

The Audit Engagement Partner's Foreign Experience and Internal Control Oversight: Evidence from US Multinational Corporations

ABSTRACT

This study investigates whether audit engagement partners' (AEP) foreign experience has an effect on the internal control weaknesses (ICW) disclosed under section 404 of the Sarbanes-Oxley Act. Using 8,740 firm-year observations, including 2,219 AEPs and 1,649 companies from 2017 to 2023, we document several key findings. First, AEPs' foreign experience is positively associated with ICW disclosures. Second, this effect is more pronounced in firms with greater operational complexity. Third, AEPs' foreign experience is negatively associated with future financial restatements. Forth, we find that AEP's foreign experience negatively associates with auditor dismissal following adverse internal control audit opinions. Lastly, we do not find a statistically significant relationship between AEP's foreign experience and discretionary accruals. These results remain consistent across multiple robustness tests, reinforcing their validity and reliability.

I. INTRODUCTION

Over the past two decades, following the enactment of Sarbanes-Oxley Act in 2002 (SOX), and the subsequent Public Company Accounting Oversight Board (PCAOB) standards relevant to the section 404 of SOX (PCAOB, 2004), scholars have increasingly focused on internal control over financial reporting (ICFR)¹ disclosed by publicly listed firms (J. Doyle, Ge, and McVay 2007a; Ashbaugh-Skaife et al. 2009; M. Cheng, Dhaliwal, and Zhang 2013; Hoitash, Hoitash, and Bedard 2009; Ettredge, Li, and Sun 2006; Q. Cheng, Goh, and Kim 2018; Järvinen and Myllymäki 2016; Cao et al. 2024; W.P. Liu and Huang 2020; Myllymäki 2014).

In this study, we examine the association between internal control weakness (ICW)² disclosures

¹ Internal control over financial reporting (ICFR) is defined as "a process designed by, or under the supervision of, the company's principal executive and principal financial officers, or persons performing similar functions and effected by the company's board of directors, management, and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles" (PCAOB 2004, AS No. 02, para.07)

² Internal control weakness (ICW) denotes the material weaknesses in ICFR. Material weakness is defined as "a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis." (PCAOB Release 2007-005A)

made pursuant to the section 404 of Sarbanes-Oxley Act (SOX 404) by US Multinational corporations (MNCs) and the AEP's foreign experience.

The section 404 of the Sarbanes-Oxley Act requires management to assess and report on the effectiveness of ICFR [SOX 404(a)], and mandates that external auditors independently attest to management's assessment [SOX 404(b)]. The Auditing Standard No. 5 (AS 5), issued by the PCAOB and now codified as AS 2201, emphasises if one or more material weaknesses exist, the company's ICFR cannot be considered as effective. Hence, to express an opinion on ICFR effectiveness, auditors must plan and perform the audit diligently to obtain sufficient and appropriate evidence to reasonably determine whether any material weaknesses exist as of the date specified in management's assessment. Given that the AEP plays a central role in this process, this study posits that AEP attributes significantly influence the firm's ICW disclosures.

ICW represent significant risks to the integrity of financial reporting and the overall governance of corporations. For MNCs, the complexity of managing internal controls across diverse geographic and regulatory environments further amplifies these risks. As a result, the role of AEPs in identifying and addressing ICW becomes critical. Despite the critical role of AEPs in assessing the effectiveness of internal controls, prior research has primarily focused on audit firm-level or audit committee characteristics as determinants of ICWs (Yangyang Chen et al. 2016; Haislip, Peters, and Richardson 2016; Khalil 2011; Anantharaman and Wans 2019; Oradi and E-Vahdati 2021), largely neglecting the potential influence of AEP-specific attributes on ICW disclosures.

One reason for this historical gap is the lack of available data identifying individual AEPs. However, the implementation of PCAOB Rule 3211³ in 2017, which mandates the disclosure

³ PCAOB Rule 3211 requires the registered public accounting firms to file the Form AP-Auditor Reporting of Certain Audit Participants which discloses the audit engagement partner identity data. This rule is effective for the audit reports issued on or after January 31, 2017.

of AEP identities via Form AP, has facilitated a growing body of research examining how AEP characteristics affect audit outcomes in the US context (Burke, Hoitash, and Hoitash 2019; Cai et al. 2023; C. Liu and Xu 2021; Zimmerman, Bills, and Causholli 2021; Lee, Nagy, and Zimmerman 2019). While these studies have explored various AEP attributes on different outcomes such as audit quality, audit fees and audit delays, the specific impact of AEPs' foreign experience on ICW disclosures and broader financial reporting outcomes in multinational settings remains underexplored.

This study seeks to address this gap by examining whether AEPs with foreign experience are more effective in identifying and disclosing ICW in U.S.-headquartered multinational corporations. We argue that such partners, by virtue of their cross-border expertise, are better equip to understand the complexities of multinational internal control systems and are thus more capable of detecting and reporting ICWs. This hypothesis underscores the potential value of international experience in enhancing audit quality and improving the reliability of financial reporting in complex global environments. To test our hypothesis, we model ICW as a function of AEP foreign experience and control other potential firm characteristics, industry and year fixed effects.

We construct a unique panel dataset comprising 2,219 AEPs and 1,649 U.S.-headquartered multinational audit clients from 2017 to 2023, the period following the implementation of Form AP disclosures. We collect individual AEP identity information from Form AP fillings in AuditorSearch website, including their working office locations, and obtained client location details from external sources such as the Compustat database, firm websites, and other publicly available sources. We define AEPs' foreign experience as instances where the AEP's working location differs from the client's location. This information is merged with SOX 404 (ICW) disclosures, Compustat financial data, restatement data, and segment data, resulting in a final

sample of 8,740 firm-year observations.

Our findings show a positive association between ICW and AEP's foreign experience which denotes that AEPs with foreign experience are likely to detect and disclose more ICW, suggesting that their international exposure enhances their specialized knowledge and audit diligence. Furthermore, using two operational complexity measures—the number of operating segments and the percentage of foreign income—we find that this relationship is more pronounced in firms with higher operational complexity. This indicates that the value of foreign experience is particularly significant in complex environments with heightened control challenges.

Additional tests demonstrate that AEPs' foreign experience is associated with a reduction in future financial restatements, implying improved financial reporting quality and a lower likelihood of material internal control weaknesses, likely due to enhanced audit quality. We also find that when AEPs with foreign experience issue adverse internal control audit opinions, the likelihood of subsequent auditor dismissal is lower. This suggests that multinational corporations and audit committees perceive such partners' assessments as more credible, reducing the need for auditor changes. However, we find no statistically significant relationship between AEPs' foreign experience and abnormal discretionary accruals. This implies that AEPs' foreign experience may not significantly influence managers' earnings management behaviors while their expertise is more aligned with detecting material financial statement errors.

To ensure the robustness of our main findings and address potential endogeneity concerns, we conducted a series of sensitivity tests. First, we applied a propensity score matching procedure to mitigate potential selection bias in our sample. Second, we performed a falsification test to validate the reliability of our results. Third, we redefined our key independent variable, AEP's

foreign experience as a binary variable rather than a continuous measure. Fourth, we used an alternative dependent variable by replacing ICW with ICW_COUNT in our regression model. Finally, we employed alternative econometric models, including the Linear Probability Model (LPM), the Random Effects Probit Model (xtprobit), and the Correlated Random Effects Model (CRE), to further validate the consistency of our results.

This study makes several important contributions to the literature on audit quality and internal controls. First, it extends the growing body of research that explores the role of individual auditor characteristics by focusing on the international experience of AEPs, an underexamined dimension of auditor human capital. By establishing a positive association between AEPs' foreign experience and the ICW disclosures, the study provides novel evidence that internationally experienced partners may bring enhanced professional skepticism and broader perspectives to their audits. Second, by demonstrating that this association is stronger in firms with higher operational complexity, the study contributes to the literature on audit in complex environments and suggests that international exposure may better equip AEPs to navigate multifaceted audit risks. Third, the negative association between AEPs' foreign experience and future restatements, as well as auditor dismissal following adverse ICW opinions, underscores the long-term benefits of foreign experience for audit quality and client relationships. Collectively, these findings enrich our understanding of how experiential diversity among AEPs influences audit outcomes, and they carry important implications for regulators, audit firms, and corporate governance stakeholders concerned with enhancing audit effectiveness and internal control reliability

Our study significantly differs from those of Gunn and Michas (2018) and Dao, Xu, and Liu (2019). Gunn and Michas (2018) focus on audit firm-office multinational expertise, examining how the collective capabilities of audit office influence audit quality in the context of

multinational group audits. In contrast, we shift the lens to the engagement partner level by investigating whether the foreign experience of AEPs affects ICW disclosures. By emphasizing partner-specific human capital, our study underscores the nuanced role of individual auditor experience in shaping audit outcomes. In doing so, it bridges a critical gap between human capital theory and auditing research, demonstrating that experiential attributes at the partner level, rather than firm-level expertise alone, can meaningfully influence audit quality.

Meanwhile, Dao, Xu, and Liu (2019) examine whether the disclosure of AEP identity enhances a firm's ability to detect ICW. Our study extends this line of inquiry by focusing on whether AEPs' foreign experience is associated with a greater likelihood of ICW disclosures in multinational corporations.

The remainder of the paper is organized as follows. Section II describes the literature reviews, and theoretical background and provides our hypothesis. Section III presents the research design. Section IV describes our empirical results including supplemental and sensitivity analyses. Section V provides the summary of findings, conclusion and directions for future research.

II. LITERATURE REVIEW, THEORETICAL BACKGROUND AND HYPOTHESIS DEVELOPMENT

Literature Review

Internal Control Weakness

The practice of reporting internal controls in publicly traded entities dates back to before the enactment of the Sarbanes-Oxley Act (SOX). Although not mandatory, some firms had begun voluntarily including disclosures on their internal control systems in annual reports to shareholders (Stratton 1981). However, prior to SOX, the disclosure of significant internal

control deficiencies was only required in cases involving auditor changes.

In response to a series of high-profile corporate scandals, most notably Enron and WorldCom, the U.S. government enacted the SOX in 2002, to restore investor confidence and improve financial reporting quality. Section 404 of SOX mandates that management of public companies assess and report on the effectiveness of their ICFR [SOX 404(a)]. Additionally, Section 404(b) expands the auditor's role by requiring an independent evaluation and attestation of management's assessment. Auditing Standard No. 2, later superseded by Auditing Standard No. 5, issued by the PCAOB, further requires auditors to issue an adverse opinion when a material weakness in internal controls is identified (PCAOB 2004, 2007).

These regulatory requirements have opened new avenues for researchers to examine ICW from various perspectives. Over the past two decades, a substantial body of literature has investigated the determinants and consequences of ICW across multiple dimensions (Ashbaugh-Skaife, Collins, and Kinney Jr 2007; Balsam, Jiang, and Lu 2014; J.T. Doyle, Ge, and McVay 2007b; Ge and McVay 2005; Ji, Lu, and Qu 2015; Abernethy et al. 2023; Donelson, Ege, and McInnis 2017; D. Zhang, Zhang, and Ma 2020; Cao et al. 2024; S. Cheng, Felix, and Indjejikian 2019; Kim, Song, and Zhang 2011; W.P. Liu and Huang 2020; Kim, Yeung, and Zhou 2019; Ashbaugh-Skaife et al. 2008; Mitra and Hossain 2011).

A key strand of this literature focuses on the role of audit-related factors in shaping ICW disclosures. In particular, prior studies have examined how audit firm-level characteristics and audit committee attributes are associated with ICW (Y. Zhang, Zhou, and Zhou 2007; Lisic et al. 2019; S. Cheng, Felix, and Indjejikian 2019; Oradi and E-Vahdati 2021; Krishnan 2005; Ananzeh 2024; Sterin 2020). Despite the critical importance of AEP's role in internal control auditing, no empirical study found in US context prior to PCAOB Rule 3211.

Audit Engagement Partner Identity Disclosures

The PCAOB adopted Rule 3211—*Auditor Reporting of Certain Audit Participants*, in 2015. This rule requires registered accounting firms in the U.S. to disclose the engagement partner responsible for the audit opinion and any other firms involved through filling the Form AP for all public company audit reports issued on or after January 31, 2017. Following this mandate, a growing body of research has examined whether and how the implementation of this rule (Rule 3211) influences audit outcomes, as well as how individual AEP characteristics affect audit quality (Burke, Hoitash, and Hoitash 2019; Cai et al. 2023; C. Liu and Xu 2021; John and Liu 2021; Dao, Xu, and Liu 2019; Park 2021; Kelly 2025; Cunningham et al. 2019).

For an example, Burke, Hoitash, and Hoitash (2019) examine changes in audit quality, fees, and delay following Rule 3211 and find that, in its first year of adoption, audit quality and fees increased while audit delay declined. They also explore whether newly disclosed partner characteristics such as gender, education, busyness, and social ties affect audit outcomes. While several traits are linked to audit fees and delay, no significant association is found with audit quality. Similarly, John and Liu (2021) report improvements in both audit quality and costs after Rule 3211, along with enhanced auditor independence in the post-regulation period.

C. Liu and Xu (2021) study the effect of AEPs' professional experience on audit outcomes and find a concave relationship with audit quality improving in early career stages and declining in later stages. They also find that experience is positively associated with audit fees in non-Big 4 firms, but not significantly in Big 4 firms. Cai et al. (2023) further investigate AEP characteristics such as gender, education, and work experience and show that these traits are associated with audit quality, with the effects differing between Big N and non-Big N firms.

Building on this emerging literature, our study investigates whether AEPs' foreign experience influences the disclosure of ICW in U.S. multinational corporations.

Theoretical Background

The relationship between AEP's foreign experience and ICW can be understood through several theoretical lenses. Human Capital Theory posits that individuals accumulate knowledge, skills, and competencies through education, training, and diverse work experiences, which enhance their productivity and decision-making capabilities (Becker, 2009). In the auditing context, an AEP's foreign experience represents a unique form of human capital that equips them with broader perspectives on regulatory environments, cultural norms, risk management practices, and corporate governance structures across different jurisdictions. This diverse exposure can improve auditors' ability to identify and assess risks related to internal controls, especially within complex multinational operations where cross-border activities introduce additional layers of financial reporting risks.

Upper Echelons Theory (Hambrick and Mason 1984) suggests that executives' characteristics, including their background and experience, influence organizational outcomes. Applying this theory to AEPs, it follows that partners with diverse backgrounds, including foreign experience, may bring different perspectives and insights that enhance the auditing process and improve the identification of ICWs.

Furthermore, the agency theory (Jensen and Meckling 1976) underscores the importance of monitoring mechanisms in mitigating agency problems. Audit partners with foreign experience may be more vigilant in safeguarding shareholder interests, thus reducing the likelihood of material weaknesses in internal controls that could lead to financial misstatements.

Hypothesis Development

AEPs with foreign experience are likely to possess a deeper understanding of the diverse regulatory, cultural and operational environments in which multinational corporations operate. This broader perspective enhances their ability to identify weaknesses in internal controls, especially those arising from cross-border operations. Engagement partners with international

experience are better equipped to navigate the complexities of financial reporting in multinational contexts, identifying risks that may not be as apparent to auditors with only local experience.

Prior research supports the notion that AEPs with international experience positively influence audit quality. For example, Y. Chen et al. (2017) found that auditors with international experience achieve better audit outcomes, such as lower accruals and less aggressive audit reporting. This suggests that such auditors bring greater scrutiny and professionalism to the audit process, leading to a more comprehensive evaluation of internal controls.

Moreover, Dao, Xu, and Liu (2019) highlighted the importance of disclosing the identities of engagement partners, showing that it increases the likelihood of detecting material weaknesses in internal controls. This emphasizes the role of transparency in enhancing audit quality and accountability. Similarly, Wang et al. (2015) argued that the experience of an engagement partner, beyond their tenure, significantly influences audit outcomes. This is particularly relevant in multinational contexts, where complex operations and regulatory challenges demand advanced expertise.

C. Liu and Xu (2021) further corroborate these findings, showing a positive correlation between the professional experience of AEPs and audit quality, which is crucial for accurate internal control reporting. Research also underscores that auditors' professional expertise and exposure to diverse environments significantly enhance their ability to identify and report material weaknesses (Dao, Xu, and Liu 2019; DeFond and Zhang 2014).

Taken together, these findings suggest that experienced auditors are more likely to provide superior audit services and effectively detect ICWs. Notably, international experience appears to amplify these effects by fostering a heightened level of professional skepticism and judgment. AEPs with global exposure are likely to have encountered a wide range of business

practices, cultural nuances, and regulatory environments, enabling them to navigate complex audit scenarios with greater expertise. This diverse background better equips them to identify weaknesses in a firm's internal controls. Based on this reasoning, we hypothesize the following:

H1: AEP's foreign experience positively impacts on the disclosure of ICW in multinational corporations.

Previous research has demonstrated that client complexity is associated with increased ICW disclosures, as more complex organizations tend to face greater challenges in internal controls, leading to higher rates of ICW reporting (Ge and McVay 2005). Gunn and Michas (2018) further suggested that auditors' multinational expertise enhances audit quality, particularly when a significant portion of a client's sales is derived from foreign markets. Their study emphasizes the importance of effective coordination and planning across international teams to mitigate risks associated with poor communication or supervision, which can undermine audit results. While Gunn and Michas (2018) focused on the audit firm's foreign experience, our study specifically examines the international experience of AEPs.

We argue that the international experience of AEPs plays a critical role in identifying and disclosing ICW in complex multinational settings. AEPs with foreign experience are better equipped to understand the intricate operational, regulatory, and cultural challenges faced by multinational corporations, thereby enhancing their ability to detect and disclose weaknesses in internal controls. In highly complex companies, where operations span multiple jurisdictions and involve diverse regulatory frameworks, AEPs' international experience is likely to be especially valuable.

Based on this reasoning, we propose the following hypothesis:

H2: The association between AEP’s foreign experience and the disclosure of ICW is stronger for clients with high complexity.

III. RESEARCH DESIGN

Sample

The sample for this study was compiled in several steps. First, we obtained AEP identity data from Form AP filings in the AuditorSearch database. To measure each AEP’s foreign experience, we identified the client locations where they conducted audits in a given year. Since Form AP lacks client location data, we supplemented it using the Compustat database, firm websites and other publicly available sources.

Next, we incorporated firms’ ICW data from SOX Section 404 reports, which were obtained from the Audit Analytics database. Additionally, we collected firm-level financial data from the Compustat database. We also merged restatement data from Audit Analytics and segment data from WRDS to construct the final dataset for the study.

The study specifically targets multinational corporations headquartered in the United States, which are defined as firms either having at least one foreign subsidiary located outside the US or reporting foreign income. To ensure data consistency and meet common data requirements, we excluded companies in the utilities and finance sectors (SIC codes 4900-4999 and 6000-6999) as well as those with negative equity. Furthermore, to minimize the impact of outliers, we winsorized firm-level observations at the 1st and 99th percentiles. The final sample includes 8,740 firm-year observations from 2017 to 2023. The sample period begins in 2017, the first year AEP identity data became available through Form AP filings. The detailed sample selection procedure is given in Table 1 below.

TABLE 1

Sample Selection Procedure

	n
Engagement partner identity data (Form AP fillings: All records)	125, 038
Deleted: Duplicate records	30,835
Unique Form AP records	94,203
Combine with SOX 404 data and Compustat: Number of records matched	17,257
Deleted: Utility and finance sector companies [SIC 4900-4999 and 6000-6999] and non-US-headquartered companies	5,620
	11, 637
Deleted: Missing control variables related to records	2,897
Final sample (2017-2023)	8, 740

Empirical Model

We used the following baseline regression model to examine the relationship between the AEP's foreign experience and the ICW:

$$ICW_{it} = \alpha + \beta_1(AEP_ForExp)_{it} + \beta_2(controls)_{it} + \beta_3(industry_effects) + \beta_4(year_effects)_t + e_i(1)$$

The dependent variable, ICW_{it} , denotes internal control weakness reported by the firm i in year t , and it is an indicator variable that takes the value "1" if the internal control is identified as ineffective in SOX 404 reports and "0" otherwise.

Our main test variable is the engagement partner's foreign experience. In the model, AEP_ForExp_{it} represents the foreign experience of the engagement partner for firm i in year t . This variable is measured by the number of foreign countries in which the AEP's working location differs from the client's location.

$Controls_{it}$ denotes the firm-specific control variables used in this model. We follow methods outlined in prior literature to control firm characteristics that may influence the likelihood of reporting ICWs. We control for several variables (firm size, firm age, aggregate loss, mergers

and acquisitions, restructuring, foreign transactions, number of segments, restructuring charges, sales growth, auditor tenure, auditor change, and industry special auditor) expected to be related to firms' disclosures of ICWs. Prior research shows that smaller firms are more likely to have ICWs (Balsam, Jiang, and Lu 2014; J. Doyle, Ge, and McVay 2007a; Ge and McVay 2005), thus we add the natural logarithm of total assets (SIZE) to our model and expect a negative coefficient on SIZE. Also, scholars reported that internal control systems are better in older firms (Y. Chen et al. 2017; J.T. Doyle, Ge, and McVay 2007b) and ICW firms tend to be younger (J. Doyle, Ge, and McVay 2007a). So, we add the natural logarithm of the number of years after the initial public offering (AGE) to our model and expect a negative coefficient. Ge and McVay (2005) and Krishnan (2005) reported that poorly performing firms are more likely to have ICWs. Therefore, we used aggregate loss (AGG_LOSS) an indicator variable equal to one if income before extraordinary items in years t and $t-1$ sum to less than zero, and zero otherwise, to control for firm performance and expect AGG_LOSS to be positively associated with ICW.

Moreover, prior studies have reported that the incidence of ICW is higher for firms with more complex operations and recent organizational changes (Ashbaugh-Skaife, Collins, and Kinney Jr 2007; J. Doyle, Ge, and McVay 2007a). Hence, to control for operating complexities and recent organizational changes, we include several variables namely, mergers and acquisitions (MERG_AQUI); an indicator variable equal to 1 if the firm reported non-zero acquisitions in the last 3 years, and 0 otherwise, restructuring (RESTRUCT); an indicator variable equal to 1 if the firm reports a non-zero value in any of the four restructuring items at the fiscal year-end, and 0 otherwise, foreign currency translations (FRGN_TRA); an indicator variable equal to 1 if the firm reported non-zero foreign currency translations and 0 otherwise, the natural logarithm of the number of business segments (Ln_SEGMENTS) and aggregate restructuring charges (REST_CHRG); the aggregate value of restructuring charges in years t and $t-1$ scaled

by the market value of equity at the end of year t . We expect positive coefficients for all these variables. Furthermore, J. Doyle, Ge, and McVay (2007a) reported that ICW firms tend to be growing rapidly. Similarly, Y. Chen et al. (2017) report that growth firms are more likely to have internal control problems. Therefore, we add sales growth (Ln_SALEGR) to our model and expect a positive coefficient for Ln_SALEGR . Finally, we include auditor-related variables; auditor tenure (AUD_TENU), auditor change (AUD_CHANGE), and industry specialist auditor (IND_SP_AUD) to control for the effect of the auditor on the identification of ICWs (Dao, Xu, and Liu 2019).

Additionally, we controlled the industry fixed effects using industry dummies and the year fixed effects using year dummies. As the year dummies are included, we did not control any macro-economic variables due to multicollinearity (Wooldridge 2010).

In our second hypothesis, we conducted a subsample analysis to examine the relationship between AEPs' foreign experience and ICW disclosure separately for high- and low-complexity clients. We hypothesized that this association would be stronger for more complex clients. To test this, we used two proxies for client complexity. First, we classified a client as highly complex if its foreign pretax income was at least 33% of its total pretax income. Based on this criterion, we divided the sample into 2,586 high-complexity and 6,154 low-complexity clients and estimated Equation (1) separately for each group. Next, we categorized clients based on the number of operating segments, defining high complexity as having more segments than the median value in the total sample. We then re-estimated Equation (1) separately for the high- and low-complexity groups.

IV. EMPIRICAL RESULTS

Descriptive Statistics

Table 2 presents the descriptive statistics for all variables used in the main analysis of this study. It is divided into three panels: Panel A provides firm-year observations on AEP's foreign experience, measured by the number of foreign countries in which they have audited; Panel B summarizes the distributional properties of all variables across the entire sample; and Panel C compares the descriptive statistics between firms audited by AEPs with at least one instance of foreign country audit experience and those audited by AEPs without such experience, including tests for mean differences between the two groups.

Panel A shows that only 6% of the sample firms are audited by AEPs with at least one foreign country audit experience whereas the remaining 94% are audited by partners with no such experience. Panel B reports a mean ICW value of 0.054 (SD = 0.225), indicating that only 5.4% of the sample companies reported ICW. Additionally, Panel B shows that the mean value of 0.067 indicates that, on average, AEPs in the sample have audit experience in 0.067 foreign countries. The low mean value (0.067) relative to the maximum (6) indicates that only a small proportion of AEPs have substantial foreign audit experience, while the majority (94%) have little to none. The results shown in panel C demonstrate significant differences between the two groups, as indicated by the t-statistics for the mean comparison tests.

TABLE 2

Descriptive Statistics

Panel A: AEP's Foreign Experience

Experience: No. of foreign countries	Freq.	Percent	Cum.
0	8,224	94.10	94.10
1	469	5.37	99.46
2	36	0.41	99.87
3	6	0.07	99.94

4	2	0.02	99.97
5	2	0.02	99.99
6	1	0.01	100.00

Panel B: Distributional Properties Of Variables

Variable	N	Mean	Median	Std. Dev.	Max	Min
ICW	8740	.054	0	.225	1	0
AEP_ForExp	8740	.067	0	.292	6	0
SIZE	8740	7.662	7.567	1.631	12.244	3.545
AGE	8740	2.891	3.091	.755	4.564	.693
AGG_LOSS	8740	.268	0	.443	1	0
MERG_AQUI	8740	.459	0	.498	1	0
RESTRUCT	8740	.4498	0	.497	1	0
FRGN_TRA	8740	.398	0	.490	1	0
Ln_SEGMENTS	8740	2.292	2.398	.817	4.127	0
REST_CHRG	8740	.009	0	.067	3.216	0
Ln_SALEGR	8740	1.764	1.979	1.569	14.056	-5.512
AUD_TENU	8740	3.602	3	1.959	7	1
AUD_CHANGE	8740	.029	0	.168	1	0
IND_SP_AU	8740	.018	0	.133	1	0
CFOA	8725	.074	.087	.131	.386	-.672
ROA	8740	.016	.041	.147	.381	-.850
BIG4	8740	.825	1	.380	1	0
CF_VOL	8636	.046	.030	.058	.808	0.00001
TACC	8512	-367.381	-38.603	2534.408	23381	-76767

Panel C: Firms Audited By AEPs With No Foreign Experience Vs With Foreign Experience

Variable	AEP_forExp2=0 (n=8224)			AEP_forExp2=1 (n=516)			Test of Difference (n=8740)
	Mean	Median	Std. Dev.	Mean	Median	Std. Dev.	t-test
ICW	0.051	0	0.220	0.097	0	0.296	-3.475***
AEP_ForExp	0.000	0	0.000	1.130	1	0.495	-51.826***
SIZE	7.687	7.588	1.626	7.261	7.278	1.658	5.663***
AGE	2.893	3.091	0.755	2.855	2.944	0.756	1.103
AGG_LOSS	0.264	0	0.441	0.322	0	0.468	-2.718***
MERG_AQUI	0.458	0	0.498	0.481	0	0.500	-1.016
RESTRUCT	0.449	0	0.497	0.440	0	0.497	0.421
FRGN_TRA	0.394	0	0.489	0.455	0	0.498	-2.704***
Ln_SEGMENTS	2.294	2.398	0.815	2.268	2.485	0.851	0.667
REST_CHRG	0.010	0	0.069	0.005	0	0.015	3.990***
Ln_SALEGR	1.756	1.975	1.556	1.888	2.050	1.756	-1.664*

AUD_TENU	3.611	3	1.959	3.463	3	1.944	1.669*
AUD_CHANGE	0.028	0	0.166	0.041	0	0.198	-1.390
IND_SP_AU	0.018	0	0.133	0.017	0	0.131	0.093
CFOA	0.076	.088	0.129	0.049	.081	0.162	3.618***
ROA	0.017	.042	0.144	-0.008	.036	0.175	3.239***
BIG4	0.829	1	0.377	0.762	1	0.427	3.480***
CF_VOL	0.046	.030	0.057	0.057	.031	0.077	-3.395***
TACC	-381.877	-39.901	2601.208	-138.031	-21.937	970.491	-4.687***

***, **, and * indicate 1%, 5%, and 10% levels of significance, respectively. See Appendix I for all the variable definitions.

Correlation Analysis

Table 3 presents the Pearson correlation coefficients for all study variables. The correlation between AEP's foreign experience and ICW is 0.05 ($p < 0.01$), indicating a weak but statistically significant positive relationship. This suggests that AEPs with foreign audit experience may be associated with a higher likelihood of ICW disclosure. Additionally, none of the correlation coefficients exceeds 0.8, aligning with established guidelines in the literature. This indicates that multicollinearity is not a significant concern in this dataset.

TABLE 3
Correlation Metrix

Variables	(1)	(2)	(3)	(4)	5)	(6)	(7)	(8)	(9)
(1) ICW	1								
(2) AEP_ForExp	0.050	1							
(3) SIZE	-0.139	-0.060	1						
(4) AGE	-0.047	-0.008	0.228	1					
(5) AGG_LOSS	0.074	0.035	-0.320	-0.277	1				
(6) MERG_AQUI	0.030	0.012	0.143	0.014	-0.084	1			
(7) RESTRUCT	-0.005	-0.007	0.187	0.118	-0.012	0.217	1		
8) FRGN_TRA	0.017	0.034	0.052	0.038	-0.027	0.084	0.145	1	
(9) Ln_SEGMENTS	0.001	-0.008	0.267	0.235	-0.189	0.155	0.240	0.331	1
(10) REST_CHRG	0.0002	-0.014	0.009	-0.012	0.094	0.010	0.164	0.021	0.031
(11) Ln_SALEGR	-0.015	0.023	-0.003	-0.142	0.026	0.110	-0.170	-0.009	-0.036
(12) AUD_TENU	-0.041	-0.023	0.216	0.240	-0.084	0.010	0.070	0.014	-0.028
(13) AUD_CHANGE	0.082	0.013	-0.105	-0.0001	0.028	0.014	-0.008	0.002	-0.021
(14) IND_SP_AU	-0.024	-0.004	0.011	0.004	-0.006	-0.035	-0.027	-0.058	-0.031
(15) CFOA	-0.078	-0.063	0.285	0.188	-0.514	0.061	0.036	0.044	0.173

(16) ROA	-0.085	-0.054	0.313	0.257	-0.644	0.062	0.019	0.060	0.218
(17) BIG4	-0.149	-0.052	0.411	-0.016	-0.063	0.054	0.129	0.002	0.088
(18) CF_VOL	0.043	0.056	-0.293	-0.112	0.206	-0.151	-0.135	-0.072	-0.215
(19) TACC	0.027	0.021	-0.302	-0.096	0.064	0.017	-0.032	-0.004	-0.064

TABLE 3. Correlation matrix continued

Variables	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
(10) REST_CHRG	1									
(11) Ln_SALEGR	-0.082	1								
(12) AUD_TENU	-0.002	-0.036	1							
(13) AUD_CHANGE	-0.005	-0.002	0.035	1						
(14) IND_SP_AU	-0.006	-0.005	-0.048	-0.003	1					
(15) CFOA	-0.041	0.015	0.092	-0.025	0.017	1				
(16) ROA	-0.072	0.053	0.125	-0.038	0.020	0.809	1			
(17) BIG4	0.039	0.006	0.050	-0.153	0.063	0.069	0.055	1		
(18) CF_VOL	-0.014	0.116	-0.021	0.016	-0.008	-0.262	-0.239	-0.109	1	
(19) TACC	0.003	0.0484	-0.044	0.016	0.010	-0.066	-0.043	-0.064	0.066	1

This table presents the correlation matrix of the variables used in the analysis. Statistically significant coefficients are given in bold. Definitions for all variables can be found in the Appendix I.

Regression Analysis

AEP's Foreign Experience and ICW

Table 4 presents the multivariate logistic regression results examining the impact of AEPs' foreign experience on ICW. Columns (1) through (5) show results for different model specifications: (1) without controls and fixed effects, (2) without year and industry fixed effects, (3) without year fixed effects, (4) without industry fixed effects, and (5) the full model, which includes all controls along with both industry and year fixed effects.

Across all five models, the coefficient for AEP_ForExp is positive and statistically significant ($p < 0.01$), suggesting that multinational firms are more likely to report ICW when their AEP has greater foreign experience. Additionally, the coefficient for AEP_ForExp remains relatively stable across Models 2 to 4, indicating that the relationship between AEPs' foreign

experience and ICW persists regardless of industry or year effects.

TABLE 4
Baseline Results: AEP's Foreign Experience and ICW

Variables	Dependent Variable: ICW				
	(1)	(2)	(3)	(4)	(5)
AEP_ForExp	0.612*** (0.136)	0.434*** (0.143)	0.437*** (0.136)	0.466*** (0.136)	0.468*** (0.126)
SIZE		-0.433*** (0.050)	-0.455*** (0.052)	-0.415*** (0.050)	-0.448*** (0.052)
AGE		-0.278*** (0.092)	-0.289*** (0.096)	-0.205** (0.096)	-0.216** (0.100)
AGG_LOSS		0.173 (0.137)	0.278* (0.144)	0.188 (0.138)	0.293** (0.145)
MERG_AQUI		0.472*** (0.120)	0.472*** (0.128)	0.455*** (0.122)	0.451*** (0.129)
RESTRUCT		0.105 (0.123)	0.057 (0.125)	0.072 (0.125)	0.033 (0.126)
FRGN_TRA		0.089 (0.136)	0.074 (0.146)	0.051 (0.139)	0.034 (0.148)
Ln_SEGMENTS		0.214*** (0.083)	0.211** (0.088)	0.428*** (0.096)	0.443*** (0.103)
REST_CHRG		-0.372 (0.728)	-0.165 (0.530)	-0.286 (0.631)	-0.118 (0.499)
Ln_SALEGR		-0.046 (0.035)	-0.036 (0.037)	-0.046 (0.037)	-0.038 (0.039)
AUD_TENU		-0.016 (0.033)	-0.013 (0.033)	-0.368*** (0.063)	-0.367*** (0.063)
AUD_CHANGE		0.953*** (0.193)	0.925*** (0.197)	0.788*** (0.202)	0.774*** (0.205)
IND_SP_AU		-0.885 (0.585)	-0.608 (0.671)	-0.718 (0.598)	-0.407 (0.685)
Constant	-2.931*** (0.068)	0.211 (0.420)	0.741 (0.638)	-0.429 (0.441)	-0.036 (0.640)
Controls	No	Yes	Yes	Yes	Yes
Year Fixed effects	No	No	No	Yes	Yes
Industry Fixed effects	No	No	Yes	No	Yes
Observations	8740	8740	8209	8740	8209
Pseudo R ²	1%	8%	10%	11%	12%

This table presents the multivariate logistic regression estimation results of the impact of AEP's foreign experience on ICW. Cluster robust standard errors are provided in parentheses.

Statistical significance is indicated by ***, **, and * for 1%, 5%, and 10% levels of significance, respectively. Definitions for all variables can be found in the Appendix I.

In our second hypothesis, we explored the relationship between AEPs' foreign experience and ICW disclosures by splitting the sample into high- and low-complexity client groups using two criteria: (1) foreign pretax income and (2) the number of operating segments. Table 5 reveals that for high-complexity clients based on foreign pretax income (column 2), the coefficient for AEP_ForExp is 0.638 ($p < 0.01$), while for low-complexity clients (column 1), it is 0.499 ($p < 0.01$). This suggests that AEPs' foreign experience is significant for both high- and low-complexity company audits. However, the coefficient for high-complexity clients (column 2) is larger, and the SUEST test confirms that this difference is statistically significant, providing support for Hypothesis 2.

Similarly, when using the number of operating segments as a complexity measure, the coefficient for high-complexity clients is 0.466 ($p < 0.05$) (column 4), which is larger than the coefficient for low-complexity clients at 0.429 ($p < 0.01$) (column 3). The SUEST test again shows that the difference in coefficients is statistically significant. These results demonstrate that the impact of AEPs' foreign experience is more pronounced in the context of client complexity, particularly for high-complexity firms, reinforcing the importance of foreign expertise in identifying and disclosing ICWs in more complex operational environments

TABLE 5

AEP'S Foreign Experience and ICW based on Client Complexity

<u>Variables</u>	Foreign Income		Operating Segments	
	Low (1)	High (2)	Low (3)	High (4)
AEP_ForExp	0.499*** (0.132)	0.638*** (0.243)	0.429*** (0.158)	0.466** (0.183)
SIZE	2.048**	5.461***	-0.414***	-0.446***

	(0.940)	(1.446)	(0.076)	(0.064)
AGE	-0.090	-0.369**	-0.185	-0.195
	(0.118)	(0.144)	(0.145)	(0.124)
AGG_LOSS	0.615***	0.629**	0.314	0.253
	(0.162)	(0.303)	(0.193)	(0.201)
MERG_AQUI	0.462***	0.110	0.513***	0.353**
	(0.154)	(0.235)	(0.185)	(0.166)
RESTRUCT	-0.234	0.218	-0.214	0.283
	(0.143)	(0.270)	(0.172)	(0.185)
FRGN_TRA	-0.124	0.300	-0.015	0.174
	(0.173)	(0.268)	(0.198)	(0.201)
Ln_SEGMENTS	0.344***	-0.105		
	(0.114)	(0.209)		
REST_CHRG	-0.331	-7.974*	0.394	-0.473
	(0.727)	(4.717)	(0.546)	(0.839)
Ln_SALEGR	-0.001	-0.227*	0.013	-0.101
	(0.040)	(0.121)	(0.047)	(0.062)
AUD_TENU	-0.486***	-0.485***	-0.333***	-0.450***
	(0.072)	(0.146)	(0.072)	(0.109)
AUD_CHANGE	1.053***	1.230***	1.036***	0.590*
	(0.245)	(0.374)	(0.264)	(0.330)
IND_SP_AU	-0.362	0.000	-0.052	-0.831
	(0.712)	(.)	(0.805)	(1.169)
Constant	-2.387***	-1.132	0.153	1.421*
	(0.713)	(0.968)	(0.876)	(0.789)
Year Fixed effects	Yes	Yes	Yes	Yes
Industry Fixed effects	Yes	Yes	Yes	Yes
Observations	5505	2303	3822	4153
Pseudo R ²	11%	14%	14%	13%
Test of difference in Coeff. (Chi-squared value)	552.41***		1745.21***	

This table presents the multivariate logistic regression estimation results of the impact of AEP's foreign experience on ICW based on client complexity. Client complexity was defined using two criteria foreign income (Column 1 and 2) and number of segments (Column 3 and 4). Cluster robust standard errors are provided in parentheses. Statistical significance is indicated by ***, **, and * for 1%, 5%, and 10% levels of significance, respectively. Definitions for all variables can be found in the Appendix I.

Additional Analysis

We conducted additional analyses to further assess the impact of AEPs' foreign experience on audit quality. Specifically, we examined its effect on future financial restatements, discretionary accruals, and subsequent auditor dismissals.

AEP's Foreign Experience and Future Restatements of Financial Statements

Auditing Standard No. 05, issued by the PCAOB, identifies financial statement restatements as an indicator of material weaknesses in ICFR. Prior research also supports restatements as a strong signal of ICWs (Croteau 2015; Feng et al. 2022). Accordingly, we incorporate financial statement restatements into our analysis to assess the impact of AEP's foreign experience.

While our primary hypothesis suggests that AEP's foreign experience increases ICW disclosure in the current year, we extend our analysis to examine its effect on the likelihood of future financial restatements. Research shows that auditor experience improves audit quality (Cahan and Sun 2015; Chi et al. 2017; Wang et al. 2015), which in turn reduces restatement risk. Gunn and Michas (2018) found that multinational expertise at the audit office level negatively correlates with financial restatements. Our study shifts the focus to individual AEP's foreign experience.

Foreign experience equips AEPs with broader insights and skills, enhancing their ability to assess control weaknesses and risks in multinational firms. This reduces the likelihood of undetected misstatements and allows for proactive risk mitigation. Since undetected misstatements are a key driver of restatements (Eilifsen and Messier Jr 2000), we propose that multinational firms audited by AEPs with foreign experience are less likely to issue future restatements.

Table 6 presents the results of a multivariate logistic regression examining this relationship. As expected, greater AEP foreign experience is associated with a lower likelihood of future restatements (coefficient = -0.226, $p < 0.1$). The negative coefficient indicates that as foreign experience increases, the probability of restatements decreases. This suggests that AEPs with international exposure are better equipped to navigate multinational complexities and detect financial reporting errors. Overall, our results suggest that AEPs' foreign experience positively

impacts financial statement quality, reinforcing the importance of diversity and international exposure in auditing.

TABLE 6
AEP'S Foreign Experience and Future Restatements

<u>Variables</u>	<u>DV: Future Restatement</u>
AEP_ForExp	-0.226* (0.132)
SIZE	0.066* (0.036)
ALTMANZ	-0.109** (0.052)
AGG_LOSS	0.187* (0.096)
MERG_AQUI	-0.004 (0.072)
RESTRUCT	0.040 (0.078)
FRGN_TRA	0.047 (0.074)
SEGMENTS	-0.006* (0.004)
Ln_SALEGR	-0.036 (0.022)
ROA	1.044*** (0.303)
LEV	-0.283 (0.235)
CFOA	-1.089*** (0.387)
AUD_TENU	-0.032 (0.058)
AUD_CHANGE	0.185 (0.207)
IND_SP_AU	-0.125 (0.301)
Ln_AUDITFEES	-0.135** (0.069)
AUDFIRM_EXP	-0.010 (0.009)
BIG4	-0.282 (0.553)
Constant	0.316

	(0.998)
Year Fixed effects	y
Industry Fixed effects	y
Audit firm fixed Effects	y
Observations	6135
Pseudo R ²	10%

This table presents the multivariate logistic regression estimation results of the impact of AEP's foreign experience on future financial restatements. Cluster robust standard errors are provided in parentheses. Statistical significance is indicated by ***, **, and * for 1%, 5%, and 10% levels of significance, respectively. Definitions for all variables can be found in the Appendix I.

AEP's Foreign Experience and Abnormal Discretionary Accruals

In this study, abnormal discretionary accruals were utilized as an alternative proxy for ICW. Discretionary accruals are widely acknowledged as a measure of earnings management, often associated with weak internal controls. Prior research suggests that firms with material weaknesses in their internal control systems exhibit higher levels of absolute discretionary accruals. Accordingly, we employed absolute discretionary accruals as an alternative dependent variable to investigate the relationship between the AEP's foreign experience and ICW.

The analysis was conducted using the following baseline regression model.

$$Abs_DACC_{it} = \alpha + \beta_1(AEP_ForExp)_{it} + \beta_2(controls)_{it} + \beta_3(industry_effects) + \beta_4(year_effects)_t + e_{it} \quad (2)$$

In model (2) the dependent variable abs_DACC represents the absolute discretionary accruals. Following the literature we estimate the abs_DACC using the modified Jones model (Kothari, Leone, and Wasley 2005; Tucker and Zarowin 2006). We employed the following model (3), using pooled OLS regression, to estimate the discretionary component of accruals based on data from the Compustat database.

$$TACC_{it} = a(1/Assets_{it-1}) + b\Delta Sales_{it} + cPPE_t + dROA_{it} + \mu_t \quad (3)$$

In the equation (3) above, total accruals (TACC), change in sales (ΔSales) and gross property plant and equipment (PPE) are each deflated by lagged total assets (Assets_{it-1}). The total accruals was calculated using the balance sheet approach as follows.

$$\text{TACC} = (\Delta\text{CA} - \Delta\text{CASH} - \Delta\text{CL} + \Delta\text{DCL} - \text{DEP}) \quad (4)$$

Where;

ΔCA	: Change in current assets in firm i from $t-1$ to t
ΔCASH	: Change in cash and cash equivalents in firm i from $t-1$ to t
ΔCL	: Change in current liabilities in firm i from $t-1$ to t
ΔDCL	: Change in short-term debt included in current liabilities from $t-1$ to t
DEP	: Depreciation and amortization in firm i from $t-1$ to t

In equation (2), Controls_{it} represents the control variables included in the model. For the regression model where abs_DACC is the dependent variable, we additionally control for total accruals (TACC), following (DeFond and Zhang 2014), as well as operating cash flows (CFOA), cash flow volatility (CF_VOL), return on assets (ROA), and the presence of Big 4 auditors (BIG4), based on Dao et al. (2019). These variables are included in addition to the control variables specified in Equation (1).

Table 7 presents fixed effect regression results examining this relationship. While we did not find a statistically significant association, the coefficient for AEP_ForExp is negative, aligning with our expectations. Moreover, we tested this relationship with income-increasing discretionary accruals (column 3) and income-decreasing discretionary accruals (column 4). Similarly, we did not find a statistically significant relationship between AEP's foreign experience and either income-increasing or income-decreasing discretionary accruals. The lack of impact on discretionary accruals indicates that AEPs' foreign experience may not significantly influence managers' earnings management behaviors (e.g., smoothing earnings or

manipulating accruals).

TABLE 7
AEP'S Foreign Experience and Discretionary Accruals

<u>Variables</u>	<u>Dependent Variable</u>			
	<u>DACC</u>	<u>DACC_{t+1}</u>	<u>DACC_Positive</u>	<u>DACC_Negative</u>
AEP_ForExp	-0.004 (0.005)	-0.006 (0.012)	0.002 (0.004)	-0.012 (0.008)
SIZE	-0.007*** (0.001)	-0.006*** (0.001)	-0.010*** (0.002)	-0.001 (0.001)
AGE	0.004** (0.002)	0.011*** (0.002)	-0.001 (0.003)	0.003 (0.002)
AGG_LOSS	-0.015*** (0.005)	-0.028*** (0.006)	0.010 (0.009)	-0.015*** (0.004)
MERG_AQUI	-0.012*** (0.002)	-0.018*** (0.003)	-0.012*** (0.003)	-0.004** (0.002)
RESTRUCT	0.005 (0.003)	0.004 (0.003)	0.006 (0.006)	0.005** (0.002)
FRGN_TRA	-0.003 (0.002)	0.000 (0.003)	-0.006 (0.004)	0.002 (0.002)
Ln_SEGMENTS	0.004** (0.002)	0.010*** (0.003)	-0.003 (0.003)	0.003* (0.002)
REST_CHRG	0.083*** (0.025)	0.001 (0.021)	0.017 (0.032)	0.053*** (0.017)
Ln_SALEGR	-0.001 (0.001)	-0.001 (0.001)	0.004** (0.002)	-0.005*** (0.001)
AUD_TENU	-0.001 (0.002)	-0.001 (0.003)	-0.004 (0.004)	0.005* (0.003)
AUD_CHANGE	0.008 (0.006)	0.011* (0.006)	-0.002 (0.006)	0.005 (0.007)
IND_SP_AU	0.009 (0.006)	0.010 (0.007)	0.010 (0.007)	0.005 (0.006)
CFOA	-0.884*** (0.047)	-0.106*** (0.041)	-0.709*** (0.111)	-0.654*** (0.034)
ROA	0.893*** (0.055)	0.116*** (0.041)	0.754*** (0.132)	0.651*** (0.035)
BIG4	-0.004 (0.004)	-0.009* (0.005)	-0.004 (0.006)	0.007* (0.004)
Constant	0.090*** (0.011)	0.007 (0.012)	0.162*** (0.016)	-0.024 (0.015)
Year Fixed effects	y	y	y	y
Industry Fixed effects	y	y	y	y
Adj. R-sq	0.528	0.069	0.359	0.504

Observations	5813	5805	2412	3401
This table presents the fixed effect regression estimation results of the impact of AEP's foreign experience on discretionary accruals. Columns (1) to (4) present the results for absolute discretionary accruals (DACC), future discretionary accruals (DACC_{t+1}), income-increasing discretionary accruals (DACC_{positive}) and income-decreasing discretionary accruals (DACC_{negative}) respectively. Cluster robust standard errors are provided in parentheses. Statistical significance is indicated by ***, **, and * for 1%, 5%, and 10% levels of significance, respectively. Definitions for all variables can be found in the Appendix I.				

AEP's Foreign Experience and Auditor Dismissal

Auditor dismissals can occur for various reasons, such as dissatisfaction with audit quality or differences in professional judgment. We examine whether auditor dismissals following an adverse internal control opinion are influenced by the AEP's foreign experience using the following model:

$$AUD_DISMISSAL_{t+1} = \alpha + \beta_1 ICW + \beta_2 (AEP_ForExp)_{it} + \beta_3 (AEP_ForExp)_{it} \times ICW_{it} + \beta_4 (controls)_{it} + \beta_4 (industry_effects) + \beta_6 (year_effects)_t + e_{it} \quad (5)$$

In equation (5), the dependent variable $AUD_DISMISSAL_{t+1}$ represents the dismissal of an auditor within a one-year window following the filing of financial statements. It is a binary indicator variable, taking the value of "1" if an auditor dismissal occurs and "0" otherwise. Consistent with prior literature, we expect the coefficient of ICW (β_1) to be positive, reflecting a greater likelihood of auditor dismissal following an adverse internal control opinion (Ettredge et al., 2011; Lisic et al., 2019). Our coefficient of interest is β_3 - the coefficient on the interaction between AEP's foreign experience (AEP_ForExp) and ICW, because this reveals whether the likelihood of auditor dismissal following adverse internal control opinion (ICW) differs when the audit engagement partner possesses foreign experience.

Table 8 presents the multivariate logistic regression results examining the impact of AEP's foreign experience on the future dismissal of auditors. Aligning with our hypothesis we find a

lower likelihood of subsequent auditor dismissal following an adverse internal control audit opinion when the AEPs have greater foreign experience (AEP_Exp $\times$ ICW = -0.676, $p < 0.1$). The results suggest that AEPs with greater foreign experience are perceived as more credible and reliable by clients and audit committees. When these AEPs issue adverse internal control opinions, their assessments are seen as more objective and well-founded and they are likely more adept at managing cross-cultural dynamics and building strong relationships with multinational clients, reducing the likelihood of auditor dismissal.

TABLE 8
AEP'S Foreign Experience and Future Auditor Dismissals

<u>Variables</u>	<u>DV: Auditor Dismissals</u>
ICW	1.309*** (0.203)
AEP_ForExp	0.360** (0.170)
AEP_ExpXICW	-0.676* (0.406)
ACCRUALS	1.138 (0.700)
ALTMANZ	0.144 (0.129)
Ln_SEGMENTS	0.124 (0.112)
SIZE	-0.488*** (0.057)
MVTBV	-0.003 (0.010)
LOSS	-0.045 (0.220)
LEV	0.265 (0.541)
ROA	0.056 (0.833)
IND_SP_AU	0.092 (0.485)
AUD_TENU	0.012 (0.097)
Constant	-0.536 (0.505)

Year Fixed effects	y
Observations	6549
Pseudo R ²	0.092

This table presents the multivariate logistic regression estimation results of the impact of AEP's foreign experience on auditor dismissal. Cluster robust standard errors are provided in parentheses. Statistical significance is indicated by ***, **, and * for 1%, 5%, and 10% levels of significance, respectively. Definitions for all variables can be found in the Appendix I.

Sensitivity Tests

We conduct a series of sensitivity tests to ensure that our results are not influenced by selection bias or specific research design choices, enhancing the confidence in the validity of our findings.

Propensity Score Matching

To mitigate potential selection bias in our sample, we used the propensity score matching procedure. Aligning with the prior research we used all control variables used in our baseline model (table 4) including fixed effects as our matching variables (Shipman, Swanquist, and Whited 2017). Each treated firm is matched with its nearest neighbour in the same industry and year. Subsequently, we rerun our baseline model using the propensity score matched sample. We achieved very strong covariate balance after matching as none of the control variables are significantly different across the treatment and control samples. The regression results after propensity score matching are shown in table 9 below. Notably, the findings are nearly identical to the baseline regression results reported in Table 4, reinforcing the robustness of our analysis.

TABLE 9
Propensity Score Matching (PSM)

<u>Variables</u>	Dependent variable: ICW			
	(1)	(2)	(3)	(4)
AEP_ForExp	0.414** (0.175)	0.425** (0.181)	0.466*** (0.168)	0.471*** (0.164)
SIZE	-0.415*** (0.114)	-0.407*** (0.130)	-0.390*** (0.117)	-0.386*** (0.137)

AGE	-0.125 (0.187)	-0.181 (0.227)	-0.061 (0.199)	-0.090 (0.243)
AGG_LOSS	-0.251 (0.300)	-0.038 (0.324)	-0.246 (0.302)	-0.062 (0.318)
MERG_AQUI	0.322 (0.253)	0.270 (0.281)	0.286 (0.257)	0.252 (0.288)
RESTRUCT	-0.533* (0.285)	-0.753** (0.341)	-0.594** (0.291)	-0.844** (0.354)
FRGN_TRA	-0.030 (0.290)	-0.129 (0.288)	-0.020 (0.300)	-0.108 (0.299)
Ln_SEGMENTS	0.120 (0.187)	-0.056 (0.196)	0.313 (0.219)	0.123 (0.227)
REST_CHRG	10.289** (4.063)	22.948** (9.140)	10.835** (4.294)	23.473*** (8.757)
Ln_SALEGR	0.004 (0.074)	0.024 (0.089)	-0.009 (0.078)	0.006 (0.100)
AUD_TENU	-0.033 (0.074)	-0.048 (0.080)	-0.397*** (0.128)	-0.450*** (0.136)
AUD_CHANGE	0.969** (0.382)	1.058** (0.449)	0.829** (0.401)	0.979** (0.470)
IND_SP_AU	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)
Constant	0.359 (0.982)	1.217 (1.448)	-0.528 (1.098)	0.055 (1.578)
Year Fixed effects	No	No	Yes	Yes
Industry Fixed effects	No	Yes	No	Yes
Observations	1014	887	1014	887
Pseudo R ²	10%	17%	14%	21%

This table presents the multivariate logistic regression estimation results of the impact of the engagement partner's foreign experience on internal control weakness after propensity score matching. Cluster robust standard errors are provided in parentheses. Statistical significance is indicated by ***, **, and * for 1%, 5%, and 10% levels of significance, respectively. Definitions for all variables can be found in the Appendix I.

Falsification Test

To ensure the robustness of our findings, we conducted a falsification test using firm age as the dependent variable. The rationale behind choosing firm age as the dependent variable to run the falsification tests is that the firm age is static over time for mature firms and should not be influenced by the foreign experience of the AEPs. As expected, the treatment variable was

statistically insignificant ($p > 0.1$), indicating that the observed effects are unlikely to be driven by spurious correlations (untabulated results).

Redefined the Engagement Partners Foreign Experience

We redefined our variable of interest, AEP's foreign experience as a categorical variable, assigning a value of "1" if the AEPs have at least one foreign country audit experience and "0" otherwise, instead of using a continuous measure. We then re-estimated the baseline regression equation, replacing the original engagement partner experience variable (AEP_ForExp) with this newly defined categorical variable (AEP_forExp2). Notably, the results (reported in Table 10) remained consistent with our initial findings.

TABLE 9

Alternative Definition to AEP's Foreign Experience: As a Binary Variable

Variables	(1)	(2)	(3)	(4)	(5)
AEP_forExp2	0.695*** (0.181)	0.490*** (0.189)	0.503*** (0.188)	0.514*** (0.187)	0.516*** (0.186)
Constant	-2.927*** (0.069)	0.239 (0.423)	0.765 (0.639)	-0.401 (0.444)	-0.008 (0.643)
Controls	No	Yes	Yes	Yes	Yes
Year Fixed effects	No	No	No	Yes	Yes
Industry Fixed effects	No	No	Yes	No	Yes
Observations	8740	8740	8209	8740	8209
Pseudo R ²	1%	8%	9%	11%	12%

This table presents the results of regression analysis of engagement partners international experience and ICW by redefining engagement partners experience as a binary variable. Cluster robust standard errors are provided in parentheses. Statistical significance is indicated by ***, **, and * for 1%, 5%, and 10% levels of significance, respectively. Definitions for all variables can be found in the Appendix I.

Alternative Dependent Variables

SOX 404 filings disclose the number of material internal control weaknesses reported by firms. We used this information to create an alternative dependent variable, ICW_COUNT,

representing the count of material ICWs.

We re-estimated our baseline regression model (Equation 1), replacing ICW with ICW_COUNT as the dependent variable using a pooled OLS regression. The results, presented in Table 5.11, show that the coefficient for AEP_ForExp is 0.079 ($p < 0.05$), indicating a significant positive relationship between the audit engagement partner's international experience and the number of disclosed material ICWs. This finding supports and validates our baseline results reported in Table 4.

TABLE 10

Alternative Dependent Variable: AEP's Foreign Experience and ICW_COUNT

<u>Variable</u>	<u>ICW_COUNT</u>
AEP_ForExp	0.079** (0.034)
Constant	0.374*** (0.120)
Controls	Yes
Year and Industry Fixed effects	Yes
Observations	8740
Adjusted R2	6%
This table displays the results of a regression analysis examining the impact of engagement partners' foreign experience on the alternative dependent variable: ICW_COUNT. Robust standard errors are provided in parentheses. Statistical significance is indicated by ***, **, and * for 1%, 5%, and 10% levels of significance, respectively. Definitions for all variables can be found in the Appendix I.	

Robustness Test Using Alternative Econometric Models

The logistic regression approach does not account for the panel structure of the data, potentially leading to biased results if unobserved heterogeneity exists. To ensure the robustness and reliability of our findings on the impact of AEPs foreign experience on ICW, we complemented the baseline analysis with three additional models: the Linear Probability Model (LPM), the Random Effects Probit Model (xtprobit), and the Correlated Random Effects Model (CRE).

These models address potential methodological concerns and offer alternative perspectives, enhancing the validity of our results.

The LPM was employed to provide a straightforward interpretation of the relationship between the independent (AEPs' foreign experience) and dependent (ICW) variables. Unlike logistic regression and probit models, LPM uses a linear framework, where coefficients directly represent marginal effects on the probability of internal control weaknesses. When dealing with binary response in the context of panel data Wooldridge (2010) recommends beginning with a linear model with an additive, unobserved effect and using the within transformation or first differencing to remove the unobserved effect. Though the linear probability model for binary outcomes has some problems, we commenced our analysis with a linear probability model.

The random effect probit model was utilised to explicitly address the panel nature of the dataset. Unlike standard logistic or probit regression, this model incorporates firm-specific random effects to account for unobserved heterogeneity (Mood 2010). Moreover, the CRE model, following Wooldridge (2010), was used to address potential correlations between unobserved heterogeneity and the explanatory variables. Unlike standard random-effects models, the CRE approach includes the time averages of the explanatory variables to control for unobserved effects that may correlate with AEPs' foreign experience. Notably, the results of these models reported in Table 12 are consistent with the baseline regression results presented in Table 4.

TABLE 11

Robustness Test: AEP's foreign Experience and ICW Using Alternative Econometric Models

<u>Variable</u>	Dependent variable: ICW		
	<u>LPM</u>	<u>Probit (RE)</u>	<u>CRE</u>
AEP_ForExp	0.041*** (0.013)	0.306*** (0.090)	0.235** (0.119)
Constant	0.194*** (0.052)	-0.144 (0.441)	-0.747* (0.403)

Controls	Yes	Yes	Yes
Year and Industry Fixed effects	Yes	Yes	Yes
Adjusted R2	6%		
Wald chi2		1064.62	262.02
Prob		0.000	0.000
Observations	8740	8209	8696

The table displays the regression results assessing the influence of AEP's foreign experience on ICW utilizing three different models: Linear Probability Model (LPM), Random Effect Probit Model (Probit (RE)), and Correlated Random Effect Model (CRE). Robust standard errors are provided in parentheses. Statistical significance is indicated by ***, **, and * for 1%, 5%, and 10% levels of significance, respectively. Definitions for all variables can be found in the Appendix I.

V. CONCLUSION

In this paper, we examine the relationship between AEPs' foreign experience and ICW disclosures of U.S.-headquartered multinational corporations, as well as how this relationship varies with client complexity. We hypothesize that greater foreign experience among AEPs is associated with an increased disclosure of ICWs, and that this association is stronger for more complex clients. Additionally, we extend our analysis to investigate whether AEPs' foreign experience affects future financial statement restatements, abnormal discretionary accruals, and auditor dismissals following the issuance of adverse internal control opinions. We utilized a novel dataset constructed by combining engagement partner identity data from Form AP filings, ICW data from SOX 404 reports, financial data from Compustat, segment data, and restatement data. Consistent with our hypothesis, our findings indicate a positive association between AEPs' foreign experience and ICW disclosures, with this relationship being stronger for highly complex client companies.

To test the second hypothesis, we categorized clients into two groups, highly complex and less complex based on two measures of operational complexity: the number of operating segments and the percentage of foreign income. Under both variables, our results show that the influence of AEPs' foreign experience is greater when client complexity is high. Furthermore, additional

analyses reveal that AEPs' foreign experience is associated with a lower likelihood of future financial statement restatements and a reduced likelihood of auditor dismissal following an adverse internal control opinion. To ensure the reliability of our findings, we conducted a series of robustness checks, which consistently supported our results.

Overall, this research enriches the understanding of the influence of AEPs' characteristics beyond audit firm-level measures such as tenure and industry expertise, emphasizing the value of diverse international experiences in the context of globalized business operations. Our findings have practical implications for audit firms, regulators and multinational corporations in considering the assignment of AEPs to complex global clients.

Appendix I. Variable Definitions and Data Sources

Variable	Definition	Data Source
Dependent variable		
ICW	Internal control weakness of US head quartered multinational company (firm i) in year t. This is an indicator variable that takes the value “1” if the internal control is identified as ineffective in SEC 404 reports and “0” otherwise.	Audit Analytics; SOX 404 data
Test Variables		
AEP_ForExp	Audit engagement partner’s foreign experience. Instances where the AEP’s working location differs from the client’s location.	Form Ap fillings available at AuditorSearch database, Compustat, Firm websites
AEP_forExp2	Audit engagement partners foreign experience is measured as a categorical variable which is equal to 1 if the AEP has at least one foreign country audit experience and 0 otherwise	
Control variables		
SIZE	Firm size. Defined as the natural logarithm of firm’s total assets	Compustat, at
AGE	Firm age. The natural logarithm of the firm’s number of years in the market since its initial public offering.	Compustat, ipodate
AGG_LOSS	Aggregate loss. An indicator variable equal to one if income before extraordinary items in years t and t–1 sum to less than zero, and zero otherwise	Compustat, ib
MERG_AQUI	An indicator variable equal to 1 if the firm reported non-zero acquisitions in the last 3 years, and 0 otherwise	Compustat, aqs, aqp
RESTRUCT	An indicator variable equals to 1 if a firm reports a non-zero value in any of the four restructuring items at a fiscal year and 0 otherwise	Compustat, rca, rcd, rceps, rcp
FRGN_TRA	An indicator variable equals to 1 if the firm has foreign exchange income in year t and 0 otherwise	Compustat, fca
Ln_SEGMENTS	The natural logarithm of the sum of the number of operating and geographic segments for the firm in year t	Compustat segment database
REST_CHRG	The aggregate value of restructuring charges in years t and t-1 scaled by the market value of equity at the end of year t	Compustat, rcp, csho, prcc_f

Ln_SALESGR	Sales growth rate based on the change in sales from year t-1 to t	Compustat, sale
AUD_TENU	Number of years the auditor works to a client	
AUD_CHANGE	An indicator variable equals to 1 if a client changed its auditor from year t-1 to t, and 0 otherwise	Compustat, auditor name
IND_SP_AU	An indicator variable equals to 1 if the auditor is a industry special auditor as defined by Knechel et al., 2007 and 0 otherwise	Compustat data
CFOA	Operating activities net cash flow in year t scaled by the average total assets in years t and t-1	Compustat, oancf, at
ROA	Return on Assets	Compustat, ni, at
BIG4	An indicator variable that equals 1 if the firm engaged one of the big4 audit firms, 0 otherwise	Compustat, auditor name
CF_VOL	Cash flow volatility. The standard deviation of the previous three years cashflow from operating activities scaled by total assets	
TACC	Total Accruals	

Main variables used in additional tests

ICW_COUNT	The number of material internal control weaknesses reported for multinational company (firm i) in year t extracted from the SEC 404 reports.	Audit Analytics, SOX 404 data
Future Restatements	Financial statement Restatement in year t +1	Audit Analytics, Restatement data
DACC	Absolute discretionary accruals calculated using the modified Jones model	Compustat data
DACCt+1	Abnormal discretionary accrual in year t+1	Compustat data
DACC_Positive	Income-increasing discretionary accruals	Compustat data
DACC_Negative	Income-decreasing discretionary accruals	Compustat data
Auditor Dismissal	A categorical variable equals 1 if there is a dismissal of an auditor within a one-year window following the filing of financial statements and 0 otherwise.	Audit Analytics data

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