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Economic Freedom and Audit Fees: Evidence From the USA

Mahmud Hossain¹  | Ahsan Habib²  | Dinithi Ranasinghe³  | Marliisa Phillips¹

¹School of Business, Clark Atlanta University, Atlanta, Georgia, USA | ²School of Accountancy, Economics and Finance, Massey University, Auckland, New Zealand | ³Department of Accountancy and Finance, School of Business, University of Otago, Dunedin, New Zealand

Correspondence: Ahsan Habib (a.habib@massey.ac.nz)

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ABSTRACT

We examine the association between US state-level economic freedom and audit fees. We argue that economic freedom lowers clients' perceived business risk, thereby requiring reduced audit effort and exposing auditors to a lower probability of litigation risk, which enables auditors to charge lower audit fees to clients headquartered in states with high economic freedom. Using a US sample, we find a negative association between economic freedom and audit fees. Our study contributes to the emerging literature on socio-economic determinants of audit fees by providing evidence that economic freedom reduces overall inherent risk, thereby reducing audit risks.

JEL Classification: M41, G30

1 | Introduction

A plethora of research examines the determinants of audit fees following the seminal paper by Simunic (1980). Most of these studies focus on firm-level and auditor-level determinants of audit fees (Hay et al. 2006). Departing from firm and auditor-level determinants, there is an increasing interest in audit research to investigate the impact of socio-economic factors on auditors' pricing decisions. In this sense, studies find that informal institutional characteristics such as social capital (Jaggi and Xin 2017; Jha and Chen 2015), religiosity (Leventis et al. 2018) and local creative culture (Costa and Habib 2023) affect auditors' pricing decisions. We extend this socio-economic determinant of audit fee literature and examine the association between economic freedom and audit fees.

Economic freedom is a fundamental aspect of an institutional environment (Gwartney and Lawson 2003) and encompasses factors such as low government intervention, reduced regulatory burden and reduced tax obligations (Bjørnskov 2016; Graafland 2019; Jackson et al. 2015). Economic freedom refers to

the degree to which economic activities are guided by 'personal choice, voluntary exchange, open markets, and clearly defined and enforced property rights' (Gwartney 2009, 939). Considering global economic freedom, the scholars have shown that more freedom is associated with less uncertainties, lower entry and administrative costs, and better operating performance reflected in high firm value, growth, revenues, innovations and hiring (Acs et al. 2005; Bailey and Thomas 2017; Douglas and Pejaska 2017; Gropper et al. 2015; Kaya 2020; Nawaser et al. 2011; Ovaska and Sobel 2005). Research also documents that country-level economic freedom encourages managers to invest in social and environmental activities (Graafland 2019). Applying US state-level economic freedom data, Jackson et al. (2015) find that economic freedom reduces social capital. To the best of our knowledge, there is no empirical evidence that examines the impact of economic freedom on accounting outcomes such as audit outcomes. Understanding this is crucial for auditors because factoring economic freedom into pricing decisions ensures that they accurately assess and mitigate risk, leading to fairer and more competitive pricing. Understanding the impact of economic freedom on audit fees also helps managers to determine

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the intensity of the internal control system. Regulators can use this information to balance the need for regulation to maintain a business-friendly environment.

Audit fees are determined by both demand and supply-based factors. In economically free states, firms demand lower audit engagement, due to efficient internal controls, driven by regulatory efficiency (Bjørnskov 2016; Grzeszczak 2020), competitive and innovative market orientation (Gwartney 2009) and financial stability (Mawardi et al. 2024), thereby resulting in lower audit fees. From the supply side, we argue that auditors charge lower fees to clients in states with high economic freedom due to reduced perceived business risk, enhanced financial stability, and a lower tax burden that together decrease audit complexity and costs. In addition, reduced audit fees in states with high economic freedom can be attributed to decreased audit effort and lower information asymmetry, as auditors rely more on clients' internal controls and face less complexity and risk in such environments, thereby lowering the cost of audits (Graham et al. 2012; Jha and Chen 2015). We further argue that firms headquartered in economically free states face lower audit fees due to the reduced likelihood of litigation risk arising from a more relaxed regulatory environment, as auditors perceive lower litigation risks and thus do not need to charge a risk premium typically associated with more regulated environments (DeFond and Zhang 2014; Gwartney and Lawson 2003; Houston 1999).

Using a sample from the US between 2004 and 2021, we find support for our assertion. Specifically, we find a negative and statistically significant association between economic freedom and audit fees. In our sub-component analysis, we find that lower government spending, lower tax burden, and relaxed regulations on labour reduce audit fees. However, our results may be subject to bias due to endogeneity concerns from various sources. First, numerous factors determine audit fees, and although we account for several of these, the potential for omitted variable bias—a common source of endogeneity—remains a concern. To address this, we employ firm fixed effects regression. Second, one might argue that the choice of firm location in a state with high economic freedom might be endogenous. Our findings remain robust after controlling for endogeneity by using an instrumental variable regression technique. Finally, we implement an entropy-balanced matching approach to address endogeneity concerns stemming from the observed differences in characteristics between firms located in regions with high versus low economic freedom, and our findings remain consistent with the baseline results.

We then examine the mediating effects of audit report lag, litigation risks, accounting complexity, and the disclosures of material control weakness on the association between economic freedom and audit fees. In all these tests, we find that firms headquartered in high economic freedom states incur shorter audit report lag, are subject to a lower probability of litigation, face less accounting complexity, and disclose fewer material control weaknesses. Our final set of analysis tests whether business risk or financial reporting quality for firms headquartered in states with high economic freedom moderates the relationship between audit fees and economic freedom. We fail to find any significant effects of financial reporting quality and conclude that more economic freedom reduces audit fees by decreasing the overall business risks.

We contribute to the literature in multiple ways. First, by providing evidence on the relationship between economic freedom and audit fees, we extend the growing body of research examining the impact of socio-economic factors on audit pricing. Although extensive studies have investigated client-specific and auditor-specific determinants of audit fees (e.g., Hay et al. 2006; Hay 2013; Mayhew and Wilkins 2003), an emerging stream of research has highlighted the role of informal institutional mechanisms, such as culture and religiosity, in shaping audit outcomes (Costa and Habib 2023; Jaggi and Xin 2017; Jha and Chen 2015). However, evidence on broader socio-economic determinants, particularly economic freedom, remains limited. Although existing audit fee models incorporate industry-level risk, they do not explicitly consider the interplay of multiple institutional and economic factors that collectively define economic freedom. Our study addresses this gap by employing a comprehensive measure that integrates various dimensions of economic freedom, including personal choice, government size, regulatory intervention, market competition and property rights, to examine its impact on audit fees. By doing so, we contribute to the audit literature by providing evidence on how these diverse socio-economic mechanisms interact to shape risk perceptions, which ultimately influence audit fee determination. Understanding the role of economic freedom in audit pricing is particularly relevant for auditors, investors, and regulators in today's increasingly dynamic and uncertain business environment. Furthermore, our analysis of the sub-components of economic freedom deepens the literature by illustrating how specific elements, such as tax obligations, government spending and labour regulations, shape business decision-making and, in turn, audit demand.

Second, we extend the literature on the consequences of economic freedom by demonstrating that economic freedom influences accounting decisions, particularly the auditing process. Although prior research on economic freedom has explored its impact on environmental performance, firm value and market competition (Baier et al. 2012; Graafland 2019; Hafer 2013; Kaya 2020; Mawardi et al. 2024; Sobel 2015), little is known about its role in shaping independent audit practices. Our study bridges this gap by positioning economic freedom as a multidimensional economic construct that affects audit engagement and pricing decisions. By extending economic freedom research into the technical and highly specialised domain of auditing, we provide novel insights into how institutional economic factors shape financial oversight and assurance processes.

We proceed as follows. The next section reviews the literature and develops the hypothesis. Section 3 explains the research method and sample selection procedure. Section 4 presents the descriptive test results. In Section 5, we present the empirical test results, including the endogeneity test results, mediating results and moderation results. Section 6 concludes the paper.

2 | Literature and Hypothesis Development

Generally, economic freedom is defined as the capacity for individuals to exchange goods and services freely, provided they do not infringe upon the rights of others to engage in similar exchanges (Gwartney et al. 2004). Economic freedom has been measured by various institutions and the most prominent and widely used measures in academic research are those developed by the Fraser

Institute¹ and the Heritage Foundation² (Graafland 2019). For this study, we have utilised the Fraser Institute index calculated for the North American continent. This economic freedom measure has been determined considering three main areas of the economy: Government spending, taxes and labour regulation. Using this US state-level economic freedom data, Jackson et al. (2015) do not find any systematic association between economic freedom and social capital. However, in a similar study, Jackson (2017) observes that economic freedom has a negative impact on social capital. The differing results between Jackson et al. (2015) and Jackson (2017) can be attributed to methodological differences and the disaggregation of economic freedom components. Jackson et al. (2015) used 5-year averaged data with OLS and System GMM estimators, whereas Jackson (2017) employed annual data and the pooled-mean group (PMG) estimator, capturing more granular variations. Moreover, Jackson (2017) found that this relationship was entirely driven by labour market freedom, suggesting that the observed negative association was not a broad effect of economic freedom but rather a consequence of economic freedom-induced labour market characteristics. Using the world economic freedom data from both these institutions, Graafland (2019) observes that economic freedom decreases corporate social responsibility.

Economic freedom ensures transparency, reduces regulatory uncertainty, enforces effective governance, implements efficient regulations, reduces the risk of failure, and hence is crucial for creating incentives (Yang et al. 2023). Consequently, economic freedom generates financial development, a happier population, inclusive economic growth, a lower likelihood of financial crisis, and financial stability (Baier et al. 2012; Hafer 2013; Mawardi et al. 2024). In addition, economic freedom results in favourable outcomes by fostering entrepreneurship, enhancing economic efficiency and reducing corruption (Sobel 2015). Economic scholars have shown that more corporate freedom is associated with less uncertainties, lower entry and administrative costs, and better operating performance reflected in high firm value, growth, revenues, innovations and hiring (Acs et al. 2005; Bailey and Thomas 2017; Douglas and Pejaska 2017; Gropper et al. 2015; Kaya 2020; Nawaser et al. 2011; Ovaska and Sobel 2005).

As per Gul and Goodwin (2010), audit risk comprises three components: inherent risk, control risk and detection risk. The inherent risk is the probability that environmental factors cause a significant error, whereas control risk is the probability of preventing and detecting errors due to weaknesses of internal controls. Detection risk arises due to the likelihood that audit procedures will fail to identify significant errors. Accordingly, client characteristics, auditor characteristics and engagement characteristics determine audit fees (Hay et al. 2006). Client-specific factors that tend to increase audit fees include firm size, operational complexity, business risk and firm risk (Hay 2013). Factors related to the auditor that can increase audit fees include the size of the audit firm, the length of the auditor-client relationship, and the auditor's industry specialisation (Hay 2013; Mayhew and Wilkins 2003). Engagement characteristics that typically drive up audit fees include audit report lag (Ho and Ng 1996) and the busyness of the audit partner (Hardies et al. 2015).

Recent research on the determinants of audit fees suggests that informal institutional characteristics, such as social capital and creative culture, play an important role. For example,

Costa and Habib (2023) find that companies headquartered in US counties with a strong creative culture typically incur higher audit fees compared to those located in counties with a less creative culture. Leventis et al. (2018) observe that religiosity, defined as the level of adherence to religious norms in the region where a company's headquarters are situated, lowers audit fees. Jaggi and Xin (2017) and Jha and Chen (2015) also find evidence suggesting that county-level religiosity and social capital affect auditor pricing decisions. Further to this informal institution literature, Jha et al. (2021) observe that greater political corruption is associated with higher audit fees; based on this finding, they posit that the informal norms and behavioural patterns within a social group influence audit fees by increasing expropriation risk. The Public Company Accounting Oversight Board (PCAOB) (2010, AS 2810) advises auditors to adopt a comprehensive approach by considering both non-financial and financial elements when evaluating their clients' business environment. Therefore, we posit that auditors factor economic freedom as one of the risk factors in assessing audit fees for their clients.

2.1 | Economic Freedom and Audit Fees

Prior research indicates that audit fees are influenced by both demand- and supply-side factors (DeFond and Zhang 2014; Hilary and Lennox 2005). Managers in economically free states are more likely to demand lower audit engagement due to the development of efficient and reliable internal control systems, which emerge as a response to key institutional and economic characteristics of economic freedom. First, regulatory efficiency (Bjørnskov 2016; Grzeszczak 2020), facilitated by lower tax and regulatory burdens³ (Graafland 2019; Jackson et al. 2015), fosters a predictable and well-structured compliance environment (Yang et al. 2023). In such settings, firms proactively establish robust internal control mechanisms to navigate regulatory expectations efficiently (DeFond and Lennox 2017), reducing firms' reliance on external auditors for risk mitigation. Second, the competitive pressures of open markets, which encourage innovation and personal choice (Gwartney 2009), compel firms to strengthen internal financial governance to ensure transparent reporting and smooth business operations in an environment where credibility is crucial for market survival (Kaya 2020; Nawaser et al. 2011; Ovaska and Sobel 2005). As a result, managers prioritise internal monitoring over external audits to maintain strategic flexibility and operational efficiency. Third, financial stability, a hallmark of economically free states, reduces firm-level financial risk and the probability of financial distress (Baier et al. 2012; Hafer 2013; Mawardi et al. 2024), lowering the necessity for intensive external audit scrutiny. Taken together, regulatory efficiency, competitive market discipline, and financial stability create an environment where firms view extensive audit engagement as costly, thus reducing their demand for external audit effort and, consequently, lowering audit fees.

On the supply side, building on prior literature (Bell et al. 2001; Lyon and Maher 2005; Morgan and Stocken 1998), we posit that auditors charge lower fees to clients headquartered in states with high economic freedom due to the reduced perceived business risk. Business risk, as defined by Arens and Loebbecke (2000), refers to 'the possibility that an auditor or audit firm may experience negative consequences from a client relationship, despite

the audit report provided being accurate' (p. 262). This risk is linked to both the ongoing viability of the client and the auditor's potential exposure, irrespective of audit accuracy (AICPA 2006). Economic freedom, by fostering financial stability, inclusive growth, and transparency, enhances the likelihood of continuous business survival, thereby mitigating business risk and reducing audit fees. Moreover, the reduction in tax burden—a key component of economic freedom—further contributes to market efficiency and effective price mechanisms (Olson 1982), which in turn lowers business risk and consequently audit fees.

In addition to the perceived lower business risk, the reduced audit fees in states with high economic freedom can also be attributed to decreased audit effort and lower information asymmetry. Auditors must balance the costs and benefits of various audit procedures, as auditing entire account populations is prohibitively expensive. Auditors allocate more resources to higher-risk areas during the planning stage to mitigate audit risk (Jha and Chen 2015). In strong institutional settings, where managerial ability to manipulate financial reporting is constrained, earnings management is typically lower (Leuz et al. 2003). We take the efficient regulation orientation of economic freedom and argue that auditors are more likely to rely on the client's internal controls and financial reporting systems, thereby reducing their audit effort and associated fees. In economically free states, the presence of an efficient, low-burden, and low-cost regulatory environment fosters the development of strong and reliable internal control systems. Regulatory efficiency, characterised by lower tax and compliance burdens (Bjørnskov 2016; Graafland 2019; Grzeszczak 2020; Jackson et al. 2015), provides firms with a structured yet flexible framework to enhance internal governance (Yang et al. 2023), ensuring that internal controls are robust and effective in maintaining financial transparency and operational integrity (DeFond and Lennox 2017). Additionally, the lower tax burden associated with economic freedom reduces client risk and audit complexity. The complexity of tax expense calculations, which allows for managerial discretion and potential earnings management (Graham et al. 2012), is lessened in economically free states, where reduced incentives for aggressive tax planning simplify the audit process. Consequently, audit firms may charge lower fees in these states due to decreased audit risk and complexity. Markets with higher levels of economic freedom tend to experience less noise, as reduced information search costs for investors in these markets lead to decreased information asymmetry (Frino et al. 2023; Hou and Gao 2021). Auditors frequently engage third parties to assess management integrity, review past financial performance, and communicate with previous auditors (Rittenberg et al. 2011). Low information asymmetry induced by economic freedom enables an auditor to gather such evidence more easily and with more precision. As a result, auditors need to exert less effort to gather sufficient and appropriate audit evidence, which in turn reduces audit fees.

Finally, we argue that firms headquartered in economically free states face lower audit fees due to the reduced likelihood of litigation risk, which arises from a more relaxed regulatory environment. Greater litigation risks cannot be entirely mitigated by effective management (Laux and Stocken 2012). Stricter regulations necessitate that auditors bear certain litigation risks (DeFond and Zhang 2014). Auditors in more regulated environments typically charge a risk premium to cover these risks, thereby increasing audit fees (Houston 1999). Numerous studies have documented

that stringent regulations elevate expected losses for auditors, including legal liabilities and reputational damage, requiring additional effort and higher fees (e.g., Abbott et al. 2017; Bronson et al. 2017; Choi et al. 2009; Seetharaman et al. 2002; Simunic and Stein 1996). Efficient regulations, such as labour laws, lead to less stringent compliance requirements, creating a less contentious legal environment (Gwartney and Lawson 2003) and, consequently, lowering the overall risk of litigation for companies operating under such conditions. Therefore, auditors perceive a lower litigation risk in economically free states and consequently charge lower fees to firms operating in these environments.

Although our primary arguments suggest that economic freedom reduces audit fees through lower business risk, efficient internal controls, and reduced information asymmetry, we acknowledge that certain aspects of economic freedom may also create conditions that could lead to higher audit fees in specific scenarios. For example, prior research suggests that firms characterised by high innovation and creativity face higher audit fees, as increased uncertainty and risk require auditors to conduct more extensive procedures (Costa and Habib 2023; Lobo et al. 2018). Since economic freedom fosters innovation and competition (Carlos Díaz-Casero et al. 2012; Zhu et al. 2024), auditors may charge a risk premium for firms operating in highly dynamic and entrepreneurial environments where financial outcomes are less predictable. In addition, firms headquartered in economically free states may engage in more complex business transactions, such as cross-border operations and sophisticated financial instruments, which require more rigorous audit procedures, leading to high audit fees.

We formulate our hypothesis as follows:

Hypothesis. *Firms headquartered in high economic freedom states pay lower audit fees.*

3 | Research Design

To test the relationship between economic freedom and audit fees, we use the following standardised regression estimation (Johannesson et al. 2024). Standardised regressions estimate the coefficients after normalisation of all variables, including the dependent variable, to ensure that the variables satisfy unit standard deviation. This estimation procedure allows direct comparison of the incremental effects of each variable and, hence, the relative importance of the test variable compared to known alternative impacts.

$$\begin{aligned}
 Fee_{i,t} = & \alpha_0 + \alpha_1 Ef_{i,t} + \alpha_2 Size_{i,t} + \alpha_3 Invrec_{i,t} \\
 & + \alpha_4 Segments_{i,t} + \alpha_5 Foreign_{i,t} + \alpha_6 Std_Ret_{i,t} \\
 & + \alpha_7 Chg_Ppe_{i,t} + \alpha_8 Ma_{i,t} + \alpha_9 Discops_{i,t} \\
 & + \alpha_{10} Lev_{i,t} + \alpha_{11} Roa_{i,t} + \alpha_{12} Loss_{i,t} + \alpha_{13} Big4_{i,t} \\
 & + \alpha_{14} Indspec_{i,t} + \alpha_{15} Busy_{i,t} + \alpha_{16} Gc_{i,t} + \alpha_{17} Ic_{i,t} \\
 & + \alpha_{18} Capex_{i,t} + \alpha_{19} Lag_{i,t} + \alpha_{20} Mb_{i,t} + \alpha_{21} Nafees_{i,t} \\
 & + \alpha_{22} Secdist_{i,t} + \alpha_{23} Soccap_{i,t} + \alpha_{24} Corr_{i,t} + \alpha_{25} Relig_{i,t} \\
 & + \alpha_{26} Educ_{i,t} + \alpha_{27} Percapinc_{i,t} + \alpha_{28} Pop_{i,t} + \alpha_{29} Popden_{i,t} \\
 & + \sum_j \lambda_j industry_{j,t} + \sum_k \lambda_k year_{k,t} + \epsilon_{i,t} \quad (1)
 \end{aligned}$$

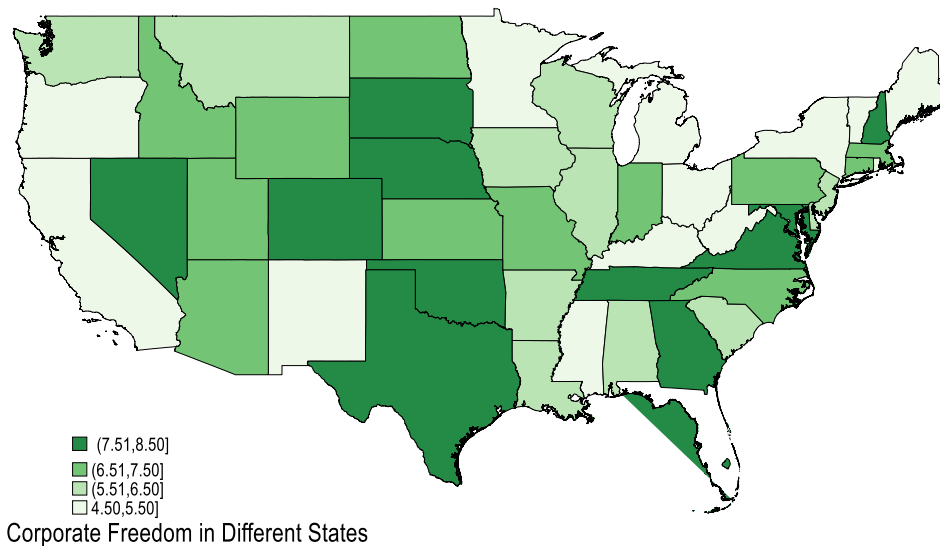


FIGURE 1 | Average EFSCORE in different states from 2004 to 2021.

Fee is the natural logarithm of audit fees paid by audit clients. We restrict our sample to the firms that did not change auditors in our sample period (Barua et al. 2020). Our variable of interest is *Ef* which is the proxy for the overall economic freedom of the state where a firm is located. We collect this economic freedom score for all US states from the Fraser Institute's website.⁴ The Economic Freedom Index from the Fraser Institute has been used in the extant academic research (Graafland 2019; Gropper et al. 2015). The Fraser Institute estimates the overall economic freedom scores: government spending, taxes and labour markets. A high (low) economic freedom score indicates that a firm headquartered in a US state enjoys more (less) economic freedom. A statistically significant negative coefficient on *Ef* supports the assertion that auditors charge lower audit fees to a client firm located in a high economic freedom state.

We add an array of firm-level control variables that, according to prior studies, are likely to influence audit fees. Given that auditors typically charge higher audit fees to a larger client firm, we control for *Size*, which is the natural logarithm of the firm's total assets. With an increase in the complexity of the audit client's business operations audit fee is likely to escalate (e.g., Casterella et al. 2004; Hay et al. 2006; Hogan and Wilkins 2008; Larcker and Richardson 2004). We use the following variables as proxies for audit complexity: (1) total of inventory and receivables scaled by total assets (*Invrec*), (2) natural logarithm of one plus the number of business segments (*Segments*), (3) a dummy variable of 1 if the firm has foreign operations (*Foreign*), and 0 otherwise, (4) standard deviation of monthly stock returns over the past 5 years (*Std_Ret*), (5) change in property, plant and equipment (*Chg_Ppe*), (6) the incidence of mergers or acquisitions (*Ma*) and (7) an indicator variable coded 1 for clients with discontinued operations (*Discops*), and 0 otherwise. We anticipate significant positive values of all these complexity variables. Prior studies document that audit fees are positively associated with financial leverage (*Lev*), market-to-book ratio (*Mb*) and negatively with return on assets (*RoA*). In busy seasons, auditors are likely to charge higher audit fees (*Busy*). Auditors are

also likely to charge higher audit fees to clients with material weaknesses in internal controls (*Ic*), having going concern audit opinion (*Gc*), more capital expenditure (*Capex*) and longer audit report lags (*Lag*) (e.g., Hogan and Wilkins 2008; Raghunandan and Rama 2006). We include non-audit fees (*Nafees*) charged by the auditors to control for the spillover effect of non-audit fees on audit fees (Whisenant et al. 2003).

We also add some demographic variables that are likely to influence audit fees. Jha et al. (2021) observe that an audit firm's proximity to the regional SEC office affects audit fees. More specifically, they report that the further the client firm's headquarters are from a regional SEC office, the lower the audit fee. Following this research, we add the distance of the client firms from the SEC regional office (*Secdist*) as a control variable. Jha and Chen (2015) observe that US county-level social capital reduces audit fees. Accordingly, we include the county-level social capital matrix (*Soccap*) in our baseline analysis. Further, Jha et al. (2021) and Xu et al. (2019) observe that geography-based political corruption positively affects audit fees. As such, we add the state-level corruption index (*Corr*) to our analysis. We also add a proxy for religious adherence (*Relig*), based on the finding that auditors charge clients less audit fees if they are located in a more religious region (e.g., Gul and Ng 2018; Leventis et al. 2018). We also control for various state-level demographic variables such as education level (*Educ*), per capita income (*Percapinc*), total population (*Pop*) and population density (*Popden*). Our regression includes dummy variables to control for year and industry (FF 48 code) effects.

We present the variation in average *Ef* at the state level in Figure 1 for the years 2004–2021.

4 | Sample, Descriptive Statistics and Correlation

We summarise our sample selection process in Panel A, Table 1. We start with the universe of firms with audit fee data available in Audit Analytics and find 102,844 observations for

TABLE 1 | Sample selection and industry-wide distribution.

Panel A: Sample selection procedure			
		Distinct firms	Observations
Total number of firms available in audit analytics		14,357	102,844
Firms belonging to the finance and regulated industries		(1047)	(8845)
Firms changing auditors		(2108)	(4792)
All non-financial and non-regulated firms available in Audit Analytics (2004–2021)		11,202	89,207
Minus: Missing relevant data in Compustat and CRSP		(6807)	35,560
Minus: Firms reporting negative assets and/or sales		(88)	(362)
Remaining sample firms		4307	53,285
Panel B: Industry distribution^a			
Fama–French code	Industry	Observations	Percentage
1. Agric	Agriculture	160	0.30
2. Food	Food Products	876	1.64
3. Soda	Candy & Soda	146	0.27
4. Beer	Beer & Liquor	191	0.36
5. Smoke	Tobacco Products	53	0.10
6. Toys	Recreation	420	0.79
7. Fun	Entertainment	806	1.51
8. Books	Printing and Publishing	402	0.75
9. Hshld	Consumer Goods	784	1.47
10. Clths	Apparel	773	1.45
11. Hlth	Healthcare	1180	2.21
12. MedEq	Medical Equipment	2434	4.57
13. Drugs	Pharmaceutical Products	5333	10.01
14. Chems	Chemicals	1126	2.11
15. Rubbr	Rubber and Plastic Products	401	0.75
16. Txtls	Textiles	146	0.27
17. BldMt	Construction Materials	1085	2.04
18. Cnstr	Construction	719	1.35
19. Steel	Steel Works, etc.	807	1.51
20. FabPr	Fabricated Products	176	0.33
21. Mach	Machinery	2011	3.77
22. ElcEq	Electrical Equipment	1022	1.92
23. Autos	Automobiles and Trucks	920	1.73
24. Aero	Aircraft	394	0.74
25. Ships	Shipbuilding, Railroad Equipment	175	0.33
26. Guns	Defence	188	0.35
27. Gold	Precious Metals	150	0.28
28. Mines	Non-metallic and Industrial Metal Mining	277	0.52

(Continues)

TABLE 1 | (Continued)

Panel B: Industry distribution ^a			
Fama–French code	Industry	Observations	Percentage
29. Coal	Coal	214	0.40
30. Oil	Petroleum and Natural Gas	2526	4.74
31. Telcm	Communication	1747	3.28
32. PerSv	Personal Services	745	1.40
33. BusSv	Business Services	7932	14.89
34. Comps	Computers	2362	4.43
35. Chips	Electronic Equipment	4027	7.56
36. LabEq	Measuring and Control Equipment	1501	2.82
37. Paper	Business Supplies	583	1.09
38. Boxes	Shipping Containers	191	0.36
39. Trans	Transportation	1426	2.68
40. Whlsl	Wholesale	2059	3.86
41. Rtail	Retail	2954	5.54
42. Meals	Meals, Restaurants, Hotels, Motels	989	1.86
43. Other	Almost Nothing	874	1.64
	Total	53,285	100.00

Note: This table presents the sample selection procedure and distribution of sample firms across various industries. Panel A depicts the sample selection process. Panel B presents and the distribution of our sample firms across different industries based on Fama–French 48 industry classification.

^aList of industries available at: Kenneth French's website: http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/Data_Library/det_48_ind_port.html.

14,357 distinct firms. We drop financial firms and firms operating in regulated industries (a total of 8845 firm-year observations). We also exclude firms when there is a change in auditor (a total of 4792 firm-year observations). This allows us to retain 89,207 firm-years observations pertaining to 11,202 distinct firms for the period 2004 to 2021.⁵ We match these observations with Compustat and CRSP for relevant firm-level data. Due to this matching process, we need to drop 35,560 observations related to 6807 different firms. Finally, we dropped 362 firm-year observations for 88 firms reporting negative assets and/or sales. This leaves us with 53,285 observations pertaining to 4307 firms.

In Panel B, Table 1, we show the distribution of our sample across various industries. We have the maximum number of observations for firms belonging to the business services (7932, 14.89%), followed by the pharmaceutical products sector (5333, 10.01%), and electronic equipment (4027, 7.56%). No particular industry seems to dominate our sample.

We present the descriptive statistics of our main variables in Table 2. The average (median) logarithmic value of audit fee (*Fee*) is 12.735 (12.768), whereas the mean median value of economic freedom score (*Ef*) for our sample firms is 5.869 (5.870). The average (median) log value of the assets (*Size*) is 6.054 (5.977). The average *Roa* of our sample firms is -9.2% , whereas the average leverage ratio (*Lev*) is 34.9% . 26.1% of the firms have foreign operations (*Foreign*) and 11.5% of the firms are engaged in mergers and acquisitions (*Ma*). 64.6% and 19.9% of firms are audited by

Big 4 (*Big4*) and industry specialist (*Indspec*) auditors, respectively; 10.6% of the firms receive a going concern audit opinion (*Gc*). The corresponding number is 7.4% for the internal control audit opinion (*Ic*).

Table 3 shows the pairwise Pearson correlation coefficients among the main variables. Audit fee is negatively correlated with *Ef* (correlation -0.04 , $p < 0.01$). This provides univariate support that high economic freedom is negatively associated with audit fees. Audit fees also have a positive correlation with several attributes such as firm size, number of segments, standard deviation of returns and leverage. We conduct VIF analysis to check if correlation among variables influences our multivariate analyses. The highest VIF value is 2.45, which is considerably less than 10 (Studenmund 2016). This indicates that our multivariate regression estimations have not been influenced by collinearity.

5 | Results

5.1 | Baseline Regression

Table 4 presents the baseline regression on the relationship between economic freedom and audit fees. We observe a statistically significant coefficient on *Ef* (-0.023 ; t -statistic: -4.96) in column (1). We infer from this finding that auditors charge lower audit fees to their clients headquartered in more economically free states. This is consistent with our theoretical argument that auditors perceive clients operating in a more economically free

TABLE 2 | Descriptive statistics.

	Variable	Observations	Mean	Median	SD	Q1	Q3
Dependent variable	<i>Fee (log)</i>	53,285	12.735	12.768	1.682	11.453	13.985
	<i>Fee (\$)</i>	53,285	1,723,113	733,263	2,991,251	263,000	1,794,000
Independent variables	<i>Ef</i>	53,285	5.869	5.870	0.976	5.070	6.600
	<i>Ef_Tax</i>	53,285	5.425	5.632	1.106	4.585	6.295
	<i>Ef_Labor</i>	53,285	5.903	5.886	0.977	5.151	6.652
	<i>Ef_Spend</i>	53,285	6.278	6.398	1.667	4.660	7.785
Control variables	<i>Size</i>	53,285	6.054	5.977	2.176	4.456	7.541
	<i>Invrec</i>	53,285	0.262	0.203	0.228	0.071	0.394
	<i>Segments</i>	53,285	1.587	1.386	0.979	0.693	2.565
	<i>Foreign</i>	53,285	0.261	0.000	0.439	0.000	1.000
	<i>Std_Ret</i>	53,285	14.960	12.859	9.303	8.127	19.611
	<i>Chg_Ppe</i>	53,285	0.157	0.061	0.572	0.003	0.165
	<i>Ma</i>	53,285	0.115	0.000	0.319	0.000	0.000
	<i>Discops</i>	53,285	0.223	0.000	0.416	0.000	0.000
	<i>Lev</i>	53,285	0.349	0.304	2.297	0.007	0.895
	<i>Roa</i>	53,285	-0.092	0.024	0.508	-0.075	0.068
	<i>Loss</i>	53,285	0.350	0.000	0.477	0.000	1.000
	<i>Big4</i>	53,285	0.646	1.000	0.478	0.000	1.000
	<i>Indspec</i>	53,285	0.199	0.000	0.399	0.000	0.000
	<i>Busy</i>	53,285	0.737	1.000	0.440	0.000	1.000
	<i>Gc</i>	53,285	0.106	0.000	0.308	0.000	0.000
	<i>Ic</i>	53,285	0.074	0.000	0.261	0.000	0.000
	<i>Capex</i>	53,285	0.035	0.015	0.057	0.000	0.044
	<i>Lag</i>	53,285	4.659	4.595	0.456	4.419	4.771
	<i>Mb</i>	53,285	3.645	2.747	6.290	1.826	4.216
	<i>Nafees</i>	53,285	9.493	10.824	4.539	8.868	12.426
	<i>Secdist</i>	53,285	6.818	6.867	1.127	5.944	7.662
	<i>Soccap</i>	53,285	-0.611	-0.519	0.839	-1.273	-0.010
	<i>Corr</i>	53,285	0.290	0.261	0.164	0.184	0.368
	<i>Percapinc</i>	53,285	10.641	10.632	0.218	10.478	10.789
	<i>Pop</i>	53,285	16.217	16.269	0.872	15.661	16.841
	<i>Popden</i>	53,285	5.250	5.394	0.851	4.591	5.861
<i>Chg_Gdp</i>	53,285	0.021	0.021	0.022	0.008	0.035	
<i>Educ</i>	53,285	0.357	0.347	0.054	0.310	0.396	
<i>Sd_Roa</i>	53,285	0.081	0.062	0.150	0.021	0.100	
<i>Sd_Ocf</i>	53,285	0.320	0.052	1.341	0.024	0.124	
<i>Abs_Dacc</i>	50,201	0.020	0.110	0.100	0.000	0.050	
<i>Rem</i>	48,230	-0.050	0.000	0.420	-0.200	0.170	

Note: This table presents the descriptive statistics of our main variables. All variables (other than the categorical variables) are winsorised at the 1% and 99% levels. We define all of our empirical variables in [Appendix](#).

TABLE 3 | Pearson correlation coefficients.

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(1) <i>Fees</i>	1													
(2) <i>Ef</i>	-0.037*	1												
(3) <i>Ef_Tax</i>	-0.021*	0.654*	1											
(4) <i>Ef_Labor</i>	-0.037*	1.000*	0.655*	1										
(5) <i>Ef_Spend</i>	-0.071*	0.751*	0.733*	0.751*	1									
(6) <i>Size</i>	0.836*	0.050*	0.072*	0.050*	0.013*	1								
(7) <i>Invrec</i>	-0.072*	-0.030*	-0.021*	-0.030*	-0.012*	-0.127*	1							
(8) <i>Segments</i>	0.475*	-0.029*	-0.004	-0.028*	-0.045*	0.444*	0.047*	1						
(9) <i>Foreign</i>	0.396*	-0.054*	-0.068*	-0.054*	-0.106*	0.273*	0.107*	0.392*	1					
(10) <i>Std_Ret</i>	-0.172*	-0.012*	-0.034*	-0.012*	-0.022*	-0.246*	-0.091*	-0.154*	-0.096*	1				
(11) <i>Chg_Ppe</i>	-0.439*	-0.087*	-0.069*	-0.087*	-0.028*	-0.543*	-0.033*	-0.231*	-0.160*	0.208*	1			
(12) <i>Ma</i>	-0.038*	0.039*	0.002	0.039*	0.023*	-0.010*	-0.090*	-0.043*	-0.054*	0.110*	0.035*	1		
(13) <i>Discops</i>	0.248*	0.063*	0.028*	0.062*	-0.054*	0.206*	-0.042*	0.136*	0.198*	-0.050*	-0.114*	0.053*	1	
(14) <i>Lev</i>	0.159*	0.005	0.006	0.005	0.019*	0.126*	-0.006	0.097*	0.032*	-0.041*	-0.081*	-0.108*	0.016*	1
(15) <i>Roa</i>	0.150*	0.043*	0.049*	0.043*	0.050*	0.180*	-0.032*	0.019*	-0.016*	-0.041*	-0.067*	-0.013*	0.037*	0.080*
(16) <i>Loss</i>	0.189*	0.033*	0.045*	0.033*	0.022*	0.321*	0.144*	0.175*	0.121*	-0.384*	-0.275*	0.024*	0.063*	0.013*
(17) <i>Big4</i>	-0.263*	-0.050*	-0.063*	-0.050*	-0.035*	-0.396*	-0.127*	-0.206*	-0.110*	0.186*	0.404*	0.016*	-0.064*	-0.006
(18) <i>Indspec</i>	0.499*	-0.021*	0.019*	-0.021*	-0.022*	0.494*	-0.125*	0.267*	0.192*	-0.117*	-0.264*	-0.039*	0.072*	0.032*
(19) <i>Busy</i>	0.245*	0.017*	0.031*	0.017*	0.021*	0.253*	-0.038*	0.114*	0.071*	-0.063*	-0.152*	-0.015*	0.039*	0.026*
(20) <i>Gc</i>	0.101*	0.038*	0.059*	0.038*	0.055*	0.103*	-0.168*	0.006	-0.042*	0.037*	-0.002	0.053*	0.008	0.010*
(21) <i>Ic</i>	-0.165*	-0.005	-0.011*	-0.005	0.008	-0.261*	-0.041*	-0.169*	-0.097*	0.197*	0.230*	-0.028*	-0.055*	0.008
(22) <i>Capex</i>	0.021*	0.029*	-0.020*	0.029*	-0.003	-0.071*	0.017*	-0.031*	0.006	0.046*	0.064*	0.028*	0.015*	0.030*
(23) <i>Lag</i>	-0.017*	0.121*	0.171*	0.121*	0.156*	0.077*	-0.163*	-0.023*	-0.095*	-0.037*	-0.062*	0.190*	-0.064*	-0.037*
(24) <i>Mb</i>	0.334*	-0.011	-0.038*	-0.011	-0.039*	0.360*	-0.097*	0.137*	0.138*	-0.129*	-0.009	0.066*	0.018*	0.258*
(25) <i>Naifees</i>	0.394*	-0.030*	-0.000	-0.030*	0.009*	0.426*	-0.017*	0.264*	0.230*	-0.207*	-0.025*	0.106*	0.093*	0.066*

(1) *Fees*
 (2) *Ef*
 (3) *Ef_Tax*

(Continues)

TABLE 3 | (Continued)

Variables	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
(4) <i>Ef_Labor</i>											
(5) <i>Ef_Spend</i>											
(6) <i>Size</i>											
(7) <i>Invrec</i>											
(8) <i>Segments</i>											
(9) <i>Foreign</i>											
(10) <i>Std_Ret</i>											
(11) <i>Chg_Ppe</i>											
(12) <i>Ma</i>											
(13) <i>Discops</i>											
(14) <i>Lev</i>											
(15) <i>Roa</i>	1										
(16) <i>Loss</i>	0.005	1									
(17) <i>Big4</i>	0.046*	-0.364*	1								
(18) <i>Indspec</i>	0.054*	0.125*	-0.162*	1							
(19) <i>Busy</i>	0.047*	0.065*	-0.087*	0.349*	1						
(20) <i>Gc</i>	0.048*	-0.048*	0.046*	0.091*	0.041*	1					
(21) <i>Ic</i>	0.054*	-0.390*	0.257*	-0.142*	-0.060*	0.026*	1				
(22) <i>Capex</i>	0.022*	-0.074*	0.095*	-0.099*	-0.028*	0.010	0.099*	1			
(23) <i>Lag</i>	0.034*	0.015*	-0.060*	-0.009*	0.002	0.073*	-0.015*	0.002	1		
(24) <i>Mb</i>	0.039*	-0.081*	0.126*	0.074*	0.034*	-0.022*	-0.033*	0.002	-0.106*	1	
(25) <i>Naifees</i>	0.121*	-0.159*	0.333*	0.147*	0.020*	-0.098*	-0.069*	-0.023*	-0.171*	0.171*	1

Note: This table presents the pairwise Pearson correlation coefficients among our main empirical variables. All variables (other than the categorical variables) are winsorised at 1% and 99% level. We define all of our empirical variables in [Appendix](#). *Statistical significance at 5% level or less.

TABLE 4 | Baseline regression.

Variables	Dependent variable				
	(1)	(2)	(3)	(4)	(5)
	<i>Fees</i>				
<i>Ef</i>	-0.023*** (-4.96)				
<i>Ef_Tax</i>		-0.026*** (-5.48)			-0.016*** (-4.12)
<i>Ef_Labor</i>			0.043*** (-2.60)		-0.011*** (-3.36)
<i>Ef_Spend</i>				-0.006 (-1.37)	-0.004 (-1.16)
<i>Size</i>	0.792*** (99.11)	0.792*** (99.18)	0.792*** (99.12)	0.792*** (99.06)	0.793*** (99.17)
<i>Invrec</i>	0.055*** (10.13)	0.055*** (10.14)	0.055*** (10.13)	0.055*** (10.14)	0.056*** (10.25)
<i>Segments</i>	0.059*** (12.69)	0.059*** (12.69)	0.059*** (12.69)	0.059*** (12.69)	0.059*** (12.69)
<i>Foreign</i>	0.150*** (18.03)	0.150*** (18.07)	0.150*** (18.07)	0.150*** (17.99)	0.149*** (18.03)
<i>Std_Ret</i>	0.009** (2.12)	0.009** (2.12)	0.009** (2.13)	0.009** (2.12)	0.009** (2.12)
<i>Chg_Ppe</i>	-0.018*** (-7.21)	-0.018*** (-7.21)	-0.018*** (-7.22)	-0.018*** (-7.22)	-0.018*** (-7.24)
<i>Ma</i>	0.034*** (5.78)	0.034*** (5.75)	0.034*** (5.75)	0.034*** (5.79)	0.034*** (5.73)
<i>Discops</i>	0.101*** (15.17)	0.101*** (15.17)	0.101*** (15.17)	0.102*** (15.20)	0.102*** (15.29)
<i>Lev</i>	0.005* (1.84)	0.005* (1.81)	0.005* (1.81)	0.005* (1.88)	0.006* (1.89)
<i>Roa</i>	-0.326*** (-12.55)	-0.326*** (-12.56)	-0.326*** (-12.56)	-0.326*** (-12.54)	-0.326*** (-12.56)
<i>Loss</i>	0.068*** (11.87)	0.068*** (11.86)	0.068*** (11.87)	0.068*** (11.86)	0.068*** (11.81)
<i>Big4</i>	0.220*** (25.37)	0.220*** (25.37)	0.220*** (25.34)	0.220*** (25.35)	0.219*** (25.17)
<i>Indspec</i>	0.029*** (4.24)	0.029*** (4.23)	0.029*** (4.24)	0.029*** (4.25)	0.029*** (4.26)
<i>Busy</i>	0.056*** (6.52)	0.056*** (6.50)	0.056*** (6.51)	0.056*** (6.54)	0.057*** (6.58)

(Continues)

TABLE 4 | (Continued)

Variables	Dependent variable				
	(1)	(2)	(3)	(4)	(5)
	<i>Fees</i>				
<i>Gc</i>	0.098*** (7.35)	0.098*** (7.35)	0.098*** (7.35)	0.098*** (7.35)	0.098*** (7.37)
<i>Ic</i>	0.155*** (14.28)	0.155*** (14.29)	0.155*** (14.29)	0.155*** (14.26)	0.155*** (14.27)
<i>Capex</i>	-0.015*** (-4.06)	-0.015*** (-4.09)	-0.015*** (-4.08)	-0.015*** (-4.04)	-0.015*** (-4.10)
<i>Lag</i>	0.010** (2.28)	0.010** (2.33)	0.010** (2.31)	0.010** (2.25)	0.010** (2.37)
<i>Mb</i>	0.000*** (5.35)	0.000*** (5.28)	0.000*** (5.60)	0.000*** (5.40)	0.000*** (5.28)
<i>Nafees</i>	0.008*** (9.96)	0.008*** (9.92)	0.008*** (9.95)	0.008*** (9.99)	0.008*** (9.95)
<i>Secdist</i>	0.011* (1.83)	0.011* (1.93)	0.012* (1.89)	0.010* (1.75)	0.011* (1.72)
<i>Soccap</i>	-0.018*** (-3.42)	-0.017*** (-3.25)	-0.017*** (-3.22)	-0.020*** (-3.73)	-0.019*** (-3.51)
<i>Corr</i>	-0.001 (-0.42)	-0.002 (-0.72)	-0.002 (-0.62)	-0.001 (-0.26)	-0.003 (-0.95)
<i>Relig</i>	0.005 (1.23)	0.006 (1.29)	0.006 (1.29)	0.005 (1.17)	0.005 (1.24)
<i>Educ</i>	0.007 (0.91)	0.006 (0.77)	0.006 (0.77)	0.008 (1.05)	0.006 (0.87)
<i>Percapinc</i>	0.016 (1.32)	0.019 (1.52)	0.018 (1.45)	0.016 (1.32)	0.029** (2.21)
<i>Pop</i>	0.022*** (3.93)	0.023*** (4.15)	0.022*** (4.26)	0.020*** (3.62)	0.020*** (3.53)
<i>Popden</i>	0.034*** (4.83)	0.035*** (4.97)	0.035*** (4.93)	0.033*** (4.65)	0.032*** (4.50)
Observations	53,285	53,285	53,285	53,285	53,285
Industry FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Adj. R-squared	0.834	0.834	0.834	0.834	0.835

Note: The table shows the results of baseline regression testing whether state-wide economic freedom is associated with audit fees after controlling for different variables that could potentially influence audit fees. It also shows whether tax, labour and spending-related economic freedom scores influence audit fees. All variables (other than the categorical variables) are winsorised at the 1% and 99% levels. The numbers in the parentheses are *t*-statistics. We define all variables in [Appendix](#). ***, ** and *Statistical significance at 1%, 5% and 10%, respectively.

zone as less risky and hence charge lower audit fees. We therefore find support for [H1](#). Regarding economic significance, our reported coefficient on *Ef* implies that every one unit increase in *Ef*

leads to a 2.33% decrease in *Fee* [-0.0023×100]. Considering the mean audit fee stands at \$1,723,113, this translates to an average decrease of approximately \$39,632 in audit fees. As expected,

auditors charge higher audit fees for larger firms (coefficient: 0.792; t -statistic: 99.11), with more investment and receivables (coefficient: 0.055; t -statistic: 10.13), more business segments (coefficient: 0.059; t -statistic: 12.69) and foreign operations (coefficient: 0.150; t -statistic: 18.03). Although more profitable firms pay lower audit fees (coefficient: -0.326 ; t -statistic: -12.55), firms engaging in mergers and acquisitions (coefficient: 0.034; t -statistic: 5.78), and experiencing either going concern (coefficient: 0.096; t -statistic: 7.35) and/or internal control audit opinion (coefficient: 0.155; t -statistic: 14.28) are likely to pay higher audit fees. Consistent with prior audit research, we observe that both Big4 (*Big4*) (coefficient: 0.220; t -statistic: 25.37) and industry-specialist auditors (*Indspec*) (coefficient: 0.029; t -statistic: 4.24) charge higher audit fees. Although distance from SEC (*Secdist*) does not affect audit fees, consistent with both Jha and Chen (2015) and Jha et al. (2021), social capital (political corruption) negatively (positively) influences audit fees. Both state-level total population (*Pop*) (coefficient: 0.022; t -statistic: 3.93) and population density (*Popden*) (coefficient: 0.034; t -statistic: 4.83) exhibit systematic positive links with audit fees.

To develop a better understanding of the link between economic freedom and audit fees, we examine whether tax, labour and spending-related economic freedom impact audit fees. We depict the results of these analyses in columns (2), (3) and (4) of Table 4. Although the coefficients of *Ef_Tax* (-0.026 ; t -statistic: -5.48) and *Ef_Labor* (-0.043 ; t -statistic: -2.60) are negative and statistically significant, *Ef_Spend* does not load significantly on audit fees. Column (5), Table 4 shows the regression estimation with all three different economic freedom categories. Statistically significant negative coefficients of *Ef_Tax* and *Ef_Labor* and an insignificant coefficient of *Ef_Spend* are consistent with the results reported in columns (2), (3) and (4).

5.2 | Endogeneity Tests

Acknowledging the possibility that our findings are influenced by endogeneity, we conduct several endogeneity tests, the results of which are presented in Table 5.

5.2.1 | Firm Fixed Effects Regression

To address the time-invariant unobserved heterogeneity, we check if adding firm fixed effects instead of industry fixed effects alters our findings. The results of this analysis are reported in Panel A, Table 5. For the sake of brevity, we only report the coefficient of our variable of interest: *Ef*. The coefficient on *Ef* is still negative and statistically significant (coefficient: -0.010 ; t -statistic: -3.10). That is, using firm fixed effects does not alter our main findings.

5.2.2 | Entropy Balancing

We conduct an entropy-balanced matching sample test to address the endogeneity issue arising from the observable differences in the firm characteristics between firms located in high versus low economic freedom states in the US. Entropy balancing specifies a set of covariates to be matched, the balanced conditions, and a tolerance threshold Hainmueller (2012); McMullin

and Schonberger (2020). To conduct the Entropy balancing test, we first divide our sample into two groups. *Ef_H* is a categorical value coded as 1 (treatment group) for firms with an economic freedom score greater than the median and 0 (control), otherwise. We then perform entropy balancing to ensure that the mean, variance and skewness of the observations in the two groups are similar. The results of our entropy balancing tests are presented in panels B.1 and B.2 of Table 5. As shown in panel B.1, Table 5, we achieve the desirable covariate balance. We then use the entropy-balanced pooled sample to re-estimate our baseline regression. The results of this entropy-balanced regression analysis are presented in Panel B.2, Table 5. The coefficient on *Ef* is negative and significant (coefficient: -0.014 ; t -statistic: -2.83). This is consistent with our original baseline findings.

5.2.3 | Two-Stage Least Squares (2SLS) Regression

To further address endogeneity stemming from simultaneity bias, we conduct a 2SLS regression estimation, in which we use an instrumental variable (IV) in the first stage: *Republic*. *Republic* is a categorical variable with a value of 1 if a state has a Republican majority, 0 otherwise. Given that the Republican majority states typically enjoy more economic freedom (Smith 2000), we anticipate that the variable *Republic* would load positively on *Ef*. Hence, in the first-stage analysis, we regress *Ef* on *Republic* and all control variables used in our baseline analysis. We use the coefficients of independent variables, generated from the first-stage analysis, and estimate the predicted value of economic freedom (*pred_Ef*) in our second-stage analysis.

Panel C, Table 5, depicts the results of our 2SLS estimation. For brevity, we only report the coefficients of our variables of interest. Column (1) presents the results of the first stage analysis. As per column (1), *Republic* is significantly positively associated with *Ef* (coefficient: 0.984; t -statistic: 11.92). This is consistent with our prediction that Republican majority states are characterised by greater economic freedom. To test the validity of our instrument, we estimate the Kleibergen-Paap rk Wald F statistic which is significant at the 1% level (1201.21), thereby rejecting the null hypothesis that *Republic* is not a valid instrument. The Cragg-Donald Wald F statistic and Stock and Yogo (2005) critical value also indicate that our instrument does not suffer from a weak identification problem. Based on the coefficients of independent variables, generated from our first-stage analysis, we estimate the predicted values of the economic freedom score (*pred_Ef*). We present the results of the second stage analysis in column (2), which shows that the *pred_Ef* is negative and significant (coefficient: -0.014 ; t -statistic: -3.53). This is consistent with our baseline regression estimation, which documents a negative association between economic freedom and audit fees.

5.3 | Mediating and Moderating Tests

5.3.1 | Mediating Role of Audit Effort, Litigation Risks and Accounting Complexity

So far, our analysis reveals that there is a negative association between economic freedom and audit fees. We now assert that economic freedom affects audit fees via audit efforts, litigation

TABLE 5 | Tests for endogeneity.

Panel A: Firm fixed effect									
Variables	Dependent variable								
	Fee								
<i>Ef</i>	−0.010*** (−3.10)								
Other control variables	Yes								
Observations	53,285								
Firm FE	Yes								
Year FE	Yes								
Adj. R-squared	0.843								
Panel B.1: Entropy balancing: Covariate matching table									
Variables	Treatment variable: <i>Ef</i>								
	Treatment: <i>Ef_H=1</i>			Control: <i>Ef_H=0</i> (before matching)			Control: <i>Ef_H=0</i> (after matching)		
	Mean	Variance	Skewness	Mean	Variance	Skewness	Mean	Variance	Skewness
<i>Size</i>	0.183	0.565	0.101	0.093	0.569	0.281	0.183	0.574	0.112
<i>Invrec</i>	−0.095	0.703	0.916	−0.044	0.697	0.885	−0.095	0.690	0.939
<i>Segments</i>	0.546	0.868	−0.281	0.600	0.865	−0.397	0.546	0.890	−0.291
<i>Foreign</i>	0.405	0.241	0.387	0.496	0.250	0.018	0.405	0.241	0.387
<i>Std_Ret</i>	0.228	0.841	1.373	0.340	0.924	1.171	0.228	0.872	1.262
<i>Chg_Ppe</i>	−0.009	0.660	6.686	−0.037	0.590	6.668	−0.009	0.676	7.021
<i>Ma</i>	0.175	0.144	1.713	0.177	0.146	1.695	0.175	0.144	1.713
<i>Discops</i>	0.173	0.143	1.726	0.151	0.128	1.947	0.173	0.143	1.726
<i>Lev</i>	−0.051	0.920	5.450	−0.157	0.676	6.397	−0.051	0.889	5.363
<i>Roa</i>	0.172	0.016	−9.852	0.161	0.025	−12.390	0.172	0.030	−17.580
<i>Loss</i>	0.342	0.225	0.667	0.391	0.238	0.447	0.342	0.225	0.667
<i>Big4</i>	0.742	0.192	−1.105	0.731	0.197	−1.040	0.742	0.192	−1.105
<i>Indspec</i>	0.238	0.181	1.232	0.214	0.168	1.393	0.238	0.181	1.232
<i>Busy</i>	0.773	0.175	−1.306	0.708	0.207	−0.916	0.773	0.175	−1.306
<i>Gc</i>	0.033	0.032	5.227	0.034	0.033	5.134	0.033	0.032	5.227
<i>Ic</i>	0.056	0.053	3.876	0.057	0.054	3.811	0.056	0.053	3.876
<i>Capex</i>	0.327	1.255	2.549	0.062	0.593	3.052	0.327	1.192	2.501
<i>Lag</i>	−0.106	0.498	1.832	−0.044	0.519	1.910	−0.106	0.453	1.856
<i>Mb</i>	0.068	0.580	6.947	0.115	0.749	6.112	0.068	0.516	6.473
<i>Nafees</i>	0.206	0.838	−1.692	0.200	0.845	−1.652	0.206	0.848	−1.672
<i>Secdist</i>	−0.079	1.004	−1.484	0.321	0.892	−0.263	−0.079	0.743	0.195
<i>Soccap</i>	−0.132	0.894	0.279	0.063	0.985	0.282	−0.132	1.417	−0.385
<i>Corr</i>	0.193	1.111	1.471	−0.258	0.630	1.864	0.193	1.672	1.683
<i>Relig</i>	−0.091	0.571	1.436	0.090	1.254	2.435	−0.091	0.902	2.396
<i>Educ</i>	−0.030	1.361	0.539	0.010	0.502	−0.238	−0.030	0.934	−0.779
<i>Percapinc</i>	−0.134	0.925	0.298	0.114	0.789	0.065	−0.134	0.818	0.214

(Continues)

TABLE 5 | (Continued)

Panel B.1: Entropy balancing: Covariate matching table									
Variables	Treatment variable: <i>Ef</i>								
	Treatment: <i>Ef_H=1</i>			Control: <i>Ef_H=0</i> (before matching)			Control: <i>Ef_H=0</i> (after matching)		
	Mean	Variance	Skewness	Mean	Variance	Skewness	Mean	Variance	Skewness
<i>Pop</i>	-0.226	0.691	-0.286	0.416	0.960	-0.814	-0.226	1.094	-0.607
<i>Popden</i>	-0.197	1.161	0.068	0.113	0.721	-0.359	-0.197	1.255	-0.150

Panel B.2: Regression (after entropy balancing)	
Variables	Dependent variable
<i>Ef</i>	-0.014*** (-2.83)
Other control variables	Yes
Observations	53,285
Industry FE	Yes
Year FE	Yes
Adj. <i>R</i> -squared	0.760

Panel C: 2SLS (Instrumental variable: Republic)		
Variables	(1)	(2)
	First stage	Second stage
	Dependent variable	
	<i>Ef</i>	<i>Fee</i>
<i>Republic</i>	0.984*** (11.92)	—
<i>pred_Ef</i>	—	-0.014*** (-3.53)
Control variables	Yes	Yes
<i>Under-identification test</i>		
Kleibergen-Paap rk Wald <i>F</i> statistic	1201.30	
<i>p</i> -value	0.001	
<i>Weak identification test</i>		
Cragg-Donald Wald <i>F</i> statistic	183.71	
Stock and Yogo (2005) critical value	21.53	
Observations	53,285	53,285
Industry FE	Yes	Yes
Year FE	Yes	Yes
Adj. <i>R</i> -squared	0.423	0.834

Note: This table presents the results of various endogeneity tests. Panel A shows the association between economic freedom and audit fees for the firm fixed effect specification. Panel B.1 presents the Entropy balancing variance-covariance matrix, while Panel B.2 presents the regression estimation after doing the Entropy balancing. Finally, Panel C presents the results of the two-stage least squares (2SLS) estimation, where we use *Republic* as our instrumental variable at the first stage. All variables (other than the categorical variables) are winsorised at 1% and 99% level. The numbers in the parentheses are *t*-statistics. We define all variables in Appendix. ***, **, and * indicate statistical significance at 1%, 5% and 10%, respectively.

risks, accounting complexity and the disclosures of material control weaknesses. For instance, we anticipate that greater economic freedom is associated with lower audit efforts, lowering audit fees (see Section 2.1 for the theoretical development). Further, as client firms—located in states characterised by more economic freedom—face lower litigation risks, auditors of these firms are likely to charge lower audit fees. We project that greater economic freedom has a negative association with accounting complexity, thereby lowering audit fees. The complexity of financial reporting, which allows for managerial discretion and potential earnings management (Graham et al. 2012), is lessened in economically free states, where reduced incentives for aggressive tax planning simplify the audit process. Consequently, audit firms may charge lower fees in these states due to decreased audit risk and complexity. Finally, from the demand-side perspective, we argued that firms headquartered in states enjoying high economic freedom are more likely to strengthen internal financial governance to ensure transparent reporting and smooth business operations. One such manifestation of such reporting would be fewer disclosures of material weaknesses in internal control.

We use audit report lag (*Lag*) (the natural logarithm of the number of calendar days from fiscal year-end to the signature date of the auditor's report) as a proxy for audit effort. Our litigation proxy is *Lawsuit*, which takes a value of 1 if a firm experiences Accounting and Auditing Enforcement Releases (AAER), accounting malpractices, or financial reporting-related lawsuits (as per Audit Analytics), and 0 otherwise. We use the accounting complexity (*Complexity*) measure developed by Hoitash and Hoitash (2018) as a proxy for accounting complexity. Finally, we use management disclosure of internal control weakness (*Mw*), a dummy variable coded 1 if the management indicates a material weakness exists, and zero otherwise, as a proxy for internal control quality. We apply Baron and Kenny's (1986) mediation analysis approach to test whether *Lag*, *Lawsuit*, *Complexity* and *Mw* are the channels through which economic freedom influences audit fees. More specifically, we conduct the following three regression estimations:

$$Fee_{i,t} = \beta_0 + \beta_1 Ef_{i,t} + \sum_i \lambda_i Controls_{i,t} + \sum_j \lambda_j Industry_{j,t} + \sum_k \lambda_k Year_{k,t} + \varepsilon_1 \quad (2)$$

$$Mediator_{i,t} = \beta_0 + \beta_1 Ef_{i,t} + \sum_i \lambda_i Controls_{i,t} + \sum_j \lambda_j Industry_{j,t} + \sum_k \lambda_k Year_{k,t} + \varepsilon_2 \quad (3)$$

$$Fee_{i,t} = \beta_0 + \beta_1 Ef_{i,t} + \beta_2 Mediators_{i,t} + \sum_i \lambda_i Controls_{i,t} + \sum_j \lambda_j Industry_{j,t} + \sum_k \lambda_k Year_{k,t} + \varepsilon_3, \quad (4)$$

where the four mediating variables are *Lag*, *Lawsuit*, *Complexity* and *Mw*.

Panel A, Table 6 depicts the mediating effect of audit report lag (*Lag*), using the regression model (2). As we observe in column (2), *Ef* is significantly negatively related to audit report lag (mediator) (coefficient: -0.011 ; t -statistic: -3.14), indicating that higher economic freedom lowers audit effort. The coefficient

on *Ef* in column (1) is -0.023 ($p < 0.01$), but the magnitude of the coefficient becomes smaller (coefficient: -0.020 , t statistic: -4.30) in column (3) when we include both *Ef* and *Lag* in the same regression model. The coefficient on *Lag* is positive and significant as expected for audit fees (coefficient: 0.107 , t -statistic: 9.40) (column 3). We infer from this finding that there is a partial mediating effect of *Lag* on the association between economic freedom and audit fees. The indirect effect of *Lag* is significant and constitutes about 5% of the total effect.

Panel B, Table 6 presents the mediating effect of *Lawsuit* (regression model 3). As shown in column (2), the mediator *Lawsuit* has a significant negative coefficient (coefficient: -0.006 ; t -statistic: -2.42). This indicates that the likelihood of facing a lawsuit in a state with greater economic freedom is relatively lower. The magnitude of the coefficient on *Ef* becomes smaller in column (3) compared to column (1) when we include both *Ef* and *Lawsuit* in the same regression model (-0.021 compared to -0.023 , both significant at $p < 0.01$, respectively). The coefficient on *Lawsuit* is positive and significant for audit fees (coefficient: 0.314 , t -statistic: 9.31) (column 3). We infer from this finding that there is a partial mediating effect of lawsuits on the association between economic freedom and audit fees. Although the indirect effect of the *Lawsuit* is significant, it constitutes only about 9% of the total effect.

Panel C, Table 6 shows how *Complexity* mediates the association between economic freedom and audit fees. We observe in column (2) that as economic freedom increases, accounting complexity decreases (coefficient: -1.021 , t -statistic: -2.12). The coefficient on *Ef* in column (1) is -0.019 ($p < 0.01$), but the magnitude of the coefficient becomes smaller (coefficient: -0.018 , t statistic: -4.23) in column (3) when we include both *Ef* and *Complexity* in the same regression model. The coefficient on *Complexity* is positive and significant as expected for audit fees (coefficient: 0.007 , t -statistic: 19.14) (column 3). We infer from this finding that there is a partial mediating effect of accounting complexity on the association between economic freedom and audit fees. The indirect effect of *Complexity* is significant and constitutes about 28% of the total effect.

Finally, Panel D, Table 6, depicts how *Mw* mediates the association between economic freedom and audit fees. According to column (2), greater economic freedom lowers the likelihood of disclosing material control weaknesses (coefficient on *Ef*: -0.031 ; t -statistic: -4.12). However, the coefficient on *Ef* becomes smaller when we use both *Ef* and *Mw* in the same regression estimation (coefficient: -0.014 , t -statistic: -3.37). The coefficient on *Mw* is positive and significant as expected for audit fees (coefficient: 0.104 , t -statistic: 6.80) (column 3). *Mw* has a significant indirect effect, which constitutes about 18% of the total effect.

5.3.2 | Moderating Effects of Business Risk and Financial Reporting Quality

We then proceed to investigate whether business risks and/or earnings quality moderate the association between economic freedom influences audit fees. We present the results of these analyses in Table 7. We use two different proxies of business

TABLE 6 | Mediating effects.

Panel A: Mediating effect of audit report lag			
	(1)	(2)	(3)
Variables	<i>Fee</i>	<i>Lag</i>	<i>Fee</i>
<i>Ef</i>	-0.023*** (-4.96)	-0.011*** (-3.14)	-0.020*** (-4.30)
<i>Lag</i>			0.107*** (9.40)
Control variables	Yes	Yes	Yes
Observations	53,285	53,285	53,285
Industry FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Adj. R-squared	0.834	0.179	0.834
Direct effect			-0.020***
Indirect effect			-0.001**
Total effect			-0.021***
Panel B: Mediating effect of lawsuit			
	(1)	(2)	(3)
Variables	<i>Fee</i>	<i>Lawsuit</i>	<i>Fee</i>
<i>Ef</i>	-0.023*** (-4.96)	-0.006** (-2.42)	-0.021*** (-4.93)
<i>Lawsuit</i>			0.314*** (9.31)
Control variables	Yes	Yes	Yes
Observations	53,285	53,285	53,285
Industry FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Adj. R-squared	0.834	0.178	0.834
Direct effect			-0.021***
Indirect effect			-0.002***
Total effect			-0.023***
Panel C: Mediating effect of accounting complexity			
	(1)	(2)	(3)
Variables	<i>Fee</i>	<i>Complexity</i>	<i>Fee</i>
<i>Ef</i>	-0.019*** (-4.25)	-1.021** (-2.12)	-0.018*** (-4.23)
<i>Complexity</i>			0.007*** (19.14)
Control variables	Yes	Yes	Yes
Observations	15,719	15,719	15,719

(Continues)

TABLE 6 | (Continued)

Panel C: Mediating effect of accounting complexity			
	(1)	(2)	(3)
Variables	<i>Fee</i>	<i>Complexity</i>	<i>Fee</i>
Industry FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Adj. R-squared	0.795	0.629	0.796
Direct effect			-0.018***
Indirect effect			-0.007***
Total effect			-0.025***
Panel D: Mediating effect of material weakness			
	(1)	(2)	(3)
Variables	<i>Fee</i>	<i>Mw</i>	<i>Fee</i>
<i>Ef</i>	-0.016*** (-3.46)	-0.031** (-4.12)	-0.014*** (-3.37)
<i>MW</i>			0.104*** (6.80)
Control variables	Yes	Yes	Yes
Observations	2845	2845	2845
Industry FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Adj. R-squared	0.729	0.138	0.729
Direct effect			-0.014***
Indirect effect			-0.003***
Total effect			-0.017***

Note: This table depicts how four variables mediate the link between economic freedom and audit fees. Panel A shows the mediating effect of audit reporting lag (*Lag*). Panel B shows how the risks of lawsuits (*Lawsuit*) mediate the association of economic freedom with audit fees. Panel C shows how accounting complexity (*Complexity*) acts as a mediator between economic freedom and audit fees. Panel D depicts the mediating effects of disclosure of material weakness (*Mw*). For brevity, we only show the results pertaining to our variables of interest. All variables (other than the categorical variables) are winsorised at the 1% and 99% levels. The numbers in the parentheses are *t*-statistics. We define all variables in Appendix. ***, ** and *Statistical significance at 1%, 5% and 10%, respectively.

risks: (1) standard deviation of ROA (*Sdroa*) and (2) standard deviation of operating cash flows (*Sdocf*). Our two variables of interest are the interaction between economic freedom score and standard deviation of ROA ($Ef \times Sdroa$), and the interaction between economic freedom score and standard deviation of operating cash flows ($Ef \times Sdocf$). As per Panel A, the coefficients of $Ef \times Sdroa$ are -0.023 (*t*-statistic: -2.23) and $Ef \times Sdocf$ -0.018 (*t*-statistic: -1.81), respectively. Together, these two values indicate that firms headquartered in US states enjoying more economic freedom experience lower business risks, which gives rise to lower audit risk and hence lower audit fees. Both *Sdroa* and *Sdocf* have statistically significant positive coefficients, indicating that firms with more volatile earnings and operating cash flows pay higher audit fees.

TABLE 7 | Channel analysis.

Panel A: The role of business risks		
Variables	Dependent variable	
	Fee	
<i>Ef</i>	−0.020*** (−4.03)	−0.019*** (−4.00)
<i>Sdroa</i>	0.082*** (3.39)	
<i>Sdocf</i>		0.100*** (2.87)
<i>Ef</i> × <i>Sdroa</i>	−0.023** (−2.23)	
<i>Ef</i> × <i>Sdocf</i>		−0.018* (−1.81)
Other controls	Yes	Yes
Observations	46,432	41,200
Industry FE	Yes	Yes
Year FE	Yes	Yes
Adj. R-squared	0.830	0.831
Panel B: The role of earnings quality		
Variables	Dependent variable	
	Fee	
<i>Ef</i>	−0.021*** (−5.21)	−0.021*** (−5.23)
<i>Absdacc</i>	0.018*** (3.65)	
<i>Rem</i>		0.069** (2.00)
<i>Ef</i> × <i>Absdacc</i>	−0.005 (1.01)	
<i>Ef</i> × <i>Rem</i>		0.002 (0.50)
Other control variables	Yes	Yes
Observations	50,201	48,230
Industry FE	Yes	Yes
Year FE	Yes	Yes
Adj. R-squared	0.832	0.837

Note: This table shows whether economic freedom affects audit fees via two different channels (1) business risk (Panel A) and (2) earnings quality (Panel B). All variables (other than the categorical variables) are winsorised at the 1% and 99% levels. The numbers in the parentheses are *t*-statistics. We define all our empirical variables in Appendix. ***, ** and *Statistical significance at 1%, 5% and 10%, respectively.

We use two different proxies of earnings quality: (1) the absolute value of the discretionary accruals (*Abs_Dacc*) and (2) the real earnings management (*Rem*). Our variables of interest are two interaction terms: *Ef*×*Abs_Dacc* and *Ef*×*Rem*. As shown in Panel B, the values of both these interaction terms are insignificant. We assert, based on these findings, that earnings quality does not have any systematic impact on the link between economic freedom and audit fees.

5.4 | Other Test

5.4.1 | Economic Freedom and Future Earnings Restatements

Our analysis provides robust evidence that firms headquartered in states with high economic freedom pay lower audit fees. We conclude our analysis by examining the implications of economic freedom-induced reduction in audit fees for future reporting quality. We first replace the dependent variable with 1-year-ahead earnings restatement (*Restate_{t+1}*), as earnings restatements better reflect earnings quality (Dechow et al. 2010). We use the absolute value of abnormal audit fees (*Abs_Abnfee*) derived as the absolute values of the residuals of the audit fee regression using Equation (1) excluding the *Ef*. A higher value of *Abs_Abnfee* is considered to be an indicator of poor audit quality (Li and Liu 2024). We then run a logistic regression, where our dependent variable is *Restate_{t+1}*, which has a value of 1 if in year *t*+1 the company restates earnings, and 0 otherwise. The main independent variables are *Abs_Abnfee*, *Ef*, *Abs_Abnfee*×*Ef* and the control variables related to the determinants of restatements. The coefficient on *Abs_Abnfee* is positive but insignificant. The negative and significant coefficient on *Ef* (coefficient: −0.033, *t*-statistic: −2.86) suggests that the probability of earnings restatement decreases as economic freedom increases. Importantly, the statistically significant positive coefficient on the interaction term *Abs_Abnfee*×*Ef* (coefficient: 0.008, *t*-statistic: 1.83) indicates that in higher economic freedom settings, lower audit quality is associated with poorer financial reporting quality. This implies that economic freedom, as an institutional mechanism, may fail to substitute for a formal governance mechanism, external auditing in this setting, for ensuring high-quality external reporting (Table 8).

6 | Conclusions

This study contributes to the nascent body of research on the impact of socio-economic factors on audit fees by examining whether state-level economic freedom in the United States plays any role in the audit fee determination process. A state enjoying more economic freedom is characterised by an efficient regulatory regime, tax obligations and government intervention. We anticipate that greater economic freedom would be associated with lower audit fees. Using a sample of 53,285 non-financial firm-year observations, we find that auditors charge less audit fees to audit clients operating in a more economically free state. More specifically, auditors consider tax and labour-related economic freedom while determining audit risks. A battery of endogeneity tests suggests that our original assertion remains valid after controlling for identified biases.

TABLE 8 | Abnormal audit fees, economic freedom and earnings restatements.

Variables	(1)
	<i>Restate</i> _{<i>t</i>+1}
<i>Abs_Abnafee</i>	0.083 (1.083)
<i>Ef</i>	−0.033*** (−2.86)
<i>Abs_Abnafee</i> × <i>Ef</i>	0.008* (1.83)
Other control variables	Yes
Industry FE	Yes
Year FE	Yes
Observations	47,795
Pseudo <i>R</i> ²	0.010

Note: This table shows how audit quality, proxied by absolute abnormal audit fees (*Abs_Abnafee*) affects earnings quality, proxied by earnings restatement in year *t* + 1 (*Restate*_{*t*+1}), and whether economic freedom influences the association between abnormal audit fees and earnings restatements. For brevity, we only show the results pertaining to our variables of interest. All variables (other than the categorical variables) are winsorised at the 1% and 99% levels. The numbers in the parentheses are *t*-statistics. We define all variables in Appendix. ***, ** and *Statistical significance at 1%, 5% and 10%, respectively.

Our empirical analysis further reveals that client firms functioning in an economically free state seem to pay lower audit fees due to less audit efforts, litigation risks, accounting complexities and strong internal controls. Unlike prior studies that examine isolated institutional or cultural factors, we employ a composite measure that captures the multifaceted nature of economic freedom. Thus, we fill a critical gap in the literature by establishing the relevance of an overarching institutional construct, economic freedom, in explaining variations in audit fees. Our evidence suggests that efficient regulatory frameworks can support strong internal controls and reduce audit risk. Thus, these findings suggest that regulators should carefully assess the balance between the regulatory controls and the costs of these regulations for the business. We provide implications for auditors suggesting that they factor economic freedom into their audit risk assessments in determining competitive and fair audit pricing strategies. Finally, investors can gauge that economically free environments generate lower audit costs signalling lower perceived risk that may contribute to investor confidence.

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Data Availability Statement

Data derived from public domain resources.

Endnotes

¹ <https://www.fraserinstitute.org/studies/economic-freedom>.

² <https://www.heritage.org/index/>.

³ Empirical evidence (Bjornskov 2016; Grzeszczak 2020) underscores that economic freedom is characterised by regulatory environments that are both effective and efficient, facilitating business activities without imposing undue burdens. In addition, as per anecdotal evidence, high-ranking countries in economic freedom indices (e.g., Singapore, Switzerland and New Zealand) are not devoid of regulation. Instead, they are characterised by well-designed, efficient regulatory frameworks that support business activity while maintaining accountability and fairness (<https://www.heritage.org/index/>; <https://www.fraserinstitute.org/economic-freedom>).

⁴ Available at: <https://www.fraserinstitute.org/studies/economic-freedom>.

⁵ We start our sample period from the year 2004 to limit the sample to a time-period subsequent to the implementation of the Sarbanes-Oxley Act, which substantially changed the audit risk determination process.

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Appendix

Variable Definitions

Variable	Definition	Source
<i>Fee</i>	Natural logarithm of audit fees paid by client firm	Audit Analytics
<i>Ef</i>	Overall economic freedom score developed by the Fraser Institute by assigning equal weightage to three different freedom scores-tax, labour and spending	Fraser Institute
<i>Ef_Tax</i>	Tax-related economic freedom score	Fraser Institute
<i>Ef_Labor</i>	Labour-related economic score	Fraser Institute
<i>Ef_Spend</i>	Government spending-related economic freedom score	Fraser Institute
<i>Size</i>	Natural logarithm of the firm's total assets (AT)	Compustat
<i>Invrec</i>	Sum of inventories (INVT) and receivables (RECT) divided by total assets (AT)	Compustat
<i>Segments</i>	Natural logarithm of (1 + number of business segments), or 1 if the item is missing from Compustat	Compustat
<i>Foreign</i>	1 if the firm has foreign operations, 0 otherwise. We assume a firm has foreign operations if it reports nonzero foreign income taxes (TXFO)	Compustat
<i>Std_Ret</i>	Standard deviation of monthly stock returns from CRSP calculated over the last 5 years, with at least 3 years of data required	CRSP
<i>Chg_Ppe</i>	Change in ratio of total property, plant and equipment to assets (PPENT/AT) from year $t-1$ to year t	Compustat
<i>Ma</i>	1 if the client firm is involved in merger & acquisition activity in the current year, 0 otherwise	Compustat
<i>Discops</i>	1 if the firm reported discontinued operations (DO), 0 otherwise	Compustat
<i>Lev</i>	Leverage ratio, calculated as long-term debt (DLTT) plus debt in current liabilities (DLC), divided by total assets (AT)	Compustat
<i>Roa</i>	Return on assets, calculated as income before extraordinary items (IB) divided by total assets (AT)	Compustat
<i>Loss</i>	1 if the firm reported negative net income (NI), 0 otherwise	Compustat
<i>Big4</i>	1 if the firm is audited by any of the Big 4 auditors (Deloitte & Touche, Ernst & Young, KPMG, and PricewaterhouseCoopers), 0 otherwise	Audit Analytics
<i>Indspec</i>	1 if the auditor is an industry specialist (based on 2-digit SIC industry), following Reichelt and Wang (2010), 0 otherwise	Authors' calculation based on Audit Analytics and Compustat
<i>Busy</i>	1 if the client firm's fiscal year ends in December, 0 otherwise	Compustat
<i>Gc</i>	1 if the client firm receives a going-concern audit opinion from its auditor, 0 otherwise	Audit Analytics
<i>Ic</i>	1 if the client firm receives an adverse internal control opinion, 0 otherwise	Audit Analytics
<i>Capex</i>	Capital expenditures (CAPX) scaled by total assets (AT)	Compustat
<i>Lag</i>	Audit report lag, measured as the natural logarithm of the number of calendar days from fiscal year-end to the signature date of the auditor's report	Audit Analytics
<i>Mb</i>	Market to book ratio (CSHO \times PRCC_F)/CEQ	Compustat
<i>Nafees</i>	Natural logarithm of non-audit fees paid by client firm to the auditor	Audit Analytics
<i>Secdist</i>	Geographic distance to the closest SEC branch, using firm and SEC ZIP codes. We consider the SEC branches as SEC headquarters in Washington DC, and the regional offices located in Chicago, IL; Denver, CO; Miami, FL; and Los Angeles, CA New York City, NY. After 2007, we added the new offices of the SEC located in the following areas: Atlanta, GA; Boston, MA; Fort Worth, TX; Philadelphia, PA; Salt Lake City, UT and San Francisco, CA	Compustat
<i>Soccap</i>	Social capital at the county level	Authors' calculation based on Rupasingha and Goetz's (2008) approach
<i>Corr</i>	The number of convictions by the U.S. Department of Justice for political corruption in each federal judicial district standardised by population within the district	US Census Bureau and Department of Justice

Variable	Definition	Source
<i>Relig</i>	The percentage of religious adherents in the state	Association of Religion Data Archive
<i>Educ</i>	The percentage of the population with a college degree or higher	U.S. Census Bureau
<i>Percapinc</i>	Natural logarithm of per capita income of the state	Bureau of Economic Analysis (BEA)
<i>Pop</i>	Natural logarithm of the population of the state	U.S. Census Bureau
<i>Popden</i>	The total population of the state scaled by the area in miles	U.S. Census Bureau
<i>Sd_Roa</i>	Standard deviation of ROA (income before extraordinary item [IT] divided by total assets [AT]) calculated over the last 5 years, with at least 3 years of data required	Compustat
<i>Sd_Ocf</i>	Standard deviation of cash flow from operations (OANCF) calculated over the last 5 years, with at least 3 years of data required	Compustat
<i>Dac</i>	<p>Discretionary accruals are calculated using the Modified Jones model controlling for firm performance (Dechow et al. 1995; Kothari et al. 2005). We estimate the following equation for all firms in the same industry with at least 10 observations for an industry in a particular year:</p> $\frac{ACC_{i,t}}{TA_{i,t-1}} = \gamma_0 \left(\frac{1}{TA_{i,t-1}} \right) + \gamma_1 \left[\frac{\Delta SALES_{i,t} - \Delta RECEIV_{i,t}}{TA_{i,t-1}} \right] + \gamma_2 \left(\frac{PPE_{i,t}}{TA_{i,t-1}} \right) + \gamma_3 (ROA_{i,t-1}) + \varepsilon_{i,t} \quad (A.1)$ <p>where <i>Acc</i> is total accruals calculated as earnings before extraordinary items and discontinued operations (<i>Ib</i>) minus operating cash flows (<i>Oanctf</i>); <i>Ta</i> is total assets in year <i>t</i> - 1; $\Delta Sales$ is the change in sales from year <i>t</i> - 1 to year <i>t</i>; $\Delta Receiv$ is the change in accounts receivable from year <i>t</i> - 1 to year <i>t</i>; <i>Ppe</i> is the gross property plant & equipment; <i>Roa</i> is the return on assets measured as earnings before extraordinary items and discontinued operations for the preceding year divided by total assets for the same year. The coefficient estimates from Equation (A.1) are used to estimate the non-discretionary component of total accruals (<i>Ndac</i>) for our sample firms. The discretionary accruals are then the residuals from Equation (A.1), that is, <i>Dac</i> = <i>Acc</i> - <i>Ndac</i>. We use the absolute value of <i>Dac</i> and denote this as <i>Abs_Dacc</i></p>	Compustat
<i>Rem</i>	<p>Composite <i>Rem</i> score calculated as <i>Aprod</i> + <i>Adisx</i> + <i>Acfo</i>. To calculate abnormal <i>Cfo</i>, we first measure the normal levels of CFO, using the following cross-sectional regression for each industry and year with at least 10 observations:</p> $\frac{CFO_t}{A_{t-1}} = \alpha_0 + \alpha_1 \frac{1}{A_{t-1}} + \alpha_2 \frac{SALES_t}{A_{t-1}} + \alpha_3 \frac{\Delta SALES_t}{A_{t-1}} \quad (A.2)$ <p>where <i>CFO_t</i> is the cash flow from operations in year <i>t</i>. The <i>Acfo</i> is the residual from the above regression. We multiply the residual by -1 so that higher values imply greater <i>Rem</i></p> <p>To measure abnormal production cost (<i>Aprod</i>), we first estimate the normal level of production costs using Equation (A.3) below, according to the model developed by Roychowdhury (2006)</p> $\frac{PROD_t}{A_{t-1}} = \alpha_0 + \alpha_1 \frac{1}{A_{t-1}} + \alpha_2 \frac{SALES_t}{A_{t-1}} + \alpha_3 \frac{\Delta SALES_t}{A_{t-1}} + \alpha_4 \frac{\Delta SALES_{t-1}}{A_{t-1}} \quad (A.3)$ <p>where <i>PROD_t</i> is the sum of the cost of goods sold in year <i>t</i> and the change in inventory from <i>t</i> - 1 to <i>t</i>, <i>A_{t-1}</i> is the total assets in year <i>t</i> - 1, <i>Sales_t</i> is the net sales in year <i>t</i>, $\Delta Sales_t$ is the change in net sales from year <i>t</i> - 1 to <i>t</i>. Equation (A.3) is estimated cross-sectionally for each industry-year with at least 15 observations. The abnormal level of discretionary production (<i>Aprod</i>) is measured as the estimated residual from the regression</p> <p>Similarly, following Roychowdhury (2006), we first measure the normal level of discretionary expenses (<i>Rem_Disx</i>) using Equation (A.4) below</p> $\frac{DISX_t}{A_t} = \alpha_0 + \alpha_1 \frac{1}{A_{t-1}} + \alpha_2 \frac{SALES_{t-1}}{A_{t-1}} \quad (A.4)$ <p>where <i>DISX_t</i> are the discretionary expenses (i.e., the sum of R&D, advertising and SG&A expenditure) in year <i>t</i>. We estimate Equation (A.4) cross-sectionally for industry-years with at least 15 observations. The abnormal level of <i>Disx</i> is the estimated residual from the regression. We multiply the residuals by -1 so that the higher values indicate greater amounts of discretionary expenses cut down and, hence, higher REM</p>	Compustat
<i>Ef_H</i>	1 (treatment group) for firms with audit fees greater than the median and 0 (control), otherwise	Fraser Institute
<i>Republic</i>	A dummy variable coded 1 if a firm is headquartered in a republican majority state, 0 otherwise	Compustat
<i>Lawsuit</i>	1 if a firm experiences AAER, accounting malpractices, or financial reporting-related lawsuits, 0 otherwise	Audit Analytics
<i>Complexity</i>	Accounting complexity score developed by Hoitash and Hoitash (2018)	https://www.xbrlresearch.com/
<i>Mw</i>	A dummy variable coded 1 if the management indicates a material weakness exists, and 0 otherwise	Audit Analytics
<i>Abs_Abnfee</i>	Absolute values of the residuals of the audit fee regression excluding the variable <i>Ef</i>	Equation (1)
<i>Restate</i>	1, if a firm restates earnings in year <i>t</i> , 0 otherwise	Audit Analytics