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Board Independence, Audit Quality and Financial Performance with the Mediating Role of Technological Innovation in China

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Abstract: This study examines the relationships among corporate governance, audit quality, technological innovation, and financial performance in Chinese accounting firms, with particular emphasis on the mediating role of technological innovation. Grounded in agency theory and the resource-based view (RBV), the study develops an integrated framework to explain how governance mechanisms influence firm performance in a digitally evolving environment. Corporate governance is proxied by board independence, while audit quality is measured using firm-level audit characteristics, and technological innovation is captured through R&D intensity and digital investment indicators. Using panel data of 420 firm-year observations, the study employs fixed-effects regression and bootstrapped mediation analysis to test the proposed relationships. The results indicate that both board independence and audit quality are positively associated with financial performance. In addition, corporate governance and audit quality significantly promote technological innovation. Mediation analysis reveals that technological innovation partially mediates the relationships between corporate governance, audit quality, and financial performance, suggesting that governance mechanisms influence performance both directly and indirectly through technological capabilities. This study contributes to the corporate governance and accounting literature by highlighting the complementary role of technological innovation in enhancing governance effectiveness. The findings provide practical implications for accounting firms and policymakers, emphasising the importance of aligning governance reforms with digital transformation strategies to improve firm performance and long-term competitiveness.
Key Words:Board Independence;Audit Quality; Financial Performance; Mediating Role; Technological Innovation;

1.Introduction

1.1 Background of the Study

Corporate governance plays a fundamental role in shaping organisational behaviour, safeguarding stakeholder interests, and enhancing firm performance. Effective governance mechanisms mitigate agency conflicts between managers and shareholders, promote transparency, and strengthen accountability within firms. In the accounting profession, where public trust, professional judgment, and information credibility are paramount, the quality of corporate governance is especially critical. Weak governance structures in accounting firms can undermine audit quality, distort financial reporting, and ultimately erode investor confidence and market stability.

Audit quality constitutes a central pillar of corporate governance in accounting firms. High-quality audits improve the reliability of financial statements, reduce information asymmetry, and enhance corporate credibility in capital markets. Conversely, audit failures can trigger severe economic and reputational consequences, particularly in emerging markets where institutional frameworks and regulatory enforcement are still evolving. In China, despite continuous regulatory reforms aimed at strengthening corporate

governance and audit supervision, concerns persist regarding audit independence, professional competence, and governance effectiveness in accounting firms. High-profile financial misstatements and audit scandals have further intensified scrutiny of governance practices within the profession.

Simultaneously, rapid technological advancement has profoundly transformed the accounting and auditing landscape. Technologies such as artificial intelligence, blockchain, big data analytics, and cloud-based systems have reshaped audit methodologies, risk assessment processes, and internal control mechanisms. Technological innovation enables accounting firms to enhance audit precision, improve operational efficiency, and strengthen compliance and monitoring functions. Beyond operational benefits, technological innovation increasingly serves as a strategic resource that supports governance effectiveness by facilitating information transparency, real-time monitoring, and data-driven decision-making.

Despite the growing importance of technological innovation, existing research largely treats corporate governance, audit quality, and technological innovation as independent determinants of firm performance. Limited attention has been paid to the interaction between governance mechanisms and technological innovation, particularly the extent to which innovation enhances or channels the effectiveness of governance practices. This gap is especially evident in studies focusing on accounting firms, where technological adoption directly influences audit quality and governance outcomes.

The governance of the Chinese institutional environment is different from the other economies in the West. In China, corporate governance is characterized by concentrated ownership structures, heavy involvement from state authorities, and evolving regulatory enforcement mechanisms (Jiang & Kim, 2015). In many companies, dominant shareholders have considerable power over the firm and this may make formal governance like board independence less effective. Regulatory enforcement varies by region, leading to differences in audit quality and governance practices. Other than that, managerial decision-making is often influenced by relational dynamics (guanxi) and informal networks, which hampers formal governance frameworks. In other words, technological innovation can strengthen governance through enhanced transparency, standardisation of processes and reduction in subjective discretion.

The Chinese context offers a unique setting for examining these relationships. China's accounting firms operate within an institutional environment characterised by concentrated ownership structures, evolving regulatory oversight, and rapid digital transformation. While governance reforms and technological investments have accelerated in recent years, the effectiveness of these initiatives in improving financial performance remains an empirical question. Understanding whether technological innovation strengthens the link between corporate governance, audit quality, and financial performance is therefore of both theoretical and practical significance.

Against this background, this study investigates the relationships among corporate governance, audit quality, technological innovation, and financial performance in Chinese accounting firms. Specifically, it examines whether technological innovation mediates the effects of corporate governance and audit quality on financial performance. By adopting an integrated analytical framework, this research contributes to a deeper understanding of how governance mechanisms translate into performance outcomes in a technologically evolving accounting environment.

1.2 Problem Statement

Although corporate governance has been extensively examined in the finance and accounting literature, empirical findings regarding its impact on firm performance remain inconsistent. Studies report mixed evidence on the effectiveness of governance mechanisms such as board independence and audit quality, particularly in emerging economies. These inconsistencies suggest that corporate governance alone may not be sufficient to explain variations in firm performance and that additional organisational or contextual factors may influence governance effectiveness.

In the accounting sector, the problem is further compounded by the critical role of audit quality. While audit quality is widely recognised as a key governance mechanism that enhances financial reporting reliability and investor confidence, its impact on firm performance is not always straightforward. In some cases, stricter audit controls may increase compliance costs without generating proportional performance gains. In others, weak

audit oversight can expose firms to reputational damage and regulatory sanctions. In China, despite strengthened governance regulations, accounting firms continue to face challenges related to audit independence, professional standards, and uneven enforcement across regions.

At the same time, technological innovation has emerged as a powerful force reshaping the accounting profession. Investments in digital technologies are expected to improve audit efficiency, strengthen internal controls, and enhance governance transparency. However, empirical research has not sufficiently clarified whether technological innovation directly improves financial performance or whether its value lies in reinforcing existing governance mechanisms. Most prior studies treat technological innovation as an independent driver of performance, overlooking its potential role as an enabling or mediating mechanism within corporate governance frameworks.

This gap is particularly evident in the context of Chinese accounting firms. While China has experienced rapid technological advancement and digital transformation, the extent to which technological innovation enhances the effectiveness of corporate governance and audit quality remains underexplored. Existing studies rarely examine whether technological innovation serves as a transmission channel through which governance mechanisms influence financial performance. As a result, the mechanisms linking governance practices, audit quality, and financial outcomes remain inadequately understood.

Furthermore, China's distinctive institutional environment intensifies this research problem. The coexistence of strong regulatory intervention, ownership concentration, and rapid technological adoption creates a complex governance landscape. Governance reforms alone may be insufficient to improve performance if they are not supported by appropriate technological capabilities. Conversely, technological investments may fail to generate value if governance structures are weak or ineffective. Understanding the interdependence between governance and technological innovation is therefore essential for explaining performance outcomes in Chinese accounting firms.

Given these unresolved issues, there is a clear need for empirical research that integrates corporate governance, audit quality, and technological innovation within a unified analytical framework. This study addresses this need by examining the mediating role of technological innovation in the relationship between corporate governance, audit quality, and financial performance in Chinese accounting firms. By doing so, it seeks to clarify how governance mechanisms operate in a technologically dynamic environment and to provide more robust explanations for performance differences within the accounting sector.

1.3 Research Questions

To achieve the objectives of this study, the following research questions are formulated:

- To what extent do corporate governance practices influence the financial performance of accounting firms in China?
- Does audit quality significantly affect the financial performance of Chinese accounting firms?
- Does technological innovation mediate the relationship between corporate governance and financial performance?
- Does technological innovation mediate the relationship between audit quality and financial performance?

1.4 Research Objectives

The primary objective of this study is to examine how corporate governance and audit quality influence financial performance, with particular emphasis on the mediating role of technological innovation in Chinese accounting firms.

The specific objectives are to:

- Examine the relationship between corporate governance practices and financial performance in Chinese accounting firms.
- Investigate the impact of audit quality on financial performance.
- Analyse the mediating effect of technological innovation on the relationship between corporate governance and financial performance.
- Examine whether technological innovation mediates the relationship between audit quality and financial performance.

1.5 Significance of the Study

This study makes several important contributions to the literature on corporate governance, auditing, and technological innovation, particularly within the context of emerging economies. First, it extends corporate governance research by integrating technological innovation as a mediating mechanism between governance practices and financial performance. While prior studies have predominantly examined corporate governance, audit quality, and technological innovation as independent determinants of firm performance, this study offers a more nuanced explanation by demonstrating how technological innovation functions as a transmission channel through which governance mechanisms influence financial outcomes.

Second, this study contributes to the accounting and auditing literature by providing empirical evidence from Chinese accounting firms, a context that remains underrepresented in existing research. Given the critical role of audit quality in ensuring financial reporting credibility, the findings enhance understanding of how governance structures and audit practices operate in environments characterised by concentrated ownership, evolving regulatory frameworks, and uneven institutional enforcement. By focusing on accounting firms, this study sheds light on governance-performance dynamics within a profession where trust, independence, and information reliability are fundamental.

Third, from a theoretical perspective, the study enriches corporate governance theory by bridging governance mechanisms with innovation-based perspectives. By highlighting the mediating role of technological innovation, the findings support the view that governance effectiveness depends not only on formal structures but also on firms' technological capabilities. This integrated perspective provides a more comprehensive explanation of performance variation and advances theoretical discussions on the interaction between governance and innovation.

From a practical standpoint, the study offers valuable insights for regulators, policymakers, and practitioners. The findings suggest that governance reforms and audit quality improvements are more likely to translate into superior financial performance when supported by technological innovation. For accounting firm managers, the results underscore the importance of aligning governance structures with digital transformation strategies. For policymakers, the study provides evidence to support regulatory initiatives that promote both governance effectiveness and technological adoption. Overall, this research contributes to more informed decision-making and supports the sustainable development of the accounting profession in technologically dynamic environments.

2. Literature Review

2.1 Corporate Governance and Firm Performance

Corporate governance constitutes the foundational framework through which firms are directed, monitored, and controlled. It establishes the allocation of rights and responsibilities among shareholders, boards of directors, and management, thereby shaping decision-making processes and organisational outcomes. The primary objective of corporate governance is to mitigate agency conflicts arising from the separation of ownership and control, enhance transparency, and promote accountability, ultimately improving firm performance. From the perspective of agency theory, corporate governance mechanisms are designed to reduce opportunistic behaviour by managers and align managerial actions with shareholder interests (Jensen & Meckling, 1976). Governance tools such as board oversight, independent directors, and monitoring systems reduce agency costs by constraining self-serving managerial decisions and improving the efficiency of resource allocation. Empirical evidence from developed economies generally supports a positive relationship between strong governance practices and firm performance, as measured by profitability, market valuation, and operational efficiency (Brown & Caylor, 2009; Black et al., 2012).

However, the governance–performance relationship is far from uniform. Numerous studies report mixed or inconclusive findings, suggesting that governance mechanisms do not exert a universally positive effect across institutional contexts. For example, Wintoki et al. (2012) argue that the effectiveness of governance structures is contingent on firm-specific and environmental factors, including ownership concentration, regulatory enforcement, and market maturity. In some cases, excessive monitoring may constrain managerial flexibility, hinder strategic decision-making, and reduce performance. These complexities are particularly evident in

emerging economies. Weak legal enforcement, concentrated ownership structures, and institutional voids may limit the effectiveness of formal governance mechanisms. In China, corporate governance operates within a unique institutional framework characterised by strong state influence, concentrated shareholding, and evolving regulatory oversight. Although governance reforms have strengthened formal board structures and disclosure requirements, the effectiveness of these mechanisms in enhancing firm performance remains subject to debate.

Within the accounting sector, the governance–performance relationship is especially critical. Accounting firms rely heavily on reputation, professional credibility, and information integrity. Weak governance can undermine audit quality, damage trust, and expose firms to regulatory and reputational risks. Accordingly, understanding how corporate governance influences performance in accounting firms requires a context-sensitive approach that considers both institutional constraints and complementary organisational capabilities.

Recent research increasingly highlights the impact of technological innovation and digital transformation on corporate governance outcomes. To illustrate, Chen et al. (2020) note that board-level technological expertise enhances firm performance in digitally intensive settings. Claessens and Yurtoglu (2013) and more recent extensions similarly suggest that the effectiveness of governance in emerging markets depends on institutional development and technology.

In the audit context, DeFond and Zhang (2020) examine the concept of audit quality. At the same time, they support the significance of data analytics and digital tools in our audit. Above all, they help enhance audit reliability in auditing. The above developments suggest that we need to supplement conventional governance techniques with technology to stay relevant in a modern organisation.

According to recent studies, it is digital transformation and technological capabilities that increasingly shape corporate governance, especially in developing countries. Research evidence indicates that the effectiveness of governance is enhanced by the incorporation of digitally-related technologies and systems by firms into their governance (Chen, Chen, & Lin, 2023). Furthermore, elements of corporate governance may interact with technology capabilities to create firm performance whilst, at the same time, the effective governance of organizations may be influenced by institutional and technology factors (Alabdullah, 2023).

2.2 Audit Quality as a Governance Mechanism

Audit quality represents a central component of corporate governance, particularly within accounting firms. High-quality audits enhance the reliability of financial reporting, reduce information asymmetry, and reinforce investor confidence. From an agency theory perspective, auditing serves as an external monitoring mechanism that constrains managerial opportunism and aligns managerial actions with shareholder interests (DeAngelo, 1981).

Prior research highlights the economic consequences of audit quality. High audit quality is associated with lower earnings management, improved financial reporting credibility, reduced cost of capital, and enhanced firm value (Francis & Michas, 2013; Lennox & Li, 2020). For accounting firms themselves, audit quality is not only an internal governance issue but also a determinant of market reputation and long-term competitiveness. Audit failures can lead to regulatory sanctions, litigation risk, and reputational damage, directly affecting firm performance.

In China, audit quality has attracted increasing regulatory and academic attention due to historical weaknesses in the auditing profession. Although regulatory authorities have introduced stricter audit standards and oversight mechanisms, challenges persist regarding auditor independence, professional competence, and consistency of audit practices across regions. The dominance of large clients, ownership concentration, and institutional pressures may compromise auditor objectivity, reducing the effectiveness of audit quality as a governance mechanism. Empirical findings on the relationship between audit quality and firm performance in China remain mixed. Some studies document positive performance effects associated with higher audit quality, while others find limited or insignificant impacts due to institutional constraints. These mixed results suggest that audit quality alone may not be sufficient to enhance firm performance unless supported by complementary governance structures and organisational capabilities.

The concept of audit quality is gradually changing with literature focusing on the role of digital technologies and data analytics in recent papers. According to studies, the use of innovative audit technology enhances audit efficiency, risk assessment capability, and the reliability of financial reporting (Appelbaum; Kogan; Vasarhelyi; Yan, 2023). Moreover, high audit quality enhances transparency and firm value. However, its interaction with innovation activities is not that clear (Lennox & Li, 2020; DeFond & Zhang, 2020).

2.3 Technological Innovation and Firm Performance

Technological innovation has emerged as a key driver of organisational competitiveness, productivity, and performance. Innovation encompasses investments in research and development, adoption of advanced technologies, and the implementation of new processes and services. In the accounting profession, technological advancements such as artificial intelligence, blockchain, big data analytics, and cloud computing have fundamentally transformed audit methodologies, risk assessment, and internal control systems.

From the resource-based view (RBV), technological innovation constitutes a strategic resource that can generate sustainable competitive advantage when it is valuable, rare, difficult to imitate, and non-substitutable (Barney, 1991). Empirical studies generally support a positive relationship between innovation and firm performance, particularly in knowledge-intensive and professional service industries. Technological adoption enables firms to improve efficiency, enhance service quality, and respond more effectively to regulatory and market demands.

However, technological innovation does not automatically translate into superior financial performance. Innovation investments involve significant costs, uncertainty, and implementation challenges. Without effective governance and strategic alignment, technological initiatives may increase operational complexity, expose firms to cybersecurity risks, and fail to deliver expected performance gains. This suggests that the performance effects of innovation are contingent upon firms' governance structures and managerial capabilities.

In accounting firms, technological innovation plays a dual role. On the one hand, it enhances audit quality by improving data accuracy, audit coverage, and risk detection. On the other hand, it supports governance transparency and monitoring by enabling real-time information flows and data-driven decision-making. As such, technological innovation represents both an operational and governance-related capability.

Technological innovation remains a key factor in improving firm performance and governance efficiency. Recent research studies show that digital transformation and innovation capabilities enhance firms' operations efficiency and decision-making processes (Verhoef et al., 2021; Nambisan, Lyytinen, Majchrzak, & Song, 2017). More recent evidence has shown that artificial intelligence and the use of big data analysis are reinventing the auditing industry and strengthening internal controls (Appelbaum et al., 2023).

2.4 Linking Corporate Governance and Technological Innovation

Recent literature increasingly recognises the interdependence between corporate governance and technological innovation. Governance mechanisms shape managerial incentives, strategic priorities, and risk-taking behaviour, all of which are central to innovation outcomes. Boards with effective oversight and diverse expertise are better positioned to support long-term innovation investments and manage the risks associated with technological change.

Agency theory suggests that governance mechanisms can mitigate managerial risk aversion and short-termism, thereby encouraging innovation-oriented investments. At the same time, resource dependence theory emphasises the role of boards in providing access to external knowledge, expertise, and networks that support innovation activities. Empirical evidence indicates that board characteristics and ownership structures significantly influence firms' R&D intensity, patent output, and innovation efficiency (Chen et al., 2015; Amore & Failla, 2020).

In China, governance structures may exert a particularly strong influence on innovation due to concentrated ownership and state involvement. Governance mechanisms affect resource allocation decisions and the extent

to which firms pursue technological upgrading. These findings suggest that technological innovation may function as an intermediary mechanism through which governance practices influence firm performance.

2.5 Technological Innovation as a Mediating Mechanism

Despite growing interest in governance and innovation, limited research has explicitly examined technological innovation as a mediating mechanism between corporate governance and firm performance. Most prior studies treat innovation as either an independent predictor or a direct outcome of governance practices, overlooking its potential role as a transmission channel.

Mediation theory suggests that governance mechanisms influence performance indirectly by shaping firms' innovation capabilities. Effective governance improves oversight, strategic alignment, and resource allocation, thereby fostering innovation, which in turn enhances performance. Empirical evidence supporting such mediation effects has begun to emerge, particularly in studies examining ownership structure and firm performance (Qin et al., 2019; Peng & Zhang, 2022).

In the context of accounting firms, this mediating role is especially relevant. Technological innovation enhances audit quality, strengthens internal controls, and improves governance transparency, suggesting that innovation amplifies the effectiveness of governance mechanisms. Accordingly, examining technological innovation as a mediating variable provides a more comprehensive understanding of how corporate governance and audit quality translate into financial performance.

As the digital transformation continues to gain pace, recent studies are increasingly reflecting the need for linking corporate governance with technology innovation. For example, Alabdullah (2023) shows that governance mechanisms impact firm performance through innovation capability in emerging markets. In the same vein, Zhang et al. (2023) claim that through transparency and more efficient decision-making, digital transformation enhances the effectiveness of governance structures.

Data analytics and AI use enhances the reliability and quality of an audit (Appelbaum et al., 2023). In addition, article Liu et al. (2024) state that technological innovation mediates the relationship between governance mechanisms and firm performance in knowledge-intensive industries. The recent findings emphasize the unified analytical approach for analysis of governance and innovation.

New real-world findings show that technological innovation mediates the relationship between governance mechanisms and firm performance. Research shows governance structures impact firm performance indirectly through innovation capability and digital transformation (Alabdullah, 2023). Therefore, technological innovation is an important transmission mechanism through which governance enhances organisational outcomes, especially in knowledge-based and service-oriented industries.

2.6 Hypothesis Development

Corporate Governance and Financial Performance

Based on agency theory and prior empirical evidence, effective corporate governance is expected to enhance firm performance by reducing agency costs and improving monitoring efficiency.

H1: Corporate governance practices are positively associated with the financial performance of Chinese accounting firms.

Audit Quality and Financial Performance

Audit quality serves as a critical governance mechanism that enhances reporting reliability and firm credibility, thereby improving performance outcomes.

H2: Audit quality is positively associated with the financial performance of Chinese accounting firms.

Mediating Role of Technological Innovation

From an RBV perspective, technological innovation represents a strategic capability that enables governance mechanisms to translate into performance gains. Effective governance and high audit quality are expected to foster technological adoption, which in turn enhances financial performance.

H3: Technological innovation mediates the relationship between corporate governance and financial performance in Chinese accounting firms.

H4: Technological innovation mediates the relationship between audit quality and financial performance in Chinese accounting firms.

2.7 Conceptual Framework

Based on the literature review and hypothesis development, this study proposes a conceptual framework in which corporate governance and audit quality influence financial performance both directly and indirectly through technological innovation. This framework integrates governance theory and innovation-based perspectives to explain performance outcomes in Chinese accounting firms operating in a technologically dynamic environment.

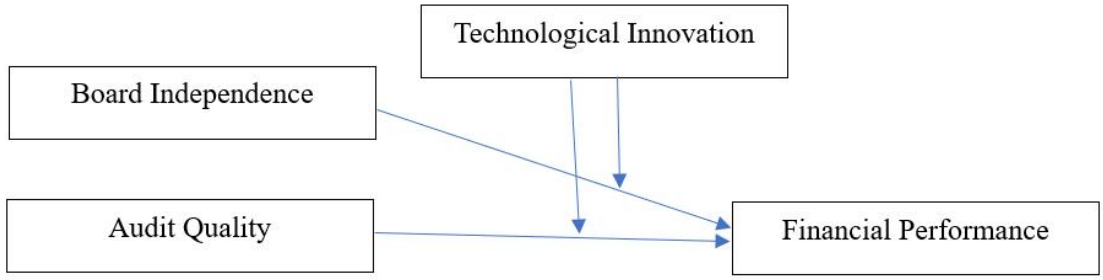

Diagram 1 Conceptual Framework

3. Research Methodology

3.1 Research Design

This study adopts a quantitative research design to examine the relationships among corporate governance, audit quality, technological innovation, and financial performance in Chinese accounting firms. A quantitative approach is appropriate given the study's objective of testing theoretically grounded hypotheses and identifying statistically significant relationships among variables. Consistent with prior corporate governance and accounting research, this study employs secondary data and econometric analysis to provide robust empirical evidence. The research framework is grounded in agency theory and the resource-based view (RBV), which jointly explain how governance mechanisms and technological capabilities influence organisational performance. In particular, the study examines whether technological innovation functions as a mediating mechanism through which corporate governance and audit quality affect financial performance. A mediation-based analytical framework is therefore adopted to capture both direct and indirect effects.

3.2 Sample Selection and Data Sources

The empirical analysis focuses on Chinese accounting firms operating within the institutional and regulatory framework of mainland China. China provides a suitable research context due to its rapidly evolving corporate governance environment, concentrated ownership structures, and accelerated technological transformation in the accounting and auditing profession. The sample selection follows several criteria. First, accounting firms with available and consistent financial, governance, and innovation-related data are included. Second, firms with missing or incomplete information on key variables are excluded to ensure data reliability. Third, to mitigate the influence of extreme observations, firms with abnormal financial indicators are screened using standard data-cleaning procedures. Data for this study are obtained from multiple secondary sources. Financial performance data are collected from publicly available financial statements and professional databases. Corporate governance and audit-related information are sourced from annual reports, regulatory disclosures, and firm-level governance reports. Technological innovation data are derived from firm disclosures related to research and development (R&D) expenditure, digital investment, and technology adoption indicators.

To reduce potential biases arising from short-term fluctuations, the study adopts a panel data structure covering multiple years. The use of panel data enhances statistical power, controls for unobserved firm-specific heterogeneity, and improves the reliability of causal inference.

3.3 Variable Measurement

3.3.1 Dependent Variable: Financial Performance

Financial performance is the dependent variable in this study. Consistent with prior research in corporate governance and accounting, financial performance is measured using accounting-based indicators that capture operational efficiency and profitability. Return on Assets (ROA) is employed as the primary performance measure. ROA reflects a firm's ability to generate profits from its total assets and is widely used in governance-performance studies due to its comparability across firms and industries. In robustness analyses, alternative performance measures such as Return on Equity (ROE) may be employed to ensure consistency of results.

3.3.2 Independent Variables

● ***Corporate Governance***

Corporate governance is operationalized primarily through board independence, measured as the proportion of independent non-executive directors to total board size. This proxy is widely adopted in corporate governance literature as it reflects the board's monitoring effectiveness and ability to mitigate agency conflicts (Jensen & Meckling, 1976). In the context of Chinese accounting firms, board independence is particularly relevant due to the prevalence of concentrated ownership and potential managerial dominance, which may weaken internal monitoring mechanisms. A higher proportion of independent directors is therefore expected to enhance oversight quality and improve governance effectiveness.

● ***Audit Quality***

Multiple quantitative proxies are used to operationalize audit quality to enhance measurement and replication. In line with previous studies, audit quality is assessed based on the following measures: (i) the size of the auditors (i.e. Big 4 versus non-Big 4 auditors) (ii) the tenure of the audit (iii) the audit fees (scaled by total assets). Audit fees may contain useful information regarding audit effort and auditor independence (DeFond & Zhang, 2014; Lennox & Li, 2020).

The size of the auditor has been coded as a dummy variable 1 = Audit firms affiliated with Big 4; 0 = Otherwise. Generally, audit quality will vary according to the size of the auditor as it is observed that audit quality displayed by Big 4 auditors is far superior as compared to any other auditors. The number of years for which an auditor has audited a client is called audit tenure, the longer the audit. Audit fees are scaled by firm size to control for differences in engagement risks.

The multi-angled approach to measurement relates to audit quality assessment robustly and replicable. This is especially useful in the Chinese context as the audit quality in China is different for different regions and different firm types.

3.3.3 Mediating Variable: Technological Innovation

Technological innovation is evaluated through input-based and output-based indicators. It can capture the multidimensional nature of innovation. Similar to earlier studies, we proxy innovation input by R&D intensity (R&D expenditure/total assets), whereas innovation output is measured using patent applications and granted patents (Hall, Jaffe, & Trajtenberg, 2005; Chen et al., 2020).

In addition, as accounting firms are service-oriented organizations, technological innovation is augmented by digital transformation indicators, which include various firm disclosures related to artificial intelligence, big data, and cloud-based auditing settings.

This dual-measurement strategy makes sure that both classical innovation initiatives and cutting-edge digital transformation behaviours are recorded, improving construct validity and replicability.

3.3.4 Control Variables

To isolate the effects of corporate governance, audit quality, and technological innovation on financial performance, several control variables are included in the empirical models. Firm size is controlled for using the natural logarithm of total assets. Larger firms may benefit from economies of scale and greater access to resources, which can influence performance. Firm age is included to account for organisational maturity and

accumulated experience. Leverage is measured as the ratio of total liabilities to total assets and controls for financial risk. Year and firm fixed effects are incorporated to control for time-specific shocks and unobserved firm-level heterogeneity.

3.4 Econometric Model Specification

To test the research hypotheses and examine the mediating role of technological innovation, this study employs panel regression analysis. Panel data methods are suitable for capturing both cross-sectional and time-series variations while controlling for unobserved heterogeneity.

The baseline model examines the direct effects of corporate governance and audit quality on financial performance:

Model (1):

$$CE = \dot{\imath}_1 + \beta 1 Firm\ size + \beta_2 Leverage + \beta_3 Firm\ age + \beta_4 State\ Ownership + \beta_5 Domestic\ non\text{-}state\ ownership + \beta_6 Foreign\ ownership + \beta_7 Managerial\ ownership + \beta_8 Board\ size + \beta_9 Independent\ director\ ratio + \beta_{10} Supervisory\ board\ size + \beta_{11} CEO\ duality + (Industry\ dummy) + \mathcal{E}_1$$

Model (2):

$$Performance = \dot{\imath}_2 + \beta_1 Firm\ size + \beta_2 Leverage + \beta_3 Firm\ age + \beta_4 State\ ownership + \beta_5 Domestic\ non\text{-}state\ ownership + \beta_6 Foreign\ ownership + \beta_7 Managerial\ ownership + \beta_8 Board\ size + \beta_9 Independent\ director\ ratio + \beta_{10} Supervisory\ board\ size + \beta_{11} CEO\ duality + \beta_{12} R\&D\ intensity + \beta_{13} Patent\ applications + \beta_{14} Granted\ patents + (Industry\ dummy) + \mathcal{E}_2$$

Model (3):

$$Performance = \dot{\imath}_3 + \beta_1 Firm\ size + \beta_2 Leverage + \beta_3 Firm\ age + \beta_4 State\ ownership + \beta_5 Domestic\ non\text{-}state\ ownership + \beta_6 Foreign\ ownership + \beta_7 Managerial\ ownership + \beta_8 Board\ size + \beta_9 Independent\ director\ ratio + \beta_{10} Supervisory\ board\ size + \beta_{11} CEO\ duality + \beta_{12} R\&D\ intensity + \beta_{13} Patent\ applications + \beta_{14} Granted\ Patents + \beta_{15} (State\ ownership, Domestic\ non\text{-}state\ ownership, Foreign\ ownership, Managerial\ ownership, Board\ size, Independent\ director\ ratio, Supervisory\ board\ size, and\ CEO\ duality) * (R\&D\ intensity, Patent\ applications, and\ Granted\ patents) + (Industry\ dummy) + \mathcal{E}_3$$

Where $\dot{\imath}$ represents the constant and is the slope of the independent variable which reflects a partial explanation or prediction for the value of the dependent variable. β is the independent variable and Ɛ is an error term. Partial mediation is supported if the coefficients of corporate governance and audit quality are reduced but remain significant after including technological innovation. Full mediation is indicated if the direct effects become insignificant.

3.5 Mediation Analysis Procedure

To rigorously examine the mediating role of technological innovation in the relationship between corporate governance, audit quality, and financial performance, this study adopts a structured mediation analysis framework grounded in contemporary econometric practice. Mediation analysis enables the decomposition of total effects into direct and indirect effects, providing a clearer understanding of the underlying mechanisms through which governance practices influence performance outcomes. The mediation procedure follows a multi-step approach. First, the direct effects of corporate governance and audit quality on financial performance are estimated to establish baseline relationships. Second, the effects of corporate governance and audit quality on technological innovation are examined to determine whether governance mechanisms significantly influence firms' innovation activities. Third, technological innovation is incorporated into the performance model to assess whether it transmits the effects of governance mechanisms to financial performance.

To ensure robust inference, this study employs bootstrapping techniques to test the significance of indirect effects. Bootstrapping is particularly suitable for mediation analysis because it does not rely on normality assumptions and provides bias-corrected confidence intervals for indirect effects. A statistically significant indirect effect indicates the presence of mediation. Partial mediation is supported if the coefficients of corporate governance and audit quality remain significant but are reduced in magnitude after the inclusion of technological innovation. Full mediation is indicated if the direct effects become statistically insignificant.

In addition, the study examines potential temporal effects by introducing lagged independent variables in supplementary analyses. This approach reduces concerns related to simultaneity and reverse causality, thereby strengthening causal interpretation. Collectively, these procedures ensure a rigorous assessment of the mediating role of technological innovation and enhance the credibility of the empirical findings.

3.6 Robustness Checks

To ensure the reliability and stability of the empirical results, this study conducts a series of robustness checks. Robustness analysis is essential in empirical corporate governance research, particularly in emerging markets, where data limitations and institutional complexities may influence estimation outcomes.

First, alternative measures of financial performance are employed to verify the consistency of the findings. In addition to Return on Assets (ROA), alternative accounting-based indicators such as Return on Equity (ROE) are used as dependent variables. Consistent results across multiple performance measures provide greater confidence in the robustness of the estimated relationships.

Second, alternative model specifications are estimated. Fixed-effects and random-effects panel regression models are compared to account for unobserved firm-specific heterogeneity. The Hausman test is employed to determine the appropriate model specification. Consistent coefficient signs and significance levels across model specifications indicate stable relationships.

Third, lagged independent and mediating variables are introduced to mitigate potential endogeneity and reverse causality concerns. By examining whether prior governance and innovation activities predict subsequent performance outcomes, the analysis strengthens causal inference.

Finally, multicollinearity diagnostics are conducted to ensure that the estimated coefficients are not distorted by high correlations among explanatory variables. Variance inflation factors (VIFs) are examined, and all values fall within acceptable thresholds. These robustness checks collectively enhance the credibility, validity, and generalizability of the empirical findings.

3.7 Ethical Considerations

This study adheres to established ethical standards for academic research and empirical analysis. The research is based exclusively on secondary data obtained from publicly available and authoritative sources, including financial statements, regulatory disclosures, and firm-level reports. As no primary data collection involving human participants is conducted, the study does not pose risks related to personal privacy, informed consent, or confidentiality.

All data used in the analysis is accessed and utilised in accordance with applicable regulations and database usage policies. The study does not involve data manipulation, misrepresentation, or selective reporting. Data cleaning and screening procedures are transparently documented to ensure analytical integrity and reproducibility. Furthermore, the empirical methods and statistical procedures are applied consistently and objectively to avoid analytical bias.

The study also upholds principles of academic integrity and proper attribution. All theoretical frameworks, methodologies, and empirical findings derived from prior research are appropriately cited. Any limitations related to data availability or measurement are acknowledged to ensure transparency. By adhering to ethical research practices and maintaining methodological rigor, this study ensures that its findings contribute responsibly and credibly to the corporate governance and accounting literature.

4. Empirical Results

4.1 Descriptive Statistics

Table 1 presents the descriptive statistics for all variables included in the empirical analysis. The results provide an overview of the distribution, central tendency, and dispersion of financial performance, corporate governance, audit quality, technological innovation, and control variables.

Table 1 Descriptive Statistics for all Variables

Variable	N	Mean	Std. Dev.	Min	Max
ROA	420	0.061	0.048	-0.112	0.231
Corporate Governance (CG)	420	0.372	0.091	0.250	0.600
Audit Quality (AQ)	420	0.684	0.172	0.200	1.000
Technological Innovation (TI)	420	0.034	0.027	0.000	0.142
Firm Size	420	14.82	1.36	11.25	18.94
Leverage	420	0.462	0.198	0.072	0.841
Firm Age	420	18.7	7.9	3	45

Notes: ROA represents Return on Assets and is used as the proxy for financial performance. Corporate Governance (CG) is measured by the proportion of independent directors on the board. Audit Quality (AQ) is constructed based on auditor size, audit tenure, and audit fees. Technological Innovation (TI) is measured using R&D intensity and digital investment indicators. Firm size is measured as the natural logarithm of total assets. Leverage is calculated as total liabilities divided by total assets, while firm age is measured in years since establishment.

Table 1 presents the descriptive statistics for the variables used in this study based on 420 firm-year observations. The mean Return on Assets (ROA) is 0.061, with a standard deviation of 0.048, indicating that Chinese accounting firms exhibit moderate profitability on average, accompanied by substantial variation in performance. The minimum ROA value of –0.112 and the maximum value of 0.231 suggest considerable heterogeneity in financial outcomes across firms. corporate governance (CG), proxied by board independence, has a mean value of 0.372, indicating that, on average, independent directors constitute approximately 37.2% of board membership. The standard deviation of 0.091 reflects notable differences in governance structures across firms, with values ranging from 0.250 to 0.600.

Audit Quality (AQ) shows a mean of 0.684 and a standard deviation of 0.172, suggesting moderate to high audit quality among sampled firms, while also indicating variation in professional standards and internal quality control mechanisms. The wide range of AQ values (0.200–1.000) further supports this observation. technological innovation (TI), measured using R&D intensity and digital investment indicators, has a relatively low mean of 0.034 and a standard deviation of 0.027, indicating that most accounting firms maintain limited technological investment, while a small number of firms invest substantially more in innovation. The right-skewed distribution is evident from the minimum value of 0.000 and the maximum value of 0.142.

Regarding control variables, firm size has a mean of 14.82, firm age averages 18.7 years**,** and leverage has a mean value of 0.462, reflecting diverse organisational characteristics and financial structures. Overall, the descriptive statistics indicate sufficient variability across all variables, supporting the appropriateness of regression analysis.

4.2 Correlation Analysis

Table 2 reports the Pearson correlation coefficients among the main variables. The results show that financial performance is positively correlated with corporate governance indicators, audit quality, and technological innovation. These preliminary associations are consistent with theoretical expectations and provide initial support for the proposed hypotheses.

Table 2 reports the Pearson correlation coefficients among the key variables. Financial performance (ROA) is positively correlated with Corporate Governance (CG) ($r = 0.284$, $p < 0.01$), Audit Quality (AQ) ($r = 0.251$, $p < 0.01$), and Technological Innovation (TI) ($r = 0.219$, $p < 0.01$). These results indicate that firms with stronger governance structures, higher audit quality, and greater technological investment tend to exhibit better financial performance.

Corporate Governance is positively correlated with Audit Quality ($r = 0.342$, $p < 0.01$) and Technological Innovation ($r = 0.297$, $p < 0.01$), suggesting that firms with stronger governance practices are more likely to maintain higher audit quality and invest in innovation. Audit Quality is also positively associated with Technological Innovation ($r = 0.263$, $p < 0.01$).

Table 2 Correlation Matrix

Variables	(1) ROA	(2) CG	(3) AQ	(4) TI	(5) Size	(6) Leverage	(7) Age
(1) ROA	1.000						
(2) Corporate Governance (CG)	0.284***	1.000					
(3) Audit Quality (AQ)	0.251***	0.342***	1.000				
(4) Technological Innovation (TI)	0.219***	0.297***	0.263***	1.000			
(5) Firm Size	0.183***	0.198***	0.225***	0.241***	1.000		
(6) Leverage	-0.164***	-0.092*	-0.081	-0.104**	0.356***	1.000	
(7) Firm Age	0.097*	0.121**	0.134**	0.089*	0.271***	0.062	1.000

*Notes: This table reports Pearson correlation coefficients among the variables. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively. All variables are defined as in Table 2.*

Among the control variables, firm size is positively correlated with ROA ($r = 0.183$, $p < 0.01$) and Technological Innovation ($r = 0.241$, $p < 0.01$), indicating that larger firms tend to perform better and invest more in technology. Leverage shows a negative correlation with ROA ($r = –0.164$, $p < 0.01$), while firm age exhibits a weak but positive correlation with financial performance ($r = 0.097$, $p < 0.10$).

Importantly, all correlation coefficients remain below 0.40, suggesting that multicollinearity is unlikely to be a serious concern. These findings provide preliminary empirical support for the hypothesised relationships and justify the use of multivariate regression analysis in subsequent sections.

4.3 Regression Results: Direct Effects

4.3.1 Corporate Governance and Financial Performance

Table 3 presents the regression results examining the direct relationship between corporate governance and financial performance. The results show that corporate governance is positively and significantly associated with ROA. Firms with stronger governance structures, particularly higher levels of board independence, exhibit superior financial performance. This finding supports Hypothesis 1, which predicts a positive relationship between corporate governance practices and financial performance.

Table 3 Baseline Regression Results: Corporate Governance, Audit Quality, and Financial Performance

Variables	Model (1)	Model (2)	Model (3)
Corporate Governance (CG)		**0.087***	**0.063***
		(0.021)	(0.019)
Audit Quality (AQ)			**0.058***
			(0.017)
Technological Innovation (TI)			
Firm Size	**0.012***	**0.009***	**0.007**
	(0.003)	(0.003)	(0.003)
Leverage	**–0.041***	**–0.036***	**–0.031***
	(0.011)	(0.010)	(0.009)
Firm Age	0.002	0.001	0.001
	(0.001)	(0.001)	(0.001)
Constant	**–0.172***	**–0.146***	**–0.121***
	(0.038)	(0.036)	(0.034)
Year Fixed Effects	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes
Observations	420	420	420
R^2	0.214	0.261	0.298

*Notes: Standard errors are reported in parentheses. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively. Year and firm fixed effects are included in all models.*

Table 3 presents the baseline regression results examining the effects of corporate governance and audit quality on financial performance. Model (1) includes only control variables. Firm size exhibits a positive and statistically significant coefficient ($\beta = 0.012$, $p < 0.01$), indicating that larger accounting firms tend to achieve higher profitability. Leverage shows a negative and significant association with ROA ($\beta = –0.041$, $p < 0.01$), suggesting that higher financial leverage is associated with lower financial performance. Firm age is not statistically significant.

Model (2) introduces Corporate Governance (CG). The coefficient on CG is positive and statistically significant ($\beta = 0.087$, $p < 0.01$), indicating that stronger governance structures are associated with higher financial performance. The inclusion of CG increases the explanatory power of the model, with R^2 rising from 0.214 to 0.261.

Model (3) further incorporates Audit Quality (AQ). Both corporate governance and audit quality remain positively and significantly associated with ROA. The coefficient for CG decreases slightly but remains significant ($\beta = 0.063$, $p < 0.01$), while AQ exhibits a positive and significant coefficient ($\beta = 0.058$, $p < 0.01$). This indicates that audit quality contributes additional explanatory power beyond corporate governance alone. The R^2 increases further to 0.298, suggesting improved model fit.

Across all models, the signs and significance levels of the control variables remain largely stable. Overall, the results provide strong empirical support for Hypothesis 1 and Hypothesis 2, confirming that corporate governance and audit quality are positively associated with the financial performance of Chinese accounting firms.

4.3.2 Audit Quality and Financial Performance

The regression results provide clear evidence of a positive and statistically significant relationship between audit quality and financial performance. As reported in Model (3) of Table 3, audit quality exhibits a positive coefficient ($\beta = 0.058$, $p < 0.01$), indicating that accounting firms with higher audit quality achieve superior financial performance, as measured by return on assets. This result provides strong empirical support for Hypothesis 2. The inclusion of audit quality in the regression model leads to an increase in explanatory power, with the R^2 rising from 0.261 in Model (2) to 0.298 in Model (3). This improvement suggests that audit quality contributes additional explanatory value beyond corporate governance and control variables. Importantly, the positive effect of audit quality remains robust after controlling for firm size, leverage, firm age, and fixed effects. Overall, the findings indicate that audit quality functions as an effective internal governance mechanism that is positively associated with firm profitability. The statistically significant coefficient underscores the economic relevance of audit quality in explaining performance differences among Chinese accounting firms.

4.4 Regression Results: Governance, Audit Quality, and Technological Innovation

Table 4 reports the regression results examining the effects of corporate governance and audit quality on technological innovation. Both governance indicators and audit quality exhibit positive and statistically significant associations with technological innovation.

Table 4 Regression Results: Corporate Governance, Audit Quality, and Technological Innovation

Variables	**Model (1)**	**Model (2)**	**Model (3)**
Corporate Governance (CG)		**0.112***	**0.085***
		(0.028)	(0.026)
Audit Quality (AQ)			**0.074***
			(0.022)
Firm Size	**0.018***	**0.014***	**0.012***
	(0.004)	(0.004)	(0.004)
Leverage	**–0.026**	**–0.021**	**–0.018**
	(0.013)	(0.012)	(0.011)

Variables	**Model (1)**	**Model (2)**	**Model (3)**
Firm Age	–0.001	–0.001	–0.001
	(0.001)	(0.001)	(0.001)
Constant	**–0.163***	**–0.142***	**–0.121***
	(0.041)	(0.039)	(0.037)
Year Fixed Effects	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes
Observations	420	420	420
R^2	0.189	0.236	0.271

*Notes: Standard errors are reported in parentheses. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively. Year and firm fixed effects are included in all models.*

Table 4 reports the regression results examining the effects of corporate governance and audit quality on technological innovation. Model (1) includes only control variables. Firm size is positively and statistically significant ($\beta = 0.018$, $p < 0.01$), indicating that larger accounting firms tend to exhibit higher levels of technological innovation. Leverage and firm age are not statistically significant. Model (2) introduces Corporate Governance (CG). The coefficient on CG is positive and statistically significant ($\beta = 0.112$, $p < 0.01$), suggesting that firms with stronger governance structures demonstrate higher levels of technological innovation. The inclusion of CG increases the explanatory power of the model, with R^2 rising from 0.189 to 0.236. Model (3) further incorporates Audit Quality (AQ). Both corporate governance and audit quality remain positively and statistically significant. The coefficient for CG decreases slightly but remains significant ($\beta = 0.085$, $p < 0.01$), while AQ exhibits a positive and significant association with technological innovation ($\beta = 0.074$, $p < 0.01$). The R^2 increases further to 0.271, indicating improved model fit. Across all models, the signs and significance levels of the control variables remain largely stable. Overall, the results indicate that corporate governance and audit quality are positively associated with technological innovation, providing empirical support for the proposed mediation framework, and laying the groundwork for the mediation analysis reported in the subsequent section.

4.5 Mediation Analysis Results

4.5.1 Technological Innovation as a Mediator

Table 5 presents the results of the mediation analysis examining whether technological innovation mediates the relationships between corporate governance, audit quality, and financial performance. When technological innovation is introduced into the performance model, the coefficients of corporate governance and audit quality decrease in magnitude but remain statistically significant.

Table 5 Mediation Analysis Results: The Mediating Role of Technological Innovation

Effects	**Coefficient**	**Std. Error**	**z-value**	**p-value**	**95% CI**
Panel A: Mediation of CG → TI → ROA					
Direct Effect (CG → ROA)	**0.063***	0.019	3.32	0.001	[0.026, 0.100]
Indirect Effect (CG → TI → ROA)	**0.019***	0.007	2.71	0.007	[0.006, 0.034]
Total Effect	**0.082***	0.021	3.90	0.000	[0.041, 0.123]
Panel B: Mediation of AQ → TI → ROA					
Direct Effect (AQ → ROA)	**0.058***	0.017	3.41	0.001	[0.025, 0.092]
Indirect Effect (AQ → TI → ROA)	**0.017**	0.008	2.13	0.033	[0.003, 0.032]
Total Effect	**0.075***	0.019	3.95	0.000	[0.038, 0.112]

Notes: Indirect effects are estimated using bootstrapping procedures with bias-corrected confidence intervals. A significant indirect effect indicates mediation.

Table 5 presents the results of the mediation analysis examining the mediating role of technological innovation in the relationships between corporate governance, audit quality, and financial performance. Panel A reports the mediation results for corporate governance. The direct effect of corporate governance on financial performance remains positive and statistically significant ($\beta = 0.063$, $p < 0.01$), indicating that corporate governance continues to exert a direct influence on ROA after accounting for technological innovation. The indirect effect through technological innovation is also positive and statistically significant ($\beta = 0.019$, $p < 0.01$), with the bootstrapped confidence interval excluding zero. The total effect of corporate governance on financial performance is 0.082 ($p < 0.01$)**.** These results indicate that technological innovation partially mediates the relationship between corporate governance and financial performance, supporting Hypothesis 3**.** Panel B reports the mediation results for audit quality. The direct effect of audit quality on ROA is positive and statistically significant ($\beta = 0.058$, $p < 0.01$). In addition, the indirect effect of audit quality on financial performance through technological innovation is positive and significant ($\beta = 0.017$, $p < 0.05$). The total effect of audit quality on ROA is 0.075 ($p < 0.01$)**.** The persistence of a significant direct effect alongside a significant indirect effect indicates partial mediation, providing empirical support for Hypothesis 4**.** Overall, the mediation results demonstrate that technological innovation serves as a significant transmission mechanism through which corporate governance and audit quality influence financial performance, while direct effects remain economically meaningful.

4.6 Robustness Test Results

To ensure the reliability of the findings, several robustness tests are conducted. First, alternative measures of financial performance, including Return on Equity (ROE), are employed. The results remain consistent in terms of coefficient signs and significance levels, confirming the robustness of the main findings. Second, alternative model specifications using fixed-effects and random-effects estimators yield consistent results. The Hausman test supports the use of fixed-effects models, indicating the importance of controlling for unobserved firm-specific heterogeneity. Third, lagged independent and mediating variables are introduced to address potential endogeneity and reverse causality concerns. The results remain stable, suggesting that the observed relationships are not driven by simultaneity bias. Finally, multicollinearity diagnostics indicate that variance inflation factors fall within acceptable ranges, further confirming the stability of the regression estimates.

4.7 Summary of Hypothesis Testing

Table 6 summarises the hypothesis testing results. All four hypotheses are supported by the empirical evidence. Corporate governance and audit quality exhibit positive direct effects on financial performance, while technological innovation partially mediates these relationships.

Table 6 Summary of Hypotheses Testing

Hypothesis	Statement	Expected Sign	Empirical Result	Conclusion
H1	Corporate governance is positively associated with financial performance.	Positive	**β = 0.063***	Supported
H2	Audit quality is positively associated with financial performance.	Positive	**β = 0.058***	Supported
H3	Technological innovation mediates the relationship between corporate governance and financial performance.	Positive	**Indirect effect = 0.019***	Supported (Partial Mediation)
H4	Technological innovation mediates the relationship between audit quality and financial performance.	Positive	**Indirect effect = 0.017**	Supported (Partial Mediation)

The results collectively demonstrate that governance mechanisms and audit quality are more effective in improving financial performance when supported by technological innovation. These findings underscore the importance of integrating governance practices with digital transformation strategies in the accounting sector.

5. Discussion, Conclusions, and Implications

5.1 Discussion of Findings

This study investigated the relationships among corporate governance, audit quality, technological innovation, and financial performance in Chinese accounting firms. The findings offer theoretical and contextual insights into the functioning of governance mechanisms in a digitally transforming professional context as they adopt an integrated framework based on agency theory and resource-based view (RBV). The first results indicate that board independence, as a proxy for corporate governance, is positively associated with firm performance. According to agency theory, good governance mechanisms reduce agency conflict and improve monitoring efficiency (Jensen & Meckling, 1976). This finding conforms to this theory. In accounting firms where the credibility and independence of the entity are essential, board independence strengthens oversight, professional judgment, and decisions by one level more oversight of management and internal auditors.

Governance mechanisms in China need to be interpreted in its own institutional context. According to Jiang and Kim (2015), Chinese firms are often characterised by concentrated ownership structures and significant state influence. As a result, the monitoring role of boards may be weakened, and formal governance mechanisms may be less effective. Despite these limitations, the positive link found in this study suggests that governance reforms, especially board independence improvements, remain a key driver of firm performance in institutional complexity environments.

The findings also confirm that audit quality had a positive and significant impact on financial performance. This shows that high-quality audits help improve the quality and reliability of financial reports, improve information asymmetry between stakeholders, and boost their confidence (DeFond & Zhang, 2014). audit quality is a governance mechanism. It also has an important role to play in the reputation and competitiveness of the accounting profession.

In China, where a variety of regulatory enforcement and professional standards can vary regionally, audit quality has played many roles. Findings of the study positively associate audit quality and improvement in these institutional weaknesses signified more transparency and stronger trust in the firm's financial reporting. Moreover, the significant role of audit quality in improving firm performance has been enhanced by the recent emergence of innovative audit technologies (Appelbaum et al., 2023) like data analytics and artificial intelligence.

Essentially, the findings show that technological innovation partially mediates the relationship between corporate governance, audit quality, and financial performance. The results provide strong support for the resource-based view (RBV) suggesting that firm performance is attributed not only to governance structures but also to the firm's ability to develop and use strategic resources such as technological capabilities (Barney, 1991).

In this sense, governance mechanisms have a direct and indirect impact on performance through influencing a firm's investment in technological innovation. Efficient resource allocation, long-term innovation strategies, and enhanced technology adoption are characteristic of well-governed firms. In turn, they improve operational efficiency, enhance audit quality, and fortify internal controls to yield superior financial performance.

The mediating impact of technological innovation is particularly prevalent in China's ongoing digital transformation. The government of China has continuously encouraged the use of digital technologies in all industries, but especially in accounting and auditing. In this environment, technological innovation, such as artificial intelligence (AI), big data analytics, and cloud-based auditing systems, plays a very important role in increasing the effectiveness of governance by adding transparency, reducing manual intervention, and enabling real-time monitoring.

The result of partial mediation means that technological innovation can improve the efficiency of mechanisms of governance. But corporate governance and the quality of audit have direct effects on financial performance. Thus, technological innovation works as a complementary mechanism, strengthening rather than substituting for governance practices. The investigation (2023) by Liu et al. was not the first to observe this, digitalization-transformation is not just relevant, but growingly relevant, enhancing the governance-performance relationship.

In sum, the literature extension shows that the positive role played by corporate governance and audit quality in financial performance depends on the firm's technological capabilities. In the accounting industry, it is especially important and crucial to integrate governance mechanisms with technology for accuracy.
These insights reiterate the significance of governance–innovation integrated perspective in dynamic emerging economies like China where institutional environment is evolving and digital transformation is turbo-charging. Companies that synchronize their governance practices with their technological innovation strategies are better placed to enable sustainable performance and long-term competitiveness.

5.2 Theoretical Implications

This study offers several important theoretical contributions to the corporate governance and accounting literature. First, it extends existing governance research by explicitly incorporating technological innovation as a mediating mechanism. While prior studies have examined governance, audit quality, and innovation largely in isolation, this study demonstrates how these elements interact within a unified analytical framework. Second, the findings contribute to agency theory by highlighting the role of technological capabilities in enhancing governance effectiveness. Traditional agency-based explanations focus on monitoring and incentive alignment, whereas this study suggests that governance mechanisms also operate by facilitating strategic investments in innovation. This perspective enriches theoretical understanding of how governance structures translate into performance outcomes. Third, by focusing on accounting firms in China, the study adds context-specific insights to the literature on emerging economies. The findings indicate that governance mechanisms remain effective even in institutional environments characterised by ownership concentration and evolving regulatory frameworks, particularly when complemented by technological innovation. This contributes to a more nuanced understanding of governance–performance relationships across institutional contexts.

5.3 Practical Implications

The results of this study have significant implications for accounting firms, regulators and policymakers, and stakeholders in China. Also, it is particularly relevant in light of the fast-paced digital revolution in the accounting profession. The findings released revealed that it is requisite to improve the financial performance of the company by having effective corporate governance through board independence and simultaneously install more knowledgeable independent directors with accounting and auditing skills along with advisory for software and technology experts like data analytics, financial technology among others for accounting firms. Moreover, companies ought to make proactive investments in tech-enabled audit practices like AI-assisted auditing, big data analytics auditing, automated auditing, etc., to enhance audits' accuracy, efficiency, and transparency. In long-term strategic planning, make ongoing investments in research and development, digital infrastructure and staff training, with a focus on emerging technologies such as cloud-based audit systems, blockchain verification, and real-time reporting. The findings underscore the necessity for regulators and professional bodies to ensure that governance reforms are accompanied by clear guidelines and incentives for digital transformation. This refers to the establishment of digital audit standards, provision of financial incentives for technology adoption and establishment of secure data-sharing platforms for enhancing audit transparency. There is a need to align improvements in corporate governance with the strategy of the digital economy at the policy level. This can be achieved by promoting cooperation between accounting firms and technology firms; and supporting the development of digital skills as well as promoting the adoption of national standards for digital auditing practices. The results are meaningful for investors and stakeholders by indicating that firm evaluation should look beyond governance indicators to technology capabilities and readiness. Firms in China that are able to combine governance mechanisms and technology innovation for achieving sustainable performance and competitiveness in China's institutional and industry environment.

5.4 Limitations and Directions for Future Research

Despite its contributions, this study has several limitations that should be acknowledged. First, the analysis relies on secondary data, which may limit the ability to capture qualitative aspects of governance practices and technological implementation. Future research could incorporate primary data or case-based approaches to

gain deeper insights into governance and innovation processes. Second, the study focuses on accounting firms in China, which may limit the generalizability of the findings to other institutional contexts. Future studies could extend the analysis to other emerging or developed economies to examine whether similar governance–innovation dynamics exist. Third, technological innovation is measured using quantitative proxies such as R&D intensity and digital investment disclosures. While these measures are widely used, they may not fully capture the complexity of technological capability. Future research could explore alternative measures, such as technology adoption indices or qualitative assessments of digital maturity. Finally, future studies could examine additional moderating or mediating variables, such as organisational culture, leadership characteristics, or regulatory intensity, to further enrich understanding of governance–performance relationships.

5.5 Conclusion

This study examines the relationships among corporate governance, audit quality, technological innovation, and financial performance in Chinese accounting firms. The findings demonstrate that corporate governance and audit quality are positively associated with financial performance and that technological innovation partially mediates these relationships. By integrating governance and innovation perspectives, the study provides a more comprehensive explanation of how governance mechanisms translate into performance outcomes in a technologically dynamic environment. Overall, the study contributes to the corporate governance and accounting literature by highlighting the importance of technological innovation as a strategic enabler of governance effectiveness. The findings underscore the need for accounting firms and regulators to consider governance and innovation as complementary forces in enhancing firm performance and sustaining long-term competitiveness. This study moves beyond traditional governance-performance analysis by demonstrating that governance effectiveness in emerging economies is increasingly contingent upon firms' technological capabilities.

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