		**0.521**	**0.598**	**0.301**
(5)	Fin_CL	0.126	0.094	**0.906**	**0.546**		**0.627**	0.154
(6)	No_of_CL	0.075	0.026	**0.528**	**0.266**	**0.625**		**0.467**
(7)	Word_Count	**0.339**	**0.230**	**0.177**	**0.185**	0.133	0.013	

Panel C—Summary Statistics by Rule Type:

	Fin. Reporting	Corp. Governance	Market & Trading	Req. by Law
Obs.	59	35	89	50
Mean Cite_N	10.237	13.486	8.652	7.840
Mean Cite_Cost	2.424	3.200	1.787	1.400
Mean Academic_CL	2.831	4.971	2.236	2.440
Mean Law_CL	1.017	2.514	0.730	0.940
Mean Fin_CL	1.814	2.457	1.505	1.500
Mean No_of_CL	126	233	284	134
Mean Word_Count	59,764	64,248	86,398	82,903

Table II.2 shows the descriptive statistics of the SEC rulemaking data. Panel A presents the summary statistics of the rulemaking variables in their raw format (i.e., non-logarithmic). Panel B presents the Pearson (below the diagonal) and Spearman (above the diagonal) correlation coefficients for the 145 rules. Correlation coefficients significant at the 5 percent level are printed in **bold**. Panel C presents the number of rules by rule type (i.e., financial reporting, corporate governance, market & trading, and required by law) and the mean value of the rulemaking variables for each rule type. See Appendix II.A for variable descriptions.

participate in the rulemaking process. It is also reasonable to expect that longer rules contain more academic citations and, due to their increased scope, more comment letters.

Furthermore, I coded the rules according to the topics they regulate. To do so, I read through the abstracts of the rules and skimmed the rules' full text to extract their main regulatory topics. I was able to identify three main—relatively broad—rule types: First, financial reporting, second, corporate governance, and third, market & trading.[12] It is possible that a rule belongs to several of these rule types; or even that no type is assigned to a rule at all. Following Geoffroy & Lee (2021), I added a further rule type for rules resulting from laws (namely the Jumpstart Our Business Startups Act (JOBS Act) and the Dodd-Frank Act as the main laws regarding financial market regulation during the sample period; 50 rules). Table II.2, Panel C, contains a summary statistic indicating the number of rules belonging to each type. Moreover, the mean values of the rulemaking variables are given. In terms of content, the largest category is the market & trading type (89), followed by financial reporting rules (59) and finally corporate governance rules (35). Market & trading rules tend to be the longest rules in terms of word count and receive the highest number of comment letters overall and consequently attracting most public attention. In contrast, corporate governance rules receive the highest number of comment letters from academia—and the SEC cites the most research papers in these rules.

[12] Since the research design depends on a sufficiently large number of rules for the analyses, it is essential to define the rule types broadly.

4 Descriptive Statistics and Main Results

4.1 Sample and Descriptive Statistics

Table II.3 shows the sample breakdown for the years 2006–2023 of all variables used in this study. The presented statistics which refer to the data *before* the matching procedure, as described in the research design, i.e., they show the raw data. The annual mean value of the variables is depicted for each year; moreover, in deviation from the variables in the regression analyses, the non-logarithmic values are analyzed for ease of interpretation. Panel A presents the capital market variables. Additionally, I provide the number of firms with available data for the respective year. Capital market variables can be divided into the dependent variables, measuring liquidity, and the control variables commonly used in literature—as evident from the research design.

The main dependent variable is the *bid–ask spread* in percentage, which follows a downward trend over the sample period. Consequently, the U.S. capital market—at least the part covered by Datastream EIKON—has become more liquid during the sample period, i.e., market efficiency increased, and information asymmetries tended to decrease. In addition, a temporary increase in the *bid–ask spreads* can be observed for the period after the 2007-2008 financial crisis. However, a clear trend cannot be identified for the *price impact* nor for the percentage of *zero return days*. All control variables are within an economically plausible range (for comparison, see Daske et al. (2008) or Christensen et al. (2016), showing the same variables for prior periods and international samples). The average market value of the firms' equity increases over the sample period. In addition, the number of firms shows a general increase over the sample period, albeit with a slightly decreasing trend for the last three years (2021-2023).

Table II.3: Sample Breakdown by Year

Panel A—Capital Market Variables

	Dependent Variables			Control Variables			
Year	Bid_Ask	Price_Impact	Zero_Returns	Mkt_Value	Std_Ret	Share_Turn	No_Firms
2006	3.099	1.299	11.07 %	3,467	0.649	0.606	4,486
2007	2.610	1.954	10.98 %	3,729	2.339	0.733	4,751
2008	4.827	6.185	10.91 %	3,124	0.876	0.866	4,947
2009	5.309	11.797	11.58 %	2,510	0.238	0.860	5,115
2010	5.254	11.452	11.91 %	3,005	0.203	0.671	5,327
2011	5.084	12.165	11.34 %	3,312	0.224	0.636	5,509
2012	1.852	14.313	11.34 %	3,552	0.207	0.588	5,750
2013	2.270	10.809	10.80 %	4,062	0.388	0.592	6,012
2014	2.362	8.220	12.03 %	4,360	0.489	0.658	6,427
2015	1.177	10.710	11.67 %	4,533	0.390	0.657	6,659
2016	0.843	17.262	11.15 %	4,464	0.662	0.704	6,862
2017	0.850	19.752	12.51 %	4,975	1.283	0.745	7,094
2018	0.850	19.304	11.46 %	5,427	1.518	0.739	7,305
2019	0.608	24.367	10.74 %	5,662	0.532	0.769	7,317
2020	0.551	51.064	10.73 %	5,973	0.568	1.315	7,240
2021	0.470	17.182	9.35 %	7,503	0.983	1.182	7,797
2022	0.572	3.020	10.27 %	7,320	1.796	0.803	7,439
2023	0.689	10.482	10.28 %	8,030	4.898	0.896	7,052

Panel B—SEC Rulemaking Variables

	Study Variables					Control Variables		
Year	Cite_N	Cite_Cost	Acad._CL	Law_CL	Fin_CL	No_of_CL	Word_Count	No_Rules
2006	0.000	0.000	10.000	6.000	4.000	413.000	18,526	2
2007	0.455	0.000	1.364	0.182	1.182	100.727	24,204	11
2008	1.091	0.182	2.182	0.909	1.273	210.455	31,643	11
2009	0.222	0.000	1.444	0.333	1.111	48.222	32,030	9
2010	0.286	0.143	5.286	1.000	4.286	1,474	20,776	7
2011	3.545	1.000	4.091	2.455	1.636	398.727	48,541	11
2012	2.800	0.700	1.900	1.200	0.700	90.800	84,100	10
2013	2.750	0.000	1.750	1.000	0.750	46.750	66,196	4
2014	6.750	1.750	3.125	0.750	2.375	191.875	136,614	8
2015	15.857	3.000	3.429	0.857	2.571	340.429	149,546	7
2016	8.500	2.100	4.200	1.600	2.600	125.100	86,706	10
2017	2.167	0.500	1.500	0.500	1.000	108.667	82,245	6
2018	6.500	1.000	0.375	0.000	0.375	40.625	64,913	8
2019	21.692	4.154	2.385	1.077	1.308	294.077	95,839	13
2020	18.462	3.385	3.308	1.462	1.846	105.231	82,493	13
2021	24.375	5.750	2.875	2.125	0.750	206.250	95,878	8
2022	19.667	3.667	4.000	2.000	2.000	103.333	58,820	3
2023	45.000	15.250	2.250	0.500	1.750	113.750	85,783	4

Table II.3 shows the sample breakdown by year. Panel A presents the mean value of the capital market variables (non-logarithmic) on an annual basis, for the years 2006 to 2023. Panel B presents the mean value of the SEC rulemaking variables (non-logarithmic) also from 2006 to 2023 (related to the effective date). See Appendix II.A for variable descriptions.

In a similar way, Panel B shows the sample breakdown for the rulemaking variables, i.e., the respective mean value of the characteristics of the rules for each year according to the respective effective date. In addition, the number of rules per year is given. The number of rules does not follow a clear trend and is rather scattered over the years. This is beneficial for the research design, as it means the analysis may be less likely to be biased by rules clustered in particular years. The variables for the rule characteristics are divided into study variables and control variables. The first two variables $Cite\_N$ and $Cite\_Cost$, which relate to the first hypothesis and therefore focus on the SEC's use of research, show an increasing trend over the years. This is in line with the analyses by Geoffroy & Lee (2021); in particular, an upward trend for both citation variables, but in particular for $Cite\_Cost$, can be noted for the years after the new rulemaking regime following the *Business Roundtable v. SEC* decision. A trend is less clear for the second hypothesis' variables, i.e., $Academic\_CL$, Law_CL, and Fin_CL. And neither of the two control variables, No_of_CL and $Word\_Count$, show any notable temporal pattern.

In Table II.4, I present the descriptive statistics for the variables as they appear in the regressions of my main study. Specifically, I aggregated the daily measures from the capital market data, as described in the research design, for each rule and each firm for the 90 days before and after the effective date. On average, 3,583.7 firms can be linked to each rule, ranging from a minimum of 3,049 to a maximum of 4,671. This results in a total of 1,028,434 observations, whereby missing values, due to data availability reasons, have already been removed from the analysis. In Panel A, I present the summary statistics for all variables in the study. At this point, it is important to note that higher values for the three dependent variables (Ln_Bid_Ask, Ln_Price_Impact, and $Zero\_Returns$) can be interpreted as lower liquidity. Panel B depicts the correlations between the variables. Almost all correlations are significant at the five percent threshold, due to the large number of observations.

Table II.4: Descriptive Statistics

Panel A—Summary Statistics for Variables used in the Regressions

	Mean	Std. Dev.	Min	Q1	Median	Q3	Max
Ln_Bid_Ask	−1.072	2.026	−4.184	−2.565	−1.549	0.183	4.970
Ln_Price_Impact	−7.000	3.673	−13.484	−9.705	−7.567	−4.716	3.788
Zero_Returns	5.501	9.656	0.000	0.000	1.613	5.085	52.500
Ln_Cite_N	1.360	1.438	0.000	0.000	0.693	2.639	4.691
Ln_Cite_Cost	0.580	0.913	0.000	0.000	0.000	1.099	4.025
Ln_Academic_CL	0.821	0.905	0.000	0.000	0.693	1.386	3.611
Ln_Law_CL	0.450	0.669	0.000	0.000	0.000	0.693	3.135
Ln_Fin_CL	0.586	0.762	0.000	0.000	0.000	1.099	3.219
Ln_No_CL	3.936	1.554	0.693	2.890	3.989	4.644	9.206
Ln_Word_Count	10.689	1.083	6.920	9.910	10.750	11.459	12.676
Ln_MV_1	6.138	2.389	−0.094	4.501	6.198	7.807	11.560
Ln_Std_Ret	−3.586	0.787	−5.683	−4.098	−3.655	−3.157	−0.942
Ln_Share_Turn	−0.740	1.204	−4.260	−1.437	−0.587	0.023	2.344
No. of Obs.:	1,028,434						

As expected, the three dependent variables measuring liquidity are positively correlated with each other. Between the liquidity variables and the main study variables, i.e., for academic participation at the rule level, a negative correlation is found almost across the board. However, these correlations must not be over-interpreted, as the mere correlations cannot consider the temporal structure of the rules as applied in my research design. Just Ln_Fin_CL exhibits no or a slightly positive correlation with the three liquidity variables. Also, the rule-level controls are negatively correlated with the liquidity variables. Following the expectations from prior literature (e.g., Christensen et al., 2016), the market value of equity (Ln_MV_1) and the share turnover (Ln_Share_Turn) negatively correlate with the liquidity variables. The return variability (Ln_Std_Ret) positively correlates with the liquidity measures, as expected. All five variables for the rules' characteristics regarding academic influences are positively correlated with each other.

Panel B—Correlations for Variables used in the Regressions

		(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	Ln_Bid_Ask		**0.909**	**0.640**	**−0.177**	**−0.142**	**0.003**	**−0.041**
(2)	Ln_Price_Impact	**0.922**		**0.648**	**−0.143**	**−0.119**	0.001	**−0.037**
(3)	Zero_Returns	**0.667**	**0.663**		**−0.158**	**−0.123**	**−0.017**	**−0.045**
(4)	Ln_Cite_N	**−0.196**	**−0.174**	**−0.159**		**0.785**	**0.224**	**0.305**
(5)	Ln_Cite_Cost	**−0.148**	**−0.133**	**−0.118**	**0.791**		**0.197**	**0.300**
(6)	Ln_Academic_CL	**−0.011**	**−0.004**	**−0.008**	**0.244**	**0.237**		**0.800**
(7)	Ln_Law_CL	**−0.038**	**−0.034**	**−0.034**	**0.299**	**0.307**	**0.838**	
(8)	Ln_Fin_CL	0.001	**0.012**	**0.008**	**0.162**	**0.138**	**0.919**	**0.599**
(9)	Ln_No_CL	**−0.011**	**−0.013**	**−0.017**	**0.229**	**0.221**	**0.723**	**0.625**
(10)	Ln_Word_Count	**−0.155**	**−0.136**	**−0.122**	**0.508**	**0.422**	**0.154**	**0.214**
(11)	Ln_MV_1	**−0.864**	**−0.943**	**−0.584**	**0.153**	**0.116**	**0.004**	**0.027**
(12)	Ln_Std_Ret	**0.599**	**0.599**	**0.318**	**−0.076**	**−0.052**	**0.021**	**−0.012**
(13)	Ln_Share_Turn	**−0.569**	**−0.628**	**−0.519**	**0.149**	**0.117**	**0.014**	**0.031**

		(8)	(9)	(10)	(11)	(12)	(13)
(1)	Ln_Bid_Ask	**0.013**	**−0.022**	**−0.158**	**−0.887**	**0.531**	**−0.524**
(2)	Ln_Price_Impact	**0.016**	**−0.019**	**−0.121**	**−0.961**	**0.526**	**−0.606**
(3)	Zero_Returns	0.001	**−0.033**	**−0.112**	**−0.650**	**0.221**	**−0.475**
(4)	Ln_Cite_N	**0.140**	**0.273**	**0.540**	**0.140**	**−0.038**	**0.128**
(5)	Ln_Cite_Cost	**0.095**	**0.239**	**0.466**	**0.113**	**−0.041**	**0.101**
(6)	Ln_Academic_CL	**0.898**	**0.713**	**0.254**	0.002	**0.041**	**0.016**
(7)	Ln_Law_CL	**0.527**	**0.601**	**0.304**	**0.034**	**−0.003**	**0.034**
(8)	Ln_Fin_CL		**0.628**	**0.159**	**−0.013**	**0.045**	**0.002**
(9)	Ln_No_CL	**0.646**		**0.467**	**0.020**	**−0.004**	**0.012**
(10)	Ln_Word_Count	**0.059**	**0.337**		**0.118**	**−0.090**	**0.081**
(11)	Ln_MV_1	**−0.010**	**0.011**	**0.120**		**−0.524**	**0.457**
(12)	Ln_Std_Ret	**0.026**	**−0.006**	**−0.099**	**−0.565**		**0.079**
(13)	Ln_Share_Turn	**−0.002**	**0.008**	**0.094**	**0.416**	**−0.018**	

Table II.4 shows the descriptive statistics for the variables used in the regression analyses. Panel A shows the summary statistics. Panel B gives the Pearson (below the diagonal) and Spearman (above the diagonal) correlation coefficients. Correlations coefficients significant at the five percent level are printed in **bold**. See Appendix II.A for variable descriptions.

4.2 Main Results

Table II.5 shows the multivariate results of estimating the main regression equation using the dependent variable Ln_Bid_Ask. I use this dependent variable as the primary research object in my analyses, as it most directly captures the underlying theoretical construct of capital market liquidity. In addition, I present all control variables in Table II.5. These include firm-level controls based on capital market data, the rule-level controls, including their interactions, as well as the $Post$ variable and the variable for the baseline effect of the respective investigation variable. For reasons of parsimony, I omit these variables in the other results tables. For all analyses, the standard errors are cluster adjusted by firm. Columns (1) and (2) report the results for the first hypothesis; columns (3) to (5) those for the second.

The regression coefficients for $Post \times Acad.$, i.e., the coefficients that reflect the effect of academic influence by the rule implementation on the capital market liquidity, are positive and highly significant for all five models. Thus, the relationship holds, irrespective of the variables used: For SEC's use of academic research (Ln_Cite_N) and the particularly relevant citations related to costs (Ln_Cite_Cost), as well as for the participation of law (Ln_Law_CL) or finance (Ln_Fin_CL) scholars, and in total ($Ln\_Academic\_CL$).[13] Consequently, these results reveal a negative effect of usage of academic research on market liquidity—and thus also on market efficiency—for the first hypothesis, related to SEC's use of academic research. This supports the argument that the SEC is in some way utilizing academic research as a 'market for excuses' and thus supports the proposition that the SEC is under capture. Similar, for the second hypothesis—which

[13] Economically, the result can be interpreted as follows: Based on the mean value, rules in which one standard unit more academic papers are cited ($Cite\_N$; corresponds to 12.5 more citations) have a *bid–ask spread* that is 0.0078 percentage points (2.28 percent) higher after the rule becomes effective. Correspondingly, an one standard unit increase in $Academic\_CL$ from the mean (equivalent to 3.35 more academic comment letters) is associated with a 0.0128 percentage point higher *bid–ask spread* (equivalent to 3.73 percent) after the rule becomes effective.

Table II.5: Main Analyses: Dependent Variable Bid–Ask Spread

	Hypothesis 1		Hypothesis 2		
	(1)	(2)	(3)	(4)	(5)
Post×Ln_Cite_N	0.0157***				
	(26.87)				
Ln_Cite_N	−0.0118***				
	(−20.48)				
Post×Ln_Cite_Cost		0.0027***			
		(3.597)			
Ln_Cite_Cost		−0.0073***			
		(−11.49)			
Post×Ln_Academic_CL			0.0405***		
			(27.06)		
Ln_Academic_CL			−0.0599***		
			(−42.92)		
Post×Ln_Law_CL				0.0576***	
				(35.80)	
Ln_Law_CL				−0.0524***	
				(−44.81)	
Post×Ln_Fin_CL					0.0222***
					(14.96)
Ln_Fin_CL					−0.0622***
					(−39.62)
Post×Ln_Word_Count	−0.0025***	0.0068***	0.0111***	0.0075***	0.0104***
	(−3.079)	(7.721)	(12.46)	(8.925)	(11.49)
Ln_Word_Count	−0.0030***	−0.0078***	−0.0152***	−0.0098***	−0.0180***
	(−5.195)	(−13.21)	(−22.70)	(−16.40)	(−25.10)
Post×Ln_No_CL	−0.0033***	−0.0025***	−0.0202***	−0.0179***	−0.0100***
	(−7.943)	(−6.079)	(−22.51)	(−25.40)	(−13.57)
Ln_No_CL	0.0045***	0.0041***	0.0308***	0.0179***	0.0262***
	(11.42)	(10.62)	(34.70)	(29.75)	(32.09)
Post	0.0283***	−0.0539***	−0.0622***	−0.0259***	−0.0751***
	(3.605)	(−6.335)	(−7.640)	(−3.241)	(−8.928)
Ln_MV_1	−0.4732***	−0.4731***	−0.4726***	−0.4734***	−0.4725***
	(−74.83)	(−74.83)	(−74.77)	(−74.88)	(−74.75)
Ln_Std_Ret	0.5024***	0.5022***	0.5032***	0.5011***	0.5044***
	(74.24)	(74.17)	(74.44)	(74.07)	(74.60)
Ln_Share_Turn	−0.3831***	−0.3829***	−0.3834***	−0.3830***	−0.3837***
	(−64.78)	(−64.75)	(−64.86)	(−64.77)	(−64.91)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes
Observations	1,028,434	1,028,434	1,028,434	1,028,434	1,028,434
R^2	0.91633	0.91631	0.91647	0.91639	0.91650
Within R^2	0.38946	0.38930	0.39048	0.38990	0.39067

Table II.5 shows the results of my main regression analyses. The dependent variable is Ln_Bid_Ask. The interaction terms of Post with the variables for academic influence (Ln_Cite_N, Ln_Cite_Cost, Ln_Academic_CL, Ln_Law_CL, and Ln_Fin_CL) are the variables of interest. All specifications include control variables as well as year and firm fixed effects. Standard errors are clustered at the firm-level and t-statistics are displayed in parentheses. See Appendix II.A for variable descriptions.
** p<0.10, ** p <0.05, *** p<0.01*

focuses on the direct participation of scholars in the rulemaking process—showing rules with more academic participation exhibit lower firm-level market liquidity. These results support for the theory that scholars participate in the rulemaking process as facilitators of regulatory capture. The coefficients for the baseline effects ($Acad.$ variables without interaction) are all negative, indicating merely that the rules take effect during phases of higher market liquidity. With regard to the rule-level controls, a positive coefficient is found for $Post \times Ln\_Word\_Count$ in models (2) to (5), suggesting that the introduction of more complex rules reduces market liquidity. The effect is reversed for model (1). The introduction of rules with a high public interest in the regulations ($Post \times Ln\_No\_CL$) shows a negative and highly significant coefficient. This can be interpreted in the sense that rules subject to high public interest increase capital market efficiency compared to rules that are less in focus. The coefficients for the $Post$ variable are negative and highly significant for regressions (2) to (5), indicating that the implementation of new rules is associated with a general improvement in capital market liquidity. As already seen in the univariate correlation coefficients, the capital market-based firm-level control variables behave in line with previous literature (e.g., Christensen et al., 2016).

Table II.6 shows the main results for the secondary dependent variables (Ln_Price_Impact and $Zero\_Returns$). The results for the *zero returns* should be interpreted cautiously, as this measure is conceptually mainly driven by small firms with illiquid stocks. Apart from the different dependent variables, the research design remains the same as for the analyses with the *bid–ask spreads*. With regard to the *price impact*, the two analyses for hypothesis 1 also reveal a negative effect on capital market liquidity (i.e., a positive and highly significant coefficient). However, for the analyses of hypothesis 2, examining the participation of academics suggests a positive effect on capital market liquidity, at least for the participation of finance, accounting, and economics scholars.

Table II.6: Main Analyses: Dependent Variables Price Impact and Zero Returns

Dependent Var.:	Ln_Price_Impact					Zero_Returns				
	Hypothesis 1		Hypothesis 2			Hypothesis 1		Hypothesis 2		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Post×Ln_Cite_N	0.0052***					-2.7×10^{-5}				
	(9.008)					(−0.0043)				
Post×Ln_Cite_Cost		0.0055***					0.0295***			
		(5.726)					(3.379)			
Post×Ln_Academic_CL			−0.0151***					0.0619***		
			(−13.90)					(4.906)		
Post×Ln_Law_CL				0.0008					0.1444***	
				(0.6141)					(9.334)	
Post×Ln_Fin_CL					−0.0320***					−0.0236
					(−23.07)					(−1.634)
Pre & Post-Rule C.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm-level C.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,028,434	1,028,434	1,028,434	1,028,434	1,028,434	1,028,434	1,028,434	1,028,434	1,028,434	1,028,434
R^2	0.98848	0.98848	0.98848	0.98848	0.98849	0.74865	0.74866	0.74865	0.74866	0.74865
Within R^2	0.86758	0.86758	0.86758	0.86756	0.86763	0.12960	0.12964	0.12962	0.12966	0.12960

Table II.6 shows the results of my main regression analyses. The dependent variables are Ln_Price_Impact for model (1) to (5) and Zero_Returns for model (6) to (10). The interaction terms of Post with the variables for academic influence (Ln_Cite_N, Ln_Cite_Cost, Ln_Academic_CL, Ln_Law_CL, and Ln_Fin_CL) are the variables of interest. All specifications include control variables as well as year and firm fixed effects. Standard errors are clustered at the firm-level and t-statistics are displayed in parentheses. See Appendix II.A for variable descriptions.
** p<0.10, ** p <0.05, *** p<0.01*

Regarding the analysis of *zero return days*, I find some evidence that the SEC's citations of academic papers relating to costs negatively influence the quality of the rules in terms of their liquidity effect. The same relationship applies to the second hypothesis in the case of participation of law scholars (and, as a consequence, also to the general participation of scholars). However, I find a modest improvement in capital market liquidity for the implementation effect of rules that are strongly influenced in their rulemaking by finance scholars, although this is not significant. The key findings remain unchanged if indicator variables are used instead of logarithmized values to measure academic participation (untabulated). Similarly, the results remain robust regarding their significance if calculating the standard errors according to White (1980) instead of clustering them at the firm-level.

I verified the robustness of my approach in further alternative research designs. See Appendix II.C, in particular Table II.C.1 and II.C.2. My findings remain valid if I use a changes specification (see, Daske et al. (2008) and Jain et al. (2008) for a comparable research design)—instead of the difference-in-differences estimation in my main analyses.[14] Furthermore, I assess the robustness of my difference-in-differences research design via several variations in terms of control variables and fixed effects structure. Again, my results remain unchanged qualitatively.

Overall, I conclude that academic participation, particularly when the SEC relies on academic research to justify its rules, leads to negative liquidity effects on the capital market. However, for some of the specifications, I find initial indications that the participation of finance, accounting, and

[14] Therefore, I estimate the following regression model for the changes specification:

$$\begin{aligned}\Delta Bid-Ask\_Spread_{ir} = {} & \beta_1 Acad_r + \beta_2 Ln\_Word\_Count_r + \beta_3 Ln\_No\_CL_r \\ & + \beta_4 \Delta Ln\_MV\_1_{ir} + \beta_5 \Delta Std\_Ret_{ir} + \beta_6 \Delta Share\_Turn_{ir} \\ & + FirmFixedEffects + YearFixedEffects + \epsilon\end{aligned}$$

Δ indicates that the variable is calculated as the difference between the 90-day post and pre-period.

economics scholars in rulemaking can improve the quality of the capital market through the rules they influence.

4.3 Analyses by Rule Type

In the previous analyses of the SEC rules, it has to be noted, though, that those regulate a wide range of very heterogeneous issues. Therefore, I have performed subsample analyses of rules for certain subject areas. Table II.7 shows the results of these subanalyses for the dependent variable of *bid–ask spreads* and Appendix II.D shows the results for the other two dependent variables.

First, I present the analysis for the rules related to financial reporting regulation. These rules are particularly interesting because the setting of financial reporting regulation has the clearest substantiated link between the reduction of information asymmetries and liquidity effects, as well as capital market efficiencies. If I look at the results for *bid–ask spread* and *price impact*, I find a positive effect on liquidity for rules that contain many cost citations. This suggests that the SEC's diligence in establishing the rule, taking also into account the adverse effects of the rule, is linked to "better" rulemaking. The only contradictory results can be found for the general academic citations by the SEC staff. Regarding the second hypothesis, differing results can be observed for financial reporting rules depending on whether law or finance scholars participate in the rulemaking process. Rules that are highly influenced by law scholars submitting comment letters to the rulemaking process are significantly less liquid and, therefore, lower capital market efficiency. The opposite effect is noticeable for rules that are influenced by finance scholars. This could be the first cautionary evidence that the paradigm of efficiency in the economic disciplines has a positive influence on the reasoning process in the SEC rulemaking—if considering efficiency as the quality criterion. At

this point, it should be noted that academic participation, especially by law scholars, may also have positive effects with regard to other objectives, which, however, are not the focus of this study.

Table II.7: Analyses by Rule Type: Dependent Variable Bid–Ask Spread

	Financial Reporting	Corporate Governance	Markets & Trading	Required by Law	All Rules
Post×Ln_Cite_N	0.0027***	0.0343***	0.0123***	0.0499***	0.0157***
	(3.680)	(27.26)	(15.52)	(33.68)	(26.87)
Post×Ln_Cite_Cost	−0.0073***	0.0195***	−0.0099***	−0.0073***	0.0027***
	(−6.732)	(16.04)	(−10.01)	(−4.848)	(3.597)
Post×Ln_Academic_CL	−0.0141***	0.0835***	0.0411***	0.0193***	0.0405***
	(−6.780)	(32.28)	(20.35)	(7.105)	(27.06)
Post×Ln_Law_CL	0.0155***	−0.0048*	0.0707***	0.0814***	0.0576***
	(6.377)	(7.207)	(28.67)	(25.50)	(35.80)
Post×Ln_Fin_CL	−0.0491***	0.0825***	0.0227***	−0.0346***	0.0222***
	(−21.10)	(37.02)	(11.84)	(−11.08)	(14.96)
Pre & Post-Rule Controls	Yes	Yes	Yes	Yes	Yes
Firm-level Controls	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes
Observations	422,546	254,983	623,046	343,745	1,028,434

Table II.7 shows the results of my regression analyses by rule type. The dependent variable is Ln_Bid_Ask. Findings are provided for financial reporting, corporate governance, markets & trading and rules required by law. In addition, I provide the results for all rules. The interaction terms from Post with the variables for academic influence (Ln_Cite_N, Ln_Cite_Cost, Ln_Academic_CL, Ln_Law_CL, and Ln_Fin_CL) are the variables of interest. All specifications include control variables as well as year and firm fixed effects. Standard errors are clustered at the firm-level and t-statistics are displayed in parentheses. See Appendix II.A for variable descriptions.
** p<0.10, ** p <0.05, *** p<0.01*

Second, I examine the rules on corporate governance. For the first hypothesis, it becomes apparent that more SEC use of academic research is not necessarily reflected in higher capital market liquidity. This leads to the conceivable interpretation that the SEC's citation of academic literature represents, to some extent, a market for excuses in the sense of Watts & Zimmerman (1979). No consistent conclusion can be drawn for the second hypothesis, focusing on scholars, concerning corporate governance rules. Here, for example, the involvement of law scholars suggests that the

associated rule tends to positively affect liquidity. This might be due to the special qualifications of law scholars for this rule type. In contrast, the opposite effect is found for finance scholars.

Third, rules associated with the market and trading regulation exhibit mixed results—albeit tending toward a deterioration in market quality due to academic influence. As with the financial reporting regulation, rules containing many cost citations have a positive effect on capital market liquidity. In addition, I can observe a negative effect on the capital market liquidity of rules that received a high number of comment letters from law scholars, finance scholar, or scholars in general. Furthermore, the total number of academic citations has a negative effect on the rule's market liquidity.

A final category consists of rules that the SEC is required to issue by law. In itself, this is not a content-based category, as it can cover a wide range of different regulatory issues. Again, I find a positive liquidity effect for rules for which comment letters are written by finance scholars. In summary, the breakdown into different categories has revealed that academic influence can have heterogeneous effects on rule quality—measured by their capital market effects.

4.4 *Business Roundtable v. SEC*

Geoffroy & Lee (2021) pointed out that the SEC changed its approach to cost-benefit analyses in its rulemaking following the *Business Roundtable v. SEC* decision; codified in the SEC's guidance on economic analysis (SEC, 2012). Hereby, an exogenous variation arises, which I utilize as described in the identification strategy (section 3.2) via a difference-in-difference-in-differences approach.

Table II.8 shows the results of this approach, for the three-way interactions. All two-way interactions and control variables are not included in this table. Furthermore, the table displays the results with *bid–ask spreads* as the dependent variable. Negative coefficients can be observed here

Table II.8: *Business Roundtable v. SEC*—Analyses: Dependent Variable Bid–Ask Spread

Model:	(1)	(2)	(3)	(4)	(5)
Post×Ln_Cite_N×BR	−0.0361***				
	(−20.21)				
Post×Ln_Cite_Cost×BR		−0.0354***			
		(−13.36)			
Post×Ln_Academic_CL×BR			−0.0242***		
			(−18.38)		
Post×Ln_Law_CL×BR				0.0318***	
				(17.79)	
Post×Ln_Fin_CL×BR					−0.0609***
					(−32.16)
Two-way Interactions	Yes	Yes	Yes	Yes	Yes
Pre & Post-Rule Controls	Yes	Yes	Yes	Yes	Yes
Firm-level Controls	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes
Observations	1,028,434	1,028,434	1,028,434	1,028,434	1,028,434
R^2	0.91637	0.91635	0.91650	0.91641	0.91656
Within R^2	0.38977	0.38958	0.39071	0.39006	0.39111

Table II.8 shows the results of my regression analyses including BR as an indicator term for the post-Business Roundtable v. SEC cost-benefit analysis regieme. The dependent variable is Ln_Bid_Ask. The three-way interaction terms from Post with the variables for academic influence (Ln_Cite_N, Ln_Cite_Cost, Ln_Academic_CL, Ln_Law_CL, and Ln_Fin_CL) and BR are the variables of interest. All specifications include two-way interactions, control variables as well as year and firm fixed effects. Standard errors are clustered at the firm-level and t-statistics are displayed in parentheses. See Appendix II.A for variable descriptions.
** p<0.10, ** p <0.05, *** p<0.01*

for the triple interactions for all except the one that examines law scholars' comment letters. The negative coefficients can be interpreted as follows: After the Business Roundtable decision, the processes within the SEC have improved in the sense that rules based stronger on academic research (hypothesis 1) and rules commented by (more) finance scholars (hypothesis 2) convert this academic influence into an increase in capital market liquidity. However, this effect is reversed for law scholars, which could possibly be explained by other political mechanisms such as regulatory capture. In non-tabulated analyses, using a sample split for the period before and after the *Business Roundtable v. SEC* decision, a negative coefficient is found for the interactions of $Post$ with Ln_Cite_Cost, as well as for $Post$ with Ln_Fin_CL in the period after the decision. This leads to the conclusion that the results for the period after *Business Roundtable v. SEC* provide partially different results from the main analyses. Accordingly, in this more recent period, rules in which more academic cost arguments are cited lead to a positive capital market outcome in the sense of higher liquidity. The same holds for the rules, which received quantitatively more comment letters from finance, accounting, and economics scholars.

Overall, my analysis of the effect of the *Business Roundtable v. SEC* decision is in line with the expectation that the quality of the rulemaking process improved afterwards. At the same time, the purpose of these analyses is to validate the initial research design in terms of the coherence of the findings by identifying this fairly plausible expectation.

5 Additional Analyses

Inherently, the research design of my study is based on a number of assumptions. For example, that the effective date of the final rule is the relevant date for the capital market impact or that in principle

all firms are affected by a rule. For this reason, I conduct a range of additional analyses to check the robustness of my results.

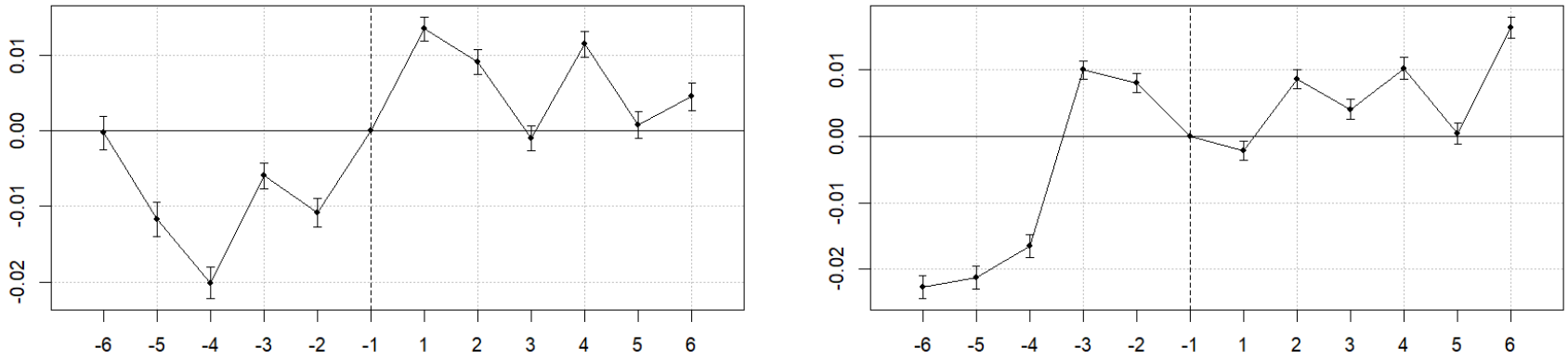
5.1 Temporal Analyses

In the first set of these additional analyses, I take a closer look at the temporal structure of my research design. In doing so, I address two main assumptions of my empirical design. First, that the effective date corresponds to the point in time at which the effects of the rule on the capital market commence. And secondly, that before the rule event takes place, no effect stemming from academic influence—as a treatment in my study—is visible on the capital market effects of the rule. (This implicitly is an adaption of the parallel trends assumption on my research setting.)

For this purpose, I conduct an investigation in which I divide the 90-day pre- and post-periods around the effective date into six fifteen-day bins. In an alternative approach, I repeat this for the 90-day pre- and post-periods around the final rule's publication date, which is always before the effective date. Afterwards, I run regressions similar to my main analysis, with the difference that instead of interacting the academic influence variables with the $Post$ variable, I interact the academic influence measures with indicator variables for the 15-day bins. I set the baseline period to the 15-day bin immediately before the respective rule date. As dependent variable, I use the *bid–ask spread* (Ln_Bid_Ask). All control variables from the main analysis, whether on the rule or firm-level, along with their interactions, are included here as well.

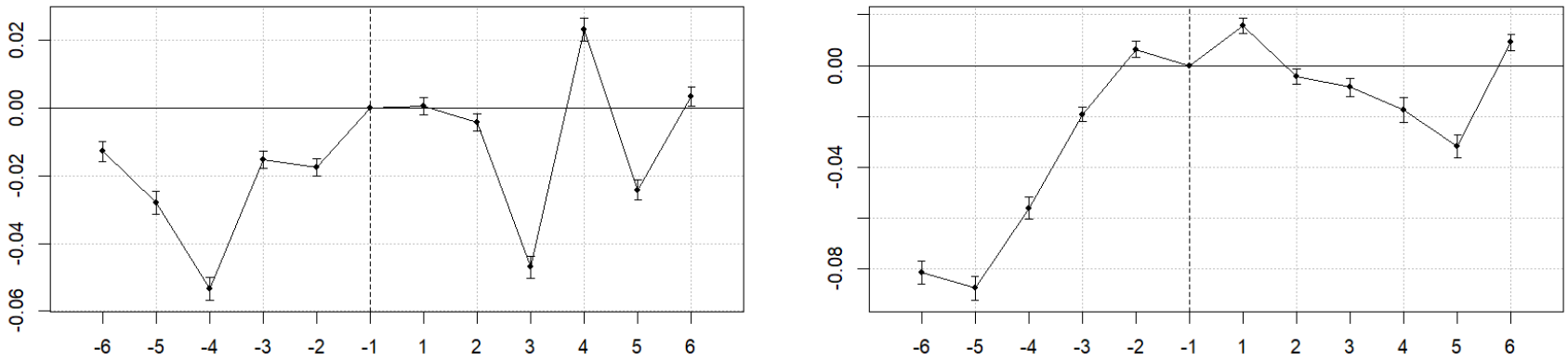
Figure II.3 shows two temporal analyses with Ln_Cite_N as the variable for SEC's usage of academic research (hypothesis 1); as does Figure II.4 with $Ln\_Academic\_CL$ as the variable for scholars' participation (hypothesis 2). Panel (a) displays, in each case, the analysis around the published date of the final rule, while panel (b) around the effective date, as in the main analyses. In

Figure II.3: Temporal Analysis: Estimates for Ln_Bid_Ask on 15-day bins × Ln_Cite_N



(a) Publication Date **(b)** Effective Date

Figure II.4: Temporal Analysis: Estimates for Ln_Bid_Ask on 15-day bins × Ln_Academic_CL



(a) Publication Date **(b)** Effective Date

Figure II.3 and **Figure II.4** show temporal analyses for the validation of my main results. They show a disaggregation of the 90-day pre and post-periods in six 15-day bins each. The estimates for the interactions of the 15-day bin with the variable for academic influence are displayed. In addition, I provide the 99 % confidence interval for each bin. The bin preceding the event date is the reference period. Figure II.3 presents results for Ln_Cite_N as the variable for academic influence, Figure II.4 for $Ln\_Academic\_CL$. Panels (a) each have the final rules' publication date as the event date. Panels (b) have the effective date as the event date, as in the main analysis.

each of these figures, I plot the respective estimate of the interaction term coefficient as well as the 99 % confidence interval for the estimate.

In line with the results of my main analyses, I find an upward trend for the estimates of the interaction coefficients for the analyses around the effective date (see both Figure II.3b and II.4b). Interestingly, this increase already appears about four 15-day bins (approx. 60 days) before the actual effective date. This suggests that the change in capital market effects already begins before the effective date. Otherwise, this is not surprisingly new as the regulatory content of the final rules is already known by the market at this point. Consequently, the capital market's expectations regarding the final rule are already incorporated before the effective date of the rule.

According to this logic, the question arises to whether the published date would be the more appropriate date for examining the effect of the rule. Correspondingly, these analyses are presented in Figures II.3a and II.4a.[15] Admittedly, there is also an upward trend in the estimates for the time bins. Nevertheless, the relationship is less clearly recognizable in these figures due to volatility.

As a consequence, there is a slight preference for analyses using the effective date—although it has to be recognized that the temporal structure represents a major challenge for my research design. Indeed, the above-described anticipation effect from the rule preceding the effective date tends to work against my results, leading to the conclusion that my approach is more conservative.

However, this anticipation effect makes it difficult to examine the second assumption to be tested here, namely that academic participation has no effect before the rule is in place.

[15] In addition, for validation reasons, I performed my main analysis using the published date instead of the effective date. The results can be found in Table II.C.3, which shows positive coefficients for all but one interactions of $Post$ and the academic influence variables, which indicates lower liquidity after the final rule is published. However, there is an opposite effect for the interaction of $Post$ with Ln_Law_CL.

5.2 Instrumental Variable Approach: Google Scholar Hits

As explained in Chapter 3.2, I apply an instrumental variable approach to address possible endogeneity concerns in my research design. In this additional analysis, I apply an instrumental variable framework based on Wooldridge (2010, chapter 9.5.2) and estimate it using a two-stage least squares method, which has two first-stages due to my research design. As aforementioned, the instrument in my analyses is the number of Google Scholar hits for the title of the final rule as deciles.

Table II.9 shows the results of the instrumental variable approach for my main specification for all rules and for the *bid–ask spread* as the dependent variable. As in the main analysis, this table reports the results of the second-stage instrumental variable approach for each of the five models with the different variables for academic influence. In addition, I exemplify the two first-stage regressions for the first model, i.e., with Ln_Cite_N as the variable for academic influence. By their conclusions, the first-stage regressions for the other academic influence variables are identical. In the first-stages, I regress the interaction term ($Post \times Ln\_Cite\_N$) on $Post \times Google\_Scholar$, $Google\_Scholar$, $Post$ and all the usual control variables from the main specification. Additionally, I run the same regression for the "main term" Ln_Cite_N instead of the interaction term as the dependent variable.

Table II.9: Instrumental Variable Approach: 2SLS Estimation

Example First-Stage Regressions		
Dep. Var.	Post×Ln_Cite_N	Ln_Cite_N
Post×Google_Scholar	0.0807***	0.0023***
	(130.0)	(30.86)
Google_Scholar	−0.0175***	0.0437***
	(−303.1)	(71.32)
Post	−6.085***	−0.0229***
	(−601.7)	(−13.99)
Pre & Post-Rule C.	Yes	Yes
Firm-level C.	Yes	Yes
Year Fixed Effects	Yes	Yes
Firm Fixed Effects	Yes	Yes
Observations	1,028,434	1,028,434
R^2	0.60047	0.55519
Within R^2	0.52277	0.15424
F-Statistics	9,744.2***	5,396.5***

Second-Stage Regressions					
	(1)	(2)	(3)	(4)	(5)
$Post \times \widehat{Ln\_Cite\_N}$	0.0318***				
	(12.59)				
$Post \times \widehat{Ln\_Cite\_Cost}$		0.0370***			
		(12.52)			
$Post \times \widehat{Ln\_Academic\_CL}$			0.0892***		
			(13.36)		
$Post \times \widehat{Ln\_Law\_CL}$				0.2511***	
				(12.23)	
$Post \times \widehat{Ln\_Fin\_CL}$					0.1110***
					(13.31)
Pre & Post-Rule Controls	Yes	Yes	Yes	Yes	Yes
Firm-level Controls	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes
Observations	1,028,434	1,028,434	1,028,434	1,028,434	1,028,434
R^2	0.91495	0.91566	0.91460	0.90364	0.91442
Within R^2	0.37935	0.38456	0.37680	0.29684	0.37550
Wu-Hausman test	137.8***	165.7***	228.4***	143.4***	264.0***
Sargan test (p-value)	1	1	1	1	1

Table II.9 shows the results for the instrumental variable estimation. As an example of the first step of the 2SLS, the two first-stage regressions are presented for model (1). The instruments used here are Google_Scholar, respectively Post × Goolge_Scholar. For the second stage regressions, the dependent variable is Ln_Bid_Ask. The interaction terms estimated in the first steps from Post with the variables for academic influence (Ln_Cite_N, Ln_Cite_Cost, Ln_Academic_CL, Ln_Law_CL, and Ln_Fin_CL) are the variables of interest. All specifications include control variables as well as year and firm fixed effects. Standard errors are clustered at the firm-level and t-statistics are displayed in parentheses. See Appendix II.A for variable descriptions.
** p<0.10, ** p <0.05, *** p<0.01*

The first-stage regressions reveal a positive relationship between $Post \times Google\_Scholar$ and the two dependent variables. Furthermore, there is a positive association between $Google\_Scholar$ and Ln_Cite_N. This suggests that, as expected, the overall body of academic research on a regulatory topic—as measured by Google Scholar hits—is positively related to the SEC's utilization of academic research in rulemaking. In addition, the two first-stage F-statistics of 9,744.2 and 5,396.5, well above the critical value of 8.96 according to Stock et al. (2002), show no indication for a weak-instrument problem (see also Larcker et al., 2011). Besides, this instrumental variable estimations show no evidence of overidentification (see Sargan test); indeed, the initial model using ordinary least squares (OLS) estimation is subject to endogeneity concerns according to the Wu-Hausman test.

The second-stage results show positive and highly significant relationships between the interactions of $Post$ with the variables for academic influence and the *bid–ask spread* (like the main results). Thus, the instrumental variable results for the main study (i.e., with all rules) point to a negative relation between academic influence—be it through the SEC itself (hypothesis 1) or initiated by academic scholars (hypothesis 2)—and firm-level liquidity. The coefficients are even slightly larger than in the initial models, which suggests an even stronger effect, which was attenuated due to endogeneity.

5.3 Analyses by Affected Firms: Event Study Approach

In the last set of additional analyses, I address one of the key assumptions of my study, namely that the final rules affect all firms in the sample. In order to assess whether this assumption substantially distorts my findings, I have to divide the firms into those that are affected by the respective rules and those that are not. Perhaps the most obvious way to do this would be to identify the firms on the

basis of criteria (e.g., size thresholds) from the final rules themselves. However, this option seems impractical, since such criteria are rarely included in the rules and often would be arbitrary and difficult to implement in cases of doubt. Therefore, I choose an alternative approach, building on the idea of Campbell et al. (2023) and Khan et al. (2018), whereby I utilize an event study approach to categorize the firms in each rule into those that are positively, negatively, and neutrally affected.

The underlying approach is as follows: By using a standard four-factor asset pricing model (e.g., Greenstone et al., 2006), I compute the abnormal returns. The firm and rule-level abnormal returns are then aggregated into cumulative abnormal returns (CARs) for each of the final rules across the [-1;1] day window for both the published date of the proposed rule and the published date of the final rule. Next, the sum of both firm-level CAR for each rule is calculated. Finally, based on this sum, the firms for each rule are categorized as positively affected (POS) for values above the upper quartile and as negatively affected (NEG) for below the lower quartile. Values within the interquartile range, according to the CARs, remain as the average affected firms and are not categorized separately. Appendix II.E describes the entire procedure in more detail.

The results in Table II.10 provide a consistent pattern showing that academically influenced SEC rules especially affect the average firms, i.e., the firms lying between the first and the third quartile, in terms of increased firm-level *bid–ask spreads*. This is evident from the positive and significant coefficients for the interaction terms from $Post \times Acad.$ In contrast, the coefficients for the three-way interaction arising from $Post \times Acad.$ with the indicators for positively (POS) and negatively (NEG) affected firms are only significant and negative for the first model. This can be interpreted as positively or negatively affected firms experiencing an increase in liquidity due to rules that cite academic research intensively. No such association appears in the other four models. In summary, the main results are predominantly driven by the medium-affected firms; therefore, the

Table II.10: Main Analyses with Differentiation between Positively and Negatively Affected Firms

	(1)	(2)	(3)	(4)	(5)
Post×Ln_Cite_N	0.0190***				
	(24.74)				
Post×Ln_Cite_N×POS	−0.0061***				
	(−5.035)				
Post×Ln_Cite_N×NEG	−0.0069***				
	(−5.713)				
Post×Ln_Cite_Cost		0.0033***			
		(3.215)			
Post×Ln_Cite_Cost×POS		−0.0012			
		(−0.6624)			
Post×Ln_Cite_Cost×NEG		−0.0013			
		(−0.7187)			
Post×Ln_Academic_CL			0.0410***		
			(23.44)		
Post×Ln_Academic_CL×POS			−0.0012		
			(−0.5982)		
Post×Ln_Academic_CL×NEG			−0.0009		
			(−0.4319)		
Post×Ln_Law_CL				0.0586***	
				(30.70)	
Post×Ln_Law_CL×POS				−0.0034	
				(−1.351)	
Post×Ln_Law_CL×NEG				−0.0005	
				(−0.1826)	
Post×Ln_Fin_CL					0.0220***
					(12.12)
Post×Ln_Fin_CL×POS					0.0007
					(0.2846)
Post×Ln_Fin_CL×NEG					0.0003
					(0.1096)
Pre & Post-Rule Controls	Yes	Yes	Yes	Yes	Yes
Firm-level Controls	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes
Observations	1,028,434	1,028,434	1,028,434	1,028,434	1,028,434
R^2	0.91636	0.91633	0.91649	0.91641	0.91651
Within R^2	0.38967	0.38947	0.39058	0.39004	0.39078

Table II.10 shows the results for the analyses with differentiation between postive and negative affected firms. The dependent variable is Ln_Bid_Ask. Each of the five models contains three variables of interest. As in the main analysis, the interaction terms from Post with the variables for academic influence (Ln_Cite_N, Ln_Cite_Cost, Ln_Academic_CL, Ln_Law_CL, and Ln_Fin_CL) are variables of interest. In addition, these two-way interaction terms are interacted with POS, for firms positively affected by the rule, and NEG, for those negatively affected. These two additional three-way interactions are the further variables of interest. All specifications include control variables as well as year and firm fixed effects. Standard errors are clustered at the firm-level and t-statistics are displayed in parentheses. See Appendix II.A for variable descriptions.
** p<0.10, ** p <0.05, *** p<0.01*

assumption that all firms are affected by the rules and, thus, the results are not driven by only a few firms that are particularly affected by the rule may be convincing.

6 Conclusion

This paper examines the effect of academically influenced SEC rules on the capital market. This focus on capital market effects originates from the SEC's mission to promote efficient and liquid capital markets. Two different perspectives on academic influences are presented. On the one hand, SEC's inclusion of academic research is viewed through the prism of classical theories of economic regulation (in particular capture and public interest theory) (Geoffroy & Lee, 2021; Posner, 1974; Stigler, 1971). On the other hand, I shed light on academia's incentives to participate in the rulemaking process from the standpoint of societal relevance on one side—and as facilitators of regulatory capture on the other (see, Fülbier & Sellhorn, 2023; Zingales, 2014).

Considering all SEC rules from 2006–2022, I find a negative effect of academic-influenced rules on firm-level liquidity. This is irrespective of whether the academic influence on the rules originates from the SEC itself, i.e., the SEC mentions of academic research in the rule, or the participation of scholars in rulemaking by writing comment letters. On the one hand, this suggests that academic research serves as a 'market for excuses' (see, Watts & Zimmerman, 1979) to enable the SEC as a regulator to promote rules favorable to interest groups. On the other hand, these findings provide indications that scholars themselves act as facilitators of regulatory capture. However, the findings are more nuanced when looking deeper. For instance, SEC rules that regulate financial reporting issues tend to have positive liquidity effects. Moreover, there is some evidence that, in particular, the participation of finance, accounting, and economics scholars in rulemaking leads to rules with

positive liquidity effects. These findings are in line with the public interest argument—that the SEC intends to increase capital market efficiency through its rules in the interest of the general public. Furthermore, since the reform of the SEC's guidelines for cost-benefit analysis following the *Business Roundtable v. SEC* decision, academically influenced rules have seen an incremental improvement in liquidity effects.

Overall, my study illuminates the (partly counter-intuitive) interplay between academic research and capital market regulation. In doing so, I provide empirical evidence that could help to improve collaborations between regulators and academia. An important caveat of my study is that it takes a shareholder-centric view by focusing on capital market outcomes. In addition, my study is based on the implicit assumption that achieving liquid capital markets is in the public interest. Future research could, therefore, focus on alternative dimensions of academic involvement in rulemaking, such as academic research as an enabler of sustainable economic activity.

Appendix II.A: Variable Definitions

Variable	Description
Dependent Variables	
Ln_Bid_Ask	The natural logarithm of 1 + the 90-days average of the firm's daily quoted bid–ask spread in percent. The daily quoted bid–ask spread is calculated as the ask price minus the bid price; divided by the average of the ask and bid prices.
Ln_Price_Impact	The natural logarithm of 1 + the 90-days median of the firm's daily price impact measure according to Amihud (2002). The daily price impact is calculated by dividing the absolute price change in percent by the U.S.-$ trading volume (in thousands). To avoid misclassifications, I omit days with zero-returns or zero trading volume (Christensen et al., 2016; Daske et al., 2008).
Zero_Returns	The proportion of trading days with a stock return of zero, relative to all potential trading days in percent (related to a 90-days window).
Study Variables	
Post	Indicator variable that is 1 for the 90-days period after the effective date.
Cite_N	The total number of paper citations in a final rule document (Geoffroy & Lee, 2021).
Ln_Cite_N	The natural logarithm of 1 + Cite_N.
Cite_Cost	The total number of paper citations in a final rule document that relates to costs or reductions of benefits (Geoffroy & Lee, 2021).
Ln_Cite_Cost	The natural logarithm of 1 + Cite_Cost.
Academic_CL	The sum of Law_CL and Fin_CL.
Ln_Academic_CL	The natural logarithm of 1 + Cite_Academic_CL.
Law_CL	The number of comment letters from legal scholars in the SEC rulemaking process commenting on the (identified) proposed rule.
Ln_Law_CL	The natural logarithm of 1 + Law_CL.
Fin_CL	The number of comment letters from finance, accounting, and economics scholars in the SEC rulemaking process commenting on the (identified) proposed rule.
Ln_Fin_CL	The natural logarithm of 1 + Fin_CL.

Rule-level Control Variables	
No_of_CL	The total number of comment letters from all stakeholders in the SEC rulemaking process commenting on the (identified) proposed rule.
Ln_No_CL	The natural logarithm of 1 + No_of_CL.
Word_Count	Number of words in the final rule document.
Ln_Word_Count	The natural logarithm of 1 + Word_Count.
Firm-level Control Variables	
Ln_MV_1	The natural logarithm of 1 + market value of equity (in U.S.-$ million) at the first day of the 90-day period.
Ln_Std_Ret	The natural logarithm of 1 + the 90-days standard deviation of daily stock returns.
Ln_Share_Turn	The natural logarithm of 1 + the 90-days average of the firm's daily turnover in percent. The daily turnover is calculated as the U.S.-$ trading volume divided by market value of equity.
Exogenous Policy Variable and Instrument	
BR	Indicator variable that is 1 for dates after the release of the new guidance on economic analysis in SEC rulemakings on March 16, 2012, following the *Business Roundtable v. SEC* decision.
Google_Scholar	The number of Google Scholar hits for research articles, published till the year before the effective date of the final rule, by searching for the final rule title. Transformed in deciles.
Affected Firms	
POS	Indicator variable that is 1 for firms which are positvely affected by the SEC rule (see Appendix II.E).
NEG	Indicator variable that is 1 for firms which are negatively affected by the SEC rule (see Appendix II.E).

Appendix II.B: Collection and Identification of Academic Comment Letter

This appendix describes how the academic comment letters were identified. For this, I apply a procedure combining automated comment letter crawling with manual review.

1. Download of 44,684 (gross) / 29,879 (net) comment letters with Python for all 191 proposed rules in my study.

2. Retrieve information about the comment letter: author, length in words, format (e.g., pdf or html).

3. Word search procedure to reduce the number of comment letters:

   (a) Word search in the author name field for the following *inclusion criteria*:

      i. **Inclusion criteria words**: "Professor", "Ph.D.", "PhD", "Dr.", "Prof.", "Prof", "University"

      Rationale: Identification of authors with a high likelihood of writing a comment letter with academic content.

      ii. Manual check of the identified 1,170 comment letters.

      iii. Identification of **165** (Law_CL and **213** Fin_CL (in total 378 academic comment letter).

      iv. Higher prevalence of academic comment letter in pdf documents (81.5 % here, vs. 34.7 % in the total sample).

   (b) Combination of a word search in the author name field for the following *exclusion criteria* and a word search in the complete comment letter text with the *inclusion criteria* words (for the remaining comment letters).

      i. **Exclusion criteria words**: "LLP", "LLC", "Limited", "CEO", "CFO", "Chairman", "Association", "President", "Director", "Lawyer", "CPA", "CFA", "Committee", "Federation", "J.D.", "plc", "Inc", "S.A.", "Ltd.", "Company", "Anonymous", "Corporation", "City", "Municipal", "District", "State", "Senate", "Manager", "Partner",

"Investor", "Trust", "Council", "L.L.C" "Analyst", "Counsel", "Representive", "Officer", "Attorney", "Comptorller", "Public Citizen", "SVP", "Barnard", "U.S.", "Bank", "Congress"

Rationale: Exclusion of authors with a low likelihood of writing a comment letter with academic content.

ii. **Inclusion criteria words** (as above): "Professor", "Ph.D.", "PhD", "Dr.", "Prof.", "Prof", "University"

Rationale: Identification of comment letter text with a high likelihood that this comment letter is written by a scholar.

iii. This results in 2,169 comment letters.

iv. Filter for PDF documents only, as they are more likely to be academic comment letters.

v. Manual check of the resulting 475 comment letters.

vi. Identification of **7** Law_CL and **4** Fin_CL (in total 11 academic comment letter).

4. Aggregation steps:

   (a) First, all Law_CL, Fin_CL, but also the total number of comment letters are aggregated on the level of comment letter requests.

   (b) Second, the resulting number of comment letters is aggregated on the level of proposed rules (As a result, it is possible that comment letters are counted for several final rules at the end).

   (c) The numbers of comment letters are assigned to the final rules as described in the section on SEC rulemaking data.

An essential consideration in this procedure is that the type I error (i.e., a rule is identified as an academic rule even though it is not) and type II error (i.e., an academic rule is not identified as one) are minimized. Step 3. (a), therefore, focuses on minimizing the type II error, and step 3. (b) on minimizing the type I error.

Appendix II.C: Alternative Research Designs for Main Analyses

Changes Specification—Dependent Variable ΔBid–Ask Spread

	Hypothesis 1		Hypothesis 2		
	(1)	(2)	(3)	(4)	(5)
Ln_Cite_N	0.0062***				
	(18.11)				
Ln_Cite_Cost		0.0031***			
		(6.987)			
Ln_Academic_CL			0.0160***		
			(26.97)		
Ln_Law_CL				0.0153***	
				(24.29)	
Ln_Fin_CL					0.0155***
					(21.17)
Ln_Word_Count	−0.0042***	−0.0026***	−0.0003	−0.0017***	0.0002
	(−10.02)	(−6.319)	(−0.7832)	(−4.327)	(0.5937)
Ln_No_CL	−0.0002	4.16×10^{-5}	−0.0072***	−0.0039***	−0.0055***
	(−0.8998)	(0.1773)	(−18.46)	(−12.34)	(−15.01)
ΔMV_1	-2.24×10^{-6}***	-2.26×10^{-6}***	-2.20×10^{-6}***	-2.34×10^{-6}***	-2.14×10^{-6}***
	(−8.028)	(−8.084)	(−7.892)	(−8.339)	(−7.683)
ΔStd_Ret	1.762***	1.761***	1.761***	1.759***	1.762***
	(46.17)	(46.17)	(46.15)	(46.15)	(46.14)
ΔShare_Turn	−0.0435***	−0.0435***	−0.0435***	−0.0435***	−0.0435***
	(−43.10)	(−43.11)	(−43.11)	(−43.14)	(−43.08)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes
Observations	508,799	508,799	508,799	508,799	508,799
R^2	0.12342	0.12305	0.12403	0.12365	0.12382
Within R^2	0.03931	0.03890	0.03997	0.03956	0.03975

Table II.C.1 shows the results for the change specification of my main analyses. These analyses represent a robustness check. The dependent variable is ΔBid_Ask. The variables for academic influence (Ln_Cite_N, Ln_Cite_Cost, Ln_Academic_CL, Ln_Law_CL, and Ln_Fin_CL) are the main variables of interest. The firm-level controls match the dependent variable in form of Δ variables. All specifications include control variables as well as year and firm fixed effects. Standard errors are clustered at the firm-level and t-statistics are displayed in parentheses. See Appendix II.A for variable descriptions.
** p<0.10, ** p <0.05, *** p<0.01*

Varying Research Designs—Control Variables and Fixed Effects

	(1)	(2)	(3)	(4)	(5)	(6)
Post×Ln_Cite_N	0.0086***	0.0165***	0.0143***	0.0160***	0.0193***	0.0088***
	(11.51)	(27.79)	(25.02)	(27.24)	(30.91)	(15.57)
Ln_Cite_N	−0.2800***	−0.0642***	−0.0498***	−0.0466***	−0.0138***	−0.0090***
	(−49.33)	(−27.44)	(−25.14)	(−24.97)	(−21.72)	(−17.00)
Post×Ln_Word_Count				−0.0024***	−0.0061***	0.0020***
				(−2.938)	(−6.739)	(2.811)
Ln_Word_Count				−0.0190***	−0.0076***	0.0014***
				(−13.18)	(−11.56)	(2.683)
Post×Ln_No_CL				−0.0031***	−0.0026***	−0.0034***
				(−7.488)	(−5.550)	(−8.528)
Ln_No_CL				0.0137***	0.0035***	0.0056***
				(21.13)	(8.095)	(15.52)
Post	−0.0326***	−0.0121***	−0.0089***	0.0265***	0.0591***	−0.0088
	(−18.65)	(−10.38)	(−8.286)	(3.370)	(6.715)	(−1.287)
Constant	−0.6812***	4.058***				
	(−24.71)	(172.3)				
Ln_MV_1		−0.4878***	−0.4915***	−0.4900***	−0.4881***	−0.3066***
		(−108.1)	(−83.23)	(−83.00)	(−109.1)	(−72.07)
Ln_Std_Ret		0.6838***	0.5553***	0.5541***	0.6438***	0.3944***
		(75.72)	(87.11)	(87.31)	(69.31)	(112.0)
Ln_Share_Turn		−0.5375***	−0.3871***	−0.3870***	−0.5234***	−0.2631***
		(−74.75)	(−64.80)	(−64.92)	(−71.83)	(−92.07)
Year Fixed Effects					Yes	
Firm Fixed Effects			Yes	Yes		
Year-Firm Fixed Effects						Yes
Observations	1,028,434	1,028,434	1,028,434	1,028,434	1,028,434	1,028,434
R^2	0.03835	0.84613	0.90993	0.91005	0.85382	0.97083
Within R^2			0.45250	0.45325	0.83152	0.17787

Table II.C.2 shows the results for varying research design specifications as robustness checks. The dependent variable is Ln_Bid_Ask. The variable of interest is the interaction terms from Post with Ln_Cite_N (i.e., the (1) model in the main analyses). The specifications vary regarding control variables and fixed effects structure. Standard errors are clustered at the firm-level and t-statistics are displayed in parentheses. See Appendix II.A for variable descriptions. ** p<0.10, ** p <0.05, *** p<0.01*

Analyses based on Published Dates: Dependent Variable Bid–Ask Spread

	Hypothesis 1		Hypothesis 2		
	(1)	(2)	(3)	(4)	(5)
Post×Ln_Cite_N	0.0154***				
	(19.69)				
Ln_Cite_N	−0.0136***				
	(−25.94)				
Post×Ln_Cite_Cost		0.0240***			
		(25.81)			
Ln_Cite_Cost		−0.0140***			
		(−23.58)			
Post×Ln_Academic_CL			0.0048***		
			(4.957)		
Ln_Academic_CL			−0.0422***		
			(−42.06)		
Post×Ln_Law_CL				−0.0061***	
				(−5.461)	
Ln_Law_CL				−0.0304***	
				(−30.33)	
Post×Ln_Fin_CL					0.0072***
					(6.076)
Ln_Fin_CL					−0.0457***
					(−43.16)
Post×Ln_Word_Count	0.0023***	0.0043***	0.0127***	0.0123***	0.0132***
	(2.984)	(6.017)	(17.07)	(17.04)	(17.14)
Ln_Word_Count	−0.0045***	−0.0074***	−0.0161***	−0.0116***	−0.0186***
	(−8.646)	(−13.79)	(−27.25)	(−21.31)	(−30.39)
Post×Ln_No_CL	0.0129***	0.0126***	0.0117***	0.0154***	0.0114***
	(26.00)	(25.33)	(19.49)	(24.94)	(21.08)
Ln_No_CL	−0.0024***	−0.0026***	0.0152***	0.0049***	0.0122***
	(−8.131)	(−8.865)	(31.94)	(13.97)	(28.61)
Post	−0.0921***	−0.1047***	−0.1806***	−0.1849***	−0.1847***
	(−11.44)	(−13.60)	(−22.62)	(−22.87)	(−22.53)
Ln_MV_1	−0.4821***	−0.4822***	−0.4819***	−0.4821***	−0.4820***
	(−75.39)	(−75.41)	(−75.36)	(−75.40)	(−75.38)
Ln_Std_Ret	0.5113***	0.5108***	0.5117***	0.5106***	0.5120***
	(74.16)	(74.04)	(74.28)	(74.00)	(74.31)
Ln_Share_Turn	−0.3777***	−0.3777***	−0.3775***	−0.3775***	−0.3775***
	(−63.59)	(−63.58)	(−63.57)	(−63.55)	(−63.56)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes
Observations	1,039,283	1,039,283	1,039,283	1,039,283	1,039,283
R^2	0.91820	0.91820	0.91831	0.91824	0.91830
Within R^2	0.39766	0.39762	0.39842	0.39793	0.39833

Table II.C.3 shows the main analysis results with the published date of the final rule instead of the effective date. The dependent variable is Ln_Bid_Ask. The interaction terms from Post with the variables for academic influence (Ln_Cite_N, Ln_Cite_Cost, Ln_Academic_CL, Ln_Law_CL, and Ln_Fin_CL) are the variables of interest. All specifications include control variables as well as year and firm fixed effects. Standard errors are clustered at the firm-level and t-statistics are displayed in parentheses. See Appendix II.A for variable descriptions.
** p<0.10, ** p <0.05, *** p<0.01*

Appendix II.D: Analyses by Rule Type

Analyses by Rule Type: Dependent Variables Price Impact and Zero Returns

	Financial Reporting	Corporate Governance	Markets & Trading	Required by Law	All Rules
Panel A—Dependent Variable: Price_Impact					
Post×Ln_Cite_N	−0.0023***	0.0079***	−0.0008	0.0087***	0.0052***
	(−2.646)	(6.364)	(−1.101)	(8.391)	(9.008)
Post×Ln_Cite_Cost	−0.0054***	0.0224***	−0.0111***	0.0052***	0.0055***
	(−4.060)	(12.99)	(−10.32)	(3.503)	(5.726)
Post×Ln_Academic_CL	−0.0179***	−0.0459***	0.0070***	0.0168***	−0.0151***
	(−10.37)	(−17.89)	(5.267)	(10.93)	(−13.90)
Post×Ln_Law_CL	0.0453***	−0.0436***	0.0067***	0.0378***	0.0008
	(18.68)	(−14.47)	(3.485)	(17.81)	(0.6141)
Post×Ln_Fin_CL	−0.0624***	−0.0370***	−0.0069***	−0.0019	−0.0320***
	(−27.54)	(−14.83)	(−4.814)	(−0.9914)	(−23.07)
Panel B—Dependent Variable: Zero_Returns					
Post×Ln_Cite_N	−0.0210**	0.0318**	0.0032	0.0089	-2.7×10^{-5}
	(−2.346)	(2.476)	(0.3638)	(0.7811)	(−0.0043)
Post×Ln_Cite_Cost	0.0621***	0.0318**	0.0039	0.0129	0.0295***
	(5.035)	(4.010)	(0.3537)	(0.8160)	(3.379)
Post×Ln_Academic_CL	0.2339***	−0.1081***	0.0604***	0.0342*	0.0619***
	(11.76)	(−3.670)	(3.842)	(1.890)	(4.906)
Post×Ln_Law_CL	0.3322***	−0.1532***	0.1694***	0.2254***	0.1444***
	(12.00)	(−4.536)	(8.296)	(9.225)	(9.334)
Post×Ln_Fin_CL	0.0824***	−0.0674**	0.0030	−0.0709***	−0.0236
	(3.671)	(−2.315)	(0.1800)	(−3.270)	(−1.634)
Pre & Post-Rule Controls	Yes	Yes	Yes	Yes	Yes
Firm-level Controls	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes
Observations	422,546	254,983	623,046	343,745	1,028,434

Table II.D.1 shows the results of my regression analyses by rule type. The dependent variables are Ln_Price_Impact for Panel A and Zero_Returns for Panel B. Findings are provided for financial reporting, corporate governance, markets & trading and rules required by law. The interaction terms from Post with the variables for academic influence (Ln_Cite_N, Ln_Cite_Cost, Ln_Academic_CL, Ln_Law_CL, and Ln_Fin_CL) are the variables of interest. All specifications include control variables as well as year and firm fixed effects. Standard errors are clustered at the firm-level and t-statistics are displayed in parentheses. See Appendix II.A for variable descriptions.
** p<0.10, ** p <0.05, *** p<0.01*

Appendix II.E: Identification of Affected Firms via Event Study Approach

This appendix describes how I use an event study approach to identify the firms that are most positively or negatively affected by the individual rules. This approach builds on the idea of Campbell et al. (2023) (SEC rules) and Khan et al. (2018) (Financial Accounting Standards Board (FASB) standards); however, both use this approach for a different purpose which is to evaluate the shareholder value of various regulations.

1. In the first step, I apply a standard four-factor asset pricing model (e.g., Campbell et al., 2023; Greenstone et al., 2006; Khan et al., 2018) to estimate abnormal returns. For this, I use the following regression equation:

   $r_{it} - r_{ft} = \alpha_{it} + \beta_{1i}(r_{mt} - r_{ft}) + \beta_{2i}SMB_t + \beta_{3i}HML_t + \beta_{4i}UMD_t + \epsilon_{it}$

   where r_{it} is the daily return for firm i, r_{ft} is the daily risk-free rate, r_{mt} is the daily stock market return. SMB_t, HML_t, and UMD_t represent the Fama-French size factor, the Fama-French book-to-market factor, and the momentum factor. I downloaded the factors from Kenneth R. French's website.[16]

   The event dates for each rule are the publication dates of the identified proposed rule and the final rule. This aligns with Campbell et al. (2023) and Khan et al. (2018) and builds on the assumption of an efficient capital market that prices in regulatory changes promptly. The event window is defined as [-1,1] days around the event date. I estimate the parameters from the regression equation for each firm *i* ($\hat{\beta}_{1i}$,$\hat{\beta}_{2i}$,$\hat{\beta}_{3i}$, and $\hat{\beta}_{4i}$) based on the calendar year prior to the publication date of the proposed rule. In addition, I exclude from this calendar year all event

[16] https://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html

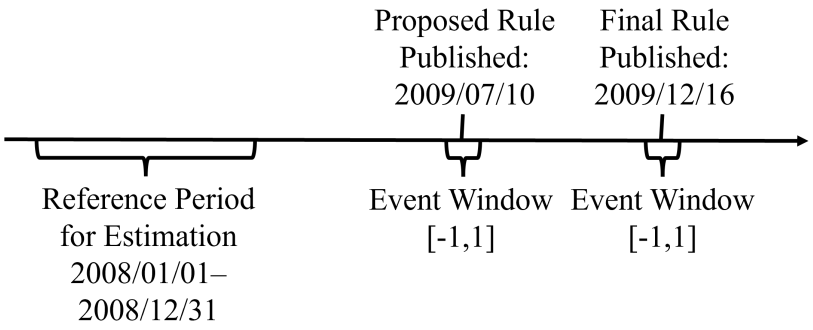


Figure II.E.1: Exemplary Timeline of the Event Study for Rule 33-9089

windows associated with any rule (i.e., from the published dates of both the proposed and final rules) (see, Khan et al., 2018). See an exemplary timeline of an event study in Figure II.E.1 based on Rule 33-9059 for "Proxy Disclosure Enhancements".

2. In the second step, I calculate the daily abnormal returns based on the estimated asset pricing model. To do so, I use the estimated parameters and compute the daily abnormal returns $\hat{\alpha}_{it}$ using the following formula:

   $\hat{\alpha}_{it} = (r_{it} - r_{ft}) - (\hat{\beta}_{1i}(r_{mt} - r_{ft}) + \hat{\beta}_{2i}SMB_t + \hat{\beta}_{3i}HML_t + \beta_{4i}UMD_t)$

3. In the third step, I generate the cumulative abnormal returns (CAR) for each rule (both for the proposed rule and final rule publication date) at the firm-level. Thereby, I use a three-day window around the publication date [-1,1]. Thus, I apply the following formula:

   $CAR_{ri} = \sum_{-1}^{1} \hat{\alpha}_{rit}$

   Next, I sum the two CARs for each firm at the rule level. Missing values for CAR are considered as zero.

4. In the final step, I group the firms per rule into those affected most positively or negatively. To do so, I create an indicator variable POS, which is set to 1 for firms above the upper quartile

in the CAR sum. I use the indicator variable NEG to identify those firms that fall below the lower quartile.

Research Paper III

Political Connenctions and SEC Attention

ABSTRACT

We examine the effects of firms' political connections (PC) on Securities and Exchange Commission (SEC) attention. Capture theory suggests that firms seek lower SEC oversight by contributing to politicians that control SEC activity. Prior literature measures of SEC oversight only cover outcomes of SEC filing reviews or enforcement investigations of only one division at a time, disregarding that initial review or investigation decisions are not reflected in this consideration. We provide evidence on the effects of PC on SEC oversight using a more comprehensive approach that covers the entire monitoring activity by investigating SEC attention. Therefore, we measure SEC attention by its own EDGAR downloads. We find PC increase SEC attention activity in general, supporting the idea that PC proxies financial reporting risk. Additional mediation analyses show that the increased SEC attention explains an increasing comment letter receipt likelihood for PC firms; supporting the attention-grabbing effect of PC. These findings contribute to the literature by shedding light on the SEC's behavior during the entire oversight process in the presence of PC.

Keywords: Political Connections, Regulatory Capture, SEC Attention
JEL-Classification: M41; K22; G18; G38

This research paper is a joint project with Lorenz Piering and also part of his dissertation (Piering, 2024). A paper version is available as Seitz & Piering (2024) and submitted to Contemporary Accounting Research.

Acknowledgements: We thank Rolf Uwe Fülbier, Thorsten Sellhorn, Joachim Gassen, Sven Hörner, Jonas Heese, the workshop participants at the University of Bayreuth Seminar on Accounting Research, the participants of the Doctoral Seminar on Accounting at the Ruhr University Bochum in September 2022, the attendants of the European Accounting Association 2022 Conference in Bergen, Norway, the 18th Workshop on European Financial Reporting in Piraeus, Greece, and the 40th European Association of Law & Economics Annual Conference in Berlin for their valuable feedback.

1 Introduction

The U.S. Securities and Exchange Commission (SEC) oversight[1] has come under public scrutiny for several recent corporate scandals, such as Enron, WorldCom, Theranos, and further. Research has widely investigated the determinants and consequences of SEC oversight. For instance, a comment letter (CL) receipt could result in upward pressure on audit fees (Gietzmann & Pettinicchio, 2014), and enforcement actions are costly both for firms and managers (Karpoff et al., 2008). Following implications from capture theory (e.g., Stigler, 1971; Peltzman, 1976), firms might try to benefit from political connectedness resulting in lax SEC oversight.

Prior literature finds indistinct results regarding the effect of firms' political connections (PC) on SEC oversight. Yu & Yu (2011) and Correia (2014) outline a negative relation between firms' political connectedness and enforcement actions. Contrary, Khokhar & Shahriari (2021) find that politically connected firms are more likely to be targeted by enforcement actions and imposed fines are relatively higher for those firms. At executive level, Fulmer et al. (2023) find that PCs reduce civil and criminal sanctions for fraudulent managers. Heese et al. (2017) provide a wider view on SEC oversight considering CL issues. Contrary to prior research, they find a positive relation between PC and the likelihood of a CL receipt which refutes the assumption of SEC capture. All these studies have two main disadvantages in common: First, they solely focus either on filing review or enforcement, ignoring that SEC oversight is a complex process that involves various SEC divisions[2] and is highly dependent on how the SEC's rank-and-file employees choose firms at their discretion. Second, these studies measure SEC activity by observable SEC issues like CLs

[1] Following Heese et al. (2017), our definition of SEC oversight covers selective filing review, conducted by the Division of Corporation Finance (DCF), as well as enforcement actions by the Division of Enforcement (DoE).

[2] Although Heese et al. (2017) mention this issue explicitly, their research covers only observable outcomes of the DCF.

or Accounting and Auditing Enforcement Releases (AAERs); ignoring those investigations do not always lead to an observable issue.[3]

A remarkable exception is Blackburne (2014), who provides a dataset consisting of budget and staffing allocations which seems to be a better approximation of SEC oversight activity, but only focuses on the DCF. Holzman et al. (2024) also use a dataset of formal SEC investigations to analyze SEC target selection. They find, among others, that SEC target selection is driven by a firm's likelihood of regulatory non-compliance and public trigger events like media coverage. Lee (2021) divides the enforcement process into investigation and enforcement decisions. He finds no evidence for lobbying influencing investigation decisions, whereas enforcement decisions are affected. Gunny & Hermis (2020) are aware that the SEC's decision to issue a CL is a joint function of the filing review probability and the CL issue probability. They deal with this issue by estimating both the review selection probability and the CL issue probability in a bivariate probit model. Stice-Lawrence (2023) examines the behavioral biases of SEC staff attention in the case of the alphabetical order of firm names, and thus, like us, focuses on the operation behavior of SEC employees and does not refer to a specific division.

We provide a relatively novel approach using a dataset of Electronic Data Gathering, Analysis, and Retrieval (EDGAR) downloads by the SEC itself to better understand the impact of PC on SEC oversight behavior in general; and in particular to that of rank-and-file employees. As SEC oversight, to our conception, describes the entire universe of filing reviews and enforcement actions of the DCF and the DoE (Heese et al., 2017; Ege et al., 2019). We denote all related operations as monitoring activities—and measure them by SEC attention following Stice-Lawrence (2023). In advantage,

[3] Blackburne et al. (2021a) and Blackburne et al. (2021b) show the notable economic effects even undisclosed and, thus, publicly unobservable SEC investigations can have. Nevertheless, Blackburne & Quinn (2023) point out that firms' managers have incentives to disclose SEC investigations.

our approach captures the operational working of the SEC also in cases that do not lead to issues like CL or AAERs. Thus, we are the first to provide evidence of how PC influence SEC attention in general instead of final issue decisions. Therefore, our first research question is: *How is SEC attention affected by firms' political connections?*

We consider two different effects of PC on SEC attention to be possible. SEC attention might decrease for PC firms, resulting from SEC capture as SEC employees are aware of firms' PC and thus omit these firms from monitoring activities. SEC attention might also increase for PC firms as PC could be interpreted as risk factors. We use common measures for PC following prior literature (e.g., Correia, 2014; Yu & Yu, 2011; Heese et al., 2017). We either measure lobbying expenditures by firms as well as contributions to Political Action Committees (PACs). We measure both short-term and long-term relationships. To shed light on PC that could have a direct influence on SEC activity, we measure PAC contributions to congressional candidates that serve in a SEC oversight committee, lobbying expenses by lobbyists having a link to the SEC, as well as lobbying expenditures directly to the SEC.

We find that PC, as measured by lobbying expenditures and contributions to PACs, have an attention-grabbing effect and, therefore, a higher monitoring activity level. In particular, we find these effects for such cases where the lobbyist involved in the lobbying activity was or is linked to the SEC through an employment relationship, or when the SEC is lobbied directly. We confirm the robustness of our findings by an additional instrumental variables approach and entropy balancing. The attention-grabbing effect, that we provide evidence on, was assumed by Heese et al. (2017) to explain the increased CL receipt likelihood for PC firms. Nevertheless, this was only a suggestion of an underlying mechanism. In contrast to prior research, our design allows us to observe SEC

attention directly. From here, our second research question arises: *To which extent can the increased CL receipt likelihood of PC firms be explained by SEC attention?*

To answer this, we conduct a set of mediation analyses to investigate the role of SEC attention on the CL receipt likelihood for PC firms. In general, we find that SEC attention is the causal link between PC and CL likelihood. According to these results, we can support the assumption of Heese et al. (2017) that actively targeting PC firms—which we refer to as the attention-grabbing effect of PC—is the reason for the increased CL likelihood of these firms.

We contribute to the literature in three ways. First and most importantly, we provide novel evidence on the impact of PCs on the SEC's decision-making process. In contrast to prior studies, we do not focus on one SEC division and observable outcomes, but on the entire SEC oversight process by observing monitoring activity of the entire authority. We find evidence that PC basically trigger SEC attention. Second, we provide insights into the SEC's inner workings of the financial oversight, showing that attention from PC contributes substantially to the likelihood of receiving a CL.

Third, we contribute to the political connections literature as we provide evidence on the effects of different characteristics of PC. Our paper proceeds as follows: Section 2 provides background information on SEC oversight activity as well as regulatory capture and depicts our research question and research design. Section 3 describes our data and shows descriptives. Section 4 presents our empirical findings regarding SEC attention and controls for robustness. Section 5 expands our study by a mediation analysis to provide evidence on the attention-grabbing effect of PC within financial oversight. Section 6 discusses our findings and concludes.

2 Background

2.1 SEC Oversight and Attention

This study aims to better understand the influence of PC on SEC oversight activity. For this purpose, we begin with the SEC's mission to "maintain fair, orderly, and efficient markets", which forms the basis of the various oversight activities (SEC, 2016). On this ground, a complex procedure of reviewing firms' filings made under the Securities Act of 1933 and the Securities Exchange Act of 1934, which are publicly available on SEC's EDGAR, is conducted. The DCF selectively reviews firms' filings "to monitor and enhance compliance with the applicable disclosure and accounting requirements" (SEC, 2019). In case there is a need for further information, clarification from the registrant, or mistakes detected, the DCF issues an initial CL which often leads to dialogue over several rounds. In addition, the SEC implemented a suspicion-based investigation and a penalty process (enforcement). The DoE conducts investigations into possible violations of the federal securities laws (SEC, 2007). A substantial violation results in an AAER issue to clarify the circumstances and civil law consequences.

In a further step, we establish a terminological basis since terms such as SEC attention, monitoring, and oversight are used in the literature in a way that is not entirely clear-cut. Blackburne (2014) and Nam & Thompson (2023) equal the term *regulatory oversight* to the DCF's filing review process. Lee (2021) denotes *oversight enforcement* as an entire process, from preliminary inquiry over an internal investigation to an enforcement action. Heese et al. (2017), Iselin et al. (2024) and Kolev et al. (2023) define *SEC oversight* as a range of activities, from advice and *monitoring* in the SEC's filing review process to enforcement actions. They limit monitoring to filing review by the DCF. By introducing SEC attention, Stice-Lawrence (2023) develops a theoretical construct that is

closely related to monitoring. This construct builds upon the theoretical concept of Internal Revenue Service (IRS) attention proposed by Bozanic et al. (2017) and is distinguished by its focus on the behavior of SEC employees (Stice-Lawrence, 2023).

Similar to the heterogeneity in the theoretical constructs, measures of *SEC oversight*, *monitoring*, and *attention* vary in prior research. Heese et al. (2017) and Nam & Thompson (2023) measure *SEC oversight* by 10-K related CLs issued by the DCF. Iselin et al. (2024) measure DCF monitoring in three ways with CLs as an ex-ante monitoring measure, a comprehensive listing of all conducted DCF filing reviews, and SEC-initiated EDGAR downloads. As they are aware that EDGAR downloads are not only conducted by the DCF, they designate it as a measure of *SEC attention*; however, they note that downloads are particularly driven by the DCF. Kolev et al. (2023) also employ the EDGAR downloads measure as an alternative proxy for SEC monitoring, which is, in turn, related to SEC filing review. Finally, Stice-Lawrence (2023), who doesn't limit it to DCF filing review, uses SEC's EDGAR downloads to measure *SEC attention*. We follow the nomenclature of Stice-Lawrence (2023) and refer to *SEC attention* as a theoretical construct of an attention-based monitoring activity that we measure with the eponymous proxy ($SEC\_Attention$). This means that a high level of SEC attention-based monitoring activities corresponds to a high level of *SEC attention*, and vice versa.

SEC oversight has been subject to various streams of research. Prior literature mainly deals with determinants and consequences of CL issues by the DCF or enforcement actions by the DoE. The DCF is required to review firms' filings at least once every three years by Section 408 of the Sarbanes-Oxley Act of 2002 (SOX). The criteria mentioned in Section 408 (b)—e.g., material restatements in firms' financial results, issuers with high stock-price volatility, and large market capitalization—are positively associated with the receipt of a CL (e.g., Cassell et al., 2013; Johnston & Petacchi, 2017). Also, other factors such as low profitability, high complexity, and weak governance increase a firm's

CL receipt likelihood, whereas Big 4 audited firms have a lower likelihood for a CL receipt (Cassell et al., 2013). In case of initial public offerings (IPOs), firms' Chief Financial Officer expertise is negatively associated with CL complexity (Ertimur & Nondorf, 2006). Blackburne (2014) assumes that the filing review activity is affected by the allocated budget of the SEC office that is conducting the review. In relation to enforcement, the distance of a firm's headquarter to the nearest SEC office seems to influence investigation decisions (Kedia & Rajgopal, 2011). Ege et al. (2019) provide evidence that unexpected resource constraints affect the quality of SEC oversight of periodic reports as CLs for periodic filings are of lower quality during periods of abnormally high transactional filings. Similarly, Gunny & Hermis (2020) find that the SEC is less likely to issue a 10-K CL when busy. An extensive literature review regarding the SEC filing review process is provided by Cunningham & Leidner (2022). With respect to SEC "monitoring" measured as SEC attention, Stice-Lawrence (2021) finds a decrease in times of internal reorganization and a lower likelihood for firms scattered over different regions and industries. Stice-Lawrence (2023) outlines that firms with names further down the alphabet get less attention by SEC employees.

Proceeding from SEC attention, we derive our explanatory concept of attention-grabbing. Originally, this concept comes from the literature that deals with the attention of investors (e.g., Barber & Odean, 2007; Yuan, 2015). Its underlying idea is that when a decision has to be made between different alternatives, for example, buying or selling a stock, those options that attract more attention are more likely to be chosen (e.g., news or extreme returns could be drivers of attention in specific stocks) (Barber & Odean, 2007). Heese et al. (2017) suggest a similar mechanism as the most probable explanation for why PC firms are more likely to receive a CL. They assume that political connectedness is a heuristic for the SEC's DCF to actively target these firms in the CL review. A potential explanation is that the DCF views firms' PC as a distinct risk factor (Heese et al., 2017).

Accordingly, this explains how PC can attract the attention of the SEC. Consequently, we denote this explanation as the attention-grabbing effect of PC.

2.2 Regulatory Capture and Political Connections

Dependencies between interest groups, congressional committees, and bureaucratic agencies were systematically shown by Freeman (1965) and Adams (1982). Interactions take place in the flows of information and influence in a triangle relationship denoted as "iron triangle". Bureaucratic agencies like the SEC are dependent on congressional committees resulting from funding, political support, and oversight (Congressional Dominance Theory, Weingast (1984); Weingast & Moran (1983); McCubbins (1999)). The Congress receives electoral support from interest groups, e.g., in the form of contributions to the re-elections of politicians who favor special legislation, in order to reduce the probability and the size of the wealth transfers generated by regulatory enforcement (Political Cost Hypothesis, Watts & Zimmerman (1978)). A correlation between political spending and reduced regulatory enforcement is observable as firms use political contributions as a signal to fight against agencies' decisions (Gordon & Hafer, 2005).

Following the triangle relationship—as politicians seek interest groups' support with votes or money—these groups have extraordinary power on agencies creating a demand for special regulation (Regulatory Capture Theory, Stigler (1971); Peltzman (1976)). Interest groups support politicians with political contributions (Grossman & Helpman, 1994). The exchange of political support by interest groups and wealth transfer by regulation agencies often takes place in case of long-term relationships between firms and politicians (Snyder, 1990). As a result, interest groups could trigger special treatment from agencies, like low oversight, if they support the Congress. Firms can be counted to interest groups in these relationships.

Literature on firms' PCs is widely spread. Nonetheless, definitions of politically connected firms differ. A common approach was provided by Faccio (2006) who defines that a firm is connected with a politician if one of the firm's large shareholders or top officers is a member of parliament, a minister, or the head of state, or is closely related to a top official. This is an example of a directly nameable relationship measure. Another common way is measuring firms' political expenditures, respectively, contributions like PAC contributions or lobbying expenditures. Firms can establish PCs with the intention to gain benefits in accounting topics, although prior literature findings are not conclusive about the real benefits. Among others, PC firms can profit from preferential access to lenders and lower taxes (Faccio, 2006), low debt and equity costs (Boubakri et al., 2012), and favorable regulations (Goldman et al., 2009). Extensive surveys on the literature on accounting-related PCs are provided by Habib et al. (2018) and Preuss & Königsgruber (2021).

2.3 Research Questions

Following the Congressional Dominance Theory, the SEC can be subject to political influence by the Congress. We can point out three critical mechanisms of political control over SEC activity. First, budget setting (Weingast, 1984) has a direct impact on SEC activity as monitoring decisions are always made under limited resources. Politicians can use the budget to control the SEC acts in line with their interests. Second, congressional oversight (e.g., Weingast, 1984; Weingast & Moran, 1983) can be costly for the SEC in case the Congress starts an investigation. Last, the Senate consents to the United States (U.S.) President's appointment of the SEC commissioners. On the one hand, these commissioners have an outstanding role in the SEC oversight process as they—beside others—can vote on DoE's enforcement decisions. On the other hand, commissioners often have a

political career history or future, so they intend to maximize their career opportunities by acting in line with congressional interests.

The firms—represented by interest groups in the "iron triangle" relation—might seek rents in SEC oversight. A lower level of filing review as well as lower investigation likelihood and, if prosecuted, lower penalties are beneficial to firms by intuition. Thus, firms intend to use PCs such as lobbying or contributions to congressional candidates to put pressure on the SEC. Prior literature indicates that PCs are often long-termed (e.g., Snyder, 1992).

First evidence suggestive of SEC capture has been provided by Yu & Yu (2011) who find that lobbying firms that are subject to security class action lawsuits have longer class action periods concluding that lobbying delays fraud detection. Similarly, Heese (2019) finds that firms that have political influence—operationalized as large employers—experience fewer enforcement actions by the SEC. Correia (2014) applies this idea to the SEC's choice of enforcement targets. These studies report a negative relation between PC and enforcement outcomes by the DoE. Firms spending in PACs or lobbying activities are less likely to be involved in enforcement actions and face lower penalties if being prosecuted. Correia (2014) considers this finding supportive to the idea that firms use long-term political contributions in exchange for regulatory favors. Furthermore, in a German setting, Heese (2022) finds a negative association between industry employment of senior regulators of the Financial Reporting Enforcement Panel and enforcement actions, which is also indicative of regulatory capture.

Heese et al. (2017) argue that interpreting this result as generalized SEC capture is complicated, as SEC oversight includes more than enforcement actions. They extend the oversight measure to CL outcomes and find a positive relation between PC and the CLs issued by the DCF. Their main conclusion is that SEC capture is not indicated in the filing review process, and prior findings

concluding SEC capture from enforcement investigations seem to be overstated. A potential explanation for their findings contrary to SEC capture provided by Heese et al. (2017) is that political connectedness is a risk indicator that leads the DCF to target PC firms in the review process actively. In line with prior literature, Heese et al. (2017) assume that some SEC officials are at least nominally aware of firms' PCs. Khokhar & Shahriari (2021) find that politically connected firms are more likely to be criminally charged by the DoE and imposed fines are higher if prosecuted. They conclude that SEC enforcement is not captured by firms' PCs. These studies have in common to measure of SEC activities by observing outcomes like AAERs or CL. Investigating the influence of political connectedness on SEC oversight by measuring outcomes seems to be difficult for different reasons.

First, we have no indication that criteria determining initial decisions like reviewing filings or investigating potential fraud are similar to those leading to final decisions like CL issues or AAERs. For instance, Johnston & Petacchi (2017) conjecture that SOX Section 408 (b) criteria increase the likelihood of a firm to be reviewed as the CL likelihood increases. From our perspective, in this context the link between review likelihood and CL receipt likelihood must be viewed in a more nuanced way. Nevertheless, the CL receipt likelihood is dependent on the review likelihood. An interesting approach is provided by Gunny & Hermis (2020) who estimate both the review and the CL issue likelihood in a bivariate probit model. Lee (2021) also addresses this problem in context with PC by dividing the enforcement process into investigation and enforcement decisions. While investigation decisions are made by staff, enforcement decisions are authorized by commissioners. Thus, PCs could function in various ways.

Second, congressional control like budget setting or oversight might affect SEC activity differently in various stages of oversight. For instance, constrained resources could have a potentially

more decisive effect on review decisions, but not on CL issue decisions. Third, SEC officials aware of firms' PCs might influence AAER or CL issue decisions, but not the usual review business. Fourth, the effect of PC might be unequally distributed over the SEC as politically appointed SEC commissioners vote on DoE's enforcement issue decisions, but not on CL issues (which appear much more often). Last, observing outcomes like AAERs or CL typically means observing the behavior of one single division. Nevertheless, research often draws contestable conclusions about the entire SEC ignoring that the different divisions are organized semi-autonomous (Katz, 2010). In fact, the indistinct results of prior research regarding SEC capture (e.g., Correia, 2014; Heese et al., 2017; Khokhar & Shahriari, 2021) might result from various underlying observed outcomes from different divisions.

To better understand actual SEC activity cross-divisional and independent of observable outcomes as proxies for final decisions, a measure of SEC employees' behavior is used in this research. Stice-Lawrence (2023) suggests that the SEC is opaque regarding its own operations to prevent firms from systematically capturing the SEC's regulatory process. Taking advantage of the circumstance that the SEC and their employees were unaware that their EDGAR downloads were observable and identifiable as reported by Stice-Lawrence (2023), we follow her suggestion in measuring SEC attention. With this approach, all downloads of firm-specific filings from EDGAR by an Internet Protocol (IP) address linked to the SEC are tracked. Compared to previous research, the concept of SEC attention makes it possible to capture the internal working practices of the SEC rank-and-file staff (Stice-Lawrence, 2023).

This measure has some substantial advantages compared to CL or AAER. First, we use a method to observe not just issues, but the entire review process, especially including initial decisions that do not lead to an outcome. Second, we tap SEC activity at every stage of the oversight process,

no matter if it belongs to the DCF or the DoE, as firm disclosures need to be accessed even during enforcement investigations and decisions (Defond et al., 2018). Prior research provides evidence that SEC downloads spike around CL issues and the beginning of enforcement investigations (Stice-Lawrence, 2023) which confirms that the SEC uses its own database EDGAR for filing review and enforcement investigations. Thus, this measure seems to be appropriate to cover the overall monitoring activity in the SEC oversight process. We develop the following research question from the considerations above:

RQ1: *How is SEC attention affected by firms' political connections?*

We consider two possible contrary impacts following prior literature. First, SEC attention could be negatively affected by firms' PCs. This consideration is in line with the idea of SEC capture (Correia, 2014). In the case of systematically lower SEC attention for PC firms, SEC employees must be aware of PC and thus actively omit PC firms in their oversight process. Second, SEC attention could be positively affected by firms' PCs. Heese et al. (2017) support the second conjecture, assuming the DCF actively targets PC firms in their filing review and conducts more substantive reviews than for non-PC firms, as PC proxies for financial reporting risk characteristics. The suspected underlying mechanism is as follows: PCs represent a risk factor for firms' financial reporting. These risks attract the attention of SEC staff and thus lead to an increased probability of receiving a CL. Nevertheless, this remained an assumption, as Heese et al. (2017) were not able to observe actual SEC rank-and-file employees review activity, but only base their assumption on the observed CL outcome. Our measure for SEC attention is able to fill in the gap by providing insights in the underlying mechanism. Thus, we can gain deeper understanding into a central component of SEC

oversight in a novel way by directly observing the behavior of employees between the triggering element (PC) and the outcome (CL). A more in-depth insight into these processes is, therefore, part of the current scientific discourse on the internal behavior of the SEC (Bonsall et al., 2024; Stice-Lawrence, 2023). This leads to our second research question:

RQ2: *To which extent can the increased CL receipt likelihood of PC firms be explained by SEC attention?*

2.4 Research Design

To investigate the relation between PC firms and SEC attention, we use the following fixed effects regression model:

$$SEC\_Attention_{i,t+1} = PC_{i,t} + Firm\_Level\_Controls_{i,t} + Year\_FE + Industry\_FE + e_{i,t}$$

The subscript i represents the individual firm, whereas t stands for the year. $SEC\_Attention_{i,t+1}$ is the natural logarithm of 1 + the total number of SEC-initiated firm-specific EDGAR downloads per calendar year. In line with prior literature (Correia, 2014; Yu & Yu, 2011; Heese et al., 2017), we measure PC either by firms' lobbying expenditures (Log_Lobby) or by PAC contributions (Log_PAC). Since all PC variables have high skewness, we use all continuous PC variables in logarithmic form. We also measure PC in the long-term view by calculating the sum of lobbying expenses over the last three years (t_{-1} to t_{-3}) as Log_PI_Lobby. For the PAC contributions, we calculate the total amount of PAC contributions over the last five years (t_{-1} to t_{-5}) as Log_PI_PAC.

These measures are in line with the long-term view of political expenditure, according to Snyder (1992).

In addition, we expand both long-term measures to the extent to which the PC target the SEC itself. We consider in the variable $Log\_PI\_Lobby\_linked\_to\_SEC$ just long-term lobbying expenditures that went through a registered lobbyist who is linked to the SEC. To supplement, we use the two indicator variables $PI\_Lobbyist\_linked\_to\_SEC$, a dummy for $Log\_PI\_Lobby\_linked\_to\_SEC$, and PI_Lobby_SEC, a dummy for direct lobbying the SEC in long-term.
We measure $Log\_PI\_Related$, our long-term PAC variable directly related to the SEC, only including PAC contributions made to politicians serving in a SEC oversight committee. We follow Correia (2014) in all presented variable definitions for PC.

Additionally, we include a set of control variables in our regression model. Thereby, we follow Heese et al. (2017) and Cassell et al. (2013), who refer to the various factors used by the SEC under SOX Section 408 (b), to identify companies for filing reviews, and Correia (2014) for supplementary control variables. We use the market-related measure Log_Market_Cap to control for the firm size, which is also a review criterion under SOX Section 408 (b). To control for emerging companies with high growth expectations, but more immature accounting and governance processes (higher risks), we use $Market\_to\_Book$. In line with Heese et al. (2017), we control for financial reporting quality using $Low\_Market\_to\_Book$, $Loss$, $Zscore$, and Age. As additional control variables, we use $Change\_Sales$ and $Leverage$, for complexity and risk, respectively, which may attract the SEC's attention. Furthermore, we use the distance to the next SEC office ($Log\_SEC\_Office\_Dist$) as a control variable to account for potential geographical constraints (Kedia & Rajgopal, 2011). We winsorize all continuous variables at the 1th and 99th percentile.

Additionally, we add aggregated SEC downloads to all specifications to reduce possible noise from automated downloads (Stice-Lawrence, 2023). We include year and industry fixed effects (4-digit SIC) in all specifications to control for time and industry invariant factors. By using year fixed effects, we address the increase in EDGAR downloads over time in an attempt to reduce noise in the measurement of SEC attention. We include industry fixed effects to control for correlated omitted variables which we assume to be inherent to our study, in particular due to data availability reasons. It follows that our study focuses on the effects of PCs on the within-industry variation of SEC attention. A drawback associated with the use of high-dimensional fixed effects, such as firm fixed effects, however, is that they may induce measurement error (Jennings et al., 2024). We address this by reviewing all of our main specifications using deHaan's (2021) approach (see Appendix III.B).

In our robustness checks, we try to address endogeneitiy concerns, e.g., through omitted variables and measurement errors. In particular, it can be argued that there are other influencing factors that we either cannot measure or for which we have no data, which could bias our inference. In the first set of additional tests, we apply an instrumental variable approach. Our instruments for the respective lobbying and PAC expenditures (only for the non-indicator variables) are the average of the lobbying and PAC expenditures of the other firms in the same 4-digit SIC industry; and the average of the lobbying and PAC expenditures in the same size decile (Correia, 2014). The rationale in using industry and size-average PC as an instrument is based on the assumption that they are likely to affect the PC of firms through peer effects, whereas there is no direct link to SEC attention (Grier et al., 1994; Kim, 2008; Heese et al., 2017). While these should not be directly related to SEC attention, they could have an influence on firms' PCs. In the second set, we use entropy balancing

to mitigate concerns that there are systematic differences between PC and non-PC firms, i.e., the treatment PC is not randomly assigned (Hainmueller, 2012; McMullin & Schonberger, 2022).

To answer the second research question, we use path analysis or, since our path is rather simple, a mediation model. Mediation analysis is an approach to find out why a variable X influences a variable Y, i.e., to investigate the mechanism of the underlying relationship (Jollineau & Bowen, 2023; Hayes, 2022). Applied to our study, this approach allows us to find out whether PCs influence financial oversight directly (PC $\rightarrow$ Pr(CL)), indirectly through the mediator SEC attention (PC $\rightarrow$ SEC attention $\rightarrow$ Pr(CL)), both directly and indirectly. Technically, we implement this with structural equation modeling (SEM) (Bhattacharya et al., 2012; Mayew et al., 2020; Bonsall et al., 2024) and, for validation reasons, with the—outdated—casual step approach according to Baron & Kenny (1986).

3 Data

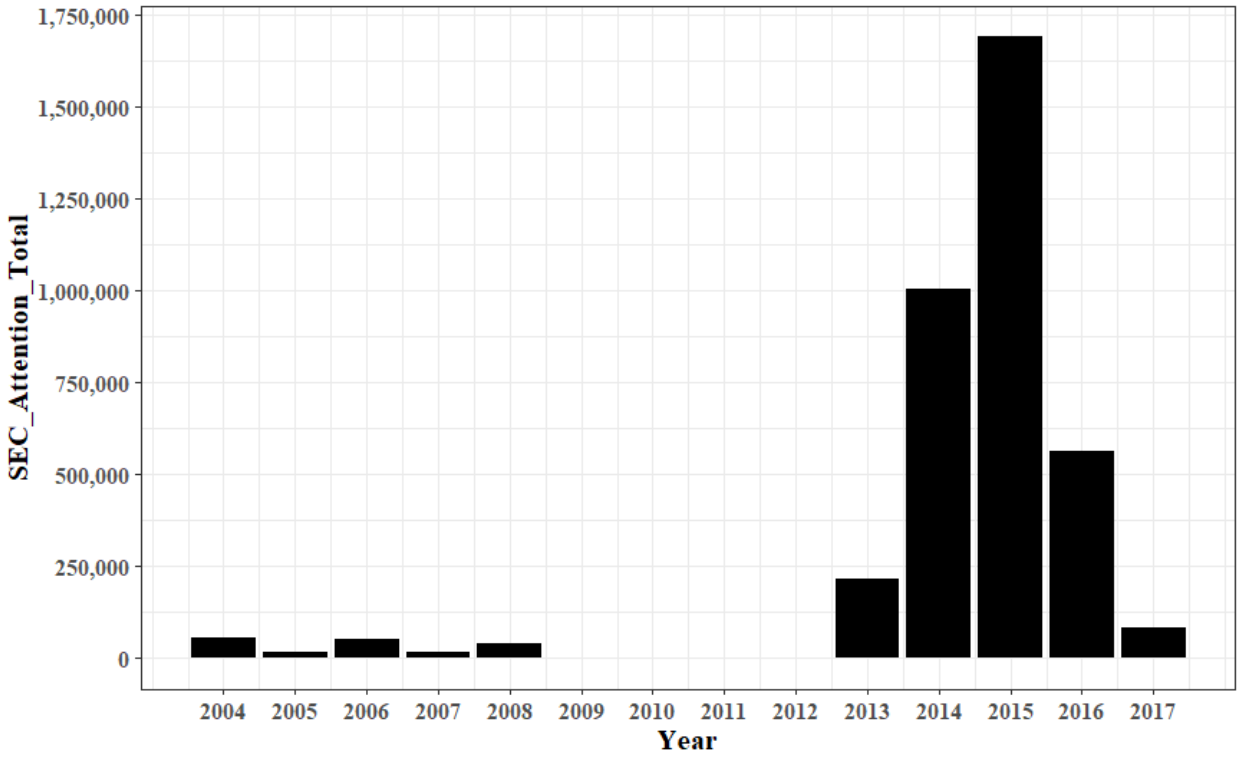
3.1 SEC Attention

3.1.1 Measure

We measure SEC attention by the natural logarithm of 1 plus the SEC initiated firm-specific EDGAR downloads per calendar year. Thereby we get the EDGAR downloads from the EDGAR Log File Data Set (log files), which logs all user activity in the EDGAR database. This database, provided by the SEC itself, contains all forms and filings of registrants required by law. Since the log files record the IP address for each individual access, along with other meta-information, we can analyze the user activity of the various stakeholders of financial reporting (e.g., Bernard et al., 2020; Bozanic et al.,

2017; Drake et al., 2015, 2016, 2017). However, to provide privacy for individual users, the last of the four octets was encoded with a combination of three unique letters (e.g., 123.456.789.abc). This is of no consequence for our analysis, as the SEC itself occupies one large block of IP addresses, so the encoded IP address octet is not needed to assign an IP address to the SEC (Stice-Lawrence, 2023). Thus, the EDGAR accesses of the SEC, or more precisely the EDGAR downloads of the individual SEC employees, represent a straightforward measure for disclosure monitoring activities.

Figure III.1: Total SEC Attention per Year



Similar measures based on EDGAR accesses have been applied in the literature for other stakeholders. For example, Drake et al. (2017) and Loughran & McDonald (2017) examined the access behavior of investors, Bernard et al. (2020) studied the accesses among rivals, Drake et al. (2019) that of auditors, and Bozanic et al. (2017) and Fox & Wilson (2023) analyzed at that of the

IRS. Our measure is based on the measures of Stice-Lawrence (2021, 2023), Iselin et al. (2024), and Kolev et al. (2023), who investigated the determinants of SEC attention.

In total, we observe an unadjusted number of 32,172,990 accesses by the SEC to firm filings in the raw data. As can already be seen in Figure III.1, there are no SEC downloads observable in EDGAR for the years 2009–2012. We remove these years from the analysis as described in the sample selection. Figure III.1 also shows the high volatility of EDGAR accesses.

3.1.2 Potential Noise and Bias

In its nature, our measurement for SEC attention is subject to several potential noises and biases. First, it is important to note that there are other monitoring activities (e.g., site visits or firms' websites), and—most importantly—there is an internal EDGAR for the SEC itself. However, the reliance on attention data based on external EDGAR should not lead to any problematic bias. In particular, internal EDGAR also includes operations performed by SEC staff (e.g., CL conversations and applications for confidential treatment) that are not of interest in our study or would tend to bias our measure of SEC attention. Inherently, these types of activities are compulsory regular operations and, thus, not in the interest of our study. In addition, SEC staff seemed to be generally unaware that their external EDGAR accesses were being logged (Stice-Lawrence, 2023).

Second, as already mentioned above and as Figure III.1 shows, SEC downloads are subject to a high degree of volatility and, in particular, an increasing trend over time. Presumably, parts of this increase could be due to automated downloads by the SEC (Stice-Lawrence, 2021). In addition, it is well known that the SEC has adopted a data-driven approach under its Accounting Quality Model, often referred to as "RoboCop" (Brown et al., 2023; Stice-Lawrence, 2021; Lewis, 2012). It is possible, therefore, that our measurement for SEC attention captures downloads that have

resulted from this type of data-driven approach. According to Stice-Lawrence (2021), two possible consequences follow from this. First, mass downloads could introduce noise into the SEC attention measurement. We address this with the inclusion of time fixed effects and control for total SEC downloads (Stice-Lawrence, 2023). Second, mass downloads may also reveal SEC preferences for certain firms and therefore are of genuine interest for our study.

Third, there may be reasons for downloads that are not related to official SEC operations (e.g., for private investment activities of SEC staff). While this could be a reason for noise in the measurement, it should not systematically bias our results since these downloads are not correlated with actual SEC activities (Stice-Lawrence, 2023). Moreover, any reviewing of SEC staff on EDGAR may lead to the discovery of conspicuous firms. According to anecdotal evidence, this might be the case. Therefore, it seems reasonable to include such downloads in the measurement of SEC attention (Stice-Lawrence, 2021, 2023). The three listed aspects of noise and bias have the property that they are essentially additive in nature, thus they tend to be less problematic econometrically (Stice-Lawrence, 2023; Wooldridge, 2020, pp. 308–309).

3.2 Political Connections

Following Correia (2014) and Heese et al. (2017), we use either firms' PAC contributions as well as lobbying expenditures for PC measures. This approach allows us a kind of comparability to prior research. A PAC is a special organization that raises and pools contributions to donate campaigns pro or contra congressional or presidential candidates. Although a firm can be connected to a PAC and can cover its operating costs, contributions come from executives and shareholders. Nevertheless, firms' top executives typically decide about PAC contributions (Correia, 2014) and this measure is a common proxy for PC (e.g., Jeffrey Milyo et al., 2000; Farber et al., 2007). Following Correia (2014),

we obtain data on PAC contributions from the Federal Election Commission's website.[4] We further obtain data on Congressional Committee assignments from Charles Stewart III's congressional data page.[5]

Firms lobby congressmen and federal agencies like the SEC with large amounts of money to benefit from regulatory actions. We obtain data on firms' lobbying expenditures from the Center for Responsive Politics (CRP)[6] that compiled lobbying data from lobbying disclosure reports filed with the Senate's Office of Public Records (SOPR). In contrast to PAC contributions, we cannot track lobbying expenses to specific congressmen or congressional candidates. Since we have a particular interest in firms' connections to the SEC, we either measure lobbying expenditures made directly to the SEC or those made by a lobbying firm that has a link to the SEC. Following Correia (2014), we define a lobbying firm having a link to the SEC if they employ a lobbyist that has worked for the SEC previously or employed a lobbyist that is working for the SEC afterward. We obtain these Revolving Door data on SEC employees also from the CRP.

Table III.1: Summary Statistics—SEC_Attention (Downloads) and Political Connections

	Count	Mean	Median	Std. Dev.	Min	Max
SEC_Attention (Downloads)	14,107	257	72	449	1	4,172
Lobby	3,295	2,079,385	400,000	4,703,155	5,000	59,941,000
PI_Lobby	3,235	5,755,347	1,000,000	13,135,453	6,500	156,787,100
PI_Lobby_linked_to_SEC	126	3,327,663	261,750	14,415,969	7,000	103,840,000
PAC	2,243	125,697	44,500	216,501	−5,000	1,568,664
PI_PAC	2,079	313,456	76,624	651,558	−1,000	5,176,300
PI_Related	1,912	145,699	38,704	284,414	−1,000	2,233,775
Total Firm-Year Observations:	15,114					

Table III.1 contains descriptive statistics for SEC_Attention and PC variables in absolute terms. See Appendix III.A for variable descriptions.

[4] http://www.fec.gov
[5] https://web.mit.edu/17.251/www/data_page.html
[6] http://wwww.opensecrets.org

We report descriptive statistics for the PC in U.S.-$ and $SEC\_Attention$ $(Downloads)$ in Table III.1, excluding firm-years where no PC were available. The amounts are comparable in magnitude to the literature (Correia, 2014). Notable here are the in some cases substantial amounts for lobbying, e.g., for long-term lobbying PI_Lobby up to U.S.-$ 156,787,100. PAC contributions, on the other hand, are, as expected, substantially smaller in value. This is not surprising given that lobbying expenditures are uncapped, unlike PAC contributions. Moreover, the measures for PC are very skewed; thus, we use the variables in logarithmic form in our analysis.

3.3 Sample

Table III.2 provides a summary of our sample selection procedure. We obtain firm financials from EIKON. Our sample spans from 2004–2017, since we cannot obtain EDGAR log files earlier than 2004 and later than 2017. Following Heese et al. (2017), we exclude foreign firms as they are not allowed to create a PAC and, thus, are unable to influence electoral outcomes in the U.S.. We also exclude firms whose fiscal years do not end on December, 31. These exclusions are necessary because we compute $SEC\_Attention$ on a calendar year basis, and we are concerned that this could lead to distortions in our final sample with regard to the temporal structure of the SEC attention. In line with Stice-Lawrence (2023), we gap the sample period for the intervals in which there were no EDGAR accesses from the SEC. These gaps occurred at certain periods when SEC internal EDGAR traffic was routed through internal servers, causing them to be missed out of the EDGAR Log File Data Set. Therefore, we exclude the years 2009–2012 from our investigation. For the PAC and lobbying data, due to the lack of a dedicated firm identifier, we use a semi-automated approach based on the Jaro-Winkler similarity to link the PAC and lobbying information to the EIKON data

(Sariyar & Borg, 2010). Similarly, we add the data on Congressional Committee assignments to the politicians supported by the PACs.

Table III.2: Sample Selection

	Firm-years	Firms
Full EIKON sample (2004–2017)	116,074	8,291
(Cross-listed firms)	(4,088)	(292)
(Fiscal year end not 31.12)	(61,435)	(2,687)
(Missing data)	(29,751)	(2,782)
(2009–2012)	(5,686)	(16)
Final Sample	**15,114**	**2,514**

Table III.2 describes the sample selection process.

The final sample consists of a panel of 15,114 firm-year observations, corresponding to 2,514 distinct firms. These summate to 3,726,518 EDGAR accesses by the SEC.

3.4 Descriptive Statistics

Table III.3 reports the descriptive statistics for the variables included in our study. $SEC\_Attention$ is consistent in magnitude with the reported figures from Stice-Lawrence (2021). We can observe $SEC\_Attention$ for 93 % of the firm-years (see Table III.1). This is in line with our expectations, as the SEC itself is one of the primary EDGAR users and accesses files on EDGAR in high volumes. The variables for lobbying and PAC contributions are economically reasonable and correspond to the logarithmic form of the variables presented in the data section. In only 0.5 % of firm-years, there is a connection to the SEC through a lobbyist who works or has worked for the SEC in the past three years ($PI\_Lobbyisit\_linked\_to\_SEC$).

In contrast, for 1.3 % of the firm-years, there was direct lobbying to the SEC in the past three years (PI_Lobby_SEC). In 1.1 % of the firm-years, the Department of Justice (DoJ) was lobbied.

Accounting issues were lobbied in 0.2 % of the firm-years and finance issues in 2.4 percent. The magnitude and distribution of the control variables are in line with expectations from the literature.

Table III.3: Summary Statistics

	Mean	Median	Std. Dev.	Min	Max
SEC_Attention	3.932	4.007	2.058	0.000	8.336
Log_Lobby	2.838	0.000	5.437	0.000	16.500
Log_PI_Lobby	2.970	0.000	5.759	0.000	17.609
Log_PI_Lobby_linked_to_SEC	0.053	0.000	0.765	0.000	11.695
PI_Lobbyist_linked_to_SEC	0.005	0.000	0.073	0.000	1.000
PI_Lobby_SEC	0.012	0.000	0.108	0.000	1.000
Log_PAC	1.561	0.000	3.801	0.000	13.190
Log_PI_PAC	1.532	0.000	3.897	0.000	14.030
Log_PI_Related	1.328	0.000	3.543	0.000	13.262
ACC_Dummy	0.002	0.000	0.049	0.000	1.000
FIN_Dummy	0.024	0.000	0.152	0.000	1.000
DoJ_Dummy	0.011	0.000	0.105	0.000	1.000
CL	0.193	0.000	0.395	0.000	1.000
Log_Market_Cap	13.443	13.568	2.444	6.735	18.810
Market_to_Book	3.076	2.289	10.784	−96.117	62.195
Low_Market_to_Book	0.185	0.000	0.388	0.000	1.000
Loss	0.367	0.000	0.482	0.000	1.000
Zscore	1.534	2.559	24.055	−224.233	118.797
Leverage	0.216	0.170	0.239	0.000	1.557
Change_Sales	0.163	0.032	0.704	−0.966	6.891
Log_SEC_Office_Dist	4.801	5.317	2.213	0.000	8.535
Age	21.356	20.000	9.537	2.000	37.000
Observations	15,114				

Table III.3 describes the descriptive statistics of all variables. See Appendix III.A for variable descriptions.

As reported in Table III.4, Panel A, all the variables for PC correlate with each other with positive significance. Moreover, all variables in our study for PC, except $Log\_PI\_Lobby\_linked\_to\_SEC$ and $PI\_Lobbyist\_linked\_to\_SEC$, also correlate significantly positive with $SEC\_Attention$. This might already be a preliminary indicator for explaining that PC might be positively related to SEC attention since the SEC is aware of PC as a risk factor and therefore targets such firms.

Table III.4: Correlation Tables

Panel A: Political Connections

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1) SEC_Attention	1.000									
(2) CL	0.168***	1.000								
(3) Log_Lobby	0.113***	0.132***	1.000							
(4) Log_PI_Lobby	0.114***	0.128***	0.931***	1.000						
(5) Log_PI_Lobby_linked_to_SEC	−0.002	−0.001	0.148***	0.151***	1.000					
(6) PI_Lobbyist_linked_to_SEC	−0.002	−0.004	0.157***	0.161***	0.948***	1.000				
(7) PI_Lobby_SEC	0.081***	0.067***	0.238***	0.243***	0.072***	0.076***	1.000			
(8) Log_PAC	0.055***	0.101***	0.569***	0.563***	0.151***	0.164***	0.231***	1.000		
(9) Log_PI_PAC	0.055***	0.099***	0.561***	0.560***	0.152***	0.165***	0.240***	0.969***	1.000	
(10) Log_PI_Related	0.057***	0.101***	0.550***	0.549***	0.156***	0.171***	0.245***	0.941***	0.973***	1.000

Panel B: Control Variables

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1) SEC_Attention	1.000									
(2) Log_Market_Cap	0.084***	1.000								
(3) Market_to_Book	−0.002	0.094***	1.000							
(4) Low_Market_to_Book	0.005	−0.351***	−0.386***	1.000						
(5) Loss	0.085***	−0.482***	−0.025***	0.247***	1.000					
(6) Zscore	−0.021***	0.273***	0.179***	−0.331***	−0.181***	1.000				
(7) Leverage	0.053***	0.121***	−0.092***	0.229***	−0.018**	−0.172***	1.000			
(8) Change_Sales	0.014*	−0.052***	0.018**	−0.029***	0.059***	0.009	−0.005	1.000		
(9) Log_SEC_Office_Dist	−0.120***	0.099***	−0.024***	0.078***	−0.099***	−0.012	0.004	−0.028***	1.000	
(10) Age	−0.119***	0.365***	−0.007	−0.135***	−0.349***	0.034***	0.038***	−0.109***	0.014*	1.000

Panel C: PC and Control Variables

	Log_Lobby	Log_PI_Lobby	Log_PI_Lobby_l_t_SEC	Log_PAC	Log_PI_PAC	Log_PI_Related
Log_Market_Cap	0.445^{***}	0.440^{***}	0.099^{***}	0.410^{***}	0.406^{***}	0.403^{***}
Market_to_Book	0.017^{**}	0.014^{*}	0.000	0.022^{***}	0.019^{**}	0.019^{**}
Low_Market_to_Book	-0.096^{***}	-0.096^{***}	-0.031^{***}	-0.096^{***}	-0.095^{***}	-0.091^{***}
Loss	-0.193^{***}	-0.194^{***}	-0.049^{***}	-0.208^{***}	-0.202^{***}	-0.194^{***}
Zscore	0.042^{***}	0.037^{***}	0.005	0.025^{***}	0.022^{***}	0.021^{**}
Leverage	0.102^{***}	0.102^{***}	-0.006	0.094^{***}	0.090^{***}	0.085^{***}
Change_Sales	-0.052^{***}	-0.057^{***}	-0.008	-0.054^{***}	-0.055^{***}	-0.053^{***}
Log_SEC_Office_Dist	-0.040^{***}	-0.034^{***}	-0.030^{***}	-0.018^{**}	-0.013	-0.014^{*}
Age	0.329^{***}	0.344^{***}	0.095^{***}	0.393^{***}	0.401^{***}	0.388^{***}

Table III.4 presents correlations. Panel A presents the Pearson correlations between the PC variables and SEC_Attention and between the PC variables themselves. Panel B presents the Pearson correlations between the control variables and SEC_Attention and between the control variables themselves. Panel C presents the Pearson correlations between the PC variables and the control variables. See Appendix III.A for variable descriptions.

$^{*}\ p < 0.10$, $^{**}\ p < 0.05$, $^{***}\ p < 0.01$

Figure III.2: Weekly SEC Attention around Comment Letter Receipt

Figure III.2.1: Weekly SEC Attention around Comment Letter Receipt (Lobby)

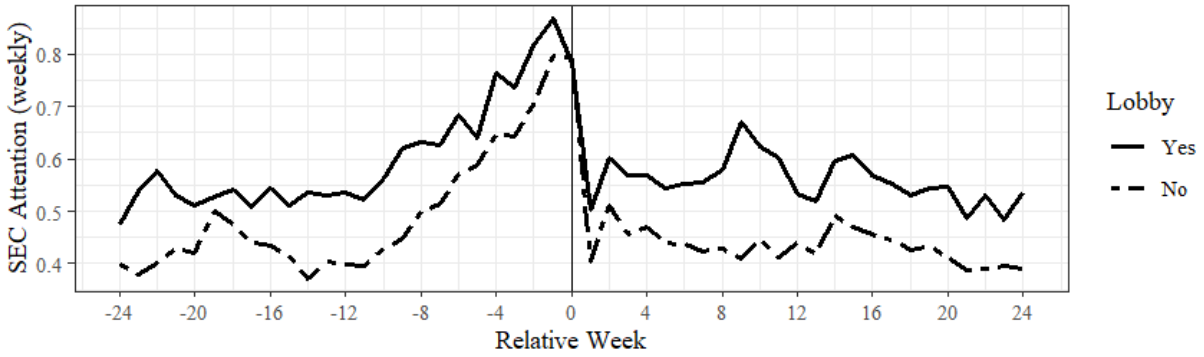


Figure III.2.2: Weekly SEC Attention around Comment Letter Receipt (PAC)

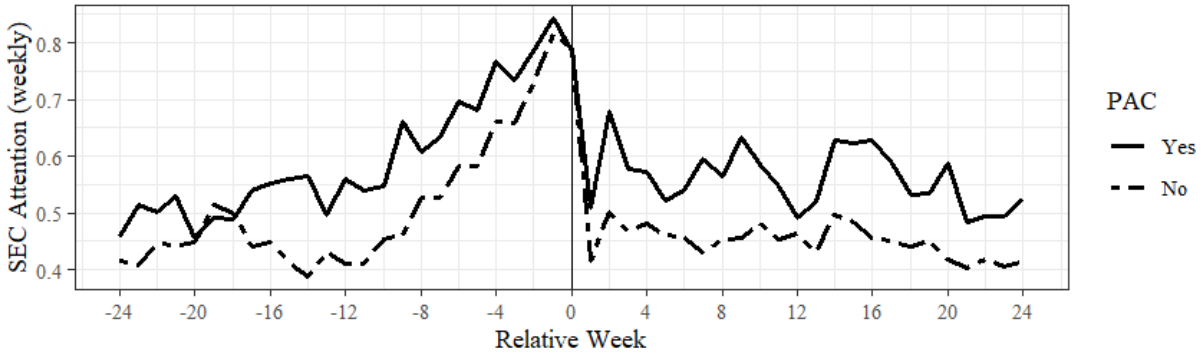


Figure III.2 shows a validation of our SEC attention measure. The line graphs show the weekly SEC attention (aggregated and logarithmized) for the 24 weeks before and after a CL receipt. In contrast to the line graphs in Stice-Lawrence (2023), we have split our observations of SEC attention by whether the observed firms had lobby expenditures (Figure III.2.1) or PAC contributions (Figure III.2.2) in the previous year. The four graphs in Figure III.2.1 and III.2.2 reveal that SEC attention peaks shortly before the receipt of a CL. The increase in SEC attention starts around 9-12 weeks before the CL receipt and ends with a sharp drop after the letter is received. These descriptive results are in line with Stice-Lawrence (2023), who additionally reports a similar pattern for enforcement investigations and restatements. The first insight that can be derived from this, at least graphically, is that the use of the public EDGAR plays a certain role for SEC staff in the

financial oversight process. Another noticeable observation is that the firms with PC (i.e., that lobbied or made PAC contributions in the previous year) receive consistently more SEC attention than those that are not politically connected.

The correlations of the control variables with $SEC\_Attention$ are in line with expectations, as are the correlations between the control variables (Table III.4, Panel B). Table III.4, Panel C shows the correlations between the variables for PC and the control variables. Again, no conspicuous patterns emerge, as all variables show the correlations as expected.

4 Political Connections and SEC Attention

4.1 Main Findings

We present our main results for the relationship between lobbying and SEC attention in Table III.5, estimating the equation we introduced in our research design. We examine different lobbying variables for the effect of PC on SEC attention in each of the five different specifications (Model 1 to 5). All five specifications show a positive and significant coefficient for our lobbying proxies. Model 1, our baseline model, examines the effect of Log_Lobby—reflecting lobbying expenditures in the year prior to the attention-based monitoring activity—on $SEC\_Attention$. This finding can also be illustrated as follows: An one percent change in lobbying expenditures (corresponding to a change of U.S.-$10,794 related to the mean lobbying expenditures) increases the number of SEC's EDGAR downloads per year by approx. 7.2.

For Model 2, which measures PC as long-term lobbying expenditures (Log_PI_Lobby), and for Model 3, which considers long-term lobbying expenditures in which the lobbyist has ties to the SEC ($PI\_Lobby\_linked\_to\_SEC$), we also obtain positive and significant results. The rationale in using

long-term measures is that PCs usually have an effect over a longer period of time; thus, according to the literature, they correspond to a measure for a more effective long-term strategy regarding political spending (Correia, 2014; Heese et al., 2017; Snyder, 1992). We find the same effect for the corresponding indicator variable $PI\_Lobbyist\_linked\_to\_SEC$ in Model 4. Similarly, in Model 5 we find that lobbying the SEC directly (PI_Lobby_SEC) has a significant and positive effect on $SEC\_Attention$.

All these results suggest that the SEC in particular monitors those firms that have PCs and thus follow the hypothesis of Heese et al. (2017), who interpret PC as a risk factor. This also applies, in particular, to cases in which the PC to the SEC is through former or current SEC employees. Even direct SEC lobbying suggests that PC is a risk factor. Consequently, in our analyses we cannot find any evidence of SEC capture as pointed out by the study of Correia (2014). The control variables are as expected for all specifications and consistent with the literature (e.g., Heese et al., 2017).

In a further analysis, we consider in Table III.6 lobbying on issues particularly relevant to the firms. These issues include those that relate to accounting (ACC_Dummy) or finance (FIN_Dummy) topics. Thus, we assume such PC are in particular related to the SEC's mandate. Moreover, in Model 8 we consider cases where firms lobbied the DoJ (DoJ_Dummy). We interact each of the dummy variables for accounting and finance issues with $Log\_Lobbying$ since both indicator variables are related to year *t* as well. In addition, each of our models contains the $Log\_Lobbying$ and the corresponding dummy variable. In line with our baseline model, the $Log\_Lobbying$ variable remains positive and significant for these three specifications (Model 6 – 8). For the respective interactions of the three dummy variables with the lobbying expenditure measure, the coefficients for all the dummy variables are positive and for cases related to financial issues and the DoJ also significant. These results imply that for situations where lobbying involves SEC-relevant issues,

Table III.5: SEC Attention and Lobbying

	Model 1	Model 2	Model 3	Model 4	Model 5
Log_Lobby	0.0279***				
	(6.84)				
Log_PI_Lobby		0.0262***			
		(6.71)			
Log_PI_Lobby_linked_to_SEC			0.115***		
			(6.00)		
PI_Lobbyist_linked_to_SEC				1.238***	
				(6.28)	
PI_Lobby_SEC					0.375***
					(2.88)
Log_Market_Cap	0.0788***	0.0799***	0.102***	0.102***	0.103***
	(7.35)	(7.51)	(10.63)	(10.59)	(10.56)
Market_to_Book	−0.000161	−0.000129	0.0000827	0.0000875	−0.00000356
	(−0.18)	(−0.15)	(0.09)	(0.10)	(−0.00)
Low_Market_to_Book	−0.0862*	−0.0828*	−0.0629	−0.0632	−0.0623
	(−1.80)	(−1.73)	(−1.30)	(−1.31)	(−1.29)
Loss	0.177***	0.177***	0.185***	0.184***	0.184***
	(5.11)	(5.10)	(5.31)	(5.29)	(5.28)
Zscore	−0.00199***	−0.00197***	−0.00217***	−0.00217***	−0.00221***
	(−3.63)	(−3.60)	(−3.95)	(−3.94)	(−3.99)
Leverage	0.0641	0.0647	0.0874	0.0871	0.0818
	(1.00)	(1.01)	(1.35)	(1.35)	(1.26)
Change_Sales	0.0589***	0.0594***	0.0565***	0.0565***	0.0573***
	(4.97)	(5.00)	(4.74)	(4.74)	(4.81)
Log_SEC_Office_Dist	−0.0978***	−0.0981***	−0.103***	−0.103***	−0.104***
	(−10.75)	(−10.78)	(−11.15)	(−11.14)	(−11.17)
Age	0.00670***	0.00640***	0.00959***	0.00957***	0.00942***
	(3.19)	(3.03)	(4.68)	(4.67)	(4.58)
Agg_SEC_Downloads	Yes	Yes	Yes	Yes	Yes
Fixed Effects	Year/Ind.	Year/Ind.	Year/Ind.	Year/Ind.	Year/Ind.
Observations	15,114	15,114	15,114	15,114	15,114
Adjusted R^2	0.680	0.680	0.678	0.678	0.677

Table III.5 presents the results for the estimation of the main model. The dependent variable is SEC_Attention, which corresponds to the natural logarithm of 1 + the total number of SEC-initiated firm-specific EDGAR downloads in year *t+1*. The variables of interest for Model 1 – Model 5 are the lobbying proxies for PC. All specifications include year and industry fixed effects, as well as control variables. Standard errors are clustered at the firm-level and t-statistics are displayed in parentheses. See Appendix III.A for variable descriptions.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

an increase in lobbying expenditures leads to an increase in SEC attention. Likewise, we find this incremental effect for cases relating to the DoJ. Thus, we can conclude that lobbying, in addition to the general attention-seeking effect, is particularly strong for cases that are explicitly relevant to the daily work of the SEC. Hence, this would also be contrary to the hypothesis of SEC capture.

Table III.6: SEC Attention and Lobbying (cont.)

	Model 6	Model 7	Model 8
Log_Lobby	0.0277***	0.0267***	0.0254***
	(6.79)	(6.59)	(6.24)
ACC_Dummy	−1.838		
	(−1.17)		
Log_Lobby×ACC_Dummy	0.147		
	(1.28)		
FIN_Dummy		−1.890**	
		(−2.32)	
Log_Lobby×FIN_Dummy		0.143**	
		(2.54)	
DoJ_Dummy			−3.897***
			(−2.82)
Log_Lobby×DoJ_Dummy			0.309***
			(3.23)
Controls	Yes	Yes	Yes
Agg_SEC_Downloads	Yes	Yes	Yes
Fixed Effects	Year/Ind.	Year/Ind.	Year/Ind.
Observations	15,114	15,114	15,114
Adjusted R^2	0.680	0.680	0.681

Table III.6 presents the results for the estimation of our main model. The dependent variable is SEC_Attention, which corresponds to the natural logarithm of 1 + the total number of SEC-initiated firm-specific EDGAR downloads in year *t+1*. The variables of interest for Model 6 – Model 8 are the interaction terms of the main lobbying variable (Log_Lobby) and the issue indicators (ACC_Dummy, FIN_Dummy, and DoJ_Dummy). All specifications include year and industry fixed effects, as well as control variables. Standard errors are clustered at the firm-level and t-statistics are displayed in parentheses. See Appendix III.A for variable descriptions.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

In Table III.7, we find a stable positive and significant effect on $SEC\_Attention$ for all specifications measuring PC using PAC contributions. So this holds for PAC contributions in year *t* (Log_PAC), for long-term PAC contributions (Log_PI_PAC), as well as for PAC contributions that relate to lawmakers serving on a SEC oversight committee ($Log\_PI\_Related$). Again, as with lobbying expenditures, these results for PAC contributions can be illustrated as follows. Here, an one percent change in PAC contributions (corresponding to a change of U.S.-$1,257 related to the mean PAC contributions) increases the number of SEC's EDGAR downloads per year by approx. 13.1. The result remains virtually unchanged if we include lobby expenditures as a control.

Table III.7: SEC Attention and PAC Contributions

	Model 9	Model 10	Model 11	Model 12
Log_PAC	0.0509***			0.0411***
	(8.72)			(7.21)
Log_PI_PAC		0.0486***		
		(8.26)		
Log_PI_Related			0.0535***	
			(8.46)	
Log_Lobby				0.0174***
				(4.43)
Controls	Yes	Yes	Yes	Yes
Agg_SEC_Downloads	Yes	Yes	Yes	Yes
Fixed Effects	Year/Ind.	Year/Ind.	Year/Ind.	Year/Ind.
Observations	15,114	15,114	15,114	15,114
Adjusted R^2	0.682	0.681	0.682	0.683

Table III.7 shows the results for the estimation of our main model. The dependent variable is SEC_Attention, which corresponds to the natural logarithm of 1 + the total number of SEC-initiated firm-specific EDGAR downloads in year *t+1*. The variables of interest for Model 9 – Model 12 are the PAC proxies for PC. All specifications include year and industry fixed effects, as well as control variables. Standard errors are clustered at the firm-level and t-statistics are displayed in parentheses. See Appendix III.A for variable descriptions.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

In summary, we can interpret PAC contributions according to Heese et al. (2017) as a risk factor that attracts the attention of the SEC in its oversight process. Overall, our main results show a consistent picture of a positive and significant correlation between PC and SEC attention.

4.2 Robustness Checks

A caveat of our investigation is that PC are subject to a possible endogeneity problem, i.e., our measures of PC are correlated with the error term. These endogeneity problems arise from the fact that we could not randomize how our firms were treated (i.e., determine which firms became PC). Additionally, it cannot be ruled out that our estimation is biased by omitted variables or that our variables are subject to measurement error. In particular, the bias due to omitted variables seems to be an important source of concern. Thus, the assumption that there are missing variables in our model that are correlated with both PC and SEC attention seems reasonable.

To mitigate these concerns, we run regressions with instrument variables for our main and long-term specification of PC. More specifically, we estimate the instrumental variable models for $Log\_Lobbying$ (Model 13), $Log\_PI\_Lobbying$ (Model 14), Log_PAC (Model 15), Log_PI_PAC (Model 16), and $Log\_PI\_Related$ (Model 17) in Tables III.9 and III.10.[7] The instrumental variable approach is common in the literature (Correia, 2014; Heese et al., 2017). As instruments for the continuous lobbying and PAC contributions measures, we use the corresponding size and industry aggregated means (i.e., the averages for all firms in the same size decile by total assets and for all other firms in the same four-digit SIC industry) of lobbying expenditures and PAC contributions, respectively. For reasons of consistency, we use these variables in logarithmic form. The rationale

[7] We do not estimate an instrumental variable model for $Log\_PI\_Lobby\_linked\_to\_SEC$, as this variable has only 126 non-zero observations; therefore, inferences here would have to be viewed with extreme caution.

behind our instruments is that while peer effects in the industry and for firms of similar size are likely to increase the intensity of PC, there is no direct logical link between these effects and the SEC's monitoring activity (and therefore, SEC's employees downloading behavior) (Heese et al., 2017). The magnitudes of the instruments are within an economically reasonable range (see descriptives in Table III.8).

Table III.8: Summary Statistics Instruments

	Mean	Median	Std. Dev.	Min	Max
Log_Mean_Size_Lobby	10.842	10.927	2.209	6.564	15.210
Log_Mean_Size_PI_Lobby	11.644	11.274	2.300	7.790	16.327
Log_Mean_Size_PAC	6.694	7.557	3.449	0.000	11.982
Log_Mean_Size_PI_PAC	6.844	7.738	3.920	0.000	12.917
Log_Mean_Size_PI_Related	6.027	6.551	3.815	0.000	12.174
Log_Mean_Industry_Lobby	8.804	11.470	5.595	0.000	15.710
Log_Mean_Industry_PI_Lobby	9.410	12.388	6.003	0.000	16.787
Log_Mean_Industry_PAC	5.580	7.755	4.600	0.000	12.676
Log_Mean_Industry_PI_PAC	9.410	12.388	6.003	0.000	16.787
Log_Mean_Industry_PI_Related	5.115	6.929	4.600	0.000	12.782
Observations	15,114				

Table III.8 presents the summary statistics for the instrumental variables. See Appendix III.A for variable descriptions.

In the first stage, we test the validity of each of the instruments using a partial F-test (Stock et al., 2002; Larcker & Rusticus, 2010). We find in all our models that the instruments have a significant relationship with the PC and are above the critical value of 11.59 proposed by Stock et al. (2002) (see Tables III.9 and III.10). Furthermore, we test our potentially endogenous regressors for exogeneity for the respective first-stage regression. For all five specifications, we cannot reject the null hypothesis that the regressors are exogenous. In addition, our test for the overidentification restriction fails to reject the hypothesis that our instruments are exogenous. This indicates at least some validity for our instruments and is in line with the tests of Heese et al. (2017). As expected, we find a positive effect for the size average instruments, meaning that there is a link between the

average PC of similarly sized firms and that of the firm in question. However, a negative effect is obtained for the industry average instruments; a plausible explanation for this could be that the high-dimensional fixed effects structure combined with the fact that the PCs of the focal firm are excluded result in these negative relations.

In Table III.9, we find that lobbying has a positive and significant effect on both current lobbying spending and long-term lobbying expenditures (see Models 13 and 14). These results confirm our main findings from Table III.5. Thus, the results from the instrumental variable approach support the view that lobbying is a risk factor according to Heese et al. (2017) that attracts the SEC attention. The findings for PC, measured by PAC contributions in the instrumental variable approach (see Table III.10), remain virtually unchanged—in fact, they are even more pronounced—from the findings in the main analysis. Thus, we also identify an attention-increasing effect on the SEC by PC measured by PAC contributions. These results indicate that there is a direct link between PC and SEC attention that is not distorted by problems such as omitted variables.

Table III.9: SEC Attention and Lobbying: Instrumental Variables Approach

	Model 13			Model 14
	Log_Lobby	SEC_Attention	Log_PI_Lobby	SEC_Attention
Log_Lobby		0.0310^{**}		
		(2.26)		
Log_PI_Lobby				0.0285^{**}
				(2.27)
Size_Mean	0.593^{***}		0.650^{***}	
	(7.72)		(8.59)	
Industry_Mean	-0.248^{***}		-0.252^{***}	
	(-11.15)		(-10.99)	
Controls	Yes	Yes	Yes	Yes
Fixed Effects	Year/Ind.	Year/Ind.	Year/Ind.	Year/Ind.
Exogeneity p-value	0.676		0.776	
F-Statistics	102.0		109.7	
Overidentifying p-value	0.178		0.384	
Observations	15,101	15,101	15,101	15,101
(Pseudo) R^2	0.042	0.671	0.048	0.671

Table III.9 presents the results of the instrumental variable approach. The dependent variable is SEC_Attention, which corresponds to the natural logarithm of 1 + the total number of SEC-initiated firm-specific EDGAR downloads in year *t+1*. The variables of interest for Model 13 and Model 14 are, in each case, one of the lobbying measures as a proxy for PC. In columns (1) and (3)—showing the first-stage of our results—the industry sum and the size sum of the respective lobbying measures are used as instruments. All specifications include year and industry fixed effects, as well as control variables. Standard errors are clustered at the firm-level and t-statistics are displayed in parentheses. See Appendix III.A for variable descriptions.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table III.10: SEC Attention and PAC: Instrumental Variables Approach

	Model 15		Model 16		Model 17	
	Log_PAC	SEC_Attention	Log_PI_PAC	SEC_Attention	Log_PI_Related	SEC_Attention
Log_PAC		0.0720***				
		(4.78)				
Log_PI_PAC				0.0629**		
				(1.99)		
Log_PI_Related						0.0664***
						(4.23)
Size_Mean	0.109***		0.0990***		0.0983***	
	(5.85)		(5.37)		(5.48)	
Industry_Mean	−0.384***		−0.115***		−0.397***	
	(−14.15)		(−7.40)		(−14.68)	
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Fixed Effects	Year/Ind.	Year/Ind.	Year/Ind.	Year/Ind.	Year/Ind.	Year/Ind.
Exogeneity p-value	0.158		0.710		0.406	
F-Statistics	117.7		44.30		121.7	
Overidentifying p-value	0.137		0.163		0.232	
Observations	15,101	15,101	15,101	15,101	15,101	15,101
R^2	0.075	0.672	0.017	0.672	0.087	0.672

Table III.10 presents the results of the instrumental variable approach. The dependent variable is SEC_Attention, which corresponds to the natural logarithm of 1 + the total number of SEC-initiated firm-specific EDGAR downloads in year *t+1*. The variables of interest for Model 15 – Model 17 are, in each case, one of the PAC measures as a proxy for PC. In columns (1), (3), and (5)—showing the first-stage of our results—the industry sum and the size sum of the respective lobbying measures are used as instruments. All specifications include year and industry fixed effects, as well as control variables. Standard errors are clustered at the firm-level and t-statistics are displayed in parentheses. See Appendix III.A for variable descriptions.

$^{*}\ p < 0.10$, $^{**}\ p < 0.05$, $^{***}\ p < 0.01$

To address further concerns stemming from endogeneity, we use an entropy balancing approach (Hainmueller, 2012). This aims to balance systematic differences between PC and non-PC firms resulting from a non-random assignment of this treatment. Entropy balancing is a more modern approach than the propensity score matching used by Heese et al. (2017), for example, with the advantage that no observations are lost. Since our data is in a panel setting, we follow the McMullin & Schonberger (2022) approach and perform entropy balancing separately for each observation year. The aim of entropy balancing is to weight the control sample so that the covariate moments—in our case, the mean, the variance, and the skewness—are almost identical to the treatment sample (PC).

As covariates, we use all the control variables from our main tests. We perform entropy balancing for the two main specifications. Thus, an assignment as treatment is done for the firm years that had either lobbying expenditures or PAC contributions in year t. We then estimate on the newly weighted sample with our usual research design (i.e., same variable definitions and fixed effects) in Table III.11. The results for Log_PI_Lobby and Log_PI_PAC remain the same in direction and significance level, but are marginally weaker than in the main analysis. This indicates that our results are robust to the concern that they originate from the non-random assignment of the treatment.

In addition, we conduct robustness checks with different variations of our research design. For this purpose, we likewise take Log_PI_Lobby and Log_PI_PAC as research variables and vary our research design regarding the inclusion of control variables and fixed effects structure. In particular, according to Krishnan et al. (2024), we also apply SEC office×year fixed effects as an alternative fixed effects structure (see Appendix III.C).

Table III.11: Entropy Balancing

	Model 18	Model 19
Log_PI_Lobby	0.0211***	
	(4.09)	
Log_PI_PAC		0.0367***
		(5.15)
Log_Market_Cap	0.0750***	0.101***
	(3.84)	(4.17)
Market_to_Book	−0.0000747	−0.0000331
	(−0.05)	(−0.02)
Low_Market_to_Book	−0.150	−0.0642
	(−1.63)	(−0.64)
Loss	0.127**	0.159**
	(2.31)	(2.42)
Zscore	−0.000899	−0.00176
	(−0.40)	(−0.97)
Leverage	0.264**	0.186
	(2.22)	(1.33)
Change_Sales	0.110***	0.159***
	(4.56)	(4.08)
Log_SEC_Office_Dist	−0.120***	−0.114***
	(−8.07)	(−6.91)
Age	0.0154***	0.0123***
	(4.58)	(3.13)
Agg_SEC_Downloads	Yes	Yes
Fixed Effects	Year/Ind.	Year/Ind.
Observations	12,631	12,652
Adjusted R^2	0.629	0.676

Table III.11 presents the results of the entropy balanced estimation. The dependent variable is SEC_Attention, which corresponds to the natural logarithm of 1 + the total number of SEC-initiated firm-specific EDGAR downloads in year *t+1*. The variables of interest for Model 18 – Model 19 are the main lobbying (Log_PI_Lobby) and PAC (Log_PI_PAC) proxies for PC. All specifications include year and industry fixed effects, as well as control variables. Standard errors are clustered at the firm-level and t-statistics are displayed in parentheses. See Appendix III.A for variable descriptions.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

5 The Role of Political Connections and SEC Attention in Financial Oversight

Our findings regarding SEC attention of PC firms are in line with those Heese et al. (2017) found for CL likelihood. These results raise the question whether increased CL likelihood is really due to the attracted attention of PC firms, as assumed by Heese et al. (2017). In other words, is there really an attention-based mechanism which explains the higher CL likelihood for PC firms?

To investigate this phenomenon and in line with our target to better understand SEC activity, we perform a mediation analysis in form of a SEM (Bhattacharya et al., 2012; Bonsall et al., 2024; Fox & Wilson, 2023; Jollineau & Bowen, 2023; Mayew et al., 2020).[8] We perform this mediation analysis, a subtype of path analysis, to understand the underlying process or mechanism by which PC influence financial oversight. In particular, our empirical framework is similar to that of Fox & Wilson (2023), who likewise use a generalized structural equation modeling (GSEM) to investigate whether increased IRS attention to restatements explains higher tax settlements and a higher likelihood of disclosing a tax audit. For robustness reasons, we perform the somewhat outdated Baron & Kenny (1986) causual step approach (see Appendix III.D).

In our analyses, PC is the independent variable, the likelihood of receiving a CL is the dependent variable[9], and the mediator corresponds to SEC attention.

[8] For accounting research using large archival data, the SEM approach is advantageous over the often-used PROCESS tool (Hayes, 2022), as it allows more flexibility with respect to common econometric methods (e.g., fixed effects).

[9] Therefore, we use a logit-based GSEM for the paths that have CL receipt as the dependent variable. $Comment\_Letter$ is an indicator for firm-years with a 10-K related CL in year t+1. In contrast to prior research, we do not obtain 10-K related CL from a financial database. Instead, we collect data directly from EDGAR index files and check each CL for its 10-K relation. This approach has some advantages in comparison to the use of financial database CL data. First, we avoid potential bias resulting from financial database use. Second, and—from our perspective—more important is the fact that both $Comment\_Letter$ and $SEC\_Attention$ variables result from the same source.

Our approach follows the basic structure of Bonsall et al.'s (2024) analysis, which examines a similar question in relation to the SEC's internal operations. They use a mediation analysis framework to understand the relationship between public and private enforcement in the context of SEC's business. In this respect, our question also relates to the procedures within the SEC. More specifically, we are interested in the extent to which the increased CL likelihood for PC firms is explained through the attention effect that Heese et al. (2017) assume. For this purpose, the method of path analysis is applicable, since it is possible to determine the relative share of the individual paths within a complex model. We have a comparatively simple mediation model, which we estimate with a GSEM. This approach allows us to estimate the direct, indirect, and total effects (e.g., Hayes, 2022; Jollineau & Bowen, 2023). In addition, our models include all fixed effects and control variables from the analyses of the relationship between PC and SEC attention (see section 4). In total, we estimate four different models that differ only in the PC proxy. The first two models are on lobbying measures for PC, and the other two are on PAC measures. For each type of PC, we consider the main variables (Log_Lobby and Log_PAC), as well as the long-term variables (Log_PI_Lobby and Log_PI_PAC). We obtain estimates for the three paths (A-C) and the resulting indirect and direct effects for each of our four models. The results can be found in Table III.12 and are illustrated in Figure III.3.

Path A is the relationship between PC and SEC attention. This path, thus, corresponds to that of our study from section 4. The results of our estimates correspond, as expected, approximately to our previous results. Therefore, they each show a positive and significant relationship.

Path B shows the relationship between SEC attention and CL likelihood. This is a central component of our models, as we are trying to illustrate what proportion of the link between PC and CL likelihood can really be explained by SEC attention. As we can already expect from our graphical

Table III.12: Mediation Analyses: PC, SEC Attention, and Oversight

Panel A:		**Lobbying Proxies for Political Connections**			
		PC=Log_Lobby		PC=Log_PI_Lobby	
		Coeff.	**z-stat**	**Coeff.**	**z-stat**
Total Effect		0.0343***	6.97	0.0290***	6.19
Direct Paths					
A		0.0279***	12.76	0.0262***	12.61
B		0.3785***	15.52	0.3798***	15.58
C		0.0238***	4.90	0.0191***	4.13
	percentage	*69 %*		*66 %*	
Indirect Path					
A × B		0.0106***	9.86	0.010***	9.80
	percentage	*31 %*		*34 %*	
Control Variables		Yes		Yes	
Fixed Effects		Year/Ind.		Year/Ind.	
Observations		15,114		15,114	
Panel B:		**PAC Proxies for Political Connections**			
		PC=Log_PAC		PC=Log_PI_PAC	
		Coeff.	**z-stat**	**Coeff.**	**z-stat**
Total Effect		0.0333***	4.65	0.0326***	4.65
Direct Paths					
A		0.0509***	15.78	0.0486***	15.37
B		0.3827***	15.68	0.3827***	15.69
C		0.0138**	1.95	0.0140**	2.03
	percentage	*42 %*		*43 %*	
Indirect Path					
A × B		0.0195***	11.12	0.0186***	10.98
	percentage	*58 %*		*57 %*	
Control Variables		Yes		Yes	
Fixed Effects		Year/Ind.		Year/Ind.	
Observations		15,114		15,114	

Table III.12 presents the results for the mediation analyses. CL receipt is the dependent and SEC attention is the mediation variable in all specifications. PC represents the independent variable. Panel A shows the mediation analyses for standard and long-term lobbying as proxies for PC. Panel B exhibits the analyses for standard and long-term PAC as proxies for PC. For all models we present the total effect, the three direct paths as well as the indirect path. We indicate the coefficient and the z-statistic in each case. For the indirect path and for path C (direct link from PC to CL receipt) we present the relative share of this path. All specifications include one-digit-SIC industry fixed effects, as well as control variables. See Appendix III.A for variable descriptions.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Figure III.3: Mediation Analyses

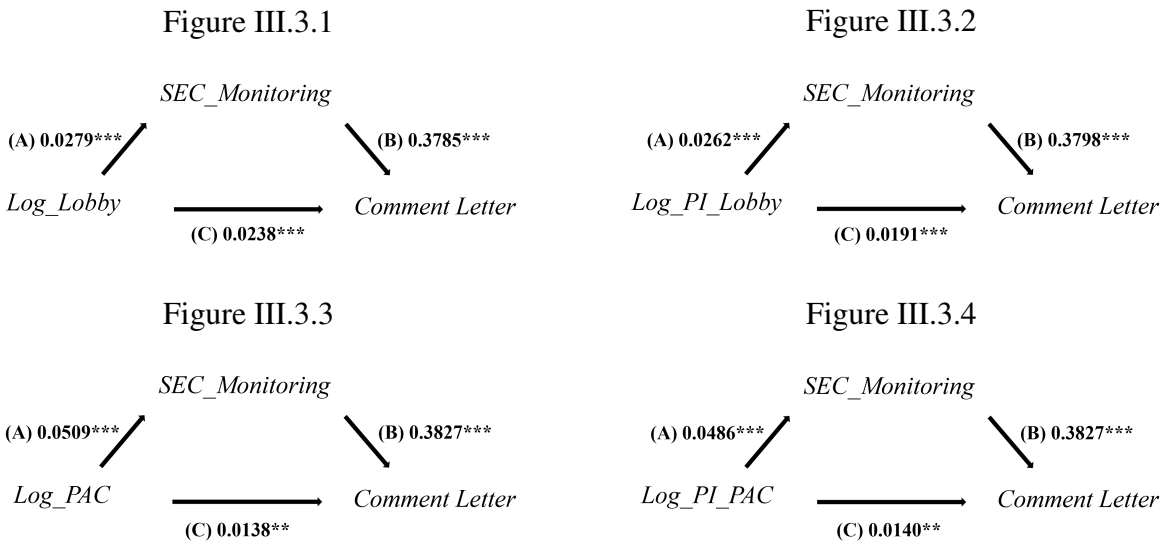


illustration shown in Figure III.2, this relationship is likewise positive. Indeed, we can observe a positive and significant relationship for all four of our specifications. This again triangulates our assumption that SEC attention is indeed an appropriate measure to capture the internal operation of the SEC (especially in the DCF). Thus, this shows that the use of EDGAR is indeed a component of SEC oversight.

Path C refers to the link between PC and CL likelihood. This corresponds to the relationship investigated by Heese et al. (2017). The results also show a positive and significant association, which is initially in line with expectations from the literature. However, the results also reveal that our four cases are in fact (complementary) partial mediations. This suggests that parts of the link between PC and CL receipt remain unexplained due to the assumed attention effect, which in itself prompts future research. The proportion of the relationship between PC and CL likelihood, that can be explained by this direct path, lies between 42 % (Log_PAC model) and 69 % (Log_Lobby model). These percentage shares represent the proportions of path C relative to the total effect. The total

effect is the effect that results from the sum of the direct effect (Path C) and indirect effect (Path A $\times$ Path B).

Conversely, this means that the indirect effect lies between 31 % and 58 %. In our mediation analyses, these indirect effects can be equated to the attention-grabbing effect. This means that the increased CL likelihood is explained by the path or the proportion of PC via SEC attention. Accordingly, this corresponds to a very substantial proportion of the overall effect, and illustrates that the theory of an attention-grabbing effect is based on sound empirical foundations. This answers the question to what extent the increased CL receipt likelihood of PC firms can be explained by SEC attention. In particular, this approach makes it possible to examine the actual behavior of rank-and-file employees of the SEC in order to explain a regulatory outcome.

For robustness reasons, we apply the mediation analysis approach according to Baron & Kenny (1986). Again, as in our GSEM analyses, we consider the following proxies for PC: Log_Lobby and Log_PI_Lobby, as well as Log_PAC and Log_PI_PAC. In this regression-based approach, we estimate a series of different regressions (Baron & Kenny, 1986; Burt & Hampton, 2017). In particular, we estimate the following regressions: First, we estimate the regression from the dependent variable ($Comment\_Letter$) on the independent variable (PC) with a logit regression.[10] These estimates can be found in Appendix III.D.1, showing a positive and significant effect for each PC variable. Second, we conduct the regression of the mediator ($SEC\_Attention$) on the independent variable (PC). We already estimated this in section 4 and found a positive and significant effect for all PC coefficients on $SEC\_Attention$. In the third step, we investigate the combined effect of SEC attention and PC on CL issues. Although $SEC\_Attention$—especially measured

[10] Whether checking this total effect is a necessary condition is controversial in the literature (e.g., Hayes, 2022, pp.119–128)

in the way we provided—captures the entire SEC oversight activity, DCF filing review activity is predominantly represented (Iselin et al., 2024). As filing review is conditional for a CL receipt (Gunny & Hermis, 2020), we expect a significantly positive relation between $Comment\_Letter$ and $SEC\_Attention$. We control all our analyses for time trends and industry characteristics using year and industry fixed effects. In addition, we include our standard control variables. Our findings are presented in Appendix III.D.2.

As expected, we find a significantly positive relation between $Comment\_Letter$ and $SEC\_Attention$ for all our specifications, indicating that SEC attention increases a firm's likelihood of receiving a CL. The results suggest that a significant part of SEC attention activity belongs to DCF filing review. In connection with the steps carried out before, we can infer mediation effects. Also for our four proxies for PC, we find positive significant effects on the CL likelihood. Thus, like our GSEM approach, this also supports the existence of a partial and complementary mediation for each variable of PC. However, we find the coefficients for the PC variables Log_PAC and Log_PI_PAC are only significant at the ten percent level (D 7 and D 8 in Appendix III.D.2). This again underlines our findings that a large part of the increased CL likelihood can be explained by the attention-grabbing effect of PC. However, the Baron & Kenny (1986) approach does not allow us to calculate percentage values.

6 Conclusion

Prior research finds ambiguous results whether SEC oversight is captured by PC firms, but frequently suffers from a missing ability to observe actual SEC activity when observing outcomes like CL or AAERs and a focus on only one division in each case. We provide a novel approach to shed fuller

light on the influence of PC on SEC attention and its role withing the entire SEC oversight activity, by measuring SEC attention with SEC initiated EDGAR downloads. We find PC are increasing SEC attention in general. As a result, we are able to gain a deeper insight into the behavior of the SEC's rank-and-file employees.

Bringing our results together, we can find a robust positive relationship between PC and SEC attention. This correlation speaks for an attention-grabbing effect of PC. This is underlined as we consider our measure of SEC attention as a direct measure of SEC behavior. As we demonstrate in our mediation analyses, the attention-grabbing effect represents a substantial share of the increased CL likelihood of PC firms. There are various factors that could explain the SEC's increased awareness towards PC firms.

The first and most immediate reason is that firms' lobbying expenditures are of high transparency in the U.S. and, thus, attract increased general attention. The second reason is the expected rumor caused by lobbying and PAC contributions, especially if it is directed to the SEC. The third is the potential attention resulting from personal relationships between current SEC staff and former staff now acting as lobbyists. The fourth explanation is an indirect and unintentional channel in the political process, that these PC firms exert pressure within the iron triangle relationship and thereby bring these firms into the focus of the SEC, possibly unintentionally and not related with the SEC oversight. For example, political involvement during the SEC's rulemaking process could be such a case.

However, our study is also subject to limitations. The first relates to our measure of SEC attention. Our SEC attention measure covers the entire SEC download activity and does not differentiate EDGAR downloads to distinct SEC divisions or offices. Thus, we cannot explain the impact of PC in different stages and divisions of the SEC oversight process. In addition, there are, of course, other

channels through which SEC staff can obtain information about firms. Another limitation is that there could be other factors related to PC, such as certain financial reporting characteristics which are also correlated with PC and drive our results. For example, Chaney et al. (2011) found that earnings quality is lower for PC firms than for non-PC firms, and Braam et al. (2015) found that PC firms substitute real earnings management for accrual-based earnings management. Through our additional analyses, however, we have tried to address this endogeneity problem.

These factors could, therefore, also explain why we only find partial mediation in our mediation analysis. Thus, future research could look at which other factors of PC are relevant besides the attention-grabbing effect. In addition, the role of the attention-grabbing effect in other divisions of the SEC (especially the DoE) may also be worth investigating.

Appendix III.A: Variable Definitions

Variable	Description
Primary Dependent Variable	
SEC_Attention	The natural logarithm of 1 + the total number of SEC-initiated firm-specific EDGAR downloads per year.
Political Connections Variables	
Lobby	The total amount of lobbying expenditures made by the firm during the fiscal year.
Log_Lobby	The natural logarithm of 1 + the total amount of lobbying expenditures made by the firm during the fiscal year.
PI_Lobby	The total amount of lobbying expenditures made by the firm over the previous three years.
Log_PI_Lobby	The natural logarithm of 1 + the total amount of lobbying expenditures made by the firm over the previous three years.
PI_Lobbyist_linked_to_SEC	Indicator variable equal to 1 if the firm employed at least one lobbyist within the previous three years that either previously worked for the SEC or is currently employed by the SEC, 0 otherwise.
PI_Lobby_linked_to_SEC	The total amount of lobbying expenditures made by the firm through a lobbyist linked to the SEC over the previous three years.
Log_PI_Lobby_linked_to_SEC	The natural logarithm of 1 + the total amount of lobbying expenditures made by the firm through a lobbyist linked to the SEC over the previous three years.
PI_Lobby_SEC	Indicator variable equal to 1 if the firm lobbied the SEC directly over the previous three years, 0 otherwise.
ACC_Dummy	1 if the firm lobbied for accounting issues, 0 otherwise.
FIN_Dummy	1 if the firm lobbied for finance issues, 0 otherwise.
DoJ_Dummy	1 if the firm lobbied the Department of Justice directly, 0 otherwise.
PAC	Total amount of PAC contributions made by the firm during the fiscal year.
Log_PAC	The natural logarithm of 1 + the total amount of PAC contributions made by the firm during the fiscal year.
PI_PAC	The total amount of PAC contributions made by the firm over the previous five years.
Log_PI_PAC	The natural logarithm of 1 + the total amount of PAC contributions made by the firm over the previous five years.

PI_Related	The total amount of PAC contributions made to politicians that serve in a SEC oversight committee (Banking, Commerce or Appropriations committee) in the current election cycle.
Log_PI_Related	The natural logarithm of 1 + the total amount of PAC contributions made to politicians that serve in a SEC oversight committee (Banking, Commerce or Appropriations committee) in the current election cycle.
SEC Oversight Variable	
CL	CL is an indicator variable equal to 1, if a firm receives a 10-K related comment letter for year *t+1* (Source: EDGAR).
Firm Characteristics Variables	
Log_Market_Cap	The natural logarithm of 1 + the firm's market capitalization.
Market_to_Book	Firm's market-to-book-ratio.
Low_Market_to_Book	1 if Market_to_Book is lower than 1.
Loss	1 if a firm reported a loss in year t, 0 otherwise.
Zscore	Altman's Z-score based on Altman (1968) is equal to 1.2×((total current assets - total current liabilities)/total assets) + 1.4×(retained earnings/total assets) + 3.3×(earnings before interest and taxes/total assets) + 0.6×(market capitalization/total liabilities) + 1.0×(total sales/total assets).
Leverage	Is equal to the amount of long-term debt divided by total assets.
Change_Sales	Is the percentage of change in annual sales.
Log_SEC_Office_Dist	The natural logarithm of 1 + the distance in miles to the closest SEC office (regional offices or the headquarter).
Age	A firm's age in years; based on the first occurrence of accounts in Datastream.
Agg_SEC_Downloads	The natural logarithm of 1 + the total number of all SEC-initiated EDGAR downloads per year.
Instruments	
Log_Mean_Size_Lobby	The natural logarithm of 1 + the average amount of lobbying in the same size decile by total assets.
Log_Mean_Size_PI_Lobby	The natural logarithm of 1 + the average amount of long-term lobbying (three years) in the same size decile by total assets.
Log_Mean_Size_PAC	The natural logarithm of 1 + the average amount of PAC contributions in the same size decile by total assets.

Log_Mean_Size_PI_PAC	The natural logarithm of 1 + the average amount of long-term PAC contributions (five years) in the same size decile by total assets.
Log_Mean_Size_PI_Related	The natural logarithm of 1 + the average amount of long-term PAC contributions made to politicians that serve in a SEC oversight committee (Banking, Commerce or Appropriations committee) in the current election cycle in the same size decile by total assets.
Log_Mean_Industry_Lobby	The natural logarithm of 1 + the average amount of lobbying by other firms within the same 4-digit SIC industry.
Log_Mean_Industry_PI_Lobby	The natural logarithm of 1 + the average amount of long-term lobbying (three years) by other firms within the same 4-digit SIC industry.
Log_Mean_Industry_PAC	The natural logarithm of 1 + the average amount of PAC contributions by other firms within the same 4-digit SIC industry.
Log_Mean_Industry_PI_PAC	The natural logarithm of 1 + the average amount of long-term PAC contributions (five years) by other firms within the same 4-digit SIC industry.
Log_Mean_Industry_PI_Related	The natural logarithm of 1 + the average amount of long-term PAC contributions made to politicians that serve in a SEC oversight committee (Banking, Commerce or Appropriations committee) in the current election cycle by other firms within the same 4-digit SIC industry.

Appendix III.B: Fixed Effects Evaluation

Summary Statistics of Fixed Effects

	Number of ...			Observations per group		
	Observations	Groups	Singletons	Min.	Avg.	Max.
SIC	15,114	333	13	1	45.39	1,049
Year	15,114	10	0	923	1,511.40	2,149
Joint singletons	.	.	0	.	.	.
Total singletons	.	.	13	.	.	.

Table III.B.1 shows that there are in total 13 singletons (0.086 % of all observations. Additionally, it shows the minimum, average, and maximum of observations per fixed effect group. See Appendix III.A for variable descriptions.

Variables that are Constant within a Fixed Effects Group

	Number of ...		SIC*		Year*	
	Obs	Singl	#Groups	#Obs	#Groups	#Obs
SEC_Attention	15,114	13	1	9	0	0
Log_Lobby	15,114	13	112	1,648	0	0
Log_Market_Cap	15,114	13	0	0	0	0
Market_to_Book	15,114	13	0	0	0	0
Low_Market_to_Book	15,114	13	88	1,141	0	0
Loss	15,114	13	53	521	0	0
Zscore	15,114	13	0	0	0	0
Leverage	15,114	13	5	49	0	0
Change_Sales	15,114	13	0	0	0	0
Log_SEC_Office_Dist	15,114	13	70	543	0	0
Age	15,114	13	72	596	0	0

Table III.B.2 shows the number of groups and observations that are constant within the fixed effects groups for the main dependent ($SEC\_Attention$) and independent variables (Log_Lobby and controls). Columns with * were computed excluding singleton observations. See Appendix III.A for variable descriptions.

Residual Variation after Partialling-Out

		Std. Dev.			R2 by fixed effect		R2
	N*	Pooled	Within*	Ratio (%)	SIC	Year	Overall
SEC_Attention	15,101	2.0581	1.1982	58.22	0.050	0.631	0.661
Log_Lobby	15,101	5.4374	4.8277	88.79	0.211	0.000	0.212
Log_Market_Cap	15,101	2.4435	2.0705	84.73	0.277	0.006	0.283
Market_to_Book	15,101	10.7838	10.6163	98.45	0.030	0.002	0.032
Low_Market_to_Book	15,101	0.3880	0.3647	93.99	0.104	0.014	0.117
Loss	15,101	0.4820	0.4146	86.03	0.247	0.025	0.261
Zscore	15,101	24.0547	23.1338	96.17	0.070	0.006	0.076
Leverage	15101	0.2385	0.2103	88.18	0.212	0.009	0.223
Change_Sales	15,101	0.7043	0.6905	98.03	0.035	0.005	0.040
Log_SEC_Office_Dist	15,101	2.2131	1.9825	89.58	0.197	0.002	0.198
Age	15,101	9.5367	7.4794	78.43	0.331	0.097	0.385

Table III.B.3 shows the variation lost or absorbed due to fixed effects. The table shows standard deviations and R2 measures for variation. It presents the standard deviation of a pooled sample, for the within fixed effect standard deviation, and its ratio. The R2 measures show the proportion of fixed effect explained variation. Columns with * were computed excluding singleton observations. See Appendix III.A for variable descriptions.

Appendix III.C: Robustness Checks

Robustness Checks

	C 1	C 2	C 3	C 4	C 5	C 6	C 7	C 8
Log_PI_Lobby	0.0378***		0.0431***		0.0245***		0.0250***	
	(12.06)		(12.65)		(6.69)		(6.85)	
Log_PI_PAC		0.0541***		0.0708***		0.0367***		0.0380***
		(10.51)		(13.10)		(6.49)		(6.76)
Controls	No	No	No	No	Yes	Yes	Yes	Yes
Agg_SEC_Downloads	No	No	No	No	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Industry Fixed Effects	No	No	Yes	Yes	No	No	No	No
SEC Office-Year Fixed Effects	No	No	No	No	No	No	Yes	Yes
Observations	15,114	15,114	15,114	15,114	15,114	15,114	15,114	15,114
Adjusted R^2	0.642	0.641	0.665	0.666	0.660	0.661	0.664	0.664

Table III.C.1 shows robustness checks by variations of our research design. The dependent variable is SEC_Attention, which corresponds to the natural logarithm of 1 + the total number of SEC-initiated firm-specific EDGAR downloads in year *t+1*. The variables of interest for Model 1 – Model 8 are Log_PI_Lobby and Log_PI_PAC. The research designs vary with regard to the inclusion of control variables and fixed effects structure. Standard errors are clustered at the firm-level and t-statistics are displayed in parentheses. See Appendix III.A for variable descriptions.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Appendix III.D: Mediation Analysis in the Style of Baron & Kenny (1986)

Political Connections and Comment Letter

	D 1	D 2	D 3	D 4
Log_Lobby	0.0310***			
	(5.90)			
Log_PI_Lobby		0.0259***		
		(5.21)		
Log_PAC			0.0274***	
			(3.64)	
Log_PI_PAC				0.0269***
				(3.61)
Log_Market_Cap	0.133***	0.138***	0.151***	0.152***
	(8.22)	(8.60)	(9.57)	(9.64)
Market_to_Book	−0.00464**	−0.00458**	−0.00472**	−0.00469**
	(−2.06)	(−2.04)	(−2.11)	(−2.10)
Low_Market_to_Book	−0.226***	−0.219***	−0.210**	−0.209**
	(−2.78)	(−2.70)	(−2.57)	(−2.55)
Loss	0.127**	0.127**	0.132**	0.131**
	(2.01)	(2.02)	(2.10)	(2.07)
Zscore	0.00161	0.00160	0.00152	0.00153
	(1.25)	(1.25)	(1.19)	(1.20)
Leverage	0.493***	0.497***	0.505***	0.505***
	(4.17)	(4.21)	(4.26)	(4.26)
Change_Sales	0.0556*	0.0556*	0.0536*	0.0533*
	(1.85)	(1.85)	(1.78)	(1.77)
Log_SEC_Office_Dist	−0.146***	−0.147***	−0.150***	−0.150***
	(−10.79)	(−10.87)	(−11.09)	(−11.10)
Age	0.00560*	0.00566*	0.00637*	0.00614*
	(1.69)	(1.70)	(1.91)	(1.82)
Agg_SEC_Downloads	Yes	Yes	Yes	Yes
Fixed Effects	Year/Ind.	Year/Ind.	Year/Ind.	Year/Ind.
Observations	14,889	14,889	14,889	14,889
Pseudo R^2	0.133	0.132	0.131	0.131

Table III.D.1 shows the results for the estimation of a logit regression of Comment Letter (CL) on our main political connections proxies. CL is an indicator variable equal to 1, if a firm receives a 10-K related CL for year *t+1*. The variables of interest are the political connections proxies Log_Lobby, Log_P_Lobby, Log_PAC, and Log_PI_PAC. All specifications include industry and year fixed effects, as well as control variables. Standard errors are clustered at the firm-level and t-statistics are displayed in parentheses. See Appendix III.A for variable descriptions.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

	D 5	D 6	D 7	D 8
SEC_Attention	0.378***	0.380***	0.383***	0.383***
	(16.34)	(16.36)	(16.47)	(16.47)
Log_Lobby	0.0238***			
	(4.55)			
Log_PI_Lobby		0.0191***		
		(3.84)		
Log_PAC			0.0138*	
			(1.87)	
Log_PI_PAC				0.0140*
				(1.92)
Log_Market_Cap	0.106***	0.111***	0.124***	0.124***
	(6.65)	(7.01)	(8.01)	(8.05)
Market_to_Book	−0.00441*	−0.00436*	−0.00442**	−0.00440*
	(−1.96)	(−1.94)	(−1.97)	(−1.96)
Low_Market_to_Book	−0.211***	−0.205**	−0.195**	−0.195**
	(−2.59)	(−2.51)	(−2.38)	(−2.37)
Loss	0.0707	0.0719	0.0774	0.0763
	(1.11)	(1.13)	(1.22)	(1.20)
Zscore	0.00238*	0.00236*	0.00225*	0.00226*
	(1.86)	(1.85)	(1.76)	(1.77)
Leverage	0.475***	0.478***	0.482***	0.482***
	(4.07)	(4.09)	(4.13)	(4.12)
Change_Sales	0.0383	0.0381	0.0359	0.0359
	(1.27)	(1.27)	(1.19)	(1.19)
Log_SEC_Office_Dist	−0.120***	−0.121***	−0.123***	−0.123***
	(−8.90)	(−8.97)	(−9.14)	(−9.15)
Age	0.00286	0.00302	0.00422	0.00405
	(0.87)	(0.92)	(1.29)	(1.23)
Agg_SEC_Downloads	Yes	Yes	Yes	Yes
Fixed Effects	Year/Ind.	Year/Ind.	Year/Ind.	Year/Ind.
Observations	14,889	14,889	14,889	14,889
Pseudo R^2	0.152	0.151	0.151	0.151

Table III.D.2 shows the results for the estimation of a logit regression of CL on SEC_Attention and four different proxies for PC. CL is an indicator variable equal to 1, if a firm receives a 10-K related CL for year *t+1*. SEC_Attention corresponds to the natural logarithm of 1 + the total number of SEC-initiated firm-specific EDGAR downloads in year *t+1*. All specifications include year and industry fixed effects, as well as control variables. Standard errors are clustered at the firm-level and t-statistics are displayed in parentheses. See Appendix III.A for variable descriptions.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

References

Adams, G. (1982). *The Politics of Defense Contracting*. Transaction Books.

Ahmed, S., Goda, G. S., Hahn, M., & Hehmeyer, P. (2023). Following the Rules: Connecting Academic Research to Policy. *Policy Brief: Stanford Insitute for Economic Policy Research*, 1–6.

Altman, E. I. (1968). Financial Ratios, Discriminant Analysis and the Prediction of Corporate Bankruptcy. *The Journal of Finance*, *23*(4), 589–609.

Amihud, Y. (2002). Illiquidity and Stock Returns: Cross-Section and Time-Series Effects. *Journal of Financial Markets*, *5*(1), 31–56.

Aziz, S., Dowling, M., Hammami, H., & Piepenbrink, A. (2022). Machine Learning in Finance: A topic Modeling Approach. *European Financial Management*, *28*(3), 744–770.

Balli, H. O. & Sørensen, B. E. (2013). Interaction Effects in Econometrics. *Empirical Economics*, *45*(1), 583–603.

Banks, G. C., Pollack, J. M., Bochantin, J. E., Kirkman, B. L., Whelpley, C. E., & O'Boyle, E. H. (2016). Management's Science–Practice Gap: A Grand Challenge for All Stakeholders. *Academy of Management Journal*, *59*(6), 2205–2231.

Barardehi, Y. H., Dixon, P., Liu, Q., & Lohr, A. (2022). Tick Sizes and Market Quality: Revisiting the Tick Size Pilot. *DERA Working Paper*, 1–54.

Barber, B. M. & Odean, T. (2007). All That Glitters: The Effect of Attention and News on the Buying Behavior of Individual and Institutional Investors. *Review of Financial Studies*, *21*(2), 785–818.

Baron, R. M. & Kenny, D. A. (1986). The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173–1182.

Bartunek, J. M. & Rynes, S. L. (2014). Academics and Practitioners Are Alike and Unlike: The Paradoxes of Academic-Practioner Relationships. *Journal of Management*, *40*(5), 1181–1201.

Basu, S. (2012). How Can Accounting Researchers Become More Innovative? *Accounting Horizons*, *26*(4), 851–870.

Baudot, L. & Wallace, D. (2023). Political Grammars of Justification and Cost-Benefit Analysis in SEC Rulemaking. *Journal of Accounting and Public Policy*, *42*(6), 107148.

Baxter, W. T. (1988). *Accounting Research – Academic Trends versus Practical Needs*. Edinburgh: The Institute of Chartered Accountants of Scotland.

Beaver, W. H. (1966). Financial Ratios as Predictors of Failure. *Journal of Accounting Research*, *4*, 71–111.

Becker, K., Bischof, J., & Daske, H. (2021). IFRS: Markets, Practice, and Politics. *Foundations and Trends in Accounting*, *15*(1–2), 1–262.

Beresford, D. R. (1991). Standard Setting Process in Trouble (Again). *Accounting Horizons*, *5*(2), 94–96.

Bernard, D., Blackburne, T. P., & Thornock, J. R. (2020). Information Flows Among Rivals and Corporate Investment. *Journal of Financial Economics*, *136*(3), 760–779.

Bessembinder, H., Carrion, A., Tuttle, L., & Venkataraman, K. (2016). Liquidity, Resiliency and Market Quality around Predictable Trades: Theory and Evidence. *Journal of Financial Economics*, *121*(1), 142–166.

Bhattacharya, N., Ecker, F., Olsson, P. M., & Schipper, K. (2012). Direct and Mediated Associations among Earnings Quality, Information Asymmetry, and the Cost of Equity. *The Accounting Review*, *87*(2), 449–482.

Bischof, J., Daske, H., & Sextroh, C. J. (2020). Why Do Politicians Intervene in Accounting Regulation? The Role of Ideology and Special Interests. *Journal of Accounting Research*, *58*(3), 589–642.

Bishop, G. F. & Coffee, M. A. (2013). A Tale of Two Commissions: A Compendium of the Cost-Benefit Analysis Requirements Faced by the SEC & CFTC. *Review Banking & Financial Law*, *32*(2), 585–665.

Blackburne, T. P. (2014). *Regulatory Oversight and Financial Reporting Incentives: Evidence from SEC Budget Allocations*. PhD thesis, University of Pennsylvania, Philadelphia.

Blackburne, T. P., Bozanic, Z., Johnson, B. A., & Roulstone, D. T. (2021a). The Regulatory Observer Effect: Evidence from SEC Investigations. *SSRN Electronic Journal*, 1–59.

Blackburne, T. P., Kepler, J. D., Quinn, P. J., & Taylor, D. J. (2021b). Undisclosed SEC Investigations. *Management Science*, *67*(6), 3403–3418.

Blackburne, T. P. & Quinn, P. J. (2023). Disclosure Speed: Evidence from Nonpublic SEC Investigations. *The Accounting Review*, *98*(1), 55–82.

Blei, D. M. (2012). Probabilistic Topic Models. *Communications of the ACM*, *55*(4), 77–84.

Blei, D. M., Ng, A. Y., & Jordan, M. I. (2003). Latent Dirichlet Allocation. *Journal of Machine Learning Research*, *3*(4-5), 993–1022.

Bloch, R., Kleinman, G., & Peterson, A. (2017). Can Gown Help Town? Exploring the "Gap" between Accounting Practice and Academia and Providing a Theory for Why it Exists. In C. R. Lehman (Ed.), *Parables, Myths and Risks*, volume 20 of *Advances in Public Interest Accounting* (pp. 23–61). Emerald Publishing Limited.

Bonsall, S. B., Holzman, E. R., & Miller, B. P. (2024). Wearing out the Watchdog: The Impact of SEC Case Backlog on the Formal Investigation Process. *The Accounting Review*, *99*(1), 81–104.

Borstadt, L. F. & Zwirlein, T. J. (1992). The Efficient Monitoring Role of Proxy Contests: An Empirical Analysis of Post-Contest Control Changes and Firm Performance. *Financial Management*, *21*(3), 22–34.

Boubakri, N., Guedhami, O., Mishra, D., & Saffar, W. (2012). Political Connections and the Cost of Equity Capital. *Journal of Corporate Finance*, *18*(3), 541–559.

Bozanic, Z., Dirsmith, M. W., & Huddart, S. (2012). The Social Constitution of Regulation: The Endogenization of Insider Trading Laws. *Accounting, Organizations and Society*, *37*(7), 461–481.

Bozanic, Z., Hoopes, J. L., Thornock, J. R., & Williams, B. M. (2017). IRS Attention. *Journal of Accounting Research*, *55*(1), 79–114.

Braam, G., Nandy, M., Weitzel, U., & Lodh, S. (2015). Accrual-Based and Real Earnings Management and Political Connections. *The International Journal of Accounting*, *50*(2), 111–141.

Bricker, R. J. & Previts, G. J. (1990). The Sociology of Accountancy: A Study of Academic and Practice Community Schisms. *Accounting Horizons*, *4*(1), 1–14.

Brown, N. C., Crowley, R. M., & Elliott, W. B. (2020). What Are You Saying? Using topic to Detect Financial Misreporting. *Journal of Accounting Research*, *58*(1), 237–291.

Brown, S. V., Ma, G., & Tucker, J. W. (2023). Financial Statement Similarity. *Contemporary Accounting Research*, *40*(4), 2577–2615.

Brüggemann, U., Kaul, A., Leuz, C., & Werner, I. M. (2018). The Twilight Zone: OTC Regulatory Regimes and Market Quality. *Review of Financial Studies*, *31*(3), 898–942.

Burt, I. & Hampton, C. (2017). Moderation and Mediation in Behavioural Accounting Research. In *The Routledge Companion to Behavioural Accounting Research* (pp. 373–387). Routledge.

Bushee, B. J. & Leuz, C. (2005). Economic Consequences of SEC Disclosure Regulation: Evidence from the OTC Bulletin Board. *Journal of Accounting and Economics*, *39*(2), 233–264.

Cairney, P. & Oliver, K. (2020). How Should Academics Engage in Policymaking to Achieve Impact? *Political Studies Review*, *18*(2), 228–244.

Calluzzo, P., Moneta, F., & Topaloglu, S. (2019). When Anomalies Are Publicized Broadly, Do Institutions Trade Accordingly? *Management Science*, *65*(10), 4555–4574.

Cambridge Dictionary (2024). Academia. https://dictionary.cambridge.org/us/dictionary/english/academia.

Campbell, J. L., Garg, M., & Ryu, P. (2023). Do the SEC's Disclosure Rules affect Shareholder Value? *SSRN Electronic Journal*, 1–69.

Cassell, C. A., Dreher, L. M., & Myers, L. A. (2013). Reviewing the SECs Review Process: 10-K Comment Letters and the Cost of Remediation. *The Accounting Review*, *88*(6), 1875–1908.

Chakrabarty, B., Jain, P. K., Shkilko, A., & Sokolov, K. (2021). Unfiltered Market Access and Liquidity: Evidence from the SEC Rule 15c3-5. *Management Science*, *67*(2), 1183–1198.

Chaney, P. K., Faccio, M., & Parsley, D. (2011). The Quality of Accounting Information in Politically Connected Firms. *Journal of Accounting and Economics*, *51*, 58–76.

Chang, J., Boyd-Graber, J., Gerrish, S., Wang, C., & Blei, D. M. (2009). Reading Tea Leaves: How Humans Interpret Topic Models. *Advances in Neural Information Processing Systems*, *22*, 288–296.

Chen, Z., Dhaliwal, D. S., & Xie, H. (2010). Regulation Fair Disclosure and the Cost of Equity Capital. *Review of Accounting Studies*, *15*(1), 106–144.

Chmielewicz, K. (1994). *Forschungskonzeptionen der Wirtschaftswissenschaft* (3., unveränd. Aufl. ed.)., volume 92 of *Sammlung Poeschel*. Stuttgart: Schäffer-Poeschel.

Christensen, H. B., Hail, L., & Leuz, C. (2013). Mandatory IFRS Reporting and Changes in Enforcement. *Journal of Accounting and Economics*, *56*(2-3), 147–177.

Christensen, H. B., Hail, L., & Leuz, C. (2016). Capital-Market Effects of Securities Regulation: Prior Conditions, Implementation, and Enforcement. *Review of Financial Studies*, *29*(11), 2885–2924.

Chua, W. F. (1986). Radical Developments in Accounting Thought. *The Accounting Review*, *64*(4), 601–632.

Chung, K. H. & Chuwonganant, C. (2012). Regulation NMS and Market Quality. *Financial Management*, *41*(2), 285–317.

Coates, J. C. (2007). The Goals and Promise of the Sarbanes–Oxley Act. *Journal of Economic Perspectives*, *21*(1), 91–116.

Coates, J. C. (2015). Cost-Benefit Analysis of Financial Regulation: Case Studies and Implications. *The Yale Law Journal*, *124*(4), 882–1011.

Coenenberg, A. G., Haller, A., Mattner, G., & Schultze, W. (2018). *Einführung in das Rechnungswesen* (7., überarbeitete Auflage ed.). Stuttgart: Schäffer-Poeschel Verlag.

Cooper, D. J. (2002). The Doctoral Colloquium of the EAA and European research traditions. *European Accounting Review*, *11*(1), 77–81.

Cooper, D. J. & Sherer, M. J. (1984). The Value of Corporate Accounting Reports: Arguments for a Political Economy of Accounting. *Accounting, Organizations and Society*, *9*(3-4), 207–232.

Copeland, T. E. & Galai, D. (1983). Information Effects on the Bid-Ask Spread. *The Journal of Finance*, *38*(5), 1457.

Correia, M. M. (2014). Political Connections and SEC Enforcement. *Journal of Accounting and Economics*, *57*(2–3), 241–262.

Cumming, D., Johan, S., & Li, D. (2011). Exchange Trading Rules and Stock Market Liquidity. *Journal of Financial Economics*, *99*(3), 651–671.

Cunningham, L. M. & Leidner, J. J. (2022). The SEC Filing Review Process: A Survey and Future Research Opportunities. *Contemporary Accounting Research*, *39*(3), 1653–1688.

Daske, H., Hail, L., Leuz, C., & Verdi, R. (2008). Mandatory IFRS Reporting around the World: Early Evidence on the Economic Consequences. *Journal of Accounting Research*, *46*(5), 1085–1142.

de Man, A.-P., Luvison, D., & de Leeuw, T. (2020). A Temporal View on the Academic–Practitioner Gap. *Journal of Management Inquiry*, *31*(2), 181–196.

Defond, M. L., Francis, J. R., & Hallman, N. J. (2018). Awareness of SEC Enforcement and Auditor Reporting Decisions. *Contemporary Accounting Research*, *35*(1), 277–313.

deHaan, E. (2021). Using and Interpreting Fixed Effects Models. *SSRN Electronic Journal*, 1–40.

Demski, J. S., Dopuch, N., Lev, B., Ronen, J., Searfoss, J., & Sunder, S. (1991). A Statement on the State of Academic Accounting. https://works.bepress.com/shyam-sunder/481/.

DERA (2017). Access to Capital and Market Liquidity. https://www.sec.gov/files/access-capital-and-market-liquidity-study-dera-2017.pdf.

Diamond, D. W. & Verrecchia, R. E. (1991). Disclosure, Liquidity, and the Cost of Capital. *The Journal of Finance*, *46*(4), 1325.

Diether, K. B., Lee, K.-H., & Werner, I. M. (2009). It's SHO Time! Short-Sale Price Tests and Market Quality. *The Journal of Finance*, *64*(1), 37–73.

DiMaggio, P. J. & Powell, W. W. (1983). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review*, *48*(2), 147.

Donovan, C. (2005). The Benefits of Academic/Practitioner Collaboration. *Accounting Education*, *14*(4), 445–452.

Drake, M. S., Jennings, J., Roulstone, D. T., & Thornock, J. R. (2017). The Comovement of Investor Attention. *Management Science*, *63*(9), 2847–2867.

Drake, M. S., Lamoreaux, P. T., Quinn, P. J., & Thornock, J. R. (2019). Auditor Benchmarking of Client Disclosures. *Review of Accounting Studies*, *24*(2), 393–425.

Drake, M. S., Roulstone, D. T., & Thornock, J. R. (2015). The Determinants and Consequences of Information Acquisition via EDGAR. *Contemporary Accounting Research*, *32*(3), 1128–1161.

Drake, M. S., Roulstone, D. T., & Thornock, J. R. (2016). The Usefulness of Historical Accounting Reports. *Journal of Accounting and Economics*, *61*(2-3), 448–464.

Dyckman, T. R. (1989). Commentary on Practice to Research: What Have You Done for Me Lately? *Accounting Horizons*, *3*(1), 111–118.

Dyckman, T. R. & Zeff, S. A. (1984). Two Decades of the Journal of Accounting Research. *Journal of Accounting Research*, *22*(1), 225–297.

Dyckman, T. R. & Zeff, S. A. (2015). Accounting Research: Past, Present, and Future. *Abacus*, *51*(4), 511–524.

Dyer, T., Lang, M., & Stice-Lawrence, L. (2017). The Evolution of 10-K Textual Disclosure: Evidence from Latent Dirichlet Allocation. *Journal of Accounting and Economics*, *64*(2-3), 221–245.

Ege, M., Glenn, J. L., & Robinson, J. R. (2019). Unexpected SEC Resource Constraints and Comment Letter Quality. *Contemporary Accounting Research*, *37*(1), 33–67.

Eleswarapu, V. R., Thompson, R., & Venkataraman, K. (2004). The Impact of Regulation Fair Disclosure: Trading Costs and Information Asymmetry. *Journal of Financial and Quantitative Analysis*, *39*(2), 209–225.

Endenich, C. & Trapp, R. (2018). Signaling Effects of Scholarly Profiles – The Editorial Teams of North American Accounting Association Journals. *Critical Perspectives on Accounting*, *51*, 4–23.

Ertimur, Y. & Nondorf, M. E. (2006). IPO Firms and the SEC Comment Letter Process. *Working Paper*, 1–57.

Evans, E., Burritt, R., & Guthrie, J. (2011). *Bridging the Gap between Academic Accounting Research and Professional Practice* (1 ed.). Sydney: Institute of Chartered Accountants in Australia.

Ewert, R. & Wagenhofer, A. (2012). Using Academic Research for the Post-Implementation Review of Accounting Standards: A Note. *Abacus*, *48*(2), 278–291.

Faccio, M. (2006). Politically Connected Firms. *The American Economic Review*, *96*(1), 369–386.

Fang, D., Yang, H., Gao, B., & Li, X. (2018). Discovering Research Topics from Library Electronic References using Latent Dirichlet Allocation. *Library Hi Tech*, *36*(3), 400–410.

Farber, D. B., Johnson, M. F., & Petroni, K. R. (2007). Congressional Intervention in the Standard-Setting Process: An Analysis of the Stock Option Accounting Reform Act of 2004. *Accounting Horizons*, *21*(1), 1–22.

Federsel, F. P., Fülbier, R. U., & Seitz, J. (2023). Research-Practice Gap in Accounting Journals? A Topic Modeling Approach. *Journal of Accounting Literature*, (ahead-of-print).

Ferri, P., Lusiani, M., & Pareschi, L. (2018). Accounting for Accounting History: A Topic Modeling Approach (1996–2015). *Accounting History*, *23*(1-2), 173–205.

Ferry, L., Saliterer, I., Steccolini, I., & Tucker, B. P. (2019). *The Research-Practice Gap on Accounting in the Public Services*. Cham: Springer International Publishing.

Feuerriegel, S. & Pröllochs, N. (2021). Investor Reaction to Financial Disclosures across Topics: An Application of Latent Dirichlet Allocation. *Decision Sciences*, *52*(3), 608–628.

Fleming, M. J. (1995). New Evidence on the Effectiveness of the Proxy Mechanism. *Federal Reserve Bank of New York*, 1–32.

Fogarty, T. J., Hussein, M. E., & Ketz, J. E. (1994). Political Aspects of Financial Accounting Standard Setting in the USA. *Accounting, Auditing & Accountability Journal*, *7*(4), 24–46.

Förster, G. & Schönenberg, A. (2013). Wahrnehmung steuerlicher Fachzeitschriften: Eine empirische Untersuchung. *Steuer und Wirtschaft*, *90*(1), 39–52.

Fox, Z. D. & Wilson, R. (2023). Double Trouble? IRS's Attention to Financial Accounting Restatements. *Review of Accounting Studies*, *28*(4), 2002–2038.

Fraser, K. & Sheehy, B. (2020). Abundant Publications but Minuscule Impact: The Irrelevance of Academic Accounting Research on Practice and the Profession. *Publications*, *8*(4), 46.

Freeman, J. L. (1965). *The Political Process. Executive Bureau-legislative Committee Relations*. New York: Random House.

Friedman, M. (1966). The Methodology of Positive Economics. In M. Friedman (Ed.), *Essays in Positive Economics* (pp. 3–16). Chicago: University of Chicago Press.

Fülbier, R. U., Hitz, J.-M., & Sellhorn, T. (2009). Relevance of Academic Research and Researchers' Role in the IASB's Financial Reporting Standard Setting. *Abacus*, *45*(4), 455–492.

Fülbier, R. U. & Sellhorn, T. (2023). Understanding and Improving the Language of Business: How Accounting and Corporate Reporting Research can better serve Business and Society. *Journal of Business Economics*, *93*(6–7), 1089–1124.

Fülbier, R. U. & Weller, M. (2009). Normative Rechnungslegungsforschung im Abseits? Einige wissenschaftstheoretische Anmerkungen. *Journal for General Philosophy of Science*, *39*(2), 351–382.

Fulmer, S., Knill, A., & Yu, X. (2023). Negation of Sanctions: The Personal Effect of Political Contributions. *Journal of Financial and Quantitative Analysis*, *58*(7), 2783–2819.

Gendron, Y. (2008). Constituting the Academic Performer: The Spectre of Superficiality and Stagnation in Academia. *European Accounting Review*, *17*(1), 97–127.

Geoffroy, R. & Lee, H. (2021). The Role of Academic Research in SEC Rulemaking: Evidence from Business Roundtable v. SEC. *Journal of Accounting Research*, *59*(2), 375–435.

Gerig, A. & Michayluk, D. (2014). Automated Liquidity Provision. *DERA Working Paper*, 1–43.

Gibbons, M. (1994). *The New Production of Knowledge: The Dynamics of Science and Research in Contemporary Societies*. London and Thousand Oaks Calif.: SAGE Publications.

Gietzmann, M. B. & Pettinicchio, A. K. (2014). External Auditor Reassessment of Client Business Risk Following the Issuance of a Comment Letter by the SEC. *European Accounting Review*, *23*(1), 57–85.

Gipper, B., Lombardi, B. J., & Skinner, D. J. (2013). The Politics of Accounting Standard-Setting: A Review of Empirical Research. *Australian Journal of Management*, *38*(3), 523–551.

Glosten, L. R. & Harris, L. E. (1988). Estimating the Components of the Bid/Ask Spread. *Journal of Financial Economics*, *21*(1), 123–142.

Glosten, L. R. & Milgrom, P. R. (1985). Bid, Ask and Transaction Prices in a Specialist Market with Heterogeneously Informed Traders. *Journal of Financial Economics*, *14*(1), 71–100.

Goldman, E., Rocholl, J., & So, J. (2009). Do Politically Connected Boards Affect Firm Value? *Review of Financial Studies*, *22*(6), 2331–2360.

Gordon, S. C. & Hafer, C. (2005). Flexing Muscle: Corporate Political Expenditures as Signals to the Bureaucracy. *American Political Science Review*, *99*(2), 245–261.

Green, J., Hand, J. R. M., & Soliman, M. T. (2011). Going, Going, Gone? The Apparent Demise of the Accruals Anomaly. *Management Science*, *57*(5), 797–816.

Greenstone, M., Oyer, P., & Vissing-Jørgensen, A. (2006). Mandated Disclosure, Stock Returns, and the 1964 Securities Acts Amendments. *The Quarterly Journal of Economics*, *121*(2), 399–460.

Grier, K. B., Munger, M. C., & Roberts, B. E. (1994). The Determinants of Industry Political Activity, 1978–1986. *American Political Science Review*, *88*(4), 911–926.

Grossman, G. M. & Helpman, E. (1994). Protection for Sale. *The American Economic Review*, *84*(4), 833–850.

Grosu, C., Almasan, A. C., & Circa, C. (2015). Difficulties in the Accounting Research–Practice–Teaching Relationship: Evidence from Romania. *Journal of Accounting and Management Information Systems*, *14*(2), 275–302.

Gunny, K. A. & Hermis, J. M. (2020). How Busyness Influences SEC Compliance Activities: Evidence from the Filing Review Process and Comment Letters. *Contemporary Accounting Research*, *37*(1), 7–32.

Habib, A., Ranasinghe, D., Muhammadi, A. H., & Islam, A. (2018). Political Connections, Financial Reporting and Auditing: Survey of the Empirical Literature. *Journal of International Accounting, Auditing and Taxation*, *31*, 37–51.

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.

Haslag, P. & Ringgenberg, M. C. (2023). The Demise of the NYSE and Nasdaq: Market Quality in the Age of Market Fragmentation. *Journal of Financial and Quantitative Analysis*, *58*(7), 2753–2782.

Hayden, G. M. & Bodie, M. T. (2012). The Bizarre Law & Economics of 'BusinessRoundtable v. SEC'. *Journal of Corporation Law*, *38*(1), 101–137.

Hayes, A. F. (2022). *Introduction to Mediation, Moderation, and Conditional Process Analysis* (3rd ed.). The Guilford Press.

Heese, J. (2019). The Political Influence of Voters' Interests on SEC Enforcement. *Contemporary Accounting Research*, *36*(2), 869–903.

Heese, J. (2022). Does Industry Employment of Active Regulators Weaken Oversight? *Management Science*, *68*(12), 9198–9218.

Heese, J., Khan, M., & Ramanna, K. (2017). Is the SEC Captured? Evidence from Comment-Letter Reviews. *Journal of Accounting and Economics*, *64*(1), 99–122.

Hessels, L. K. & van Lente, H. (2008). Re-Thinking new Knowledge Production: A Literature Review and a Research Agenda. *Research Policy*, *37*(4), 740–760.

Hirshleifer, J. (1971). The Private and Social Value of Information and the Reward to Inventive Activity. *The American Economic Review*, *61*(4), 561–574.

Hobbes, T. (1651). *Leviathan: or the Matter, Forme, & Power of a Common-wealth Ecclesiasticall and Civill.* London: Andrew Crooke.

Hobbes, T. (1668). *Leviathan: , Sive De Materia, Forma, & Potestate Civitatis Ecclesiaticae Et Civilis*. Amsterdam: Joan Blaeu.

Holzman, E. R., Marshall, N. T., & Schmidt, B. A. (2024). When are Firms on the Hot Seat? An Analysis of SEC Investigation Preferences. *Journal of Accounting and Economics*, *77*(1).

Hopwood, A. G. (2002). If only there were Simple Solutions, but there aren't. Some Reflections on Zimmerman's Critique of Empirical Management Accounting Research. *European Accounting Review*, *11*(4), 777–785.

Hopwood, A. G. (2007). Whither Accounting Research? *The Accounting Review*, *82*(5), 1365–1374.

Hu, E. (2018). Intentional Access Delays, Market Quality, and Price Discovery: Evidence from IEX Becoming an Exchange. *DERA Working Paper*, 1–50.

Huang, A. H., Lehavy, R., Zang, A. Y., & Zheng, R. (2018). Analyst Information Discovery and Interpretation Roles: A Topic Modeling Approach. *Management Science*, *64*(6), 2833–2855.

IFRS Foundation (2023). IASB Research Forum 2023. https://www.ifrs.org/news-and-events/events/2023/november/iasb-research-forum-2023/.

Ikenberry, D. & Lakonishok, J. (1993). Corporate Governance Through the Proxy Contest: Evidence and Implications. *The Journal of Business*, *66*(3), 405–435.

Inanga, E. L. & Schneider, W. B. (2005). The Failure of Accounting Research to Improve Accounting Practice: A Problem of Theory and Lack of Communication. *Critical Perspectives on Accounting*, *16*(3), 227–248.

Iselin, M., Johnson, B. A., Ott, J., & Raleigh, J. (2024). Protecting Wall Street or Main Street: SEC Monitoring and Enforcement of Retail-Owned Firms. *Review of Accounting Studies*, *29*, 1235–1275.

Ivanov, P., Orlov, A., & Schihl, M. (2020). Bond Liquidity and Dealer Inventories: Insights from US and European Regulatory Data. *DERA Working Paper*, 1–33.

Jaffe, A. B. (1989). Real Effects of Academic Research. *The American Economic Review*, *79*(5), 957–970.

Jain, P. K., Kim, J.-C., & Rezaee, Z. (2008). The Sarbanes-Oxley Act of 2002 and Market Liquidity. *The Financial Review*, *43*(3), 361–382.

Jansen, E. P. (2018). Bridging the Gap between Theory and Practice in Management Accounting: Reviewing the Literature to Shape Interventions. *Accounting, Auditing & Accountability Journal*, *31*(5), 1486–1509.

Jeffrey Milyo, David Primo, & Timothy Groseclose (2000). Corporate PAC Campaign Contributions in Perspective. *Business and Politics*, *2*(1), 75–88.

Jennings, J., Kim, J. M., Lee, J., & Taylor, D. J. (2024). Measurement Error, Fixed Effects, and False Positives in Accounting Research. *Review of Accounting Studies*, *29*, 959–995.

Johnston, R. & Petacchi, R. (2017). Regulatory Oversight of Financial Reporting: Securities and Exchange Commission Comment Letters. *Contemporary Accounting Research*, *34*(2), 1128–1155.

Jollineau, S. J. & Bowen, R. M. (2023). A Practical Guide to Using Path Analysis: Mediation and Moderation in Accounting Research. *Journal of Financial Reporting*, *8*(1), 11–40.

Jones, C. S. & Pomorski, L. (2017). Investing in Disappearing Anomalies. *Review of Finance*, *21*(1), 237–267.

Kalt, J. P. & Zupan, M. A. (1984). Capture and Ideology in the Economic Theory of Politics. *The American Economic Review*, *74*(3), 279–300.

Kaplan, R. S. (2011). Accounting Scholarship that Advances Professional Knowledge and Practice. *The Accounting Review*, *86*(2), 367–383.

Kaplan, R. S. (2019). Reverse the Curse of the Top-5. *Accounting Horizons*, *33*(2), 17–24.

Karpoff, J. M., Lee, D. S., & Martin, G. S. (2008). The Consequences to Managers for Financial Misrepresentation. *Journal of Financial Economics*, *88*(2), 193–215.

Katz, J. G. (2010). Reviewing the SEC, Reinvigorating the SEC. *University of Pittsburgh Law Review*, *71*(3), 489–516.

Kau, J. B. & Rubin, P. H. (1979). Self-Interest, Ideology, and Logrolling in Congressional Voting. *The Journal of Law and Economics*, *22*(2), 365–384.

Kavame Eroglu, Z. G. (2017). The Political Economy of International Standard Setting in Financial Reporting: How the United States Led the Adoption of IFRS Across the World. *Northwestern Journal of International Law and Business*, *37*(3), 459–516.

Kedia, S. & Rajgopal, S. (2011). Do the SEC's Enforcement Preferences Affect Corporate Misconduct? *Journal of Accounting and Economics*, *51*(3), 259–278.

Keynes, J. N. (1890). *The Scope and Method of Political Economy* (4 (1917) ed.). McMaster University Archive for the History of Economic Thought.

Khademian, A. M. (1992). *The SEC and Capital Market Regulation: The Politics of Expertise*. University of Pitsburgh Press.

Khalifa, R. & Quattrone, P. (2008). The Governance of Accounting Academia: Issues for a Debate. *European Accounting Review*, *17*(1), 65–86.

Khan, U., Li, B., Rajgopal, S., & Venkatachalam, M. (2018). Do the FASB's Standards Add Shareholder Value? *The Accounting Review*, *93*(2), 209–247.

Khokhar, A.-R. & Shahriari, H. (2021). Is the SEC Captured? Evidence from Political Connectedness and SEC Enforcement Actions. *Accounting & Finance*, *62*(2), 2725–2756.

Kieser, A. & Leiner, L. (2009). Why the Rigour–Relevance Gap in Management Research Is Unbridgeable. *Journal of Management Studies*, *46*(3), 516–533.

Kim, J.-H. (2008). Corporate Lobbying Revisited. *Business and Politics*, *10*(2), 1–23.

Kim, Y., Li, H., & Li, S. (2012). Does Eliminating the Form 20-F Reconciliation from IFRS to U.S. GAAP have Capital Market Consequences? *Journal of Accounting and Economics*, *53*(1-2), 249–270.

Kinney Jr., W. R. (1989). The Relation of Accounting Research to Teaching and Practice: A ‚qPositive'q View. *Accounting Horizons*, *3*(1), 119–124.

Kolev, K. S., Lee, D., & Neamtiu, M. (2023). SEC Confidential Treatment and Regulatory Filing Reviews. *Journal of Accounting and Public Policy*, *42*(3), 107069.

Kraus, B. R. (2015). Economists in the Room at the SEC. *The Yale Law Journal Forum*, *124*, 280–304.

Krishnan, J., Li, M., & Park, H. J. (2024). Auditor Political Connections and SEC Oversight. *SSRN Electronic Journal*, 1–52.

Larcker, D. F., Ormazabal, G., & Taylor, D. J. (2011). The Market Reaction to Corporate Governance Regulation. *Journal of Financial Economics*, *101*(2), 431–448.

Larcker, D. F. & Rusticus, T. O. (2010). On the Use of Instrumental Variables in Accounting Research. *Journal of Accounting and Economics*, *49*(3), 186–205.

Lee, T. A. (1989). Education, Practice and Research in Accounting: Gaps, Closed Loops, Bridges and Magic Accounting. *Accounting and Business Research*, *75*(19), 237–253.

Lee, T. A. (1999). Anatomy of a Professional Élite: The Executive Commitee of the American Accounting Association 1916-1996. *Critical Perspectives on Accounting*, *10*(2), 247–264.

Lee, T. A. & Williams, P. F. (1999). Accounting From the Inside: Legitimizing the Accounting Academic Elite. *Critical Perspectives on Accounting*, *10*(6), 867–895.

Lee, Y.-H. A. (2015). SEC Rules, Stakeholder Interests, and Cost–Benefit Analysis. *Capital Markets Law Journal*, *10*(3), 311–328.

Lee, Y.-H. A. (2021). A Model of Stock-Market-Based Rulemaking. *American Law and Economics Review*, *23*(1), 1–55.

Lesmond, D. A., Ogden Joseph P., & Trzcinka, C. A. (1999). A New Estimate of Transaction Costs. *Review of Financial Studies*, *12*(5), 1113–1141.

Leuz, C. (2018). Evidence-based Policymaking: Promise, Challenges and Opportunities for Accounting and Financial Markets Research. *Accounting and Business Research*, *48*(5), 582–608.

Leuz, C., Malani, A., Muhn, M., & Jakab, L. (2023). Do Conflict of Interests Disclosures Work? Evidence from Citations in Medical Journals. *NBER Working Paper Series*, (30927).

Lewis, C. M. (2012). Risk Modeling at the SEC: The Accounting Quality Model. https://www.sec.gov/news/speech/2012-spch121312cmlhtm.

Locke, J. & Lowe, A. D. (2008). Evidence and Implications of Multiple Paradigms in Accounting Knowledge Production. *European Accounting Review*, *17*(1), 161–191.

Lohmann, C. & Eulerich, M. (2017). Publication Trends and the Network of Publishing Institutions in Accounting: Data on The Accounting Review , 1926–2014. *Accounting History Review*, *27*(1), 1–25.

Loon, Y. C. & Zhong, Z. (2016). Does Dodd-Frank affect OTC Transaction Costs and Liquidity? Evidence from Real-Time CDS Trade Reports. *Journal of Financial Economics*, *119*(3), 645–672.

Loughran, T. & McDonald, B. (2016). Textual Analysis in Accounting and Finance: A Survey. *Journal of Accounting Research*, *54*(4), 1187–1230.

Loughran, T. & McDonald, B. (2017). The Use of EDGAR Filings by Investors. *Journal of Behavioral Finance*, *18*(2), 231–248.

Lukka, K. & Granlund, M. (2002). The Fragmented Communication Structure within the Accounting Academia: The Case of Activity-Based Costing Research Genres. *Accounting, Organizations and Society*, *27*(1-2), 165–190.

Lukka, K. & Kasanen, E. (1996). Is Accounting a Global or a Local Discipline? Evidence from Major Research Journals. *Accounting, Organizations and Society*, *21*(7-8), 755–773.

Lukka, K. & Mouritsen, J. (2002). Homogeneity or Heterogeneity of Research in Management Accounting? *European Accounting Review*, *11*(4), 805–811.

Marquering, W., Nisser, J., & Valla, T. (2006). Disappearing Anomalies: A Dynamic Analysis of the Persistence of Anomalies. *Applied Financial Economics*, *16*(4), 291–302.

Mattessich, R. (1995). *Critique of Accounting: Examination of the Foundations and Normative Structure of an Applied Discipline*. London: Westport, CT: Quorum Books.

Mayew, W. J., Sethuraman, M., & Venkatachalam, M. (2020). Individual Analysts' Stock Recommendations, Earnings Forecasts, and the Informativeness of Conference Call Question and Answer Sessions. *The Accounting Review*, *95*(6), 311–337.

McCarthy, W. E. (2012). Accounting Craftspeople versus Accounting Seers: Exploring the Relevance and Innovation Gaps in Academic Accounting Research. *Accounting Horizons*, *26*(4), 833–843.

McCubbins, M. D. (1999). Abdication or Delegation? Congress, the Bureaucracy, and the Delegation Dilemma. *Regulation*, *22*(2), 30–37.

McGuire, M. & Perna, L. W. (2023). Connecting Policymakers With Academic Research to Inform Public Policy. *Change: The Magazine of Higher Learning*, *55*(6), 15–20.

McLean, D. R. & Pontiff, J. (2016). Does Academic Research Destroy Stock Return Predictability? *The Journal of Finance*, *71*(1), 5–32.

McLeay, S., Ordelheide, D., & Young, S. (2000). Constituent Lobbying and its Impact on the Development of Financial Reporting Regulations: Evidence from Germany. *Accounting, Organizations and Society*, *25*(1), 79–98.

McMullin, J. & Schonberger, B. (2022). When Good Balance Goes Bad: A Discussion of Common Pitfalls When Using Entropy Balancing. *Journal of Financial Reporting*, *7*(1), 167–196.

McQueen, G. & Thorley, S. (1997). Do Investors Learn? Evidence from a Gold Market Anomaly. *The Financial Review*, *32*(3), 501–525.

Merchant, K. A. (2010). Paradigms in Accounting Research: A View from North America. *Management Accounting Research*, *21*(2), 116–120.

Merchant, K. A. (2012). Making Management Accounting Research More Useful. *Pacific Accounting Review*, *24*(3), 334–356.

Meyer, J. W. & Rowan, B. (1977). Institutionalized Organizations: Formal Structure as Myth and Ceremony. *American Journal of Sociology*, *83*(2), 340–363.

Mitchell, F. (2002). Research and Practice in Management Accounting: Improving Integration and Communication. *European Accounting Review*, *11*(2), 277–289.

Moehrle, S. R., Anderson, K. L., Ayres, F. L., Bolt-Lee, C. E., Debreceny, R. S., Dugan, M. T., Hogan, C. E., Maher, M. W., & Plummer, E. (2009). The Impact of Academic Accounting Research on Professional Practice: An Analysis by the AAA Research Impact Task Force. *Accounting Horizons*, *23*(4), 411–456.

Moizer, P. (2009). Publishing in Accounting Journals: A Fair Game? *Accounting, Organizations and Society*, *34*(2), 285–304.

Morton, S. (2015). Progressing Research Impact Assessment: A 'Contributions' Approach. *Research Evaluation*, *24*(4), 405–419.

Muller, K. A., Riedl, E. J., & Sellhorn, T. (2011). Mandatory Fair Value Accounting and Information Asymmetry: Evidence from the European Real Estate Industry. *Management Science*, *57*(6), 1138–1153.

Nam, J. & Thompson, R. (2023). Does Financial Statement Comparability Facilitate SEC Oversight? *Contemporary Accounting Research*, *40*(2), 1315–1349.

Nowotny, H. (2001). *Re-Thinking Science: Knowledge and the Public in an Age of Uncertainty*. Cambridge: Policy.

Oesterle, M.-J. (2006). Wahrnehmung betriebswirtschaftlicher Fachzeitschriften durch Praktiker. *Die Betriebswirtschaft*, *66*(3), 307–325.

O'Hara, M. & Ye, M. (2011). Is Market Fragmentation Harming Market Quality? *Journal of Financial Economics*, *100*(3), 459–474.

Oler, D. K., Oler, M. J., & Skousen, C. J. (2010). Characterizing Accounting Research. *Accounting Horizons*, *24*(4), 635–670.

Orchard, L. X., Sbaraglia, A., Bilbeisi, K., & Grant, D. M. (2020). Do Accounting Researchers Investigate Topics of Interest to Accounting Practitioners? Preliminary Evidence. *SAM Advanced Management Journal*, *85*(1), 28–37.

Palea, V. (2017). Whither Accounting Research? A European View. *Critical Perspectives on Accounting*, *42*, 59–73.

Panozzo, F. (1997). The Making of the Good Academic Accountant. *Accounting, Organizations and Society*, *22*(5), 447–480.

Parker, L. D. & Guthrie, J. (2013). Accounting Scholars and Journals Rating and Benchmarking. *Accounting, Auditing & Accountability Journal*, *26*(1), 4–15.

Parker, L. D., Guthrie, J., & Linacre, S. (2011). Editorial: The Relationship between Academic Accounting Research and Professional Practice. *Accounting, Auditing & Accountability Journal*, *24*(1), 5–14.

Peck, H. T. (1896). *Harper's Dictionary of Classical Literature and Antiquities*, volume 1. New York (State): American Book Co.

Peltzman, S. (1976). Toward a More General Theory of Regulation. *The Journal of Law and Economics*, *19*(2), 211–240.

Piering, L. (2024). *Independence of Financial Oversight: Evidence on Stakeholder Influence on Different Dimensions of SEC Independence*. PhD thesis, University of Bayreuth, Bayreuth.

Posner, E. A. & Weyl, E. G. (2013). Benefit-Cost Analysis for Financial Regulation. *The American Economic Review*, *103*(3), 393–397.

Posner, E. A. & Weyl, E. G. (2015). Cost-Benefit Analysis of Financial Regulations: A Response to Criticisms. *The Yale Law Journal Forum*, *124*.

Posner, R. A. (1974). Theories of Economic Regulation. *The Bell Journal of Economics and Management Science*, *5*(2), 335.

Preuss, S. & Königsgruber, R. (2021). How do Corporate Political Connections Influence Financial Reporting? A Aynthesis of the Literature. *Journal of Accounting and Public Policy*, *40*(1), 106802.

Qu, S. Q., Ding, S., & Lukasewich, S. M. (2009). Research the American Way: The Role of US Elites in Disseminating and Legitimizing Canadian Academic Accounting Research. *European Accounting Review*, *18*(3), 515–569.

Quagli, A., Avallone, F., & Ramassa, P. (2016). The Real Impact Factor and the Gap between Accounting Research and Practice. *Financial Reporting*, (1), 29–57.

Raffounier, B. & Schatt, A. (2010). Is European Accounting Research Fairly Reflected in Academic Journals? An Investigation of Possible Non-mainstream and Language Barrier Biases. *European Accounting Review*, (1), 161–190.

Rajgopal, S. (2021). Integrating Practice into Accounting Research. *Management Science*, *67*(9), 5430–5454.

Ratnatunga, J. (2012). Ivory Towers and Legal Powers: Attitudes and Behaviour of Town and Gown to the Accounting Research-Practice Gap. *Journal of Applied Management Accounting Research*, *10*(2), 1–20.

Ratzinger-Sakel, N. V. & Gray, G. L. (2015). Moving Toward a Learned Profession and Purposeful Integration: Quantifying the Gap between the Academic and Practice Communities in Auditing and Identifying New Research Opportunities. *Journal of Accounting Literature*, *35*, 77–103.

Röder, M., Both, A., & Hinneburg, A. (2015). Exploring the Space of Topic Coherence Measures. In Cheng, X., Li, H., Gabrilovich, E., & Tang, J. (Eds.), *Proceedings of the Eighth ACM International Conference on Web Search and Data Mining*, (pp. 399–408)., New York, NY, USA. ACM.

Rodrígez García, J. M. (2001). Scientia Potestas Est – Knowledge is Power: Francis Bacon to Michel Foucault. *Neohelicon*, *28*(1), 109–121.

Rosenlund, J., Notini, P., & Bravo, G. (2017). Exploring Attitudes to Societal Relevance: The Effects of Reflection on Research Practices among Swedish Environmental Scientists. *Journal of Responsible Innovation*, *4*(3), 337–353.

Rutherford, B. A. (2011). Accounting Research and Accounting Policy: What Kind of Gap? *Accounting in Europe*, *8*(2), 141–154.

Sariyar, M. & Borg, A. (2010). The RecordLinkage Package: Detecting Errors in Data. *The R Journal*, *2*(2), 61.

Scalia, A. (1982). Rulemaking as Politics. *Administrative Law Review*, *34*, xxv.

Schipper, K. (1994). Academic Accounting Research and the Standard Setting Process. *Accounting Horizons*, *8*(4), 61–73.

Schipper, K. (2010). How Can We Measure the Costs and Benefits of Changes in Financial Reporting Standards? *Accounting and Business Research*, *40*(3), 309–327.

Schwert, G. W. (2003). Anomalies and Market Efficiency. In G. M. Constantinides, M. Harris, & R. M. Stulz (Eds.), *Handbook of the Economics of Finance*, volume 1, Part 2 (pp. 939–974). Elsevier.

Scott, J. (2000). Rational Choice Theory. In G. Browning, A. Halcli, & F. Webster (Eds.), *Understanding Contemporary Society: Theories of the Present* (pp. 126–138). 1 Oliver's Yard, 55 City Road, London EC1Y 1SP United Kingdom: SAGE Publications Ltd.

SEC (2007). About the Division of Enfocement. https://www.sec.gov/enforce/Article/enforce-about.html.

SEC (2012). Current Guidance on Economic Analysis in SEC Rulemakings. https://www.sec.gov/divisions/riskfin/rsfi_guidance_econ_analy_secrulemaking.pdf.

SEC (2016). About the SEC. https://www.sec.gov/about.shtml.

SEC (2019). Filing Review Process. https://www.sec.gov/divisions/corpfin/cffilingreview.htm.

SEC (2022). Strategic Plan Fiscal Years 2022–2026. https://www.sec.gov/files/sec_strategic_plan_fy22-fy26.pdf.

SEC (2023). Rulemaking, How It Works. https://www.investor.gov/introduction-investing/investing-basics/glossary/rulemaking-how-it-works.

Seitz, J. & Piering, L. (2024). Political Connections and SEC Attention. *Working Paper*, 1–68.

Sellhorn, T. (2020). My Corona Moment. https://arc.eaa-online.org/blog/my-corona-moment.

Sidhu, B., Smith, T., Whaley, R. E., & Willis, R. H. (2008). Regulation Fair Disclosure and the Cost of Adverse Selection. *Journal of Accounting Research*, *46*(3), 697–728.

Sinclair, R. & Cordery, C. J. (2016). Bridging the Gap between Academia and Standard Setters. *Pacific Accounting Review*, *28*(2), 135–152.

Singleton-Green, B. (2010). The Communication Gap: Why Doesn't Accounting Research Make a Greater Contribution to Debates on Accounting Policy? *Accounting in Europe*, *7*(2), 129–145.

Snyder, J. M. (1990). Campaign Contributions as Investments: The U.S. House of Representatives, 1980-1986. *Journal of Political Economy*, *98*(6), 1195–1227.

Snyder, J. M. (1992). Long-Term Investing in Politicians; Or, Give Early, Give Often. *The Journal of Law and Economics*, *35*(1), 15–43.

Soll, J. (2014). *The Reckoning: Financial Accountability and the Rise and Fall of Nations*. New York: Basic Books a member of the Perseus Books Group.

Steffen, T. D. (2022). The Information Asymmetry Effects of Expanded Disclosures About Derivative and Hedging Activities. *Management Science*, *68*(8), 6298–6325.

Steyvers, M. & Griffiths, T. (2014). Probabilistic Topic Models. In T. K. Landauer, D. S. McNamara, S. Dennis, & W. Kintsch (Eds.), *Handbook of Latent Semantic Analysis* (pp. 427–448). Lawrence Erlbaum Associates Publishers.

Stice-Lawrence, L. (2021). Monitoring Decisions and Frictions at the SEC. *SSRN Electronic Journal*, 1–65.

Stice-Lawrence, L. (2023). SEC Attention, A to Z. *SSRN Electronic Journal*, 1–56.

Stigler, G. J. (1964). Public Regulation of the Securities Markets. *The Business Lawyer*, *19*(3), 721–753.

Stigler, G. J. (1971). The Theory of Economic Regulation. *The Bell Journal of Economics and Management Science*, *2*(1), 3.

Stigler, G. J. (1992). Law or Economics? *The Journal of Law and Economics*, *35*(2), 455–468.

Stock, J. H., Wright, J. H., & Yogo, M. (2002). A Survey of Weak Instruments and Weak Identification in Generalized Method of Moments. *Journal of Business & Economic Statistics*, *20*(4), 518–529.

Tabachnick, B. G. & Fidell, L. S. (2007). *Using Multivariate Statistics* (5th edition ed.). Boston, MA: Allyn & Bacon/Pearson Education.

Tinker, A. M., Merino, B. D., & Neimark, M. D. (1982). The Normative Origins of Positive Theories: Ideology and Accounting Thought. *Accounting, Organizations and Society*, *7*(2), 167–200.

Trombetta, M., Wagenhofer, A., & Wysocki, P. (2012). The Usefulness of Academic Research in Understanding the Effects of Accounting Standards. *Accounting in Europe*, *9*(2), 127–146.

Tucker, B. P. (2013). What the Right Hand is Doing: Academic and Practitioner Perceptions of the Research-Practice Gap in Management Accounting. *SSRN Electronic Journal*, 1–54.

Tucker, B. P. & Lawson, R. (2015). Moving Academic Management Accounting Research Closer to Practice: A View from US and Australian Professional Accounting Bodies. *SSRN Electronic Journal*, 1–45.

Tucker, B. P. & Lowe, A. D. (2014). Practitioners are from Mars; Academics are from Venus? *Accounting, Auditing & Accountability Journal*, *27*(3), 394–425.

Tucker, B. P. & Parker, L. D. (2014). In our Ivory Towers? The Research-Practice Gap in Management Accounting. *Accounting and Business Research*, *44*(2), 104–143.

Tucker, B. P. & Parker, L. D. (2020). The Question of Research Relevance: a University Management Perspective. *Accounting, Auditing & Accountability Journal*, *33*(6), 1247–1275.

Tucker, B. P. & Schaltegger, S. (2016). Comparing the Research-Practice Gap in Management Accounting. *Accounting, Auditing & Accountability Journal*, *29*(3), 362–400.

Tucker, B. P. & Vesty, G. (2014). Building a Better Mousetrap? The Research-Practice Gap in Management Accounting - What Can We Learn from Nursing? *SSRN Electronic Journal*, 1–52.

Tuttle, B. & Dillard, J. F. (2007). Beyond Competition: Institutional Isomorphism in U.S. Accounting Research. *Accounting Horizons*, *21*(4), 387–409.

Unerman, J. & O'Dwyer, B. (2010). Analysing the Relevance and Utility of Leading Accounting Research. https://pure.uva.nl/ws/files/811764/92955_APIRA_2010_007_Unerman_Relevance_accounting_research.pdf.

van Helden, G. J. & Northcott, D. (2010). Examining the Practical Relevance of Public Sector Management Accounting Research. *Financial Accountability & Management*, *26*(2), 213–240.

Venkatesh, P. C. & Chiang, R. (1986). Information Asymmetry and the Dealer's Bid-Ask Spread: A Case Study of Earnings and Dividend Announcements. *The Journal of Finance*, *41*(5), 1089.

Vickers, B. (1992). Francis Bacon and the Progress of Knowledge. *Journal of the History of Ideas*, *53*(3), 495.

Walker, R. M., Chandra, Y., Zhang, J., & Witteloostuijn, A. (2019). Topic Modeling the Research–Practice Gap in Public Administration. *Public Administration Review*, *79*(6), 931–937.

Wang, F., Yan, X. S., & Zheng, L. (2024). Institutional Trading, News, and Accounting Anomalies. *Journal of Accounting and Economics*.

Wang, X. & Zhang, M. M. (2022). Sharing the Same Bed with Different Dreams: Topic Modeling the Research-Practice Gap in Public Relations 2011-2020. *Journal of Marketing Communications*, 413–437.

Watts, R. L. (1977). Corporate Financial Statements, A Product of the Market and Political Processes. *Australian Journal of Management*, *2*(1), 53–75.

Watts, R. L. & Zimmerman, J. L. (1978). Towards a Positive Theory of the Determination of Accounting Standards. *The Accounting Review*, *53*(1), 112–134.

Watts, R. L. & Zimmerman, J. L. (1979). The Demand for and Supply of Accounting Theories: The Market for Excuses. *The Accounting Review*, *54*(2), 273.

Weber, M. (1913/1964). Gutachten zur Werturteilsdiskussion im Ausschuß des Vereins für Socialpolitik. In E. Baumgarten & M. Weber (Eds.), *Max Weber, Werk und Person* (pp. 102–139). Tübingen: Mohr Siebeck.

Weingast, B. R. (1984). The Congressional-Bureaucratic System: A Principal Agent Perspective (with Applications to the SEC). *Public Choice*, *44*(1), 147–191.

Weingast, B. R. & Moran, M. J. (1983). Bureaucratic Discretion or Congressional Control? *Journal of Political Economy*, *91*(5), 765–800.

Weinkle, J. (2020). Experts, Regulatory Capture, and the "Governor's Dilemma": The Politics of Hurricane Risk Science and Insurance. *Regulation & Governance*, *14*(4), 637–652.

White, H. (1980). A Heteroskedasticity-Consistent Covariance Matrix Estimator and a Direct Test for Heteroskedasticity. *Econometrica*, *48*(4), 817.

White, J. T. (2017). The Evolving Role of Economic Analysis in SEC Rulemaking. *Georgia Law Review*, *50*(1).

Winter, S. (2012). What Do Journals Do? — Voluntary Public Goods and the Doomsday of Commercial Science Publishing. *SSRN Electronic Journal*, 1–18.

Wolk, H. I., Dodd, J. L., & Rozycki, J. J. (2017). *Accounting Theory: Conceptual Issues in a Political and Economic Environment* (Ninth edition ed.). Los Angeles: Sage.

Wooldridge, J. M. (2010). *Econometric Analysis of Cross Section and Panel Data* (2nd ed. ed.). Cambridge Mass.: MIT Press.

Wooldridge, J. M. (2020). *Introductory Econometrics: A Modern Approach* (7th ed.). Cengage.

Wu, X. (2020). SEC Regulations and Firms. *SSRN Electronic Journal*, 1–73.

Yu, F. & Yu, X. (2011). Corporate Lobbying and Fraud Detection. *Journal of Financial and Quantitative Analysis*, *46*(6), 1865–1891.

Yuan, Y. (2015). Market-Wide Attention, Trading, and Stock Returns. *Journal of Financial Economics*, *116*(3), 548–564.

Zeff, S. A. & Dyckman, T. R. (2018). A Historical Study of the First 30 Years of Accounting Horizons. *The Accounting Historians Journal*, *45*(1), 115–131.

Zingales, L. (2014). Preventing Economists' Capture. In D. Carpenter & D. A. Moss (Eds.), *Preventing Regulatory Capture* (pp. 124–151). Cambridge University Press.

Declaration of Own Contribution

Research Paper I of this thesis is co-authored with Florian Philipp Federsel and Rolf Uwe Fülbier. The authors had the following role in conducting the research project: My main responsibility involved working out the theorization, developing the research design, and executing the data analysis; all tasks were supported by Florian Philipp Federsel. Jointly and in approximately equal proportions I developed the systematization of the research-practice gap together with Florian Philipp Federsel. Florian Philipp Federsel's main responsibility was managing the data collection and programming of the LDA Topic Model, which I also supported. Rolf Uwe Fülbier's main role was the positioning of the research paper.

All three authors jointly wrote the research paper. My main priorities were writing the systematization, theory development, and research design. The presentation of the results and additional analyses were the joint responsibility of Florian Philipp Federsel and me. Florian Philipp Federsel had priority on the description of the sample and the research method (LDA model). Rolf Uwe Fülbier focused on the introduction.

I acted as the corresponding author in the publication process.

Research Paper II of this dissertation is a single-authored research project.

Research Paper III is a co-authored project with Lorenz Piering.

Each of the authors contributed to this project as follows: I provided data on EDGAR activity from EDGAR log files. Lorenz Piering provided data on political connections, firm financials, and comment letters. Data processing, empirical analyses, as well as research design development were

jointly conducted with Lorenz Piering with me in the lead.

Both authors jointly wrote the paper. While I mainly took responsibility for the research design, data and descriptives, the empirics, and the discussion on the main findings, Lorenz Piering was in lead for the introduction, the literature review on SEC monitoring and regulatory capture, and the exploitation of the research questions.

Both authors presented the research project at at least one research conference.

I act as the corresponding author of the working paper version of this research project.