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Audit in Uncertain Times: Geopolitical Risk and Audit Outcomes

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Audit in Uncertain Times: Geopolitical Risk and Audit Outcomes

Purpose

Geopolitical risk (GPR) has skyrocketed globally and become a key concern for policymakers, regulatory authorities, and corporate strategists. Trade wars, political tensions, regional conflicts, and terrorist attacks are key components of GPR, which can significantly elevate a firm's audit risk. Given this backdrop, we investigate the relationship between firm-level GPR and audit outcomes in the U.S.

Methodology

Our data consists of 20,517 firm-year observations collected for the period 2000-2021. The data are analysed applying firm-fixed effects that address endogeneity by controlling for unobserved, time-invariant characteristics specific to each firm. We further employ two identification tests, Lewbel's (2012) method and propensity score matching, to address potential endogeneity concerns and conduct several sensitivity analyses to ensure the robustness of our findings.

Findings

Our analysis reveals an unfavourable impact of GPR on audit outcomes, indicating that firms with high GPR tend to incur higher audit fees, experience longer audit delays, face more financial restatements, are more likely to receive going-concern opinions, and experience greater internal control issues. We further show that such unfavourable impacts are more pronounced for clients that experience high information asymmetry, are located far from the auditors, exhibit weak governance oversight, and lack industry-specific audit specialists. Likewise, our additional tests reveal that the adverse impacts of GPR on audit outcomes are more prevalent in firms with lower gender diversity, fewer financially expert directors, and in firms that experience higher economic policy uncertainty (EPU). Finally, we find that firms with greater GPR face a higher likelihood of lawsuits.

Originality

To our knowledge, no prior study examines the impact of firms' GPR on audit outcomes. Our study is the first to comprehensively analyse the heterogeneous influence of GPR on important audit outcomes such as audit fees, audit report delays, financial restatements, going concern opinions, and internal control. Hence, our study addresses a critical gap in the literature.

Practical implications

Our findings have important policy implications. For example, regulators could encourage disclosures on GPR to enhance transparency for auditors, investors, and other stakeholders.

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They might also promote stronger corporate governance, improved information environments, and greater audit committee expertise and diversity, especially in high-risk geopolitical contexts. Additionally, directors and auditors should collaborate to address geopolitical threats by strengthening internal risk management systems and reducing information asymmetry.

Keywords: audit risk, geopolitical uncertainty, corporate governance, information asymmetry, agency theory, resource dependence theory

JEL classification: M41, M42

1. Introduction

Geopolitical risk (GPR), defined as the risk stemming from regional wars, military conflicts, political rifts, trade wars, diplomatic tensions, and the threat of terror attacks, has been rising globally. The Policy Uncertainty Project produces a monthly GPR index worldwide based on the methodology proposed by Caldara & Iacoviello (2022), which indicates a recent increase in the index due to the rise of conflicts worldwide. The Russian invasion of Ukraine, Iran-Israel political tensions, U.S.-China trade wars, the U.S.'s new tariffs on its trade partners, political disputes over Taiwan, the UK's divorce from the European Union (Brexit), the India-Pakistan armed conflict, and the rising political tensions in the Middle East result in a heightened GPR as they create severe uncertainty and potential conflict in the global political and economic systems.

GPR has crucial ramifications for economic growth and firms' stability. The International Monetary Fund (IMF) estimates that Trump's tariffs may reduce global economic growth by 0.5% immediately in 2026, and the tariff dispute between the U.S. and its partners could result in a loss of global economic growth by 2% in the longer term (Reuters, 2025). Research further shows that the UK's GDP contracted by approximately 2%-3% due to Brexit (Kaya et al., 2023) and may further decline by 5%-6% in the next decade. In addition, Brexit caused a decline in trade flow between the UK and the European Union countries by about 20% (de Lucio et al., 2024). Similarly, the Russia-Ukraine war resulted in a 1.4% reduction in global GDP (Tong, 2024).

While GPR affects macroeconomic indicators such as economic performance, trade flows, foreign investment, employment trends, and the inflation rate, it can also trickle down to the firm level, affecting firm-specific heterogeneous characteristics, including firms' growth, investment, and risk exposure. Caldara & Iacoviello (2022) show that GPR negatively affects firms' investment and employment, and the effect is more pronounced in industries exposed to

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higher GPR. Similarly, Le & Tran (2021) for Asian emerging economies, Rumokoy, Omura & Roca (2023) for the Australian metals and mining industries, Alam, Houston & Farjana (2023) and Wang, Wu & Xu (2014) for U.S. firms document an adverse impact of GPR on firms’ investment. Studies also show that GPR increases firms’ risk taking (Li & Cheng, 2023), credit risk (Kaya et al., 2023), idiosyncratic volatility (Ren et al., 2023), the cost of debt and equity (Nguyen & Thuy, 2023; Carney et al., 2024), corporate investment efficiency (Nguyen et al., 2025) and stock price crash risk (Fiorillo et al., 2023). Research further shows that GPR influences firms to hoard more cash for precautionary purposes (Lee & Wang, 2021; Lee, Zhang, Yu & Fang, 2023) and increases bid-ask spread owing to higher information asymmetry caused by the geopolitical uncertainty (Liu, Peng, Shi & Yang, 2022). However, the extant literature does not explore the impact of firms’ GPR on audit outcomes (e.g., audit fees, audit delay, financial restatements for material inaccuracies, going-concern opinions, and auditors’ opinions on firms’ internal control). We therefore conduct this research to empirically examine the relationship between GPR and audit outcomes, aiming to bridge the gap in the extant literature.

We draw upon agency theory and resource dependence theory (RDT) to argue that GPR poses a significant challenge to firms by increasing economic uncertainty, complicating the audit environment, and heightening audit engagement and associated risks. From the agency theory perspective (Jensen & Meckling, 1976; Fama, 1980), we argue that GPR deteriorates firms’ information environment between managers and stakeholders, providing managers with the room for earnings management (Richardson, 2000), insider trading (Kraft et al., 2014), and corporate misconduct (Yang, Wang & Xue, 2021). Afzali et al. (2021) find that managers exhibit norm-deviant behaviour, such as cheating on taxes and offering bribes, during heightened uncertainty. In such an uncertain environment, auditors struggle to obtain reliable evidence, leading to a higher audit scope and increased audit risk. Moreover, audit firms’

reputational and legal risks increase when they engage with clients exposed to higher GPR due to elevated audit complexity and the potential for misreporting. Consequently, auditors may respond by expanding audit scope, demanding higher fees and issuing more cautious opinions to safeguard their reputation.

Likewise, the RDT emphasises that firms operating in uncertain geopolitical regions and sectors often experience disruptions in supply chains (Bednarski et al., 2025), access to financing (Nguyen & Thuy, 2023), and regulatory support, negatively affecting their operational stability. These external constraints can cause delays in decision-making and lead to unstable financial performance, impacting a firm's operational and business risks. In addition, they can hinder auditors' ability to collect reliable evidence and maintain audit quality, ultimately influencing audit outcomes. *At the same time, when GPR affect a firm's dependencies on external resources, auditors appear as vital strategic resources who help firms navigate those turbulences by managing uncertainty and preserving stakeholder confidence.* Overall, agency theory and RDT suggest that GPR significantly increases a firm's business risk, audit risk, and auditors' own business risk, which may result in unfavourable audit outcomes.

Our study focuses on the U.S., as it plays a pivotal role in shaping global politics, primarily due to its robust economic base and significant political influence. Moreover, U.S. firms are mainly international and heavily reliant on foreign partners for key raw materials and supply chain support. For instance, imports of semiconductors from Taiwan and South Korea keep the U.S. key industries running. The political rift between the U.S. and China over Taiwan, as well as the ongoing trade war marked by reciprocal tariffs, has reached a new high. If these conflicts prevent U.S. firms from accessing key chipmakers, the U.S. economy is likely to face significant trouble (Lee & Glosserman, 2022). Similarly, the political tension between Washington and Tehran poses an increasing threat to export shipping through the Strait of

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Hormuz, a vital oil export route, accounting for about 20% of the fuel export worldwide. Thus, firms in the U.S. are increasingly exposed to GPR. This socio-political backdrop makes the U.S. an ideal case for investigating the influence of firms' GPR on audit outcomes. However, along with exclusive analysis with U.S. data, we also conduct a robustness test in a sample of 36 countries to ensure that our findings hold in the global context.

We collect data for 2000-2021, comprising 20,517 firm-year observations. Employing robust analytical techniques, we document that GPR has unfavourable impacts on audit outcomes, indicating that firms with greater GPR tend to incur higher audit fees, experience longer audit delays, face more financial restatements, are more likely to receive going-concern opinions, and experience greater internal control issues. Our results remain robust to alternative proxies of GPR. Finally, our cross-sectional analysis exhibits that firms experiencing high information asymmetry, residing far from the auditors, exposing weak governance oversight, and lacking industry-specific auditor expertise exhibit greater adverse effects of GPR on audit outcomes. Likewise, our additional tests show that the unfavourable impacts are more prevalent in firms with lower gender diversity, fewer financially expert directors, and those experiencing higher economic policy uncertainty (EPU). Finally, our analysis shows that firms with greater GPR face a higher likelihood of lawsuits. For the robustness and validity of our findings, our baseline results are based on firm-fixed effects to address endogeneity by controlling for unobserved, time-invariant characteristics specific to each firm. We further employ two identification tests, Lewbel's (2012) instrumental variable approach and propensity score matching (PSM) technique, to confirm that our baseline results are unbiased, consistent, and valid for policy recommendations.

Our research makes significant contributions to the existing literature. First, we contribute to the expanding literature on the determinants of audit outcomes, including audit fees, audit delay, financial restatements, going concern opinions, and internal control

assessments, by introducing GPR as a novel and underexplored explanatory factor. Following the seminal work of Simunic (1980), which models audit fees as a function of audit effort and client's business risk, subsequent studies have examined a wide range of firm-level attributes that influence audit outcomes. For instance, Ranasinghe et al. (2023) show a positive effect of client firms' business risk on audit price. Studies further identify that accounting comparability (Zhang, 2018), connected auditors (Guan et al., 2016), financial statement footnote readability (Abernathy et al., 2019), firms' culture (Andiola et al., 2020), political corruption and corporate risk disclosure (Yang, Yu, Liu & Wu., 2018), board independence (Zhang & Yu, 2016), ownership structure (Pronobis & Schaeuble, 2022), information infrastructure and human capital (Shen et al., 2024) significantly affect audit outcomes. Despite this breadth, prior research has largely overlooked macro-level geopolitical uncertainty as a distinct risk factor. This omission is notable given that Caldara & Iacoviello (2022) emphasise GPR as a significant and growing source of firm-level uncertainty, capable of influencing business operations and financial reporting integrity. Our study addresses this critical gap by empirically demonstrating the impact of GPR on multiple audit outcomes. Moreover, prior research shows that firms' disclosure, social capital, and political corruption (Jha & Chen, 2015; Jha et al., 2021) significantly influence the likelihood of a lawsuit. Extending this stream of research, our evidence demonstrates that a firm's GPR increases the probability of initiating a legal action. Overall, our distinct findings add to the growing body of literature by illustrating how a firm's GPR influences audit outcomes and the related risks and encourage interdisciplinary research that connects auditing to global economic and political dynamics.

Second, we contribute to the limited literature that examines the relationship between political uncertainty and audit outcomes. Specifically, Hossain & Mitra (2022) show that firms exposed to greater political risk experience audit report delays and pay higher audit fees. Similarly, Kim (2021) documents a positive impact of Western sanctions on audit fees of

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Russian state-owned enterprises. Our study, however, is different from the above literature. We argue that both firm-level political risk and firm-level GPR result from the political environment and influence firms’ operations. However, they vary considerably in terms of their origins and scope. Firm-level political risk pertains to the risks arising from the domestic political environment in a particular country where a firm operates (Busse & Hefeker, 2007; Liu, Peng, Shi & Yang, 2022). These risks include potential changes in government policies, regulatory changes, tax reforms, political instability, corruption, and civil disruption. The consequences of these risks are typically confined to a specific area and influence a firm’s activities within that region. In contrast, firm-level GPR is affected by global political actions and broader geopolitical dynamics (Overland, 2019). It includes international events such as interstate conflicts, international sanctions, trade disputes, and changes in global alliances (Caldara & Iacoviello, 2022). Thus, firm-level political risk pertains to the distinct risks experienced by a firm in its operations within a single country with a predominantly localised impact, while firm-level GPR encompasses broader international issues that can influence a firm’s operations in multiple regions. Consequently, addressing firm-level GPR necessitates a more comprehensive and strategic methodology for auditor risk assessment. Our study also differs from the previous studies (e.g., Kim, 2021; Hossain & Mitra, 2022) on political risk, as their focus is limited to only two aspects of audit outcomes: audit fees and audit delays. However, our study encompasses a comprehensive range of audit outcomes, including audit fees, audit effort measured by audit delay, recommendations for restatements due to material inaccuracies, going concern opinions, and issuing opinions on internal controls.

Third, previous studies highlight that a firm’s information infrastructure (Shen et al., 2024; Abad et al., 2017), geographic proximity to auditors (Choi et al., 2012; Dong & Robinson, 2018), corporate governance quality (Griffin et al., 2008; Zaman et al., 2011), and the presence of industry-specific auditor expertise (Habib & Bhuiyan 2011; Bae et al., 2021)

significantly influence audit outcomes. However, prior research remains largely silent on whether and how these firm- and auditor-level features interact with broader geopolitical uncertainty to influence audit outcomes. Our study addresses this oversight by conducting a comprehensive moderation analysis, which shows that the negative impacts of GPR on audit outcomes are significantly more substantial when firms experience high information asymmetry, are geographically far from their auditors, demonstrate weak governance oversight, and are audited by non-specialist auditors. These findings not only advance theoretical understanding of the boundary conditions under which GPR impacts audit quality but also provide practical insights for mitigating audit risk through improved firm-level controls and auditor selection.

Finally, unlike previous studies (Kim, 2021; Hossain & Mitra, 2022), we develop a theoretical framework (see Figure 1), based on agency theory and RDT, to explain the relationship between GPR and audit outcomes. By applying agency theory, we demonstrate that GPR exacerbates information asymmetries and managerial opportunism, leading to an increased agency cost that, in turn, enhances business risk, audit risk, and the auditor's own business risk. Simultaneously, RDT provides a complementary lens, demonstrating how a firm's and an auditor's dependencies on stable economic, political, and regulatory environments are disrupted under high GPR, enhancing both firm risk and audit complexity. We also argue that under RDT, auditors become critical strategic resources, providing credibility, legitimacy, and stability during geopolitical turbulence by supplying assurance and reducing external uncertainty. By integrating these two theories, our framework captures both the internal agency-related challenges and the external resource constraints imposed by geopolitical volatility and offers a more holistic academic understanding of how geopolitical uncertainty aggravates internal governance and monitoring challenges. In sum, our conceptual

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framework not only fills a critical gap in the literature but also lays a robust foundation for future research on high-risk geopolitical environments.

The paper is structured as follows: Section 2 conceptualises the theoretical framework and develops hypotheses. Section 3 explains the data and methodology used in this research. Section 4 presents baseline, endogeneity, and moderation results. Section 5 offers additional analysis. Section six concludes the paper by forwarding policy recommendations.

2. Theoretical framework and hypotheses development

2.1 GPR and audit outcomes: agency theory and resource dependence theory (RDT)

We utilise two prominent theories: the agency theory (Jensen & Meckling, 1976; Fama, 1980) and the resource dependence theory (Pfeffer & Salancik, 2015), to develop a conceptual framework on the relationship between GPR and audit outcomes. Agency theory posits that firms’ managers (agents), responsible for making critical decisions, are more informed than the owners (principals) about the risks stemming from the external environment, such as GPR. Hence, during heightened geopolitical uncertainty, firms face increased business risks (Stolbov & Shchepeleva, 2020), which incentivises managers to withhold and control information from owners to protect their interests, aggravating information asymmetry and monitoring challenges. For example, during periods of geopolitical uncertainty, managers may become more opportunistic by manipulating earnings, allowing insider trading, delaying disclosures and misrepresenting risk exposure to safeguard their interests and maintain investor confidence (Richardson, 2000; Kraft et al., 2014; Yang, Wang & Xue, 2021). A recent study conducted by Mekhaimer et al. (2024) also supports this view by documenting a positive influence of political uncertainty on disclosure complexity and information obfuscation, as managers are likely to conceal poor financial performance during uncertain times. Thus, agency theory suggests that managers may engage in withholding and manipulating information during

periods of heightened GPR to safeguard their interests, thereby impairing firms' information environment. This, in turn, elevates firms' agency costs, as external monitoring becomes more costly and complex. Consequently, auditors are required to exert greater effort, allocate more resources, and exercise professional scepticism to mitigate these risks, often resulting in higher audit fees, extended audit report delays, and more conservative audit opinions, ultimately leading to adverse audit outcomes.

Likewise, RDT offers a theoretical lens that helps explain the association between GPR and audit outcomes. RDT highlights how a firm depends on external resources, such as financial institutions, regulations and cooperative stakeholders, to maintain functional and business stability. GPR disrupts the external environment by causing volatility in access to critical resources, including supply chains (Bednarski et al., 2025), financing (Nguyen & Thuy, 2023), and regulatory support, thereby increasing business and audit complexities. These complexities can not only impact a firm's operational and business risks but also hinder auditors' ability to obtain reliable evidence and uphold audit quality, ultimately influencing audit outcomes. Moreover, firms face challenges in maintaining stakeholder trust and legitimacy when GPR disrupts external dependencies. To address these challenges, we argue that independent auditors with high-quality audits can emerge as critical strategic resources that enable firms to navigate external turbulence. By providing credibility and assurance to financial statements, auditors empower firms to signal reliability to stakeholders, including investors, regulators, and creditors, therefore reducing the GPR-related institutional uncertainty. This reposition of auditors, as per the RDT framework, extends their role as a legitimacy-building partners who assist firms in mitigating external uncertainty.

Closely aligned with the fundamental arguments of RDT, recent studies in the field of geopolitical governance literature provide crucial insights into how firms adapt their governance structures to counteract external disruptions during geopolitical uncertainties. For

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instance, Elsayed and Ammar (2020) show that British Petroleum (BP) developed hybrid governance mechanisms that incorporate corporate governance and corporate social responsibility to rebuild legitimacy and regain access to required external resources, such as stakeholder trust and regulatory support, following the major crises of the Gulf of Mexico Oil Spill. Thus, firms restructure governance to manage external uncertainty and dependence on external actors, reflecting the core RDT principle. Similarly, Ammar and Elsayed (2024) reveal that BP adopts politically connected governance (PCG) practices, emphasising responsiveness, compliance, and collaboration, to respond to regulatory, reputational, and political challenges during periods of geopolitical turbulence. These adaptive practices highlight how firms strategically influence institutional and political relationships to stabilise their external resource environment. Building on these insights, we argue that GPR disrupts firms’ dependencies on vital external resources, and firms can manage such business uncertainty, external dependencies, and institutional pressures of geopolitical disruption through restructuring their governance.

Overall, from the perspective of these two theories, we argue that GPR can affect firms’ business risk, audit risk, and auditors’ own business risks, which in turn impact audit outcomes. This scenario is illustrated in our theoretical framework in Figure 1 and explained in detail below.

[Insert Figure 1 here]

First, we argue that GPR affects firms’ business risk, which refers to the potential negative outcome resulting from significant conditions, events, circumstances and actions that adversely affect an organisation’s capacity to achieve its goals and implement its strategies (American Institute of Certified Public Accountants (AICPA), 2021). From the agency theory perspective, GPR worsens agency problems by disorienting firms’ governance structures, which can increase a firm’s business risk. In this connection, Ramesh & Athira (2024) argue

that the effectiveness of the corporate governance system is compromised during economic and political uncertainties, which has vital ramifications for profitability and risk management. During a geopolitical uprising, managers tend to protect their jobs, even sometimes compromising owners' interests. For instance, GPR-induced uncertainty may prompt managers to avoid an acceptable level of risk, which reduces firms' profitability and enhances business risk. Tang & Cao (2025) find that managers become myopic during higher business uncertainty and shift their strategic moves from long-term benefits to short-term growth.

From the lens of RDT, GPR aggravates firms' business risk by disrupting a firm's access to external resources and institutional frameworks. For instance, an armed conflict in a key region can disrupt supply chains and affect the availability of raw materials. Following the 9/11 terrorist attack at the World Trade Centre, the U.S. borders were sealed, and all air traffic was suspended, leading to a catastrophic disruption in the logistics operations of multinational companies. Consequently, the supply of key automobile parts to Toyota's manufacturing facilities in Indiana was delayed by 15 hours (Sheffi, 2001). Similarly, Ford Motors lost an estimated US\$30 million because the automaker was forced to halt production in five U.S. plants due to the shortage of key parts supplied from Canada (Wernick, 2006). This suggests that GPR increases firms' operating costs, decreases revenues, and damages reputation, leading to heightened business risk. Hence, firms exposed to greater GPR are highly likely to face unfavourable audit outcomes.

Second, GPR affects firms' audit risk when managerial opportunism and environmental complexities are aggravated due to heightened GPR. In the context of agency theory, managers facing geopolitical uncertainty may become less transparent, potentially engaging in earnings management and selective disclosure to mask the firm's deteriorating risk profile (Richardson, 2000; Kraft et al., 2014). Prior studies have shown that geopolitical unrest destabilizes financial and product markets (Foglia et al., 2023), reducing aggregate demand for goods and services

(Nguyen, Pham & Sala, 2022) and increasing inflation (Jawadi et al., 2024). Moreover, during financial constraints induced by the GPR, creditors often fail to pay their dues in time, resulting in an accumulation of accounts receivable. Accounting for inventory and receivables poses a significant risk of irregularities and financial losses. This incentivises managers to obscure information and apply aggressive accounting techniques, raising inherent and control risk. Furthermore, geopolitical tension prompts firms to hoard more cash for precautionary motives. Such accumulated resources may end up invested in non-value-maximising activities. Gul & Tsui (1997) argue that managers cover expenditures in non-value-enhancing activities by accounting manipulation. Auditors respond to such irregularities and the risk of material misstatement by exerting greater effort in their audits.

Concurrently, RDT suggests that auditors depend on several critical internal and external resources, including access to verifiable and timely information, stable regulatory environments and stakeholder cooperation to perform effective audits (Beasley et al., 2000). However, these resources are compromised to a greater extent in the context of turbulent GPR. Therefore, auditors may experience limitations in evidence collection, abstruse regulatory standards and operational delay, which increases the probability of errors and misstatements.

Finally, as depicted in Figure 1, GPR may affect auditors' own business risk as high geopolitical uncertainty influences their strategic engagement and professional behaviour. From the agency theory perspective, auditors act as agents with their own incentives and potential conflicts. Lennox & Pittman (2011) argue that auditors carefully consider their business risk, such as potential litigation, enforcement penalties and reputational loss, when engaging with risky clients. To mitigate these concerns, auditors may act cautiously by extending audit procedures and issuing conservative opinions in borderline cases to limit legal consequences (Johnstone & Bedard, 2004). These actions in a high-GPR environment impact the audit outcomes, including premium audit fees and delayed reports. In parallel, according to

RDT, audit firms primarily rely on their reputation, client trust, and institutional framework to sustain their operations, and these resources can be threatened when auditors are exposed to geopolitical instability. Connectedly, Francis (2004) suggests that political turbulence and regulatory inconsistency aggravate the risk of audit failure, increasing firms' reputational and legal exposure. Thus, under RDT, heightened GPR amplifies the audit firm's own business risk, which ultimately manifests in costly, less efficient, and conservative audit outcomes.

In sum, the theoretical insights from agency theory and RDT suggest that GPR introduces significant uncertainty into a firm's external environment, increasing its business risk, audit complexity, and the auditor's own business risk. These conditions lead to a more cautious and resource-intensive audit process. Integrating these theoretical perspectives, we propose the following hypothesis:

H1: Ceteris paribus, a firm's exposure to higher GPR results in unfavourable audit outcomes.

2.2. Moderating Effects in High-GPR Environments

2.2.1. The role of information asymmetry

GPR can substantially impact audit outcomes, especially when there is a significant information asymmetry between parties. GPR can exacerbate information asymmetry between management and auditors, creating a gap between what management knows and what is disclosed to the auditors. If management chooses not to disclose or selectively disclose information due to uncertainty and strategic concerns over geopolitical developments, auditors may lack a comprehensive understanding of the consequences of these risks on the firm's financial performance. Such a communication gap significantly affects the capacity to accurately estimate firms' financial health (Mokdadi & Saadaoui, 2023). Given the increased uncertainty and complexity stemming from GPR, auditors need to demonstrate heightened professional scepticism. This includes seeking more supporting information and thoroughly

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evaluating the appropriateness of firms’ risk disclosures and internal controls. Liu, Peng, Shi & Yang (2022) support the above proposition by showing that GPR increases information asymmetry related to firm value. Similarly, Çolak et al. (2017), Le & Tran (2021) and Fiorillo et al. (2024) illustrate that GPR increases information problems between firms and outside investors, exacerbating clients’ business risk, leading to unfavourable audit outcomes.

Based on the above insights, we argue that the degree of information asymmetry affects the impact of GPR on audit outcomes. Therefore, we develop the following hypothesis:

H2: Ceteris paribus, the unfavourable effect of GPR on audit outcomes is stronger in firms with greater information asymmetry.

2.2.2. The role of client-auditor distance

Geographical distance prevents auditors from conducting on-site visits, collecting primary evidence, and maintaining effective communication with the client’s management and operational teams (Choi et al., 2012; Francis et al., 2022). GPR exacerbates these issues by impeding auditors’ capacity to successfully carry out relevant audit procedures due to travel limitations, safety concerns, and communication disruptions. This might result in dependence on inadequate and indirect information, which raises the probability of audit errors and undermines the accuracy of the audit report.

The geographical distance between the audit office and client firms may further exacerbate the challenges of understanding the specific local circumstances in which the client operates, particularly in unstable geopolitical settings. Auditors may encounter difficulties in understanding the intricacies of the political and economic environment that shape the client’s business, resulting in possible deficiencies in identifying risks and appraising the consequences of geopolitical events on the firm’s financial statements (Bhattacharjee et al., 2020). The physical distance might also delay recognising and addressing early hazards, impacting the promptness and significance of the audit decisions. Under such circumstances, audit effort and

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3 risk increase and the audit's integrity is compromised, leading auditors to potentially provide
4 qualified views and disclaimers if they are unable to acquire adequate and relevant evidence to
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6 substantiate their findings. Based on the above discussion, we develop the following
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8 hypothesis:
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12 *H3: Ceteris paribus, the unfavourable effect of GPR on audit outcomes is stronger if*
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14 *the distance between clients and audit firms is greater.*
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17 18 19 2.2.3. The role of governance quality

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21 Poor governance in a firm typically leads to a deficiency in strong internal controls,
22 transparency, and accountability (Hoitash et al., 2009). It can result in management's
23 insufficient and biased disclosure of risks and their financial consequences, posing challenges
24 for auditors to acquire precise and thorough information (Pucheta-Martínez et al., 2016).
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26 Consequently, auditors may encounter difficulties in evaluating a firm's actual financial status,
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28 thereby heightening audit effort and the likelihood of delivering inaccurate audit opinions.
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32 Poor governance can also lead to a situation where management deliberately
33 manipulates and hides the impact of GPR on firms' operations and financial statements (Chen
34 et al., 2007; Liu & Lu, 2007). This could result in a substantial escalation of audit risk, as
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36 auditors may be unaware of crucial matters that require attention. The absence of effective
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38 governance might impede the auditor's ability to communicate efficiently with individuals
39 responsible for governance, thus restricting the ability to conduct a comprehensive and
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41 unbiased audit (Cohen et al., 2002). In the context of GPR and weak governance scenarios, the
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43 quality and reliability of audit outcomes can be significantly impacted as auditors may face
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45 challenges in obtaining appropriate evidence, increasing the likelihood of more audit efforts,
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47 audit errors, delays, and overly conservative opinions. Based on the above discussion, we
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49 develop the following hypothesis:
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H4: Ceteris paribus, the unfavourable effect of GPR on audit outcomes is stronger in firms with poor governance quality.

2.2.4. The role of auditor industry specialism

We argue that the absence of industry specialisation among auditors can significantly worsen the difficulties in providing accurate and reliable audit services when faced with GPR. Auditors with specialised industry knowledge are typically more capable of recognising and evaluating industry-specific risks (Hsu & Liao, 2023; Low, 2004; Al-Asmakh et al., 2024). Conversely, auditors who are not experts in a particular field may encounter challenges in comprehending that industry’s distinct operational, regulatory, and financial complexities. Moreover, non-specialist auditors may not have the expertise to manage the intricate challenges posed by GPR effectively. Without profound industry knowledge, non-specialist auditors may encounter difficulties in identifying the specific effect of geopolitical events on the relevant industry. This could result in misjudgements and oversights while assessing risks and reviewing firms' financial statements.

Moreover, auditors without specialised knowledge may struggle to accurately evaluate the financial consequences of GPR on a client’s business activities (Knechel et al., 2007). For example, they might not fully understand how supply chain disruptions, volatile commodity prices, and shifts in international regulations can influence a firm’s financial position and operational effectiveness. This lack of understanding in this area can result in the use of generic audit methods that fail to sufficiently consider the risks resulting from geopolitical tensions (Low, 2004). This, in turn, raises the probability of audit errors and the issuance of qualified opinions. In essence, GPR can significantly diminish the quality of an audit if auditors are industry non-specialists, as they may not fully comprehend the degree of risks the firm is exposed to, which affects the audit effort and the overall reliability and accuracy of the audit results. Based on the above discussion, we develop the following hypothesis:

H5: Ceteris paribus, the unfavourable effect of GPR on audit outcomes is stronger in firms audited by non-specialist auditors.

3. Data and empirical model

3.1 Data

Our sample includes all firms listed on U.S. stock exchanges with GPR measure and audit outcome data in the Audit Analytics database from 2000 to 2021. The sample commences in 2000, as this is the first year in which audit outcome data are available for a sufficient sample of U.S. firms from the Audit Analytics database. We collect firm characteristics data from Compustat, business segment data from Osiris, institutional ownership data from the Thomson Reuters Institutional Holdings (13F) database, analyst coverage data from I/B/E/S, and board independence data from BoardEx and the Institutional Shareholder Services (ISS) database. The list of variable definitions is provided in the Appendix (Table A1). We initially identify a sample of firms with at least two years of data from the Compustat database. We then remove firms that do not have GPR measure and audit outcome data from the Audit Analytics database. The final sample comprises 20,517 firm-year observations.

To evaluate audit outcomes, we utilise five different measures. These include: (i) audit fee (*AUDFEE*), measured as the natural logarithm of audit fees (first expressed in thousands of dollars); (ii) audit delay (*AUDELAY*), measured as the number of days between the signature date of the audit opinion and the fiscal year-end date; (iii) financial restatement (*RESTATE*), a binary variable indicating the issuance of financial restatements; (iv) going concern opinion (*GOINGCON*), a binary variable indicating the issuance of a going concern opinion; and (v) internal control (*DAOIC*), a binary variable indicating the auditors' opinions on the client's internal control systems. To measure geopolitical risk, we employ the GPR index developed by Caldara & Iacoviello (2022), which is constructed to measure adverse geopolitical events

and related risks. They base this index on newspaper articles that report geopolitical tensions. Each month, they calculate it by counting the number of articles discussing geopolitical events and risks in 11 major English-language newspapers, including *The Boston Globe*, *The Chicago Tribune*, *The Daily Telegraph*, *Financial Times*, *The Globe and Mail*, *The Guardian*, *Los Angeles Times*, *The New York Times*, *The Times*, *The Wall Street Journal*, and *The Washington Post*. The index represents the ratio of GPR-related articles to the total number of articles published. The search focuses on articles containing six-word groups: Group 1 covers explicit geopolitical risks and military tensions; Group 2, nuclear tensions; Groups 3 and 4, threats of war and terrorism; and Groups 5 and 6, actual adverse events, like terrorist attacks and wars, that could increase geopolitical uncertainty. While Groups 1 to 4 are classified as ‘Geopolitical Risk’, the last two groups are referred to as ‘Geopolitical Acts’. Thus, the GPR index captures both perceived and real-time geopolitical tensions, which provides the ideal setting to explore the relationship between GPR and audit outcomes.

To improve the accuracy of our estimation of auditors’ fees and avoid potential measurement errors due to the exclusion of predecessor audit fees in year t , we adopt a more precise approach proposed by Barua et al. (2020). We apply winsorisation to all continuous variables at the 1% and 99% levels to account for any outliers in our data.

3.2 Empirical model

To conduct our analysis, we use a panel regression approach. Our baseline model is provided in equation (1). Each subsequent test then examines the relationship between audit outcomes and GPR for a subset of the data as appropriate for each hypothesis. The baseline model is as follows:

$$AO_{i,t} = \alpha + \beta_1 GPR_{i,t-1} + \sum_c \beta_c Control_{c,i,t-1} + \sum_k \gamma_k Year_k + \sum_d \gamma_d Firm_d + \varepsilon_{i,t}. \tag{1}$$

where, audit outcomes at time t for firm i , captured by $AO_{i,t}$. $GPR_{i,t-1}$ is Caldara & Iacoviello (2022)'s GPR index. Following previous studies (e.g., Simunic, 1980; Hay et al., 2006; Hay, 2013; Jha & Chen, 2015), we include a range of client-firm level control variables ($Control_{c,i,t-1}$) in the regression for firm i at $t-1$, including firm size ($SIZE$), non-audit fee ($NONAFEE$), loss firms ($LOSS$), a firm with reporting date in the period Dec-Mar ($BUSY$), operating performance (ROA), audit opinion ($AUOP$), big auditors ($BIG4$), geographic segments ($GEOSEG$), business segments ($BUSSEG$), foreign sales ($FOREIGN$), special items ($SPECIAL$), leverage (LEV), market-to-book ratio (MB), litigation industry ($LITIGATION$), inherent risk ($INHERENT$), acquisition activity (DMA), seasoned equity offerings ($DSEO$), and the number of employees ($SQEMP$). To address potential endogeneity concerns, we incorporate lagged values of the GPR index, ensuring that audit outcomes at a given time do not simultaneously influence GPR. We illustrate a visual presentation of the empirical strategy employed in this study in Figure 2.

[Insert Figure 2]

3.3. Descriptive Statistics

Descriptive statistics for each variable in our sample are presented in Table 1. The mean audit fee ($AUDFEE$) and auditors' lag ($AUDELAY$) are 14.24 and 4.10, respectively. On average, 13.46% of our sample firms experienced financial restatements ($RESTATE$), while 11.20% of firms received a modified going-concern opinion ($GOINGCON$). Moreover, 5.25% of firms in our study received an auditor's opinion on internal control systems ($DAOIC$). The measure for GPR averages 4.54. Among the sample firms, 27.95% are loss firms, and 83.81% of the firms are clients of Big 4 audit firms. Among other variables, the average firm has a natural log of lagged total assets ($SIZE$) of 6.89, return on total assets (ROA) of 0.3%, geographical segments ($GEOSEG$) of 1.73, business segments ($BUSSEG$) of 2.66, and market-to-book ratio (MB) of 1.84.

[Insert Table 1 here]

We also graphically illustrate the relationship between GPR and all the proxies of our audit outcomes in Figure 3. As depicted, GPR and proxies of audit outcomes generally follow the same trend, suggesting that GPR is positively associated with audit outcomes. Specifically, higher GPR relates to increased audit fees (*AUDFEE*) and longer audit delays (*AUDELAY*), reflecting added complexity and risk. It also raises the likelihood of restatements (*RESTATE*), going concern opinions (*GOINGCON*), and an opinion on internal control (*DAOIC*). These illustrations provide primary evidence to support our hypothesis that GPR has a significant adverse impact on audit outcomes.

[Insert Figure 3 here]

4. Empirical results

4.1 Geopolitical risk and audit outcomes

We start our empirical analysis to examine whether the GPR is positively associated with audit outcomes. We have employed firm-fixed effects that account for both firm-specific and time-related effects. This approach helps control for unobserved heterogeneity, mitigates concerns about multicollinearity, and enhances estimation efficiency by leveraging both cross-sectional and time-series data. More specifically, firm-fixed effects capture unobservable, time-invariant characteristics, while year-fixed effects control for macroeconomic shocks and industry-wide trends. Table 2 presents the results for Hypothesis 1. The coefficients for *GPR* in Column 1 (0.0486) for *AUDFEE*, in Column 2 (0.098) for audit delay (*AUDELAY*), in Column 3 (0.0286) for the likelihood of a financial restatement (*RESTATE*), in Column 4 (0.0249) for the likelihood of the auditor issuing a modified going concern opinion (*GOINGCON*), and in Column 5 (0.0708) for the likelihood of the auditor issuing an adverse opinion on the strength of internal controls (*DAOIC*), all show significant associations at least at the 5% level. Thus,

we observe a significant positive association between GPR and all measures of audit outcomes, indicating that higher GPR levels lead to increased audit fees, longer audit delays, more financial restatements, a greater likelihood of modified going concern opinions and a higher probability of adverse opinions on internal controls.

The coefficients are economically significant. Regarding economic significance, a one standard deviation increase in GPR increases AUDFEE by 1.34%, equating to approximately \$32,736¹ for a firm with average audit fees. Likewise, a one standard deviation increase in GPR results in approximately a 1.61-day increase in audit completion time, which can materially affect reporting timelines and earnings announcements. These findings are consistent with Ma et al. (2024), who find that a one standard deviation increase in firm-level political risk raises audit fees and completion time by \$43,959 and 2.13 days, respectively. Finally, based on marginal effects, a one-unit increase in GPR increases the probability of financial restatement, the issuance of a modified going concern opinion, and an adverse opinion on internal controls by 0.08, 0.08, and 0.14, respectively. Hence, our results support the theoretical framework presented in Figure 1, which suggests that GPR increases managerial opportunism and communication barriers, thereby enhancing the information burden on auditors and potentially intensifying a firm's risk. Thus, GPR increases the need for rigorous evidence collection, leading to a greater audit scope and complexity, which negatively impacts audit outcomes. Our results support previous studies (e.g. Hossain & Mitra, 2022; Kim, 2021; Wen et al., 2023; Stolbov & Shchepeleva, 2020) demonstrating that EPU increases audit fees. Overall, the results support our hypothesis *H1*. Based on our findings, we suggest that firms should follow any geopolitical strategy framework (e.g., the Ernst & Young (EY) Geostrategy Framework) in identifying, analysing, and responding to geopolitical risks. Such a framework helps firms and

¹ Mean audit fees of our sample \$2.443 million x 1.34% = \$32736

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governing bodies proactively assess geopolitical exposures and adjust audit strategies and disclosures, enhancing organisational resilience.

[Insert Table 2 here]

While our baseline results in Table 2 appear reasonable, we acknowledge that not all GPR events carry the same level of significance concerning audit outcomes. Certain high-impact events, such as the Global Financial Crisis (GFC) and the 9/11 attacks (2001), are particularly relevant. However, our baseline analysis treats them equally alongside other geopolitical incidents. To address this concern, we refine our sample after systematically excluding major geopolitical shocks, including the GFC 2007-2008, the 9/11 attacks (2001), the Iraq War (2003), the escalation of Syria unrest and ISIS-related conflicts (2014-2016), and the 2015 Paris attacks. As presented in Table 3, our results remain consistent and robust, confirming that the relationships between GPR and unfavourable audit outcomes are not merely an artifact of isolated crisis events but reflect a persistent risk factor related to the broader geopolitical landscape. This has significant implications for auditors and regulators, as it emphasises the requirement of integrating GPR assessments into audit planning, even in periods absent from headline-grabbing geopolitical crises.

[Insert Table 3 here]

To further investigate the association between GPR and audit outcomes, we employ an alternative independent variable approach by dividing GPR into two distinct dimensions: geopolitical threats (GPT) and geopolitical acts (GPA). As discussed earlier, GPT captures the perception of geopolitical risk, while GPA measures tangible geopolitical events such as conflicts, military actions, and policy confrontations. This classification permits us to evaluate whether perceived threats or actual geopolitical occurrences primarily drive the influence of GPR on audit outcomes. The results are presented in the Appendix (Table A2). Our results provide evidence that the impacts of GPT and GPA on the proxies of audit outcomes are

positive and statistically significant, ensuring that greater GPR, whether arising from perceived threats or realised geopolitical events, systematically impacts audit risk assessments and outcomes. These findings imply that audit firms and policymakers should consider both anticipated and realised GPR equally in their risk assessment and auditing process.

4.2 Endogeneity

To address potential endogeneity concerns and establish causal inference, we employ two identification strategies as illustrated in Figure 1A in the Appendix. First, we implement Lewbel's (2012) heteroscedasticity-based instrumental variable approach to mitigate omitted variable bias. Second, we apply propensity score matching (PSM) to create comparable treatment and control groups, reducing selection bias. We also incorporate additional control variables into our empirical models to mitigate concerns related to omitted variable bias. The following sections detail each approach.

4.2.1 Instrumental variable approach

We have employed Lewbel's (2012) method, which generates an internal instrument based on heteroskedastic errors stemming from unobserved common factors (Mavis et al., 2020), which cause error correlations. This approach differs from the traditional IV method, which relies on an external instrument. This technique is predominantly beneficial where appropriate external instruments are not available. The method further ensures that the instrumented variable effectively mitigates concerns about unobserved firm-specific characteristics and omitted variable bias. Many recent studies (e.g. Tao, Jun & Ma, 2025; Haque et al., 2025) have employed this method to address endogeneity.

We present Lewbel's results in Table 4. In the second stage, we find statistically significant and positive coefficients between instrumented GPR and all proxies for audit outcomes, reinforcing our primary conclusion that heightened GPR leads to unfavourable audit

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outcomes. Additionally, our diagnostic tests, *Kleibergen-Paap rk LM statistic* and *Hansen J statistic* confirm that our internal instrument meets the standard validity criteria, as we detect no evidence of under-identification and weak identification. These results provide strong empirical support for the credibility and validity of our primary findings.

[Insert Table 4 here]

4.2.2 Propensity Score Matching (PSM) Approach

We have also conducted the propensity score matching (PSM) technique to address further concerns regarding potential differences in GPR exposure across firms. This approach is useful in mitigating selection bias and identifying unobserved factors that may affect a firm’s exposure to GPR. For example, Liu (2018) argues that PSM helps classify comparable firms based on observable characteristics, thus reducing the systematic differences that may skew the results. Moreover, PSM helps mitigate issues of potential selection bias that may arise from firm characteristics (Rosenbaum & Rubin, 1983).

For our analysis, we have defined two groups of firms based on the industry-year-median of GPR. The treatment firms are those with above-median GPR, and the control firms are those with below-median GPR. We have estimated the propensity scores based on the controls used in our Eq.1. We then match our firms based on year, two-digit SIC codes, and the closest propensity score, with a maximum matching distance of 1%, and without replacement. This matching process allows us to generate a more comparable control group of firms in terms of industry and time influences, but they diverge primarily in their level of GPR.

The results in Panel A of Table 5 show no significant difference between the treatment and control groups, suggesting that the matching procedure successfully reduces potential selection bias and ensures that observable firm-specific factors do not confound the comparison between the two groups. Subsequently, we have re-estimated our baseline models using the matched treatment-control pairs. The results in Panel B of Table 5 suggest a qualitatively

similar relationship between GPR and audit outcomes as in Table 2. Our consistent results further validate the robustness of our findings, confirming that the unfavourable impact of GPR on audit outcomes holds even when addressing potential selection bias and controlling for unobserved firm-level heterogeneity.

[Insert Table 5 here]

4.2.3. Additional Control Variables

While we control a range of firm-level variables in our baseline models, one can argue that our results may suffer from omitted variable bias, as we have not included any macro-level variables that could affect audit fees. To address this, we further investigate the relationships between GPR and audit outcomes by incorporating key macroeconomic control variables along with our baseline controls. Specifically, we have controlled per capita income, population, cost of living, and education. As presented in the appendix (Table A3), our findings remain qualitatively similar, indicating that the impact of GPR on audit outcomes persists even after accounting for these macro-level factors.

4.3 Moderation effects

4.3.1. The role of information asymmetry

In this sub-section, we investigate whether information asymmetry moderates the relationship between GPR and audit outcomes. As discussed in Section 2, information asymmetry shapes audit outcomes significantly, as it can influence audit scopes and risks. To explore this dynamic, we use analyst coverage (*ANALYST*) as a proxy for information asymmetry, as it is a widely accepted proxy for external information flow, representing the degree to which external analysts scrutinise a firm's financial health and prospects. This metric is derived from the number of analysts who follow a stock in a given year, as recorded by I/B/E/S. For empirical analysis, we categorise firms into two groups: those with high analyst coverage (*HANALYST*) and those with low analyst coverage (*LANALYST*), based on the median value of analyst

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coverage. Our results in Table 6 show that the impact of analysts’ coverage is statistically significant at both high and low analyst following. However, as per our anticipation, the coefficient values between audit outcomes and GPR are significantly higher for *LANALYST* firms than *HANALYST* firms, supporting our Hypothesis *H2* that the effect of GPR on audit outcomes is more pronounced in firms with higher information asymmetry². These findings highlight the importance of a firm’s information environment in shaping audit outcomes, especially in the context of GPR. These findings suggest that regulators and auditors should be more cautious in firms with higher information asymmetry, as these firms are more vulnerable to the challenges posed by geopolitical uncertainties.

[Insert Table 6 here]

4.3.2. *The role of the distance between the audit office and client firms*

In this sub-section, we analyse how the proximity between the auditor and the client affects the link between GPR and audit outcomes. We categorise firms into two groups based on the distance between the auditor’s office and the client’s headquarters: long-distance firms (*LDIST*) and short-distance firms (*SDIST*). *LDIST* firms are those where the auditor is located more than 100 kilometres away or in a different Metropolitan State Authority (MSA), whereas *SDIST* firms are those located within 100 kilometres or in the same MSA. We present our results in Table 7. For the *LDIST* sub-group, the coefficients of GPR on audit outcomes are significant at a 5% level or higher. For the *SDIST* sub-group, such associations display weak significance. Furthermore, as indicated by the χ^2 test, we find that the coefficients of GPR are significantly larger for *LDIST* than for *SDIST*, supporting our hypothesis *H3*. This indicates that the greater distance between auditors and clients may enhance the impact of GPR on audit outcomes, likely due to the lack of local knowledge and proper monitoring. These findings highlight the

² We also consider ‘insider trading probability’ as an alternative proxy for the information asymmetry and find qualitatively similar results, reinforcing the robustness of our findings. However, due to space constraints, we have not reported these results.

importance of auditor-client distance in shaping the association between GPR and audit outcomes.

[Insert Table 7 here]

4.3.3 *The role of corporate governance*

We further explore the moderating role of corporate governance in the relationship between GPR and audit outcomes. To assess governance quality, we use two proxies: board independence (*BIND*) and institutional ownership (*IODED*). *BIND* represents the percentage of outside directors on the board in a given year, while *IODED* is defined as the average proportion of company equity owned by institutional investors quarterly. We classify firm-year observations with higher (lower) than median *BIND* and *IODED* as groups with high (low) governance monitoring. Both low board independence and low institutional ownership indicate the potential for agency costs and managerial opportunism, especially in the context of GPR, where management may have more flexibility. Our results, presented in Table 8, show that the magnitude and significance of the unfavourable effect of GPR on audit outcomes are stronger for firms with lower board independence as well as institutional ownership, supporting our hypothesis *H4*. These findings suggest that poor corporate governance aggravates the influence of GPR on audit outcomes, as firms with less effective monitoring are more prone to managerial opportunism (Shleifer & Vishny, 1997), which increases audit effort and risk and overly conservative opinions. Based on this finding, we suggest that firms can mitigate the adverse impact of GPR on audit outcomes by ensuring better governance, which can be achieved through higher board independence and effective monitoring by institutional owners.

[Insert Table 8 here]

4.3.4. *The role of specialist auditors*

As discussed in Section 2, industry specialist auditors can be more effective in assessing and responding to the unique challenges posed by GPR than their non-specialist counterparts.

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Hence, we explore how specialist auditors differ from non-specialists in moderating the effect of GPR on audit outcomes. To identify specialist auditors (*SPECIALIST*), we follow Srinidhi et al.’s (2014) approach and label audit offices with the highest or second-highest market share by sales in a given year in their SIC two-digit industry classification as specialists. Other observations are classified as *Non-SPECIALIST* for that year. Our results in Table 9 depict a considerable difference in how GPR affects audit outcomes across the two subgroups. For the *Non-SPECIALIST* sub-group, our findings demonstrate that the coefficients of GPR on audit outcomes are significant at either the 5% or 1% level. For the *SPECIALIST*, the coefficients for GPR are significant for *AUDFEE* (at 5% level), *AUDELAY* (at 5% level), and *GOINGCON* (at 10% level), but are insignificant for *RESTATE* and *DAOIC*. Further, we find that the coefficients of the GPR are significantly greater for the *Non-SPECIALIST* than the *SPECIALIST* subgroups. These findings support our hypothesis *H5*, indicating that non-specialist auditors face more challenges in assessing and responding to GPR, increasing the likelihood of more audit efforts, audit errors, delays, and excessively conservative opinions. Therefore, firms should appoint industry-specialised auditors as they can effectively address the inherent unpredictability and complexity of GPR.

[Insert Table 9 here]

5. Additional Tests

In this section, we conduct a few additional tests to support our baseline results. First, we examine the role of audit committee characteristics and economic policy uncertainty in the relationship between GPR and audit outcomes. Second, we investigate the connection between GPR and the likelihood of lawsuits (Lawsuits). Third, we conduct a sensitivity test to determine whether our baseline results hold for the global sample.

5.1. The role of audit committee characteristics

Audit committee characteristics play a crucial role in influencing the impact of GPR on audit outcomes. Audit committees with relevant expertise and diverse perspectives are better positioned to understand the firms' complex business operations and risk environments. This deeper understanding increases their ability to recognise, evaluate, and mitigate the multifaceted and often unpredictable challenges of geopolitical disruptions. For example, audit committees with greater gender diversity may be better equipped to address the audit challenges posed by geopolitical uncertainty, as gender-diverse committees tend to exhibit more efficient monitoring (Adams & Ferreira, 2009), higher ethical sensitivity (Bernardi & Arnold, 1997), and greater risk aversion (Faccio, Marchica, & Mura, 2016) that are particularly valuable in uncertain environments. Similarly, committees with greater financial expertise have greater capacity to comprehend the complex implications of geopolitical developments on firm operations and disclosures, which can improve audit outcomes (Krishnan & Visvanathan, 2008). Therefore, we investigate how audit committee characteristics moderate the impact of GPR on audit outcomes.

To measure audit committee strength, we use two proxies: audit committee gender diversity (*GENDER*), defined as the proportion of female directors on the audit committee in a given year, and audit committee expertise (*EXPERTISE*), measured by the number of directors with financial expertise. Directors are considered financial experts if they are accountants, treasurers, financial controllers, finance professors, or work in a closely related field that requires financial acumen, such as risk management, auditing, and banking. Based on these proxies, we divide firm-year observations into two groups (high and low audit committee strength), using the median values of *GENDER* and *EXPERTISE*. Our findings in the Appendix (Table A4) show that the unfavourable effects of GPR on audit outcomes are more pronounced in firms with lower gender diversity and fewer financial-expert directors. These results imply

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that audit committee characteristics play a crucial role in the relationship between GPR and audit outcomes. Thus, firms should strengthen audit committee structures, particularly in terms of gender diversity and financial expertise, to better address geopolitical uncertainty and improve the effectiveness and efficiency of the audit process.

5.2. *The role of economic policy uncertainty*

Extant literature (Zhang, Xu, Tong & Ye, 2019; Yun & Chun, 2021) argues that economic policy uncertainty (EPU) significantly influences audit outcomes, generally leading to more conservative audit practices. In this context, we suggest that the adverse effect of GPR on audit outcomes could be exacerbated when it coincides with periods of heightened EPU. This is particularly relevant when firms experience the direct challenges stemming from geopolitical uncertainty and the indirect risk posed by uncertain policy environments. In this sub-section, we aim to empirically examine whether the unfavourable influence of GPR on audit outcomes is amplified during periods of high EPU. We have utilised the EPU index developed by Baker et al. (2016) based on the frequency of policy-related news articles and the unpredictability of policy changes. Many studies (e.g., Zhang, Xu, Tong & Ye, 2019; Ashraf & Shen, 2019) have employed this index as it comprehensively measures EPU. Based on the median value of the EPU index, we have divided our sample into high (*HEPU*) and low (*LEPU*) categories. Our results, reported in Table A5 (Appendix), show that the coefficients are significant at least 5% level for both high and low EPU. However, the χ^2 test shows that the coefficients of GPR are significantly higher in the *HEPU* group³. Our results support the view that the unfavourable impacts of GPR on audit outcomes are exacerbated when combined with heightened EPU. These findings underline the importance of considering the broader policy environment when assessing the influence of GPR on audit outcomes.

³ We have also considered the US presidential elections, which are known for heightened levels of policy uncertainty. Our un-tabulated results confirm that the adverse impacts of GPR on audit outcomes are more prevalent during election years.

5.3 The relationship between geopolitical risk and lawsuits

This sub-section examines the association between GPR and the probability of initiating legal actions against a firm. In line with the methodology outlined by Jha & Chen (2015), we define *LAWSUIT* as a binary variable denoting whether a lawsuit has been initiated during a given year. This variable is consistent with categories outlined in the Audit Analytics database, including Accounting and Auditing Enforcement Releases (category 54), Accounting Malpractice (category 2), and Financial Reporting (category 48). According to Jha & Chen (2015), *LAWSUIT* is a comprehensive indicator of the risk auditors face about their clients, capturing both financial reporting and broader business risks. Our findings in Panel A of Table 10 show a statistically significant positive relationship between GPR and the probability of legal action. This indicates the likelihood of auditors facing legal scrutiny increases as GPR increases.

Several previous studies (Munsif et al., 2011; Bryan et al., 2018; Barua et al., 2020) highlight the influence of disclosing material weaknesses on audit fees and show that firms with material weaknesses in their internal controls often face heightened scrutiny, which can increase the risk of litigation for auditors. Building on this, Ge & McVay (2005) argue that inadequate internal controls are often a result of insufficient resources being allocated to accounting controls. Under conditions of high-GPR, firms may experience greater uncertainty, resource reallocation, and managerial opportunism, which can constrain investment in effective control mechanisms. Therefore, we empirically examine the relationship between GPR and the disclosure of material weaknesses in internal controls (MW), while controlling for other variables in baseline models. The results in Panel B of Table 10 demonstrate a positive and statistically significant association between GPR and the disclosure of internal control weaknesses. Specifically, as GPR intensifies, auditors are more likely to identify and report material weaknesses in internal controls, which, in turn, heightens the risk of legal action.

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Overall, our results indicate that GPR is not only associated with changes in audit outcomes but also with an increased likelihood of legal consequences, particularly when material weaknesses are disclosed. This underscores the broader implications of GPR for auditors, as it can lead to more significant legal exposures when internal control issues are identified. As GPR rises, auditors may need to adopt more stringent measures and increase their vigilance to mitigate the potential for legal action, especially in firms where internal controls are already under scrutiny.

[Insert Table 10 here]

5.4 *Do our results hold for a global sample?*

While our study primarily focuses on U.S. firms, it is reasonable to question the extent to which our findings can be generalised to a global context and emerging economies. To address this concern, we leverage available data to test the robustness of our results across a sample of 36 countries worldwide (Australia, Austria, Belgium, Brazil, Canada, China, Denmark, Finland, France, Germany, Greece, Hong Kong, India, Indonesia, Ireland, Israel, Italy, Japan, Malaysia, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Russia, Singapore, South Africa, South Korea, Spain, Sweden, Switzerland, Thailand, Taiwan, United Kingdom, United States). Table 11 presents the results. Our analysis mainly focuses on audit fees due to data limitations related to other audit outcomes. In column 1 of Table 11, we find that the impact of GPR on audit fees remains positive and highly significant in a sample of 36 countries. In Column 2, we exclude the U.S. and find a positive and statistically significant relationship between GPR and audit fees. Finally, in Column 3, we focus on a subset of emerging countries (Brazil, China, India, Indonesia, Malaysia, Mexico, Poland, Russia, South Africa, Thailand, and Taiwan), as one may argue that the effects of GPR may manifest differently in emerging markets. However, we continue to find a significant positive association between GPR and audit fees. Thus, these findings confirm that GPR is a systematic factor affecting audit fees

across diverse institutional settings, rather than being driven by specific country characteristics. This has important implications for auditors, regulators, and multinational firms, highlighting the need for risk-adjusted audit pricing strategies to address geopolitical uncertainties.

[Insert Table 11 here]

6. Conclusion and Implications

The rise of GPR worldwide has been causing a significant disruption to business and economic activities. Although the extant literature examines various impacts of firm-level GPR, no study investigates the impact of firms' idiosyncratic GPR on audit outcomes. Thus, this study significantly contributes to academic literature by examining the relationship between a firm's GPR and audit outcomes. By analysing a comprehensive dataset covering the period 2000-2021, we have provided robust evidence of the adverse impact of GPR on audit outcomes in U.S. firms. We find that higher GPR increases audit fees, audit report delays, the probability of financial restatements, the issuance of modified going concern opinions, and adverse opinions on internal controls. These results emphasise the critical role of geopolitical events in shaping the audit process, reflecting auditors' increased perception of risk and their responses to safeguard their engagement quality and mitigate litigation risks. Our findings are robust to alternative measures of GPR and endogeneity tests. The results further show that the adverse impacts of GPR on audit outcomes are more pronounced for clients that experience high information asymmetry, exhibit weak governance oversight, lack industry-specific auditor expertise, and are located far from auditors. Likewise, our additional tests show that the unfavourable impact of GPR on audit outcomes aggravates in firms with lower gender diversity, fewer financially expert directors, and higher economic policy uncertainty. Finally, our analysis shows that firms with greater GPR face a higher likelihood of lawsuits.

Our research has important policy implications for regulatory authorities, governance professionals, industry practitioners (auditors and audit firms), and investors. First, regulators

such as the Public Company Accounting Oversight Board (PCAOB) and the Securities and Exchange Commission (SEC) should encourage more disclosures related to GPR, thereby improving transparency for auditors, investors, and other stakeholders. Although imposing a mandatory GPR disclosure requirement would be imperative for ensuring greater transparency, such regulatory harmonization may be challenging for firms to comply with because of differences in legal systems, regulatory capacities, and cultural attitudes. Therefore, regulators can instead adopt policies that promote firms to voluntarily enhance transparency by emphasizing more comprehensive disclosure of geopolitical risks. Over time, international standard-setting bodies should coordinate to develop more harmonised disclosure practices without forcing undue compliance obligations. Moreover, regulators can encourage firms to strengthen good governance, information environment, the audit committee's industry and financial expertise, and diversity to improve oversight quality in high-risk environments.

Second, we highlight the strategic role of governance boards and audit committees. We suggest that directors should work closely with auditors to predict and manage geopolitical threats by improving internal risk management systems, reducing information asymmetry, and ensuring responsiveness to external disruptions. Third, for auditors and audit firms, as GPR significantly affects audit effort and risk, audit firms should incorporate firm-level GPR (such as Caldara & Iacoviello's index, EY's Geostrategy Framework, and the Deloitte Resilience Framework) into their client evaluation and engagement planning processes. They may also benefit from specialised training and tools to assess and address GPR-related risks. Finally, investors should pay close attention to firms operating in geopolitically sensitive regions as these risks could affect firms' audit quality and financial reliability. They can also consider that increased audit fees, delays, and modified opinions may signal heightened geopolitical uncertainty.

While our global analysis enhances the validity of our findings, it is crucial to note that our cross-country analysis is limited to audit fees due to the unavailability of data for other audit outcome measures, such as audit report delays, financial restatement, and auditors' opinions about firms' internal control and going concern. Future studies may conduct cross-country analyses on these additional audit outcome indicators once comprehensive international data becomes available. In addition, including qualitative evidence into auditors' perceptions of GPR through interviews and focus group discussions may provide crucial insights into how professionals perceive, interpret and manage GPR in practice. Finally, future research may investigate the association between GPR and broader systemic risks, such as regulatory uncertainty, macroeconomic instability and financial market volatility, which may provide crucial insights into the multifaceted effects of GPR.

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TABLE 1: Descriptive statistics

This table reports the descriptive statistics for our sample. The appendix provides detailed descriptions of the variables.

	SAMPLE	Mean	P50	MIN	P25	P75	MAX	SD
<i>AUDFEE</i>	20,517	14.2427	10.5453	13.5606	14.2329	14.9414	16.8284	1.0982
<i>AUDELAY</i>	20,517	4.1011	2.9957	3.9890	4.0943	4.2627	5.1985	0.2268
<i>RESTATE</i>	20,517	0.1346	0.0000	0.0000	0.0000	0.0000	1.0000	0.3413
<i>GOINGCON</i>	20,517	0.1120	0.0000	0.0000	0.0000	0.0000	1.0000	0.3154
<i>DAOIC</i>	20,517	0.0525	0.0000	0.0000	0.0000	0.0000	1.0000	0.2230
<i>GPR</i>	20,517	4.5443	4.4850	4.2174	4.3098	4.7598	4.9143	0.2768
<i>SIZE</i>	20,517	6.8870	0.2979	5.5961	6.8529	8.1412	13.7947	1.9132
<i>NONAFEE</i>	20,517	9.9910	0.0000	9.9035	12.0100	13.3047	13.7705	4.8661
<i>LOSS</i>	20,517	0.2795	0.0000	0.0000	0.0000	1.0000	1.0000	0.4488
<i>BUSY</i>	20,517	0.8297	0.0000	1.0000	1.0000	1.0000	1.0000	0.3759
<i>ROA</i>	20,517	0.0030	-2.8892	-0.0049	0.0389	0.0777	0.3897	0.1867
<i>AUOP</i>	20,517	0.0842	0.0000	0.0000	0.0000	0.0000	1.0000	0.2777
<i>BIG4</i>	20,517	0.8381	0.0000	1.0000	1.0000	1.0000	1.0000	0.3683
<i>GEOSEG</i>	20,517	1.7343	1.0000	1.0000	1.7321	2.2361	4.0000	0.6529
<i>BUSSEG</i>	20,517	2.6594	1.4142	1.7321	2.4495	3.4641	3.8730	0.8522
<i>FOREIGN</i>	20,517	0.0052	0.0001	0.0003	0.0011	0.0040	0.0483	0.0107
<i>SPECIAL</i>	20,517	0.7410	0.0000	0.0000	1.0000	1.0000	1.0000	0.4381
<i>LEV</i>	20,517	0.2193	0.0000	0.0190	0.1819	0.3374	4.9429	0.2234
<i>AUCHANGE</i>	20,517	0.0678	0.0000	0.0000	0.0000	0.0000	1.0000	0.2515
<i>MB</i>	20,517	1.8359	0.9070	1.2043	1.5804	2.3029	3.4307	0.7962
<i>LITIGATION</i>	20,517	0.3603	0.0000	0.0000	0.0000	1.0000	1.0000	0.4801
<i>INHERENT</i>	20,517	0.2469	0.0000	0.1077	0.2196	0.3447	0.8831	0.1728
<i>DMA</i>	20,517	0.3411	0.0000	0.0000	0.0000	1.0000	1.0000	0.4741
<i>DSEO</i>	20,517	0.0699	0.0000	0.0000	0.0000	0.0000	1.0000	0.2550
<i>SQEMP</i>	20,517	2.8211	1.0000	1.3198	1.9950	3.3166	12.3045	2.2769

TABLE 2: Geopolitical risk and audit outcomes

This table reports the regression results examining the impact of geopolitical risk on audit outcomes, controlling for year- and firm-fixed effects. All continuous variables are winsorised at the 1st and 99th percentiles. Standard errors are clustered at the firm level, and t-statistics are reported in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively. Detailed variable definitions are provided in the appendix (Table A1).

	<i>AUDFEE</i>	<i>AUDELAY</i>	<i>RESTATE</i>	<i>GOINGCON</i>	<i>DAOIC</i>
<i>GPR</i>	0.0486 (5.06)***	0.0980 (4.21)***	0.0286 (3.09)***	0.0249 (2.68)**	0.0708 (4.18)***
<i>SIZE</i>	0.2194 (16.02)***	0.0281 (4.16)***	0.0146 (1.31)	0.0407 (4.28)***	0.0196 (2.83)***
<i>NONAFEE</i>	0.0175 (11.70)***	0.0003 (0.56)	0.0003 (0.34)	0.0021 (2.45)**	0.0006 (0.76)
<i>LOSS</i>	0.0062 (0.53)	0.0316 (6.15)***	0.0182 (1.72)*	0.0185 (1.99)**	0.0200 (2.63)***
<i>BUSY</i>	0.0571 (1.23)	0.0442 (2.96)***	0.0163 (0.51)	0.0045 (0.14)	0.0402 (1.48)
<i>ROA</i>	-0.0044 (-0.13)	-0.0095 (-0.67)	-0.0335 (-1.49)	-0.0194 (-1.08)	-0.0183 (-0.94)
<i>AUOP</i>	0.0247 (0.83)	0.0214 (1.40)	0.0044 (0.16)	0.0282 (0.86)	0.0071 (0.36)
<i>BIG4</i>	0.217 (6.04)***	0.0201 (1.57)	0.0152 (0.68)	0.0151 (0.85)	0.0155 (0.81)
<i>GEOSEG</i>	0.0283 (1.75)*	0.0153 (1.91)*	0.0091 (0.69)	0.0117 (0.86)	0.0106 (1.08)
<i>BUSSEG</i>	0.0319 (2.64)***	0.0002 (0.03)	0.0022 (0.23)	0.025 (2.59)***	0.0023 (0.35)
<i>FOREIGN</i>	1.4764 (2.40)**	0.3166 (1.00)	1.1882 (1.90)*	0.9804 (2.22)**	0.0018 (0.09)
<i>SPECIAL</i>	0.0115 (1.61)	0.0067 (1.72)*	0.0051 (0.69)	0.0044 (0.71)	0.0047 (1.04)
<i>LEV</i>	0.0329 (0.89)	0.0739 (4.43)***	0.0106 (0.41)	0.0643 (2.52)**	0.0178 (0.83)
<i>MB</i>	0.0109 (1.21)	0.033 (8.11)***	0.0089 (1.29)	0.0006 (0.09)	0.0104 (2.00)**
<i>LITIGATION</i>	0.0245 (1.31)	0.008 (1.23)	0.0138 (0.85)	0.0064 (0.36)	0.0202 (1.96)**
<i>INHERENT</i>	0.3805 (4.74)***	0.0200 (0.52)	0.0835 (1.48)	0.0784 (1.49)	0.0399 (0.93)
<i>DMA</i>	0.0027 (0.34)	0.0017 (0.45)	0.0088 (1.20)	0.0168 (2.18)**	0.0040 (0.82)
<i>DSEO</i>	0.024 (2.18)**	0.003 (0.62)	0.0166 (1.54)	0.011 (1.13)	0.0007 (0.10)
<i>SQEMP</i>	0.1322 (10.99)***	0.005 (1.24)	0.0097 (1.08)	0.0415 (4.46)***	0.0009 (0.18)
<i>CONSTANT</i>	Included	Included	Included	Included	Included
<i>Firm & year fixed effects</i>	Yes	Yes	Yes	Yes	Yes
<i>R2</i>	0.934	0.6528	0.305	0.2825	0.3482
<i>Obs</i>	20,517	20,517	20,517	20,517	20,517

TABLE 3: Geopolitical risk and audit outcomes excluding significant events

This table reports the regression results examining the impact of geopolitical risk on audit outcomes, including control variables, year and firm-fixed effects. All continuous variables are winsorised at the 1% and 99% levels. ***, **, and * denote statistical significance levels at the 1%, 5%, and 10% levels, respectively. The t-statistics are reported in parentheses. Standard errors are clustered by firm. The appendix (Table A1) provides detailed descriptions of the variables.

Panel A: Excluding the Global financial crisis-2007-2009					
	<i>AUDFEE</i>	<i>AUDELAY</i>	<i>RESTATE</i>	<i>GOINGCON</i>	<i>DAOIC</i>
<i>GPR</i>	0.0493 (5.27)***	0.0973 (4.18)***	0.0293 (3.21)***	0.0256 (2.73)***	0.0716 (4.26)***
<i>CONSTANT</i>	Included	Included	Included	Included	Included
<i>Firm & year fixed effects</i>	Yes	Yes	Yes	Yes	Yes
<i>R2</i>	0.8861	0.4888	0.2284	0.2115	0.2607
<i>Obs</i>	16,526	16,526	16,526	16,526	16,526
Panel B: Excluding 9/11 Attack-2001					
<i>GPR</i>	0.0536 (6.62)***	0.0993 (4.41)***	0.0313 (3.35)***	0.0281 (2.82)***	0.0762 (4.41)***
<i>CONSTANT</i>	Included	Included	Included	Included	Included
<i>Firm & year fixed effects</i>	Yes	Yes	Yes	Yes	Yes
<i>R2</i>	0.8581	0.5997	0.2802	0.2595	0.3199
<i>Obs</i>	19,724	19,724	19,724	19,724	19,724
Panel C: Excluding Iraq War-2003					
<i>GPR</i>	0.0263 (3.19)***	0.0978 (4.17)***	0.0207 (2.72)***	0.0218 (2.41)**	0.0626 (2.81)***
<i>CONSTANT</i>	Included	Included	Included	Included	Included
<i>Firm & year fixed effects</i>	Yes	Yes	Yes	Yes	Yes
<i>R2</i>	0.8861	0.6193	0.2894	0.2680	0.3303
<i>Obs</i>	19,482	19,482	19,482	19,482	19,482
Panel D: Excluding Syria unrest and ISIS Escalation 2014-2016					
<i>GPR</i>	0.0569 (6.82)***	0.1025 (4.98)***	0.0309 (3.29)***	0.0212 (2.14)**	0.0842 (5.88)***
<i>CONSTANT</i>	Included	Included	Included	Included	Included
<i>Firm & year fixed effects</i>	Yes	Yes	Yes	Yes	Yes
<i>R2</i>	0.8674	0.6063	0.2833	0.2624	0.3234
<i>Obs</i>	16,868	16,868	16,868	16,868	16,868
Panel E: Excluding Paris Attacks 2015					
<i>GPR</i>	0.0494 (5.27)***	0.0931 (4.14)***	0.0299 (3.13)***	0.0247 (3.07)***	0.0778 (4.87)***
<i>CONSTANT</i>	Included	Included	Included	Included	Included
<i>Firm & year fixed effects</i>	Yes	Yes	Yes	Yes	Yes
<i>R2</i>	0.8487	0.5932	0.2772	0.2567	0.3164
<i>Obs</i>	18,987	18,987	18,987	18,987	18,987

TABLE 4: Instrumental variable approach

This table presents the results addressing endogeneity in the relationship between geopolitical risk and audit outcomes, employing a heteroscedasticity-based instrumental variable approach, as outlined by Lewbel (2012). The t-statistics, shown in parentheses, are based on robust standard errors that account for heteroscedasticity and are clustered at the firm level. Continuous variables are winsorised at the 1st and 99th percentiles. Superscripts ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

	<i>AUDFEE</i>	<i>AUDELAY</i>	<i>RESTATE</i>	<i>GOINGCON</i>	<i>DAOIC</i>
<i>Instrumented GEO</i>	0.0378 (4.76)***	0.0829 (3.64)***	0.0244 (2.21)**	0.0217 (2.13)**	0.0528 (3.24)***
<i>CONSTANT</i>	Included	Included	Included	Included	Included
<i>Firm & year fixed effects</i>	Yes	Yes	Yes	Yes	Yes
<i>R²</i>	0.9289	0.6487	0.3376	0.2794	0.3286
<i>Obs</i>	19,765	19,765	19,765	19,765	19,765
<i>Underidentification test</i>					
<i>Kleibergen-Paap rk LM statistic</i>	275.87	273.43	256.47	236.54	268.69
<i>p-value</i>	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
<i>Hansen J statistic</i>	3.874	4.327	4.321	3.865	4.327
<i>p-value</i>	0.342	0.359	0.347	0.336	0.354

Table 5: PSM Analysis

Panel A shows the average treatment effects obtained from propensity score matching. We define treatment and a control group of firms based on the industry-year-median of geopolitical risk as the cut-off value, where treatment (control) firms were those with an above (below) median of geopolitical risk. Panel B presents the results based on PSM regression. The *t*-statistics shown in parentheses are based on standard errors adjusted for heteroscedasticity and clustered at the firm level. We winsorise continuous variables at the 1% and 99% levels. Superscripts ***, **, and * denote significance levels of 1%, 5%, and 10%, respectively.

Variables	Panel A: Propensity score matching		
	Treatment	Control	t- test
SIZE	7.258	6.952	1.26
NONAFEE	11.859	11.496	1.15
LOSS	0.208	0.199	1.46
BUSY	0.958	0.875	1.20
ROA	-0.034	-0.031	0.59
AUOP	0.083	0.092	0.90
BIG4	0.792	0.788	0.04
GEOSEG	2.013	1.924	1.07
BUSSEG	2.817	2.421	1.16
FORIEGN	0.006	0.008	0.68
SPECIAL	0.798	0.788	0.88
LEV	0.293	0.280	0.30
AUCHANGE	0.058	0.060	1.23
MB	1.988	1.967	0.43
LITIGATION	0.475	0.457	0.75
INHERENT	0.219	0.217	0.04
DMA	0.292	0.283	0.09
DSEO	0.083	0.082	0.14
SQEMP	3.294	2.847	1.28

Variables	Panel B: PSM Regression				
	AUDFEES	AUDDELY	RESTATE	GOINGCON	DAOIC
GPR	0.0267 (2.87)***	0.0897 (2.58)**	0.0194 (2.17)***	0.0107 (1.99)**	0.0638 (2.39)**
CONSTANT	Included	Included	Included	Included	Included
Control Variables	Yes	Yes	Yes	Yes	Yes
Firm & year fixed effects	Yes	Yes	Yes	Yes	Yes
R2	0.8984	0.5738	0.2593	0.2351	0.2869
Obs	1,984	1,984	1,984	1,984	1,984

TABLE 6. Moderating effects of information asymmetry on the relationship between geopolitical risk and audit outcomes.

This table examines the moderating influence of analyst coverage (*ANALYST*) on the relation between geopolitical risk and audit outcomes. We categorise firms into two groups: those with high analyst coverage (*HANALYST*) and those with low analyst coverage (*LANALYST*), based on the median value of analyst coverage. The estimated models for each subgroup include a range of control variables, and year and firm-fixed effects. All continuous variables are winsorised at the 1% and 99% levels. ***, **, and * denote statistical significance levels at the 1%, 5%, and 10% levels, respectively. The t-statistics are reported in parentheses. Standard errors are clustered by firm. The appendix (Table A1) provides detailed descriptions of the variables.

	<i>AUDFEE</i>			<i>AUDELAY</i>			<i>RESTATE</i>		
	<i>HANALYST</i>	<i>LANALYST</i>	Diff in coeff. & χ^2 (1) vs (2)	<i>HANALYST</i>	<i>LANALYST</i>	Diff in coeff. & χ^2 (4) vs (5)	<i>HANALYST</i>	<i>LANALYST</i>	Diff in coeff. & χ^2 (7) vs (8)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>GPR</i>	0.0128 (2.26)**	0.0634 (7.48)***	0.0506 [34.34]***	0.0589 (2.08)**	0.1294 (5.99)***	0.0705 [43.76]***	0.0129 (2.23)**	0.0425 (4.34)***	0.0296 [25.23]***
<i>CONSTANT</i>	Included	Included		Included	Included		Included	Included	
<i>Firm & year fixed effects</i>	Yes	Yes		Yes	Yes		Yes	Yes	
<i>R2</i>	0.8953	0.9451		0.6385	0.6417		0.3437	0.3515	
<i>Obs</i>	10,167	10,350		10,167	10,350		10,167	10,350	
<i>GOINGCON</i>			Diff in coeff. & χ^2 (1) vs (2)	<i>DAOIC</i>			Diff in coeff. & χ^2 (4) vs (5)		
	<i>HANALYST</i>	<i>LANALYST</i>		<i>HANALYST</i>	<i>LANALYST</i>				
	(1)	(2)	(3)	(4)	(5)	(6)			
<i>GPR</i>	0.0137 (2.36)**	0.0313 (2.95)***	0.0176 [18.36]***	0.0426 (2.51)**	0.0895 (6.30)***	0.0469 [33.43]***			
<i>CONSTANT</i>	Included	Included		Included	Included				
<i>Firm & year fixed effects</i>	Yes	Yes		Yes	Yes				
<i>R2</i>	0.318	0.3253		0.3814	0.3951				
<i>Obs</i>	10,167	10,350		10,167	10,350				

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Table 7: Moderating effects of distance between audit office and client firms on the relationship between geopolitical risk and audit outcomes

This table examines the moderating influence of the distance of the audit office from the client firm’s headquarters on the relation between geopolitical risk and audit outcomes. *LDIST* is defined as long distance, and *SDIST* as short distance. The estimated models for each subgroup include a range of control variables, and year and firm-fixed effects. All continuous variables are winsorised at the 1% and 99% levels. ***, **, and * denote statistical significance levels at the 1%, 5%, and 10% levels, respectively. The t statistics are reported in parentheses. Standard errors are clustered by firm. The appendix (Table A1) provides detailed descriptions of the variables.

	<i>AUDFEE</i>			<i>AUDELAY</i>			<i>RESTATE</i>		
	<i>SDIST</i>	<i>LDIST</i>	Diff in coeff. & χ^2 (1) vs (2)	<i>SDIST</i>	<i>LDIST</i>	Diff in coeff. & χ^2 (4) vs (5)	<i>SDIST</i>	<i>LDIST</i>	Diff in coeff. & χ^2 (7) vs (8)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>GPR</i>	0.0167	0.0381	0.0214	0.0116	0.0460	0.0344	0.0079	0.0188	0.0109
	(2.36)**	(4.17)***	[24.53]***	(1.69)*	(2.26)***	[29.85]***	(1.73)*	(2.61)**	[10.42]***
<i>CONSTANT</i>	Included	Included		Included	Included		Included	Included	
<i>Firm & year fixed effects</i>	Yes	Yes		Yes	Yes		Yes	Yes	
<i>R2</i>	0.9254	0.9491		0.5782	0.6532		0.3317	0.281	
<i>Obs</i>	5,139	4,031		5,139	4,031		5,139	4,031	
<i>GOINGCON</i>				<i>DAOIC</i>					
	<i>SDIST</i>	<i>LDIST</i>	Diff in coeff. & χ^2 (1) vs (2)	<i>SDIST</i>	<i>LDIST</i>	Diff in coeff. & χ^2 (4) vs (5)			
	(1)	(2)	(3)	(4)	(5)	(6)			
<i>GPR</i>	0.0107	0.0241	0.0134	0.0091	0.0439	0.0348			
	(1.82)*	(2.39)**	[11.43]***	(1.02)	(2.78)***	[29.96]***			
<i>CONSTANT</i>	Included	Included		Included	Included				
<i>Firm & year fixed effects</i>	Yes	Yes		Yes	Yes				
<i>R2</i>	0.2719	0.3017		0.2982	0.3227				
<i>Obs</i>	5,139	4,031		5,139	4,031				

TABLE 8: Moderating effects of governance mechanisms on the relationship between geopolitical risk and audit outcomes.

This table examines the moderating influence of board independence (*BIND*) and institutional ownership (*IODED*) of the client firm on the relationship between geopolitical risk and audit outcomes. It presents the regression results between GPR and audit outcomes, including a range of control variables and year and firm fixed effects, for subgroups of the moderating variable – board independence (*HBIND* vs. *LBIND* and *HIODED* vs. *LIODED*). We classify firm-year observations with higher (lower) than median *BIND* and *IODED* as groups with high (low) governance monitoring. All continuous variables are winsorised at the 1% and 99% levels. ***, **, and * denote statistical significance levels at the 1%, 5%, and 10% levels, respectively. The t-statistics are reported in parentheses. Standard errors are clustered by firm. The appendix (Table A1) provides detailed descriptions of the variables.

	<i>AUDFEE</i>			<i>AUDELAY</i>			<i>RESTATE</i>		
	<i>HBIND</i>	<i>LBIND</i>	Diff in coeff. & χ^2 (1) vs (2)	<i>HBIND</i>	<i>LBIND</i>	Diff in coeff. & χ^2 (4) vs (5)	<i>HBIND</i>	<i>LBIND</i>	Diff in coeff. & χ^2 (7) vs (8)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>GPR</i>	0.0148 (1.77)*	0.0769 (8.55)***	0.0621 [38.69]***	0.0439 (2.21)**	0.0988 (4.34)***	0.0549 [35.43]***	0.0072 (1.98)**	0.0298 (4.25)***	0.0226 [25.37]***
<i>CONSTANT</i>	Included	Included		Included	Included		Included	Included	
<i>Firm & year fixed effects</i>	Yes	Yes		Yes	Yes		Yes	Yes	
<i>R2</i>	0.9385	0.9565		0.6775	0.7023		0.4034	0.4399	
<i>Obs</i>	3,806	4,063		3,806	4,063		3,806	4,063	
<i>GOINGCON</i>				<i>DAOIC</i>					
	<i>HBIND</i>	<i>LBIND</i>	Diff in coeff. & χ^2 (1) vs (2)	<i>HBIND</i>	<i>LBIND</i>	Diff in coeff. & χ^2 (4) vs (5)			
	(1)	(2)	(3)	(4)	(5)	(6)			
<i>GPR</i>	0.0134 (2.02)**	0.0540 (4.36)***	0.0406 [32.98]***	0.0411 (2.11)**	0.0980 (6.54)***	0.0569 [36.12]***			
<i>CONSTANT</i>	Included	Included		Included	Included				
<i>Firm & year fixed effects</i>	Yes	Yes		Yes	Yes				
<i>R2</i>	0.3704	0.4044		0.4227	0.4866				
<i>Obs</i>	3,806	4,063		3,806	4,063				

	AUDFEE			AUDELAY			RESTATE		
	<i>HIODED</i>	<i>LIODED</i>	Diff in coeff. & χ^2 (1) vs (2)	<i>HIODED</i>	<i>LIODED</i>	Diff in coeff. & χ^2 (4) vs (5)	<i>HIODED</i>	<i>LIODED</i>	Diff in coeff. & χ^2 (7) vs (8)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>GPR</i>	0.0091 (1.69)*	0.0293 (2.89)***	0.0202 [21.64]***	0.0134 (1.72)*	0.0489 (3.58)***	0.0355 [31.23]***	0.0101 (1.92)*	0.0227 (2.56)**	0.0126 [11.35]***
<i>CONSTANT</i>	Included	Included		Included	Included		Included	Included	
<i>Firm & year fixed effects</i>	Yes	Yes		Yes	Yes		Yes	Yes	
<i>R2</i>	0.9149	0.9476		0.6295	0.7114		0.3371	0.3829	
<i>Obs</i>	10,259	10,258		10,259	10,258		10,259	10,258	
<i>GOINGCON</i>			Diff in coeff. & χ^2 (1) vs (2)	<i>DAOIC</i>			Diff in coeff. & χ^2 (4) vs (5)		
	<i>HIODED</i>	<i>LIODED</i>		<i>HIODED</i>	<i>LIODED</i>				
	(1)	(2)	(3)	(4)	(5)	(6)			
<i>GPR</i>	0.0062 (0.56)	0.0193 (2.51)**	0.0131 [11.41]***	0.0272 (2.26)**	0.0449 (3.49)***	0.0177 [18.54]***			
<i>CONSTANT</i>	Included	Included		Included	Included				
<i>Firm & year fixed effects</i>	Yes	Yes		Yes	Yes				
<i>R2</i>	0.3272	0.3602		0.3503	0.4507				
<i>Obs</i>	10,259	10,258		10,259	10,258				

Table 9: Moderating effects of specialist auditors on the relationship between geopolitical risk and audit outcomes

This table examines the moderating influence of specialized versus non-specialized auditors on the relationship between geopolitical risk and audit outcomes. *SPECIALIST* is a dummy variable taking the value of one for the market leader in audit work in the SIC two-digit industry by client sales, and zero otherwise, consistent with Srinidhi et al. (2014). *Non-SPECIALIST* is a dummy, taking the value of one other than the market leader in audit work in the SIC two-digit industry by client sales and zero otherwise. The *t*-statistics shown in parentheses are based on standard errors adjusted for heteroscedasticity and clustered at the firm level. Superscripts ***, **, and * denote significance levels of 1%, 5%, and 10%, respectively

	<i>AUDFEE</i>			<i>AUDELAY</i>			<i>RESTATE</i>		
	<i>SPECIALIST</i>	<i>Non-SPECIALIST</i>	Diff in coeff. & χ^2 (1) vs (2)	<i>SPECIALIST</i>	<i>Non-SPECIALIST</i>	Diff in coeff. & χ^2 (4) vs (5)	<i>SPECIALIST</i>	<i>Non-SPECIALIST</i>	Diff in coeff. & χ^2 (7) vs (8)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>GPR</i>	0.0203 (2.64)**	0.0348 (3.36)***	0.0145 [13.80]***	0.0141 (2.18)**	0.0318 (3.13)***	0.0177 [14.56]***	0.0082 (0.39)	0.0255 (2.44)**	0.0173 [14.13]***
<i>CONSTANT</i>	Included	Included		Included	Included		Included	Included	
<i>Firm & year fixed effects</i>	Yes	Yes		Yes	Yes		Yes	Yes	
<i>R2</i>	0.9163	0.9499		0.6446	0.6919		0.3414	0.3965	
<i>Obs</i>	3,402	8,140		3,402	8,140		3,402	8,140	
	<i>GOINGCON</i>			<i>DAOIC</i>					
	<i>SPECIALIST</i>	<i>Non-SPECIALIST</i>	Diff in coeff. & χ^2 (1) vs (2)	<i>SPECIALIST</i>	<i>Non-SPECIALIST</i>	Diff in coeff. & χ^2 (4) vs (5)			
	(1)	(2)	(3)	(4)	(5)	(6)			
<i>GPR</i>	0.0098 (1.76)*	0.0241 (2.54)**	0.0143 [12.42]***	0.0179 (1.60)	0.0371 (2.91)***	0.0192 [19.43]***			
<i>CONSTANT</i>	Included	Included		Included	Included				
<i>Firm & year fixed effects</i>	Yes	Yes		Yes	Yes				
<i>R2</i>	0.3394	0.3462		0.4095	0.4203				
<i>Obs</i>	3,402	8,140		3,402	8,140				

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Table 10. The impact of geopolitical risk on the likelihood of lawsuits and disclosure of material weaknesses on internal controls

Panel A (B) of this table reports the estimated probit regression results examining the impact of GPR on the likelihood of lawsuits (disclosure of material weaknesses on internal controls – MW). The model includes a set of control variables, along with year and firm fixed effects, to account for unobserved heterogeneity across firms and time. All continuous variables are winsorised at the 1% and 99% levels. ***, **, and * denote statistical significance levels at the 1%, 5%, and 10% levels, respectively. The t-statistics are reported in parentheses. Standard errors are clustered by firm. The appendix (Table A1) provides detailed descriptions of the variables.

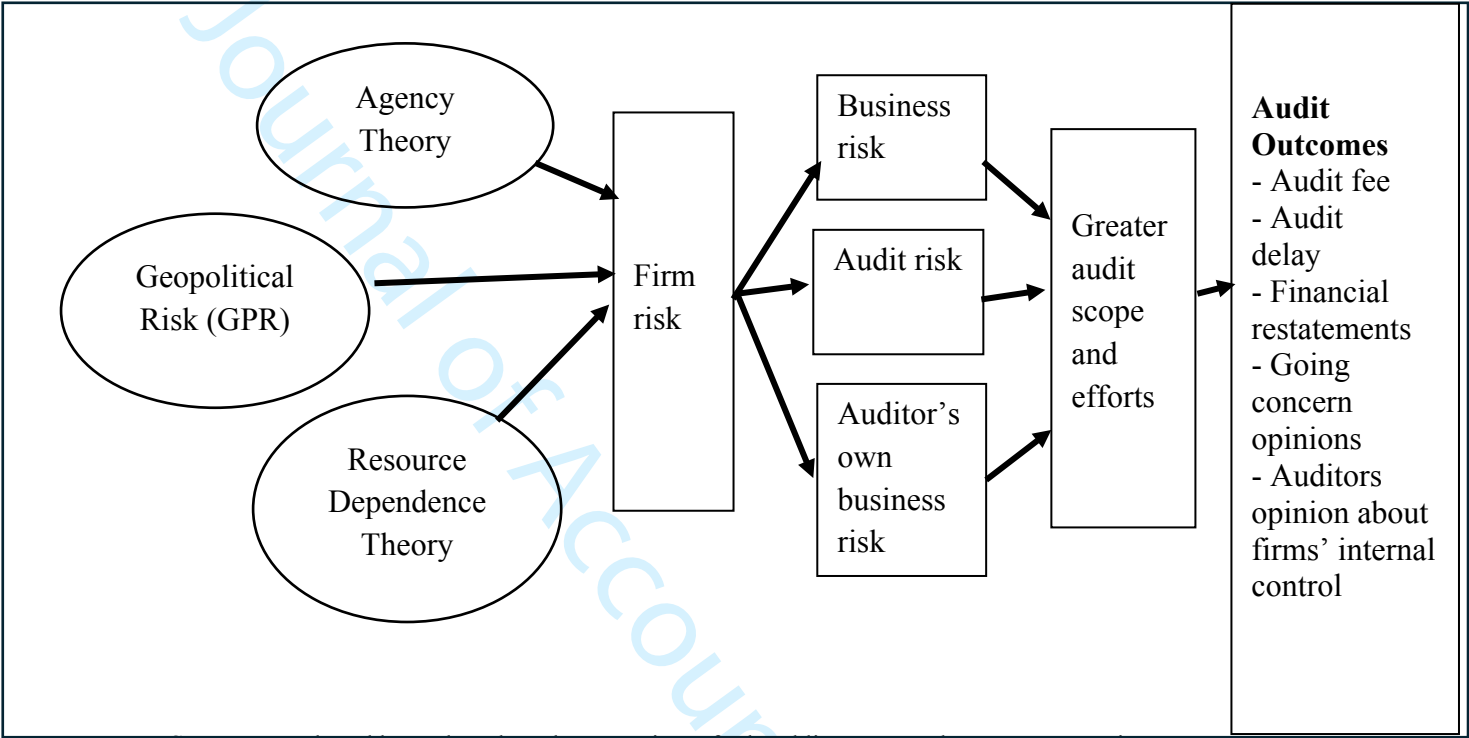
Panel A – Lawsuits	
<i>GPR</i>	0.0374 (4.52)***
<i>CONSTANT</i>	Included
<i>Firm & year fixed effects</i>	Yes
<i>R2</i>	0.1987
<i>Obs</i>	20,517
Panel B - Disclosure of material weaknesses on internal controls (MW)	
<i>GPR</i>	0.0452 (9.03)***
<i>CONSTANT</i>	Included
<i>Firm & year fixed effects</i>	Yes
<i>R2</i>	0.2384
<i>Obs</i>	20,517

TABLE 11: Geopolitical risk and audit fee: Cross-Country Evidence

This table reports the regression results examining the impact of geopolitical risk on audit outcomes, incorporating a range of control variables across 36 countries. The model includes country-year and firm-fixed effects. All continuous variables are winsorised at the 1% and 99% levels. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively. t-statistics are reported in parentheses, and standard errors are clustered at the firm level. Detailed variable descriptions are provided in the appendix (Table A1).

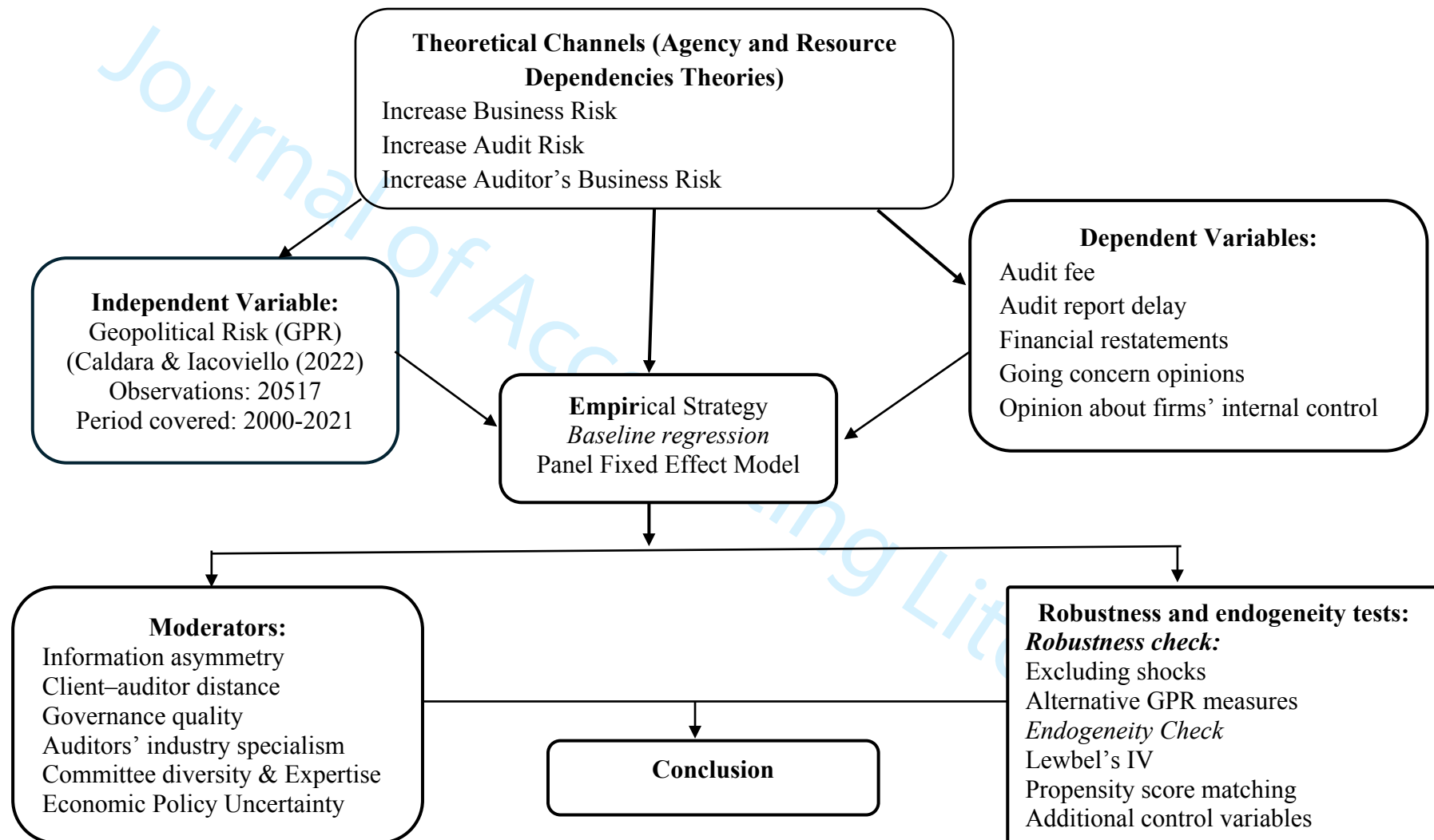
	<i>GLOBAL</i>	<i>Non-US</i>	<i>Emerging Countries</i>
<i>GPR</i>	0.0503 (5.26)***	0.0463 (4.95)***	0.0271 (2.83)***
<i>SIZE</i>	0.5295 (36.75)***	0.4953 (34.47)***	0.2145 (14.96)***
<i>LOSS</i>	0.0638 (7.57)***	0.0598 (7.04)***	0.0259 (3.00)***
<i>BUSY</i>	0.0258 (2.24)**	0.0245 (2.08)**	0.0106 (0.90)
<i>ROA</i>	-0.0494 (-8.13)***	-0.0467 (-7.62)***	-0.0202 (-3.32)***
<i>AUOP</i>	-0.0059 (-0.86)	-0.0053 (-0.81)	-0.0023 (-0.38)
<i>BIG4</i>	0.2969 (16.32)***	0.2789 (15.26)***	0.1208 (6.60)***
<i>GEOSEG</i>	0.2980 (10.82)***	0.2792 (10.15)***	0.1209 (4.39)***
<i>BUSSEG</i>	0.0337 (4.79)***	0.0315 (4.43)***	0.0136 (1.96)*
<i>FOREIGN</i>	0.5416 (7.55)***	0.5077 (7.07)***	0.2199 (3.09)***
<i>SPECIAL</i>	0.0107 (6.61)***	0.0102 (6.12)***	0.0044 (2.69)***
<i>LEV</i>	0.2341 (4.95)***	0.2198 (4.69)***	0.0952 (2.02)**
<i>MB</i>	0.0011 (2.26)**	0.0013 (2.12)**	0.0006 (0.92)
<i>INHERENT</i>	0.3979 (4.95)***	0.3791 (4.69)***	0.1642 (2.11)**
<i>DMA</i>	0.0829 (3.39)***	0.0778 (3.12)***	0.0337 (1.32)
<i>SQEMP</i>	0.1383 (11.44)***	0.1298 (10.72)***	0.0562 (4.67)***
<i>CONSTANT</i>	Included	Included	Included
<i>Country, Firm & year fixed effects</i>	Yes	Yes	Yes
<i>R2</i>	0.9506	0.9475	0.9197
<i>Obs</i>	58,280	38,763	17,696

Figure 1: Conceptual framework: Geopolitical risk and audit outcomes



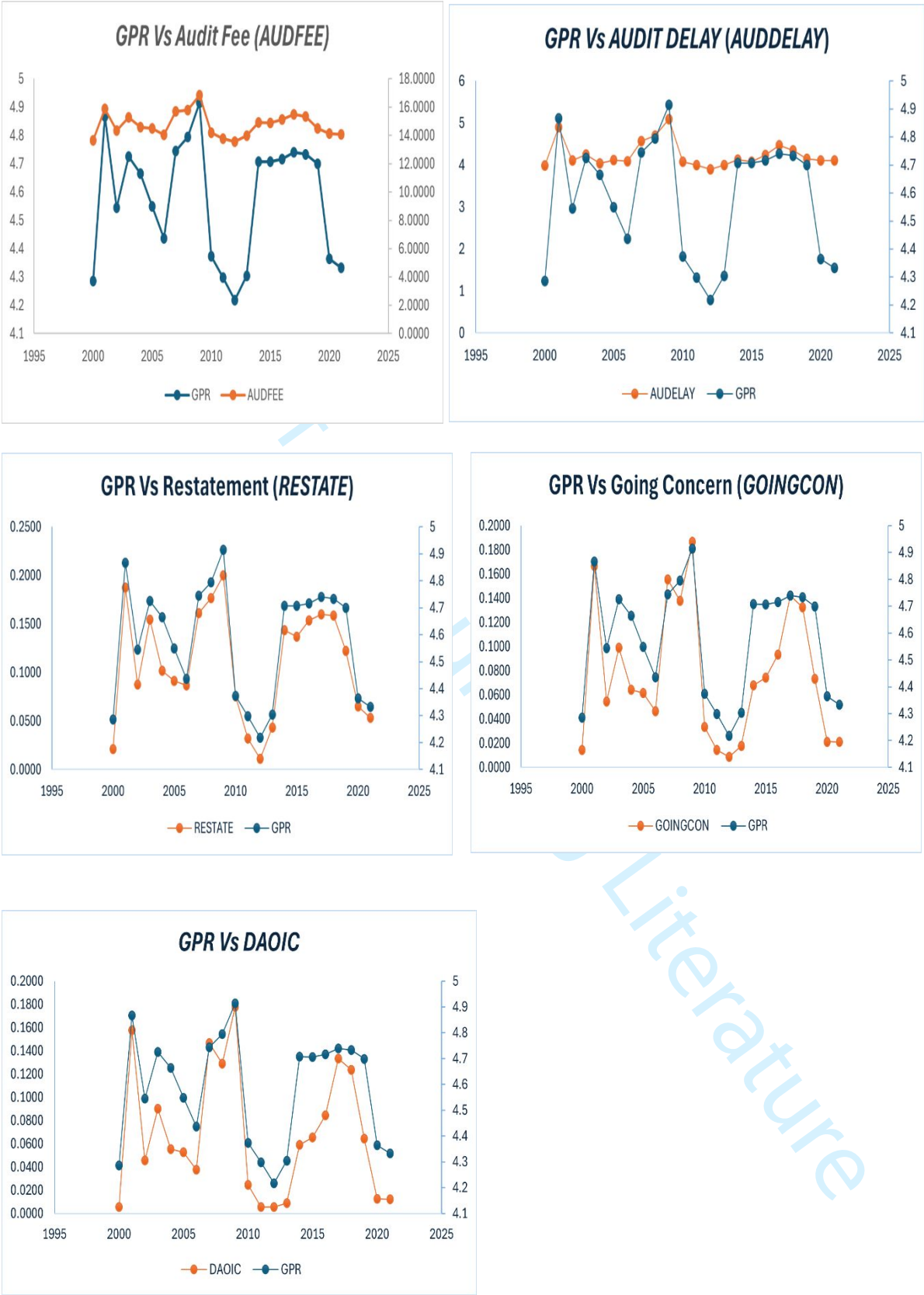
Source: Developed by authors based on a review of related literature and anonymous review comments

Figure 2: Schematic presentation of empirical strategy



Source: Developed by authors based on our empirical analysis and anonymous review comments

Figure 3: GPR and proxies of audit outcomes



Source: prepared based on data used in this study

Appendix

Table A1: Variable description

Variables	Acronym	Description	Data sources
Audit Outcome	<i>AUDFEE</i>	The natural logarithm of audit fees is adjusted as of the balance sheet date in year t.	Audit Analytics
	<i>AUDELAY</i>	The natural logarithm of the number of days between the signature date of the audit opinion and the fiscal year-end date.	
	<i>RESTATE</i>	A binary variable that takes the value one if a firm restates its financial statements in a given year, and zero otherwise.	
	<i>GOINGCON</i>	A binary variable that equals one if the auditor issues a going concern opinion, and zero otherwise.	
	<i>DAOIC</i>	A binary variable that equals one if the auditor issues a SOX 404(b) audit opinion on internal controls, and zero otherwise.	
Geopolitical Risk	<i>GPR</i>	Natural logarithm of the GPR index. The GPR index for each year is a 12-month average of the geopolitical acts calculated at the end of each fiscal year.	Caldara & Iacoviello (2022)
Firm size	<i>SIZE</i>	The natural logarithm of total assets.	Compustat
Market to book	<i>MB</i>	The ratio of a firm's equity market value to its book value.	
Leverage	<i>LEV</i>	The ratio of total debt (sum of long-term debt and debt in current liabilities) to total assets.	Compustat
Non-audit fees	<i>NONAFEE</i>	The natural logarithm of non-audit fees as of the balance sheet date.	Audit Analytics
Loss firms	<i>LOSS</i>	An indicator variable that equals one if a firm's average ROA during the periods t-1, t, and t+1 is negative and zero otherwise in year t.	Compustat
Firm with reporting date in Dec-Mar	<i>BUSY</i>	An indicator variable that equals one for a firm with a reporting date in the period Dec-Mar, and zero otherwise.	Compustat
Operating profit	<i>ROA</i>	The ratio of net income before extraordinary items to total assets (IB/AT).	Compustat
Audit opinion	<i>AUOP</i>	An indicator variable equals one for a modified audit opinion and zero for others (Item 149).	Audit Analytics
Audit quality	<i>BIG4</i>	An indicator variable equals one for a Big 4 audit firm and zero for other firms.	Audit Analytics
Geographic segments	<i>GEOSEG</i>	The square root of the number of geographic segments.	Osiris
Business segments	<i>BUSSEG</i>	The square root of the number of business segments.	Osiris
Foreign sales	<i>FOREIGN</i>	An indicator variable equals one if a firm reports foreign sales, and zero otherwise.	Compustat
Firm reports special items	<i>SPECIAL</i>	An indicator variable that equals one if the firm reports special items (COMPUSTAT SPI), and zero otherwise.	Compustat
Auditor change	<i>AUCHANGE</i>	An indicator variable that equals one if there is a change in the auditor, and zero otherwise.	Audit Analytics

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3	Litigation industry	<i>LITIGATION</i>	A binary variable that takes the value one for industries associated with high litigation risk (SIC codes: 28, 35, 36, 38, 60, 67, and 73), and zero otherwise.	Compustat
4				
5	Inherent risk	<i>INHERENT</i>	This is the sum of receivables and inventory, scaled by total assets	Compustat
6	Acquisition activity	<i>M&A</i>	An indicator variable that equals one if the firm is engaged in a merger or acquisition, and zero otherwise.	Compustat
7				
8	Seasoned equity offerings	<i>SEO</i>	An indicator variable equals 1 if the number of shares outstanding (CSHO) increased by 1 percent or more, and zero otherwise.	Compustat
9				
10	Number of employees	<i>SQEMP</i>	The square root of the number of employees.	Compustat
11	Probability of insider trading	<i>PIN</i>	The probability of insider trading (PIN) reflects the probability of an informed trader submitting a specific order.	Stephen Brown's website
12				
13	Institutional ownership	<i>IODED</i>	The average ownership proportion of institutional investors over the four quarters of the firm's financial.	13F
14				
15	Analyst coverage	<i>ANALYST</i>	The number of analysts following the firm.	I/B/E/S
16	Board independence	<i>BIND</i>	The percentage of outside directors on the board in year t. We first use BoardEX database to obtain this variable. We use the institutional shareholder services (ISS) database to obtain missing values for BI.	ISS
17				
18				
19				
20	Specialist auditor	<i>SPECIALIST</i>	An indicator variable that classifies an audit office as belonging to a specialist auditor if it has the largest or second largest market share in a two-digit industry, and zero otherwise.	Compustat
21				
22	Non-specialist auditor	<i>Non-SPECIALIST</i>	An indicator variable that classifies an audit office as belonging to a non-specialist auditor if it does not have the largest or second largest market share in a two-digit industry.	Compustat
23				
24	Lawsuits	<i>LAWSUIT</i>	An indicator variable, which equals one if, in any given year, a lawsuit is initiated, and zero otherwise.	Audit Analytics
25				
26	The distance of the audit office from the client	<i>LDIST</i>	Subgroup consisting of firms that are neither within a 100-kilometer radius nor in the same Metropolitan State Authority (MSA).	Audit Analytics
27	firm's headquarters	<i>SDIST</i>	Subgroup with firms located within a 100-kilometer radius or in the same metropolitan statistical area (MSA) of the firm's auditor.	Audit Analytics
28				
29				
30	Economic policy uncertainty	<i>EPU</i>	The monthly economic policy uncertainty index compiled by Baker et al. (2016).	Policy uncertainty database
31				
32	Per capita income	<i>Per capita income</i>	The natural logarithm of county-level per capita income	U.S. Census Bureau
33	Population	<i>Population</i>	The natural logarithm of the county's population	U.S. Census Bureau
34	Cost of Living	<i>Cost of Living</i>	The county's cost of living index	U.S. Census Bureau
35	Education	<i>Education</i>	The percentage of the population with a college or higher degree	U.S. Census Bureau
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Table A2: Geopolitical risk and audit outcomes: Alternative Proxies

This table reports the regression results examining the impact of geopolitical risk on audit outcomes, controlling for year- and firm-fixed effects, using alternative geopolitical risk. All continuous variables are winsorised at the 1% and 99% levels. ***, **, and * denote statistical significance levels at the 1%, 5%, and 10% levels, respectively. The t-statistics are reported in parentheses. Standard errors are clustered by firm. The appendix (Table A1) provides detailed descriptions of the variables.

Panel A: Geopolitical Threats (GPT)					
	<i>AUDFEE</i>	<i>AUDELAY</i>	<i>RESTATE</i>	<i>GOINGCON</i>	<i>DAOIC</i>
<i>GPT</i>	0.0246 (3.54)***	0.0451 (2.98)***	0.0274 (2.75)***	0.0123 (1.99)**	0.0341 (2.31)**
<i>CONSTANT</i>	Included	Included	Included	Included	Included
<i>Firm & year fixed effects</i>	Yes	Yes	Yes	Yes	Yes
<i>R²</i>	0.8326	0.5892	0.2715	0.2525	0.3098
<i>Obs</i>	20,517	20,517	20,517	20,517	20,517
Panel B: Geopolitical Acts (GPA)					
	<i>AUDFEE</i>	<i>AUDELAY</i>	<i>RESTATE</i>	<i>GOINGCON</i>	<i>DAOIC</i>
<i>GPA</i>	0.0318 (4.23)***	0.0311 (2.84)***	0.0206 (2.54)**	0.0156 (2.28)**	0.0370 (2.87)***
<i>CONSTANT</i>	Included	Included	Included	Included	Included
<i>Firm & year fixed effects</i>	Yes	Yes	Yes	Yes	Yes
<i>R²</i>	0.8153	0.5018	0.2345	0.2148	0.2671
<i>Obs</i>	20,517	20,517	20,517	20,517	20,517

Table A3: Geopolitical risk and audit fee: additional macroeconomic control variables

This table presents the regression results analysing the relationship between audit fees and geopolitical risk while accounting for key macroeconomic control variables. The model includes Per Capita Income, the natural logarithm of county-level per capita income; Population, the natural logarithm of the county's population; Cost of Living, which represents the county's cost of living index; and Education, measured as the percentage of the population with a college or higher degree. The regression incorporates year and firm-fixed effects, with all continuous variables winsorised at the 1% and 99% levels. Statistical significance is indicated by ***, **, and * at the 1%, 5%, and 10% levels, respectively. The t-statistics are reported in parentheses, and standard errors are clustered at the firm level. Detailed variable descriptions are provided in the appendix (Table A1).

Variables	<i>AUDFEE</i>	<i>AUDELY</i>	<i>RESTATE</i>	<i>GOINGCON</i>	<i>DAOIC</i>
<i>GPR</i>	0.0369 (3.72)***	0.0738 (3.11)***	0.0214 (2.31)**	0.0189 (2.02)**	0.0534 (3.18)***
<i>Per Capita Income</i>	0.0138 (1.52)	0.0444 (1.97)**	0.0091 (0.88)	0.0065 (0.54)	0.0207 (1.41)
<i>Population</i>	-0.0510 (-1.18)	-0.0854 (-0.95)	-0.0498 (-0.70)	-0.0259 (-0.62)	-0.0326 (-1.39)
<i>Cost of Living</i>	0.0003 (0.25)	0.0004 (0.17)	0.0001 (0.09)	0.0001 (0.06)	0.0002 (0.19)
<i>Education</i>	0.0034 (0.42)	0.0046 (0.53)	0.0016 (0.24)	0.0009 (0.11)	0.0041 (0.32)
<i>CONSTANT</i>	Included	Included	Included	Included	Included
<i>Control Variables</i>	Yes	Yes	Yes	Yes	Yes
<i>Firm & year fixed effects</i>	Yes	Yes	Yes	Yes	Yes
<i>R²</i>	0.9137	0.6297	0.2769	0.2584	0.3239
<i>Obs</i>	12,542	12,542	12,542	12,542	12,542

Table A4: Moderating effects of audit committee characteristics on the relationship between geopolitical risk and audit outcomes

This table investigates the moderating effects of audit committee gender diversity (*GENDER*) and financial expertise (*EXPERTISE*) on the relationship between geopolitical risk (GPR) and audit outcomes. The estimated model incorporates a set of control variables as well as year and firm fixed effects. The analysis is conducted separately for subgroups based on the moderating variables—high vs. low gender diversity (*HGENDER* vs. *LGENDER*) and high vs. low financial expertise (*HEXPERTISE* vs. *LEXPERTISE*). Firm-year observations are classified as having high or low audit committee characteristics based on whether *GENDER* and *EXPERTISE* values are above or below the sample median. All continuous variables are winsorised at the 1st and 99th percentiles. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively. t-statistics are reported in parentheses. Detailed variable definitions are provided in the appendix (Table A1).

	<i>AUDFEE</i>			<i>AUDELAY</i>			<i>RESTATE</i>		
	<i>HGENDER</i>	<i>LGENDER</i>	Diff in coeff. & χ^2 (1) vs (2)	<i>HGENDER</i>	<i>LGENDER</i>	Diff in coeff. & χ^2 (4) vs (5)	<i>HGENDER</i>	<i>LGENDER</i>	Diff in coeff. & χ^2 (7) vs (8)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>GPR</i>	0.0174	0.0352	0.0178	0.0115	0.0322	0.0207	0.0063	0.0265	0.0202
	(2.25)**	(3.45)***	[15.01]***	(1.88)*	(3.22)***	[22.16]***	(0.38)	(2.41)**	[21.30]***
<i>CONSTANT</i>	Included	Included		Included	Included		Included	Included	
<i>Firm & year fixed effects</i>	Yes	Yes		Yes	Yes		Yes	Yes	
<i>R2</i>	0.9084	0.9325		0.6354	0.6875		0.3348	0.3895	
<i>Obs</i>	3,118	3,117		3,118	3,117		3,118	3,117	
<i>GOINGCON</i>				<i>DAOIC</i>					
	<i>HGENDER</i>	<i>LGENDER</i>	Diff in coeff. & χ^2 (1) vs (2)	<i>HGENDER</i>	<i>LGENDER</i>	Diff in coeff. & χ^2 (4) vs (5)			
	(1)	(2)	(3)	(4)	(5)	(6)			
<i>GPR</i>	0.0084	0.0242	0.0158	0.0153	0.0375	0.0222			
	(1.46)	(2.53)**	[14.13]***	(1.31)	(2.96)***	[24.13]***			
<i>CONSTANT</i>	Included	Included		Included	Included				
<i>Firm & year fixed effects</i>	Yes	Yes		Yes	Yes				
<i>R2</i>	0.3267	0.3381		0.4053	0.4150				
<i>Obs</i>	3,118	3,117		3,118	3,117				

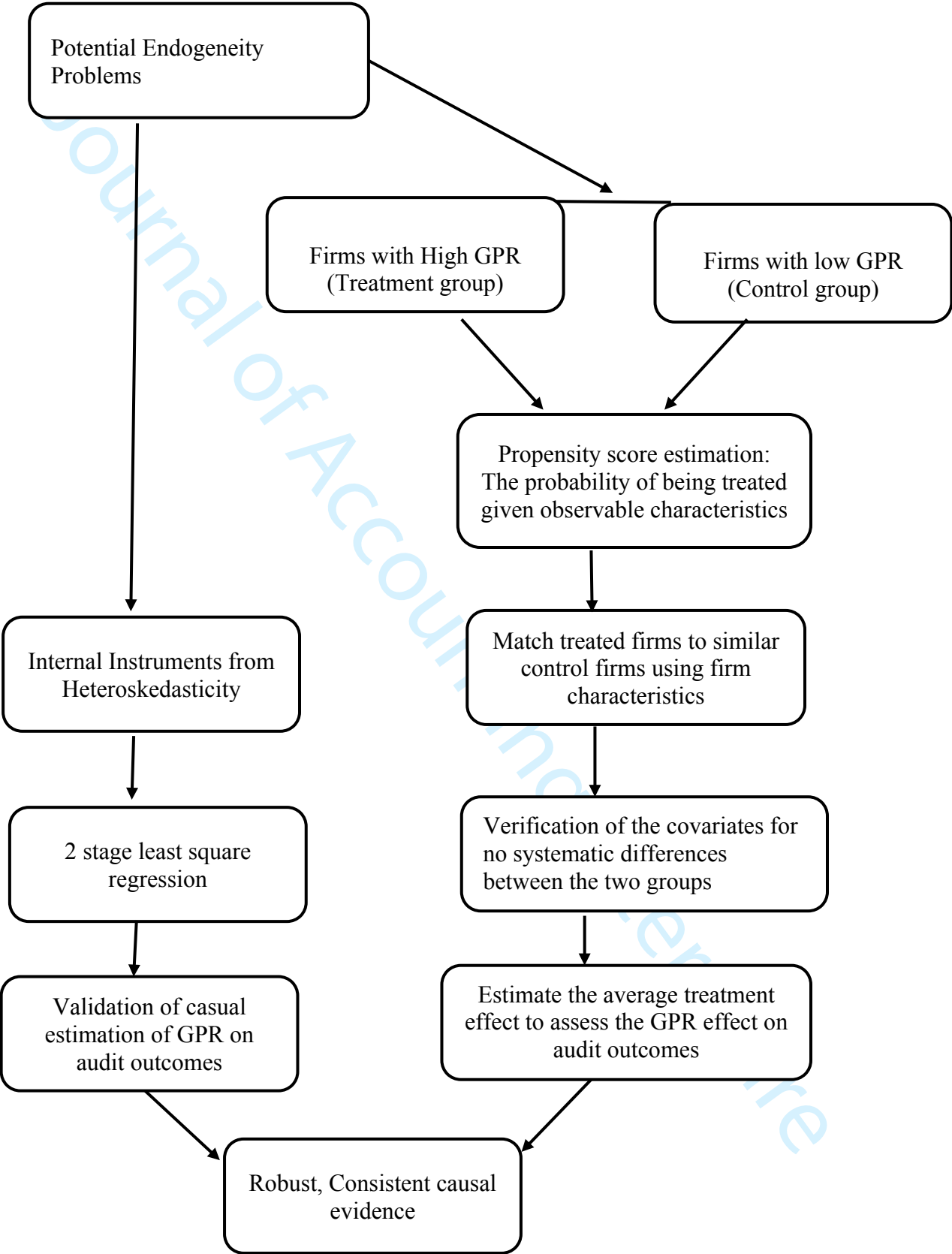
	AUDFEE			AUDELAY			RESTATE		
	HEXPERTISE	LEXPERTISE	Diff in coeff. & χ^2 (1) vs (2)	HEXPERTISE	LEXPERTISE	Diff in coeff. & χ^2 (4) vs (5)	HEXPERTISE	LEXPERTISE	Diff in coeff. & χ^2 (7) vs (8)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
GPR	0.0218	0.0394	0.0176	0.0215	0.0392	0.0177	0.0141	0.0352	0.0211
	(2.76)***	(3.72)***	[14.96]***	(2.77)***	(3.75)***	[14.90]***	(2.21)**	(3.52)***	[22.09]***
CONSTANT	Included	Included		Included	Included		Included	Included	
Firm & year fixed effects	Yes	Yes		Yes	Yes		Yes	Yes	
R2	0.9089	0.9354		0.6376	0.6883		0.3357	0.3903	
Obs	3,118	3,117		3,118	3,117		3,118	3,117	
GOINGCON			DAOIC						
	HEXPERTISE	LEXPERTISE	Diff in coeff. & χ^2 (1) vs (2)	HEXPERTISE	LEXPERTISE	Diff in coeff. & χ^2 (4) vs (5)			
	(1)	(2)	(3)	(4)	(5)	(6)			
GPR	0.0089	0.0285	0.0196	0.0106	0.0272	0.0166			
	(0.45)	(2.71)***	[20.43]***	(1.87)*	(2.83)***	[15.32]***			
CONSTANT	Included	Included		Included	Included				
Firm & year fixed effects	Yes	Yes		Yes	Yes				
R2	0.3272	0.3394		0.4058	0.4164				
Obs	3,118	3,117		3,118	3,117				

Table A5. Moderating effects of economic policy uncertainty on the relationship between geopolitical risk and audit outcomes

This table presents the regression results between GPR and audit outcomes, including a range of control variables and year and firm fixed effects for subgroups of the economic policy uncertainty (*HEPU* vs. *LEPU*). We have divided the values for economic policy into high (*HEPU*) and low (*LEPU*) categories based on their median value. All continuous variables are winsorised at the 1% and 99% levels. ***, **, and * denote statistical significance levels at the 1%, 5%, and 10% levels, respectively. The t-statistics are reported in parentheses. Marginal effects are presented in square brackets in Panels A1 and B1. Standard errors are clustered by firm. The appendix provides detailed descriptions of the variables.

	<i>AUDFEE</i>			<i>AUDELAY</i>			<i>RESTATE</i>		
	<i>HEPU</i>	<i>LEPU</i>	Diff in coeff. & χ^2 (1) vs (2)	<i>HEPU</i>	<i>LEPU</i>	Diff in coeff. & χ^2 (4) vs (5)	<i>HEPU</i>	<i>LEPU</i>	Diff in coeff. & χ^2 (7) vs (8)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>GPR</i>	0.0710 (6.64)***	0.0193 (2.19)**	0.0517 [35.47]***	0.0993 (4.58)***	0.0349 (2.72)***	0.0644 [41.54]***	0.0579 (6.47)***	0.0201 (2.32)**	0.0378 [32.25]***
<i>CONSTANT</i>	Included	Included		Included	Included		Included	Included	
<i>Firm & year fixed effects</i>	Yes	Yes		Yes	Yes		Yes	Yes	
<i>R2</i>	0.9476	0.9149		0.7114	0.6295		0.3829	0.3371	
<i>Obs</i>	10258	10259		10254	10255		10257	10258	
<i>GOINGCON</i>				<i>DAOIC</i>					
	<i>HEPU</i>	<i>LEPU</i>	Diff in coeff. & χ^2 (1) vs (2)	<i>HEPU</i>	<i>LEPU</i>	Diff in coeff. & χ^2 (4) vs (5)			
	(1)	(2)	(3)	(4)	(5)	(6)			
<i>GPR</i>	0.0363 (3.51)***	0.0162 (2.00)**	0.0201 [21.63]***	0.0739 (4.49)***	0.0372 (2.26)**	0.0367 [32.17]***			
<i>CONSTANT</i>	Included	Included		Included	Included				
<i>Firm & year fixed effects</i>	Yes	Yes		Yes	Yes				
<i>R2</i>	0.3602	0.3272		0.4507	0.3503				
<i>Obs</i>	10255	10256		10255	10256				

Figure 1A: Causal identification framework



Source: Developed by authors based on the methodology

Authors' Response to the Reviewers' Comments

Journal: Journal of Accounting Literature

Manuscript # JAL-10-2024-0274.R1

Title of the Paper: Audit in Uncertain Times: Geopolitical Risk and Audit Outcomes

Dear Professor Tom Smith

We are pleased to resubmit the revised version (**minor revisions**) of our manuscript, "*Audit in Uncertain Times: Geopolitical Risk and Audit Outcomes*," for your consideration. We sincerely appreciate the time and effort that you, the associate editor and the reviewers have devoted to providing insightful and constructive feedback. Your comments have been instrumental in enhancing the quality, clarity, and contribution of our study.

In response to the reviewers' suggestions, we have made the following key revisions to the manuscript:

- Strengthened the theoretical framework by explicitly articulating how geopolitical risk (GPR) extends agency costs and repositions auditors as strategic resources under Resource Dependence Theory (RDT).
- Expanded the discussion by integrating insights from *Ammar & Elsayed (2024)* and *Elsayed & Ammar (2020)* to more firmly situate the paper within the geopolitical risk and legitimacy literature.
- Enhanced visual presentation through the inclusion of a schematic diagram outlining the empirical strategy and a flowchart summarising the identification tests.
- Tempered the policy recommendation on mandatory GPR disclosures by acknowledging the practical challenges of achieving regulatory harmonisation across jurisdictions.
- Clarified and highlighted that the cross-country analysis is limited to audit fees due to data availability constraints.
- Expanded the future research agenda to suggest avenues for examining cross-country audit outcomes beyond audit fees, incorporating qualitative insights into auditors' perceptions of GPR, and exploring the interaction between GPR and other systemic risks.

- Improved clarity and readability by simplifying technical language and enhancing the flow and coherence across sections.

We are grateful for your constructive guidance, which has been invaluable in refining our theoretical positioning and improving the overall rigour and readability of the paper. We have provided a detailed response to the reviewer's comment below, with all corresponding revisions highlighted in **BLUE** within the manuscript.

Reviewer 1

The revisions undertaken are commendable and have significantly strengthened the manuscript. The literature review is more coherent, the methodology is well explained, the results are clearly interpreted, and the implications for practice are well articulated. I particularly value the integration of agency theory and RDT in framing the analysis of geopolitical risk, which is an original and valuable contribution to the literature.

Response: We would like to thank the reviewer for this positive note and encouraging feedback. The reviewer's insightful comments on the earlier version of the manuscript have significantly helped us improve the paper. We are pleased that the revisions have enhanced the clarity, coherence, and theoretical integration of the manuscript. We especially appreciate the reviewer's recognition of our effort to utilise Agency Theory and Resource Dependence Theory (RDT) to frame the effects of geopolitical risk on audit outcomes. We believe the revised manuscript offers a meaningful and original contribution to both the auditing and corporate governance literatures.

Comment 1: *Clarify that the cross-country analysis is limited to audit fees and highlight this limitation more prominently in the conclusion.*

Response: We appreciate the reviewer's valuable suggestion. In response, we have revised both the methodology and conclusion sections to explicitly clarify that our cross-country analysis focuses solely on audit fees, as comparable data for other audit outcomes (such as audit report delays, financial restatement, and auditors' opinions about firms' internal control and going concern) are not consistently available across countries. We now clearly acknowledge this as a limitation of our study and suggest that future research should extend the analysis to include broader audit outcomes once comprehensive international data becomes available.

Please find the following paragraph on page 37 in the manuscript:

“While our global analysis enhances the validity of our findings, it is crucial to note that our cross-country analysis is limited to audit fees due to the unavailability of data for other audit outcome measures, such as audit report delays, financial restatement, and auditors' opinions about firms' internal control and going concern. Future studies may conduct cross-country analyses on these

additional audit outcome indicators once comprehensive international data becomes available. In addition, including qualitative evidence into auditors’ perceptions of GPR through interviews and focus group discussions may provide crucial insights into how professionals perceive, interpret and manage GPR in practice. Finally, future research may investigate the association between GPR and broader systemic risks, such as regulatory uncertainty, macroeconomic instability and financial market volatility, which may provide crucial insights into the multifaceted effects of GPR.”

Comment 2: *Sharpen the articulation of the theoretical contribution by explicitly showing how geopolitical risk extends agency costs and repositions auditors as strategic resources under RDT.*

Response: We thank the reviewer for this insightful comment. In the revised manuscript, we have now explicitly demonstrated how GPR extends agency costs and redefines the auditor’s role within the lens of RDT. Specifically, we have now discussed how heightened GPR increases information asymmetry and managerial opportunism, thereby increasing agency costs. Consequently, auditors need to exert greater effort and professional skepticism to mitigate these risks, often resulting in higher audit fees, audit delays, and more conservative audit opinions. Likewise, we explain that under RDT, auditors become critical strategic resources, providing legitimacy, credibility, and stability during periods of geopolitical turbulence by offering assurance to financial statements and mitigating external uncertainty. We believe the integration of these aspects clarifies the mechanism through which GPR affects audit outcomes and enhances the theoretical depth of our study.

Please find the following paragraphs on pages 10-11 in the manuscript:

“Agency theory posits that firms’ managers (agents), responsible for making critical decisions, are more informed than the owners (principals) about the risks stemming from the external environment, such as GPR. Hence, during heightened geopolitical uncertainty, firms face increased business risks (Stolbov & Shchepeleva, 2020), which incentivises managers to withhold and control information from owners to protect their interests, aggravating information asymmetry and monitoring challenges. For example, during periods of geopolitical uncertainty, managers may

become more opportunistic by manipulating earnings, allowing insider trading, delaying disclosures and misrepresenting risk exposure to safeguard their interests and maintain investor confidence (Richardson, 2000; Kraft et al., 2014; Yang, Wang & Xue, 2021). A recent study conducted by Mekhaimer et al. (2024) also supports this view by documenting a positive influence of political uncertainty on disclosure complexity and information obfuscation, as managers are likely to conceal poor financial performance during uncertain times. Thus, agency theory suggests that managers may engage in withholding and manipulating information during periods of heightened GPR to safeguard their interests, thereby impairing firms' information environment. This, in turn, elevates firms' agency costs, as external monitoring becomes more costly and complex. Consequently, auditors are required to exert greater effort, allocate more resources, and exercise professional scepticism to mitigate these risks, often resulting in higher audit fees, extended audit report delays, and more conservative audit opinions, ultimately leading to adverse audit outcomes.

Likewise, RDT offers a theoretical lens that helps explain the association between GPR and audit outcomes. RDT highlights how a firm depends on external resources, such as financial institutions, regulations and cooperative stakeholders, to maintain functional and business stability. GPR disrupts the external environment by causing volatility in access to critical resources, including supply chains (Bednarski et al., 2025), financing (Nguyen & Thuy, 2023), and regulatory support, thereby increasing business and audit complexities. These complexities can not only impact a firm's operational and business risks but also hinder auditors' ability to obtain reliable evidence and uphold audit quality, ultimately influencing audit outcomes. Moreover, firms face challenges in maintaining stakeholder trust and legitimacy when GPR disrupts external dependencies. To address these challenges, we argue that independent auditors with high-quality audits can emerge as critical strategic resources that enable firms to navigate external turbulence. By providing credibility and assurance to financial statements, auditors empower firms to signal reliability to stakeholders, including investors, regulators, and creditors, therefore reducing the GPR-related institutional uncertainty. This reposition of auditors, as per the RDT framework, extends their role as a legitimacy-building partners who assist firms in mitigating external uncertainty.”

Comment 3: *Temper the policy recommendation on mandatory GPR disclosure by acknowledging the practical challenges of regulatory harmonisation.*

Response: We appreciate the reviewer’s constructive feedback. In response, we have revised the policy implications section to temper our recommendation on mandatory GPR disclosure. The revised manuscript now recognises that, although enhanced transparency about firms’ GPR could improve audit quality and investor confidence, implementing a uniform disclosure framework across jurisdictions presents considerable challenges. These include variations in regulatory environments, disclosure standards, and geopolitical sensitivities across countries. By acknowledging these practical constraints, we have now provided a more balanced and realistic policy recommendation.

Please find the following paragraph on pages 35-36 in the manuscript:

“Our research has important policy implications for regulatory authorities, governance professionals, industry practitioners (auditors and audit firms), and investors. First, regulators such as the Public Company Accounting Oversight Board (PCAOB) and the Securities and Exchange Commission (SEC) should encourage more disclosures related to GPR, thereby improving transparency for auditors, investors, and other stakeholders. Although imposing a mandatory GPR disclosure requirement would be imperative for ensuring greater transparency, such regulatory harmonization may be challenging for firms to comply with because of differences in legal systems, regulatory capacities, and cultural attitudes. Therefore, regulators can instead adopt policies that promote firms to voluntarily enhance transparency by emphasizing more comprehensive disclosure of geopolitical risks. Over time, international standard-setting bodies should coordinate to develop more harmonised disclosure practices without forcing undue compliance obligations. Moreover, regulators can encourage firms to strengthen good governance, information environment, the audit committee’s industry and financial expertise, and diversity to improve oversight quality in high-risk environments.”

Comment 4: *Improve accessibility of the methodology by adding a schematic diagram of the empirical strategy.*

Response: We thank the reviewer for the helpful suggestion. We have enhanced the accessibility and clarity of the methodology section by incorporating a schematic diagram (Figure 2, reproduced at the end of this response letter) that illustrates the empirical strategy. This diagram visually summarizes the steps of our empirical approach, making it easier for readers to understand the overall research design and the sequence of analyses conducted.

Comment 5: *Strengthen the future research agenda, including cross-country extensions beyond audit fees, qualitative insights into auditor perceptions of GPR, and links between GPR and other systemic risks.*

Response: We appreciate the reviewer's valuable suggestion. In response, we have expanded the future research directions to outline several promising areas for further investigation. Specifically, we now emphasize (1) extending the cross-country analysis beyond audit fees to include other audit outcomes; (2) incorporating qualitative methods, such as interviews and focus group discussion with auditors, to gain deeper insights into how practitioners perceive and respond to geopolitical risks; and (3) exploring the interconnections between GPR and broader systemic risks, including regulatory uncertainty, and macroeconomic instability and financial market volatility. These additions provide a more comprehensive research agenda for future researchers in this stream.

Please find the following paragraph on page 37 in the manuscript:

“While our global analysis enhances the validity of our findings, it is crucial to note that our cross-country analysis is limited to audit fees due to the unavailability of data for other audit outcome measures, such as audit report delays, financial restatement, and auditors' opinions about firms' internal control and going concern. Future studies may conduct cross-country analyses on these additional audit outcome indicators once comprehensive international data becomes available. In addition, including qualitative evidence into auditors' perceptions of GPR through interviews and focus group discussions may provide crucial insights into how professionals perceive, interpret and manage GPR in practice. Finally, future research may investigate the association between GPR and broader systemic risks, such as regulatory uncertainty, macroeconomic instability and

financial market volatility, which may provide crucial insights into the multifaceted effects of GPR.”

Comment 6: *Consider situating the paper more firmly within the geopolitical risk literature, for example by engaging with Ammar & Elsayed (2024) and Elsayed & Ammar (2020), both of which show how organisations adapt governance and legitimacy practices under geopolitical disruption.*

Response: We thank the reviewer for this valuable suggestion. In the revised manuscript, we have more firmly situated our study within the broader geopolitical risk literature, specifically by incorporating and engaging with Ammar and Elsayed (2024) and Elsayed and Ammar (2020). These studies provide rich insights into how organisations adopt governance and legitimacy practices in response to geopolitical disruptions, aligning closely with our theoretical framing under the RDT. Specifically, we have now discussed how Elsayed and Ammar (2020) demonstrate the emergence of sustainability governance as a hybrid mechanism that combines corporate governance and corporate social responsibility to restore legitimacy following crises, such as the Gulf of Mexico oil spill. We also integrate Ammar and Elsayed (2024), who show that firms employ politically connected governance (PCG) practices, such as responsiveness, compliance, and collaboration, to navigate geopolitical and institutional turbulence.

Please find the following paragraph on pages 11-12 in the manuscript:

“Closely aligned with the fundamental arguments of RDT, recent studies in the field of geopolitical governance literature provide crucial insights into how firms adapt their governance structures to counteract external disruptions during geopolitical uncertainties. For instance, Elsayed and Ammar (2020) show that British Petroleum (BP) developed hybrid governance mechanisms that incorporate corporate governance and corporate social responsibility to rebuild legitimacy and regain access to required external resources, such as stakeholder trust and regulatory support, following the major crises of the Gulf of Mexico Oil Spill. Thus, firms restructure governance to manage external uncertainty and dependence on external actors, reflecting the core RDT principle. Similarly, Ammar and Elsayed (2024) reveal that BP adopts politically connected governance (PCG) practices, emphasising responsiveness, compliance, and collaboration, to respond to regulatory, reputational, and political challenges during periods of geopolitical turbulence. These

adaptive practices highlight how firms strategically influence institutional and political relationships to stabilise their external resource environment. Building on these insights, we argue that GPR disrupts firms' dependencies on vital external resources, and firms can manage such business uncertainty, external dependencies, and institutional pressures of geopolitical disruption through restructuring their governance."

Concluding Comment

Overall, this is an excellent paper that makes an important and timely contribution. With these refinements, it will stand as a distinctive addition to the literature on auditing in uncertain geopolitical environments

Response: We sincerely thank the reviewer for the encouraging and thoughtful feedback. We greatly appreciate the recognition that our paper makes a significant and timely contribution to the literature on auditing in uncertain geopolitical environments. The reviewer's constructive comments have been invaluable in refining the manuscript's theoretical integration, methodological transparency, and practical relevance. We are confident that the revisions undertaken, particularly the enhanced linkage to the geopolitical risk literature, the more precise articulation of our theoretical framework, the strengthened discussion of implications and limitations and forward-looking future research directions, have further improved the clarity, depth, and overall contribution of the paper, ensuring it stands as a distinctive addition to the field.

Additional questions

Originality: *Does the paper contain new and significant information adequate to justify publication?: Yes. The paper introduces geopolitical risk (GPR) as a determinant of audit outcomes and integrates it within agency theory and resource dependence theory (RDT). This framing is original and timely, extending both literatures and demonstrating how macro-level exogenous shocks influence audit fees, reporting timeliness, restatements, and going-concern opinions.*

Response:

We sincerely thank the reviewer for recognising the originality and theoretical contribution of our study. We are pleased that the integration of geopolitical risk within agency theory and resource dependence theory has been viewed as a meaningful and timely addition to the literature.

Relationship to Literature: Does the paper demonstrate an adequate understanding of the relevant literature in the field and cite an appropriate range of literature sources? Is any significant work ignored?: The paper demonstrates good command of the literature, citing recent contributions and positioning its originality in distinguishing GPR from traditional political risk. However, it could be strengthened by engaging with related governance and legitimacy studies on geopolitical disruptions (e.g., Ammar & Elsayed, 2024; Elsayed & Ammar, 2020), which would more firmly situate its contribution within interdisciplinary debates on geopolitics, governance, and risk.

Response:
We thank the reviewer for acknowledging our comprehensive engagement with the relevant literature. Following the reviewer’s helpful suggestion, we have now incorporated and discussed Elsayed and Ammar (2020) and Ammar and Elsayed (2024) to more firmly situate our study within the broader literature on geopolitical risk, governance, and legitimacy. These additions strengthen our theoretical foundation and highlight how our work complements existing research on organizational adaptation in the face of geopolitical disruptions.

Methodology: Is the paper's argument built on an appropriate base of theory, concepts, or other ideas? Has the research or equivalent intellectual work on which the paper is based been well designed? Are the methods employed appropriate?: Yes. The methodology is transparent and appropriate. The justification for Lewbel’s IV estimator is well articulated, diagnostic tests are presented, and variable definitions are clear. The inclusion of a global robustness test is also a strength, though it is limited to audit fees and should be noted more explicitly as a boundary.

Response:
We sincerely thank the reviewer for the positive evaluation of our methodological approach. We appreciate the recognition of our use of Lewbel’s IV estimator, the clarity of variable definitions, and the inclusion of the global robustness test. Following the reviewer’s suggestion, we have now explicitly stated that our global analysis is limited to audit fees due to data constraints. This clarification appears in both the methodology and conclusion sections of the revised manuscript.

Results: Are results presented clearly and analysed appropriately? Do the conclusions adequately tie together the other elements of the paper?: Yes. Results are presented clearly, with both statistical and economic significance quantified. The moderation analyses are well

developed, and the discussion ties back effectively to the theoretical framing. A schematic diagram of the empirical strategy would further improve accessibility.

Response:

We thank the reviewer for the positive feedback on the clarity and rigour of our results. We appreciate the recognition of our statistical and economic significance analyses, as well as our moderation tests that are grounded in our theoretical framework. In response to the suggestion, we have now added a schematic diagram (please see Figure 2 at the end of this letter) of the empirical strategy to enhance accessibility and facilitate readers' better visualization of the relationships examined in the study.

Practicality and/or Research implications: Does the paper identify clearly any implications for practice and/or further research? Are these implications consistent with the findings and conclusions of the paper?: Yes. The implications for regulators, boards, auditors, and investors are well aligned with the findings. However, the recommendation of mandatory GPR disclosures should be tempered by acknowledging feasibility challenges across jurisdictions. The paper would also benefit from a more explicit future research agenda, especially regarding cross-country audit outcomes, qualitative perspectives, and interactions of GPR with other systemic risks.

Response:

We thank the reviewer for acknowledging the practical relevance of our study. In response to the suggestions, we have tempered our recommendation on mandatory GPR disclosures by noting the practical challenges of regulatory harmonisation across jurisdictions. Additionally, we have expanded the future research agenda to include cross-country extensions beyond audit fees, qualitative insights into auditor perceptions of GPR, and potential interactions between GPR and other systemic risks. These revisions ensure that the implications are both actionable and realistic, while highlighting avenues for future research directions.

Quality of Communication: Does the paper clearly express its case, measured against the technical language of the field and the expected knowledge of the journal's readership? Has attention been paid to the clarity of expression and readability, such as sentence structure, jargon use, acronyms, etc.: Overall, yes. The manuscript is clearer and more readable than the previous version, with reduced jargon and a streamlined abstract. The econometric discussion, however,

remains dense and could be made more accessible through the use of visual aids (e.g., flow diagrams).

Response:

We thank the reviewer for acknowledging the improved clarity, readability, and conciseness of the revised manuscript. In line with the reviewer’s suggestion, we have complemented the schematic presentation (Figure 2) of the empirical strategy and a visual flow diagram (Figure 1A in the Appendix) of our identification tests to make them more accessible and intuitive for readers. For convenience, these figures are also reproduced at the end of this letter. These additions aim to enhance the paper’s communicative clarity and ensure that the journal’s diverse readership can easily follow the technical aspects of our analysis.

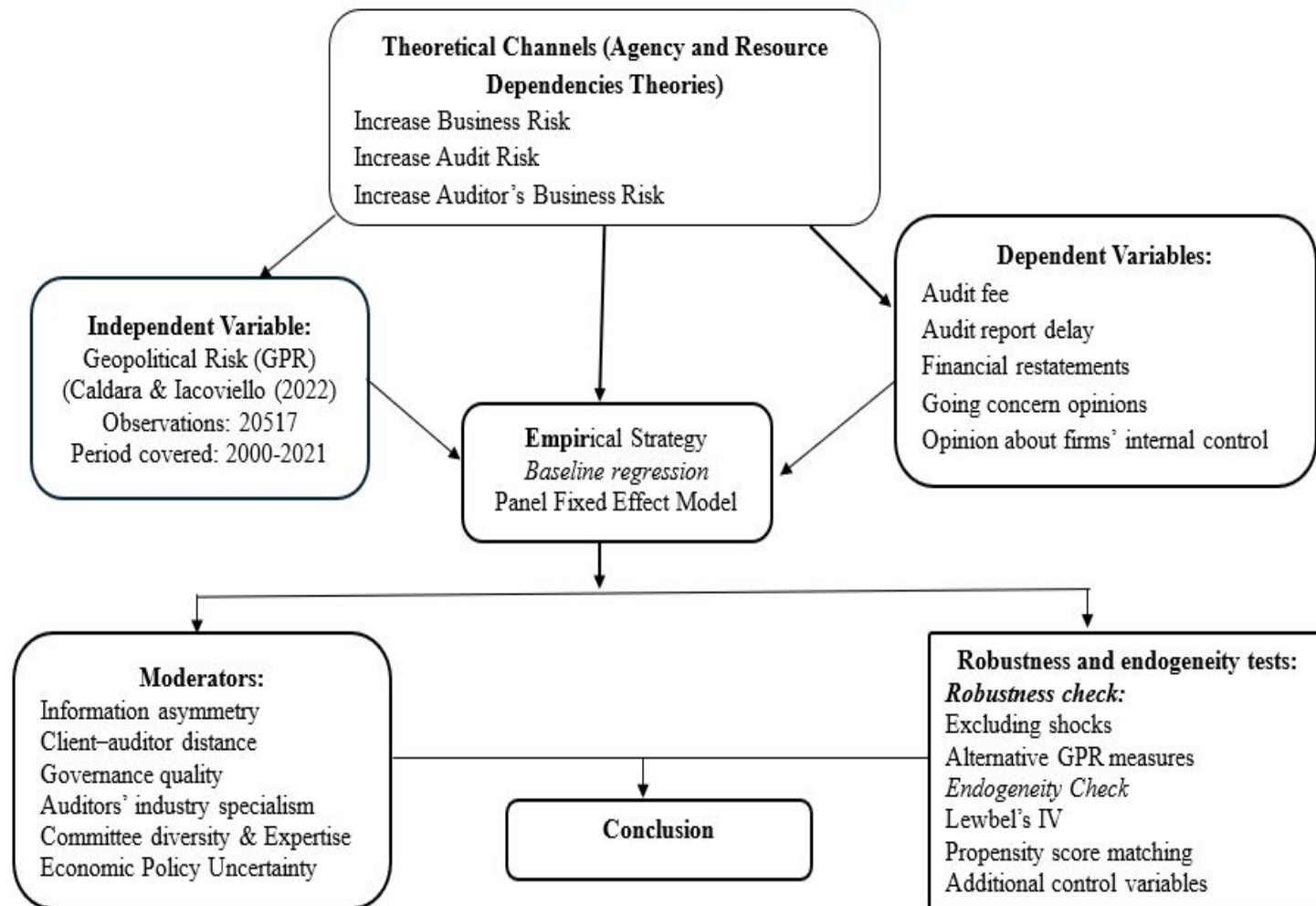
Abstract: Does the abstract relate to the article? Does it provide an adequate summary of the content? Is the language easy to understand and clear for the reader?: Yes. The revised abstract is clear and directly summarises the purpose, methodology, findings, originality, and implications. It is easy to understand and consistent with the article’s content.

Response:

We sincerely thank the reviewer for acknowledging the clarity and coherence of the revised abstract. We are pleased that it effectively summarises the study’s purpose, methodology, findings, originality, and implications in a clear and accessible manner consistent with the overall manuscript.

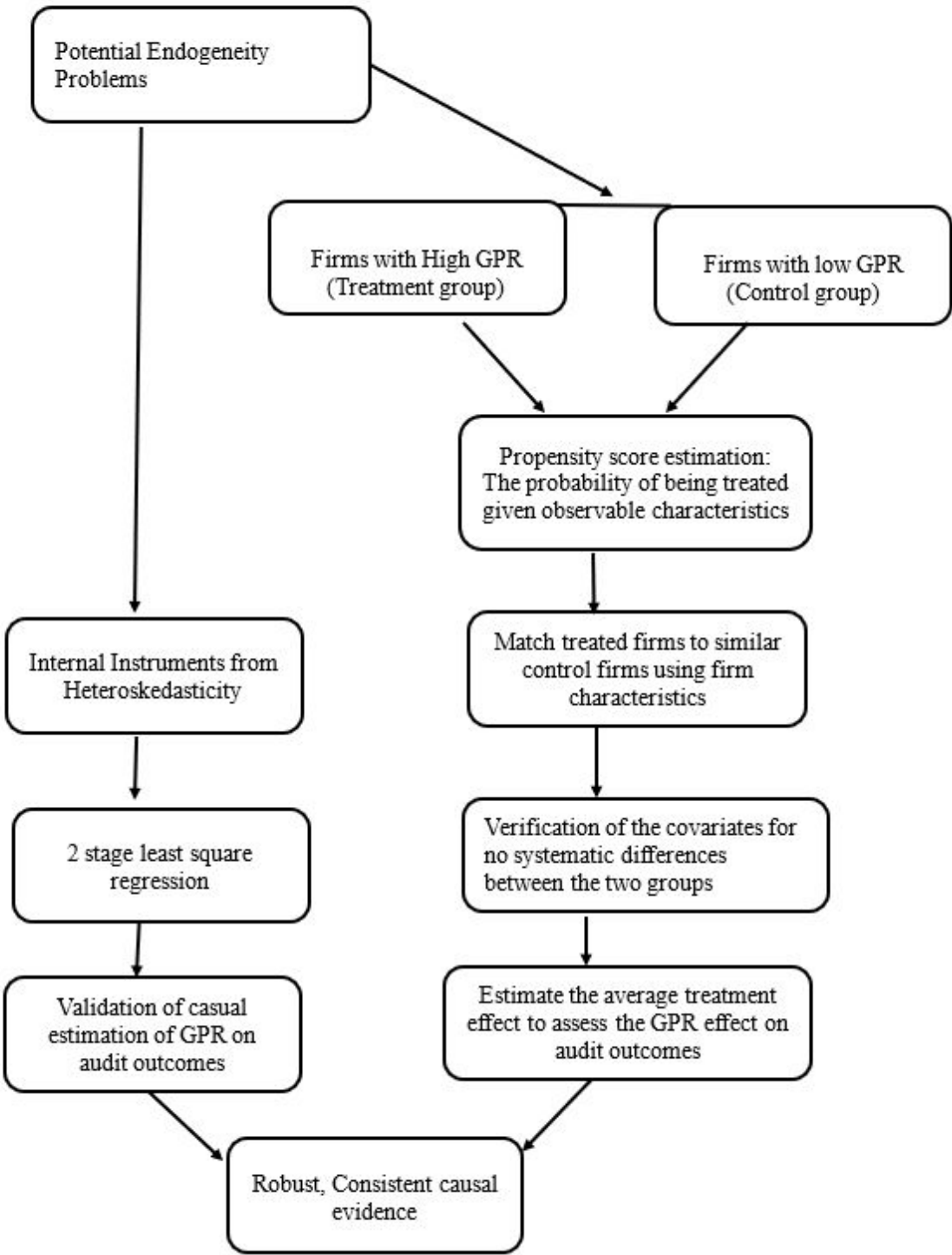
Overall, we sincerely thank the reviewer once again for their thoughtful and constructive feedback, which has significantly improved the clarity, coherence, and overall quality of our manuscript. We are deeply grateful for the reviewer’s valuable time, insights, and encouragement throughout the revision process.

Figure 2: Schematic presentation of empirical strategy



Source: Developed by authors based on our empirical analysis and anonymous review comments|

Figure 1A: Causal identification framework



Source: Developed by authors based on the methodology