

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, AEP's 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.

Key words: *Audit, Engagement Partner, Experience, Internal control weakness, Multinational, Sarbanes Oxley Act (SOX)*

I. INTRODUCTION

Over the past two decades, following the enactment of Sarbanes-Oxley Act in 2002 (SOX), scholars have increasingly focused on internal control over financial reporting (ICFR) disclosed by publicly listed firms. In this study, we examine whether the internal control weakness (ICW)¹, as reported under Section 404 of the Sarbanes-Oxley Act (SOX 404), are associated with the foreign experience of the audit engagement partner (AEP) overseeing the audit.

SOX 404 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

¹ Throughout this study, internal control weakness (ICW) denotes the weaknesses of internal controls over financial reporting. Internal controls 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)

404(b)]. Auditing Standard No. 5 (AS 5), issued by the Public Company Accounting Oversight Board (PCAOB) and now codified as AS 2201, states that if one or more material weaknesses exist, the company's ICFR cannot be considered as effective. To express an opinion on ICFR effectiveness, auditors must plan and perform the audit 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 planning and conducting the ICFR audit, we argue that their foreign experience may influence the ICW disclosures, particularly in multinational firms. This study investigates this association in the context of U.S. multinational corporations.

ICW represent significant risks to the integrity of financial reporting and the overall governance of corporations. For multinational corporations (MNC), 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, particularly in ensuring the accuracy and reliability of financial statements. While prior research has extensively examined the determinants of ICW disclosures and audit quality (Anantharaman & Wans, 2019; Chen et al., 2016; Haislip et al., 2016), little attention has been paid to the specific characteristics of AEPs that may influence these outcomes. Through this study we seek to address this gap by exploring the impact of AEPs' foreign experience on ICW disclosures in U.S.-headquartered multinational corporations.

The globalization of business operations has significantly increased the complexity of auditing multinational corporations (MNCs), creating a growing demand for auditors with specialized knowledge and experience in navigating cross-border regulatory environments, cultural differences, and operational intricacies. As key decision-makers in the audit process, audit engagement partners (AEPs) play a pivotal role in shaping audit outcomes through their expertise, professional judgment, and ability to address complex audit challenges. The

enactment of PCAOB Rule 3211², which mandates the disclosure of AEP identities through Form AP, has enabled researchers to examine the characteristics of AEPs and their influence on audit outcomes in the U.S. context (Burke et al., 2019; Cai et al., 2023; Liu & Xu, 2021; Zimmerman et al., 2021). While these studies have shed light on various AEP attributes, the specific impact of AEPs' foreign experience on internal control weakness (ICW) disclosures and broader financial reporting outcomes in multinational settings remains underexplored. We argue that AEPs with foreign experience are better equipped to understand the unique challenges of multinational internal controls, leveraging their cross-border expertise to more effectively identify and report ICW. This hypothesis underscores the potential value of foreign experience in enhancing audit quality and financial reporting reliability for MNCs operating in complex global environments.

This study utilizes a comprehensive and unique dataset comprising 2,219 AEPs and 1,649 distinct audit clients (U.S.-headquartered multinational companies) from 2017 to 2023, covering the entire period since Form AP became available under PCAOB Rule 3211. We extracted AEP identity information from Form AP, 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 data was merged with SOX 404 (ICW) disclosures, Compustat financial data, restatement data, and segment data to construct a final sample of 8,740 firm-year observations.

Our findings reveal that 6% of firms are audited by engagement partners with at least one foreign country audit experience. AEPs with foreign experience are more likely to detect and

² 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.

disclose ICWs, 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, indicating that the value of foreign experience is particularly significant in 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. The findings imply 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 contributions. First, our findings contribute to the literature on internal control weaknesses and audit quality. While prior research has extensively examined firm-level factors (e.g., firm size, complexity, and governance) and auditor-level factors (e.g., auditor size and tenure) as determinants of ICWs (Anantharaman & Wans, 2019; Ashraf et al., 2019; Campbell et al., 2016; Chen et al., 2019; Doyle et al., 2007a), this study shifts the focus to the individual characteristics of audit engagement partners (AEPs). By highlighting the importance of international exposure in navigating complex corporate structures and regulatory environments, this study offers new insights into how auditor expertise influences internal control weaknesses.

Second, we contribute to the growing body of research on AEP attributes by demonstrating that foreign experience enhances AEPs' ability to identify and report internal control weaknesses (ICWs) in multinational settings. While prior studies have examined various partner characteristics, such as gender, education, and professional experience (Burke et al., 2019; Cai et al., 2023; Liu & Xu, 2021; Zimmerman et al., 2021), our study is among the first to document that AEPs with foreign audit experience are more effective in identifying and disclosing ICW. Gunn and Michas (2018) primarily examine the role of audit firm-level multinational expertise in enhancing audit quality, focusing on the collective expertise of audit firms in handling multinational clients. In contrast, this study focuses on the individual characteristics of audit engagement partners (AEPs), specifically their foreign experience. By highlighting the role of human capital at the partner level in shaping audit quality, the study bridges the gap between human capital theory and auditing research. Beyond ICW disclosures, the study demonstrates that AEPs' foreign experience reduces the likelihood of future financial restatements and lowers the probability of auditor dismissal following adverse internal control

audit opinions. These findings highlight the broader benefits of foreign experience in enhancing financial reporting reliability and auditor reputation.

Third, the study provides important implication for auditors and auditor-client relationships in a globalized business environment. The study underscores the importance of cross-cultural and cross-regional knowledge in auditing, particularly in an era of increasing globalization. The findings have implications for auditors engaging in multiple countries. Moreover, this finding implies that multinational corporations and audit committees perceive such partners' judgments as more credible, potentially reducing disruptions in auditor-client engagements. By emphasizing the value of foreign experience in auditor qualifications and financial reporting transparency, our study offers insights for audit firms, corporations, and audit committees in improving audit quality and risk management.

The remainder of the paper is organized as follows. Section 5.3 describes the literature reviews, and theoretical background and provides our hypothesis. Section 5.4 presents the research design. Section 5.5 describes our empirical results including supplemental and sensitivity analyses. Section 5.6 provides the summary of findings, conclusion and directions for future research.

II. LITERATURE REVIEW, THEORETICAL BACKGROUND AND HYPOTHESIS DEVELOPMENT

Literature Review on ICW and Audit Quality

Triggered by a series of high-profile accounting scandals such as Enron and WorldCom, the U.S. government enacted the Sarbanes-Oxley Act (SOX) in 2002, to restore investor confidence by reducing fraudulent accounting practices and manipulations. Section 404 of the SOX requires public company management must assess and document the effectiveness of

their internal controls (SOX 404(a)), and independent auditors to attest to and report on management's assessment of the effectiveness of internal controls (SOX 404(b)).

This regulatory requirement has opened avenues for researchers to ICW from diverse perspectives. Many scholars have investigated various determinants and consequences of ICW (Ashbaugh-Skaife et al., 2007; Balsam et al., 2014; Doyle et al., 2007a; Doyle et al., 2007b; Ge & McVay, 2005; Ji et al., 2015). Among these studies, considerable attention has been devoted to understanding how audit-related factors are linked to ICW. In particular, research has focused on the association between different characteristics at the audit firm level or audit committee level and the occurrence of ICW (Zhang et al., 2007).

After the Public Company Accounting Oversight Board (PCAOB) passed Rule 3211 requiring registered accounting firms in the USA to file Form AP-*Auditor Reporting of Certain Audit Participants*, for all public company audit reports issued on or after January 31, 2017, the researchers' attention was directed towards identifying the specific influence of individual audit engagement partners characteristics on audit outcomes (Burke et al., 2019; Cai et al., 2023; John & Liu, 2021; Liu & Xu, 2021). Our study contributes to this literature by investigating 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 & 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 & 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

Audit engagement partners (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, (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 et al., 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.

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 et al., 2019; DeFond & Zhang, 2014).

Taken together, these findings suggest that experienced auditors are more likely to provide superior audit services and effectively detect internal control weaknesses (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 & 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 audit engagement partners (AEPs).

We argue that the international experience of AEPs plays a critical role in identifying and disclosing ICWs 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 filings: 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:

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

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 et al., 2014; Doyle et al., 2007a; Ge & 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 (Chen et al., 2017; Doyle et al., 2007b) and ICW firms tend to be younger (Doyle et al., 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 et al., 2007; Doyle et al., 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, Doyle et al. (2007a) reported that ICW firms tend to be growing rapidly. Similarly, 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 et al., 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 IV 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 IV.

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

Variables	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** (0.940)	5.461*** (1.446)	-0.414*** (0.076)	-0.446*** (0.064)
AGE	-0.090 (0.118)	-0.369** (0.144)	-0.185 (0.145)	-0.195 (0.124)
AGG_LOSS	0.615*** (0.162)	0.629** (0.303)	0.314 (0.193)	0.253 (0.201)
MERG_AQUI	0.462*** (0.154)	0.110 (0.235)	0.513*** (0.185)	0.353** (0.166)
RESTRUCT	-0.234 (0.143)	0.218 (0.270)	-0.214 (0.172)	0.283 (0.185)
FRGN_TRA	-0.124 (0.173)	0.300 (0.268)	-0.015 (0.198)	0.174 (0.201)
Ln_SEGMENTS	0.344*** (0.114)	-0.105 (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 Public Company Accounting Oversight Board, identifies financial statement restatements as an indicator of material weaknesses in internal control over financial reporting. 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 & 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 & 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

	DV: Future Restatement
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 et al., 2005; Tucker & 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 ($\Delta Sales$) 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.

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

Where;

ΔCA	: Change in current assets in firm i from t–1 to t
$\Delta CASH$: 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 & 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 5.7 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

	Dependent Variable			
	DACC	DACC _{t+1}	DACC_Positive	DACC_Negative
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 IV.

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:

$$AUD_DISMISSAL_{t+1} = \alpha + \beta_1 ICW + \beta_2 (AEP_ForExp)_{it} + \beta_3 (AEP_ForExp)_{it} \times ICW_{it} + \beta_4 (controls)_{it} + \beta_5 (industry_effects) + \beta_6 (year_effects)_t + e_{it} \quad (5)$$

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

	DV: Auditor Dismissals
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 IV.

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 et al., 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)

Variables	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	1.217	-0.528	0.055

	(0.982)	(1.448)	(1.098)	(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 IV.

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

Variable	ICW_COUNT
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 IV.	

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: Alternative Econometric Models

Variable	Dependent variable: ICW		
	LPM	Probit (RE)	CRE
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. 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
DACC _{t+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

Reference

- Anantharaman, D., & Wans, N. (2019). Audit office experience with SOX 404(b) Filers and SOX 404 audit quality. *Accounting Review*,
Ashbaugh-Skaife, H., Collins, D. W., & Kinney Jr, W. R. (2007). The discovery and reporting of internal control deficiencies prior to SOX-mandated audits [Article]. *Journal of Accounting and Economics*, 44(1-2), 166-192. <https://doi.org/10.1016/j.jacceco.2006.10.001>
- Ashraf, M., Michas, P. N., & Russomanno, D. (2019). The impact of audit committee information technology expertise on the reliability and timeliness of financial reporting [Article]. *Accounting Review*, 95(5), 23-56. <https://doi.org/10.2308/ACCR-52622>
- Balsam, S., Jiang, W., & Lu, B. (2014). Equity incentives and internal control weaknesses [Article]. *Contemporary Accounting Research*, 31(1), 178-201. <https://doi.org/10.1111/1911-3846.12018>
- Burke, J. J., Hoitash, R., & Hoitash, U. (2019). Audit partner identification and characteristics: Evidence from U.S. form AP filings [Article]. *Auditing*, 38(3), 71-94. <https://doi.org/10.2308/ajpt-52320>
- Cahan, S. F., & Sun, J. (2015). The Effect of Audit Experience on Audit Fees and Audit Quality [Article]. *Journal of Accounting, Auditing and Finance*, 30(1), 78-100. <https://doi.org/10.1177/0148558X14544503>
- Cai, C., Ciccone, S., Li, H., & Xu, L. E. (2023). Audit partner characteristics, career advancement and audit quality in the USA [Article]. *Managerial Auditing Journal*, 38(4), 389-418. <https://doi.org/10.1108/MAJ-09-2021-3325>
- Campbell, S., Li, Y., Yu, J., & Zhang, Z. (2016). The Impact of Occupational Community on the Quality of Internal Control [Article]. *Journal of Business Ethics*, 139(2), 271-285. <https://doi.org/10.1007/s10551-015-2624-2>
- Chen, C., Li, T., Shao, R., & Zheng, S. X. (2019). Dynamics of deterioration in internal control reported under SOX 404 [Article]. *International Review of Economics and Finance*, 61, 228-240. <https://doi.org/10.1016/j.iref.2019.02.009>
- Chen, Y., Gul, F. A., Truong, C., & Veeraraghavan, M. (2016). Auditor client specific knowledge and internal control weakness: Some evidence on the role of auditor tenure and geographic distance [Article]. *Journal of Contemporary Accounting and Economics*, 12(2), 121-140. <https://doi.org/10.1016/j.jcae.2016.03.001>
- Chen, Y., Knechel, W. R., Marisetty, V. B., Truong, C., & Veeraraghavan, M. (2017). Board independence and internal control weakness: Evidence from SOX 404 disclosures [Article]. *Auditing*, 36(2), 45-62. <https://doi.org/10.2308/ajpt-51577>
- Chi, W., Myers, L. A., Omer, T. C., & Xie, H. (2017). The effects of audit partner pre-client and client-specific experience on audit quality and on perceptions of audit quality [Article]. *Review of Accounting Studies*, 22(1), 361-391. <https://doi.org/10.1007/s11142-016-9376-9>
- Croteau, B. T. (2015). Remarks before the 2014 AICPA national conference on current SEC and PCAOB developments. In: December.
- Dao, M., Xu, H., & Liu, L. (2019). Impact of the disclosure of audit engagement partners on audit quality: Evidence from the USA [Article]. *International Journal of Auditing*, 23(1), 112-124. <https://doi.org/10.1111/ijau.12149>
- DeFond, M., & Zhang, J. (2014). A review of archival auditing research [Article]. *Journal of Accounting and Economics*, 58(2-3), 275-326. <https://doi.org/10.1016/j.jacceco.2014.09.002>

- Doyle, J., Ge, W., & McVay, S. (2007a). Determinants of weaknesses in internal control over financial reporting [Article]. *Journal of Accounting and Economics*, 44(1-2), 193-223. <https://doi.org/10.1016/j.jacceco.2006.10.003>
- Doyle, J. T., Ge, W., & McVay, S. (2007b). Accruals quality and internal control over financial reporting [Article]. *Accounting Review*, 82(5), 1141-1170. <https://doi.org/10.2308/accr.2007.82.5.1141>
- Eilifsen, A., & Messier Jr, W. F. (2000). A review and integration of archival research. *Journal of Accounting Literature*, 19, 1-43.
- Feng, M., Li, C., Raghunandan, K., & Sun, L. (2022). Restating Internal Control Reports Following Financial Statement Restatements: Determinants and Consequences* [Article]. *Contemporary Accounting Research*, 39(1), 117-156. <https://doi.org/10.1111/1911-3846.12728>
- Ge, W., & McVay, S. (2005). The disclosure of material weaknesses in internal control after the Sarbanes-Oxley Act [Article]. *Accounting Horizons*, 19(3), 137-158. <https://doi.org/10.2308/acch.2005.19.3.137>
- Gunn, J. L., & Michas, P. N. (2018). Auditor multinational expertise and audit quality [Article]. *Accounting Review*, 93(4), 203-224. <https://doi.org/10.2308/accr-51925>
- Haislip, J. Z., Peters, G. F., & Richardson, V. J. (2016). The effect of auditor IT expertise on internal controls [Article]. *International Journal of Accounting Information Systems*, 20, 1-15. <https://doi.org/10.1016/j.accinf.2016.01.001>
- Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of management review*, 9(2), 193-206.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure [Article]. *Journal of Financial Economics*, 3(4), 305-360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Ji, X. D., Lu, W., & Qu, W. (2015). Determinants and economic consequences of voluntary disclosure of internal control weaknesses in China [Article]. *Journal of Contemporary Accounting and Economics*, 11(1), 1-17. <https://doi.org/10.1016/j.jcae.2014.12.001>
- John, K., & Liu, M. (2021). Does the Disclosure of an Audit Engagement Partner's Name Improve the Audit Quality? A Difference-in-Difference Analysis [Article]. *Journal of Risk and Financial Management*, 14(11), Article 508. <https://doi.org/10.3390/jrfm14110508>
- Kothari, S. P., Leone, A. J., & Wasley, C. E. (2005). Performance matched discretionary accrual measures [Article]. *Journal of Accounting and Economics*, 39(1), 163-197. <https://doi.org/10.1016/j.jacceco.2004.11.002>
- Krishnan, J. (2005). Audit committee quality and internal control: An empirical analysis [Article]. *Accounting Review*, 80(2), 649-675. <https://doi.org/10.2308/accr.2005.80.2.649>
- Liu, C., & Xu, C. (2021). The effect of audit engagement partner professional experience on audit quality and audit fees: early evidence from Form AP disclosure [Article]. *Asian Review of Accounting*, 29(2), 128-149. <https://doi.org/10.1108/ARA-08-2020-0121>
- Mood, C. (2010). Logistic regression: Why we cannot do what We think we can do, and what we can do about it [Article]. *European Sociological Review*, 26(1), 67-82. <https://doi.org/10.1093/esr/jcp006>
- Shipman, J. E., Swanquist, Q. T., & Whited, R. L. (2017). Propensity score matching in accounting research [Review]. *Accounting Review*, 92(1), 213-244. <https://doi.org/10.2308/accr-51449>
- Tucker, J. W., & Zarowin, P. A. (2006). Does income smoothing improve earnings informativeness? [Review]. *Accounting Review*, 81(1), 251-270. <https://doi.org/10.2308/accr.2006.81.1.251>

- Wang, X., Wang, Y., Yu, L., Zhao, Y., & Zhang, Z. (2015). Engagement audit partner experience and audit quality [Article]. *China Journal of Accounting Studies*, 3(3), 230-253. <https://doi.org/10.1080/21697213.2015.1055776>
- Wooldridge, J. M. (2010). *Econometric analysis of cross section and panel data*. MIT press.
- Zhang, Y., Zhou, J., & Zhou, N. (2007). Audit committee quality, auditor independence, and internal control weaknesses [Article]. *Journal of Accounting and Public Policy*, 26(3), 300-327. <https://doi.org/10.1016/j.jaccpubpol.2007.03.001>
- Zimmerman, A. B., Bills, K. L., & Causholli, M. (2021). The market premium for audit partners with big 4 experience [Article]. *Accounting Horizons*, 35(2), 193-217. <https://doi.org/10.2308/HORIZONS-2019-524>