AUDIT COMMITTEE NOMINEE DIRECTORS AND BANK PERFORMANCE: EVIDENCE FROM INDIAN BANKS

Neeraj Gupta *, Nazia Ansari **, Ravinath Dammalapati ***, Jai Kotecha **, Bhagwan Jagwani ****, Priti Bakhshi *****

* Corresponding author, N. L. Dalmia Institute of Management Studies and Research, Mumbai, India

Contact details: N. L. Dalmia Institute of Management Studies and Research, Srishti Rd., Sector 1, Mira Road, Mira Bhayandar,

Mumbai 401107, Maharashtra, India

** N. L. Dalmia Institute of Management Studies and Research, Mumbai, India

*** Vignana Jyothi Institute of Management, Hyderabad, India **** Allenhouse Institute of Management, Kanpur, India

***** SP Jain School of Global Management, Mumbai, India



How to cite this paper: Gupta, N., Ansari, N., Dammalapati, R., Kotecha, J., Jagwani, B., & Bakhshi, P. (2023). Audit committee nominee directors and bank performance: Evidence from Indian banks. *Corporate Ownership & Control*, 20(4), 8–31. https://doi.org/10.22495/cocv20i4art1

Copyright © 2023 The Authors

This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0). https://creativecommons.org/licenses/by/ 4.0/

ISSN Online: 1810-3057 ISSN Print: 1727-9232

Received: 08.07.2023 **Accepted:** 02.10.2023

JEL Classification: C33, E58, G18, G21, M42 **DOI:** 10.22495/cocv20i4art1

Abstract

The audit committee (AC) in the Indian public sector banks consists of executive directors, Reserve Bank of India nominee directors, and the central government nominee directors in addition to independent directors, whereas the AC in the private sector banks consists mostly of independent directors. The difference in the constitution of the AC across different ownership may have a different impact on their performance. Hence, this study aims to investigate the impact of the nominee directors on the audit committee and the performance of the Indian listed banks. The study uses the panel data approach. We have taken 21 public sector banks and 15 private sector banks operating in the Indian banking sector. The fixed effects estimation technique to examine the relationship between the audit committee constituents and bank performance during the period 2009-2010 to 2016-2017 was used. It was found that CEO chairman duality, the presence of the chartered accountant (CA) director, AC chairman, and AC bear a positive relationship with bank performance. The findings are more or less consistent across the various bank performance measures and sub-samples classified based on the bank size, audit committee size, and ownership of the banks. The study explores the relationship between nominee directors and bank performance. The study provides insights to policy regulators and policymakers who are entrusted with the establishment of ACs in the banks in light of ongoing regulatory reforms.

Keywords: Audit Committee, AC Chairman, Bank Performance, CA Director, CEO Duality

Authors' individual contribution: Conceptualization — N.G., N.A., R.D., J.K., B.J., and P.B.; Methodology — N.G. and N.A.; Validation — N.G., N.A., R.D., J.K., B.J., and P.B.; Formal Analysis — N.G., N.A., R.D., B.J., and J.K.; Investigation — N.G., N.A., R.D., J.K., B.J., and P.B.; Resources — N.G., J.K., B.J., and P.B.; Data Curation — N.G., N.A., and R.D.; Writing — Original Draft — N.G., N.A., R.D., J.K., B.J., and P.B.; Writing — Review & Editing — N.G., N.A., R.D., J.K., B.J., and P.B.; Supervision — N.G., N.A., and R.D.

Declaration of conflicting interests: The Authors declare that there is no conflict of interest.

VIRTUS

1. INTRODUCTION

The present study examines the effect of the audit committee (AC) on the performance of Indian commercial banks. Through financial oversight and control, the AC protects the interests of investors, making it a crucial board committee (Mallin, 2007). In line with international norms, the Indian banking sector's AC has at least three independent directors. By ensuring the accuracy and transparency of financial reporting and effective risk management, audit committees with independent, subject-matter experts can improve bank performance. Earlier researchers (Gupta & Mahakud, 2021) investigated the relationship between independence, size, and other characteristics of the ACs and their role in enhancing performance (Klein, 1998; Chan & Li, 2008). Therefore, the AC's usefulness depends more on its attributes than on its existence. We claim that in response to the Satyam scandal, the Securities and Exchange Board of India (SEBI) changed Clause 49 of the listing agreement to improve how the AC operates and, as a result, corporate governance practises for example, the post-Satyam implies AC independence increased. Higher AC independence is thought to be related to better monitoring, accurate financial reporting, and ultimately performance (Bronson et al., 2009). We contend that the performance of banks is influenced by the inclusion of government- and RBI-nominated (RBI is for "Reserve Bank of India") directors on the audit committee. However, the early governance studies were conducted in common market settings, which contributes to the explanation of some of the contradictory findings in governance-performance research. This study intends to evaluate the effect of several AC characteristics and aspects on the performance of Indian banks in light of current legal reforms.

The current study fills the knowledge gap and shows the relevance of this topic by demonstrating the impact of AC characteristics and constituents on the performance of Indian commercial banks. We have considered the Indian banking sector for a number of reasons. The impact of AC features on net interest margin, pre-provision profit ratio (PPR), and asset quality as determined by non-performing loan (NPL) ratio, gross-NPA (non-performing assets), and net-NPA is also examined in the current study. First, the performance measures used in the available empirical research include return on assets (ROA), return on equity (ROE), or Tobin's Q. Second, the empirical study on the relationship between specific AC characteristics and bank performance (Aldamen et al., 2012; Chandrasegaram et al., 2013) mostly takes into account developed economies. Despite the fact that the structure of ACs in Indian commercial banks varies, studies on the Indian context are scarce. Therefore, the aim of the current study is to assess whether this variation in the AC structure has an impact on the performance gap between the two types, i.e., the public and private sector banks. To the best of our knowledge, a rare study on the relationship between AC characteristics and bank performance in India has been taken into account in light of current regulatory developments.

As per the BASEL committee recommendations, the audit committee must consist of at least three

independent directors who have experience in banking or finance. The executive director should only be the permanent invitee to the audit committee. The chairman of the audit committee need not be restricted to the profession of chartered accountant. Instead, he or she can be a person with knowledge of "finance" or "banking". The audit committee ought to convene meetings at least three times annually. Before the yearly accounts are finalised, one meeting must be held, as well as one every six months. The bank's executive director (ED), two official directors (nominated by the RBI and central government), and two non-official and nonexecutive directors - at least one of whom must be a chartered accountant (CA) - make up the audit committee in the public sector bank. Whereas private sector banks consist mostly of independent directors. Given the differences in AC structures across different ownerships in light of recent legal reforms, the performance of Indian banks serves as out-of-sample evidence for our research. We find that the inclusion of the CEO on the audit committee has a negative impact on the bank's performance, whereas the participation of a CA director enhances the bank's performance using a sample of 36 banks operating in the Indian banking sector from 2009-2010 to 2016-2017. We add to the body of knowledge. First of all, developed countries have been the focus of the majority of earlier studies (Aldamen et al., 2012; Chandrasegaram et al., 2013). There are rare studies on how AC features affect Indian banks. Since the banking sector in India differs in terms of ownership, shareholding pattern, ownership concentration, board structure, and director selection technique, we make an effort to assess the significance of AC characteristics in a bank-based economy (Gupta & Mahakud, 2020a, 2020b). This topic has merely been discussed in previous literature. Second, the study evaluates the impact of the AC characteristics on the performance of the bank after taking into consideration the most recent legal reforms. To analyse the robustness, we classified the banks based on ownership and time period. We estimate the suggested model using the generalised method of moments (GMM) technique. We conclude that there is a strong relationship between audit committee characteristics and bank performance.

The remaining sections are organised as follows. Section 2 talks about the institutional structure and presents a literature review. Section 3 describes research methods. Section 4 contains the findings and analyses of the study. Section 5 summarises and concludes the study.

2. LITERATURE REVIEW

2.1. CEO duality

When a person holds the positions of CEO and board chair at the same time, this is known as CEO duality. There are conflicting results regarding how CEO duality affects bank performance. The dual role of CEO and chairman can result in quicker execution of strategic initiatives and more effective decisionmaking. Some CEOs have the authority to make choices right away, which helps speed up and simplify the decision-making process. Contrarily, CEO duality can also result in conflicts of interest and a failure to hold executives accountable. For instance, the CEO might be more concerned with immediate earnings and personal gain than with the bank's and its stakeholders' long-term interests. Due to their dual roles as CEO and board chair, the CEO may also be less likely to face consequences for any poor outcomes or choices. In the banking sector, CEO duality is positively correlated with business performance (Gupta & Mahakud, 2020a, 2020b). However, CEO duality was found to be inversely related to bank performance (Firth et al., 2007) in Chinese banks and US banks (Krishnan & Park, 2005). Hence, we hypothesize that:

H1: All else equal, there is a relationship between the presence of the chairman of the board on the audit committee and bank performance.

2.2. The chairman of the board

The audit committee's ability to supervise the bank's financial reporting and internal controls can be improved by the chairman's attendance, which can add experience, expertise, and oversight to the group. The committee can benefit greatly from the chairman's advice in deciding on its priorities, agenda, and how best to handle the AC's recommendations. In addition, the chairman's presence can increase interaction and cooperation between the audit committee and the board of directors, which will benefit the board's overall governance and control over the bank. However, the chairman's participation could lead to conflicts of interest, especially if the chairman has close personal or professional ties to the bank or its management. Such connections may jeopardise the chairman's neutrality and independence, which may harm the audit committee's legitimacy and efficiency. Furthermore, the audit committee may experience a power imbalance as a result of chairman's presence, which may the limit the committee's ability to question management and deal with pressing problems. According to Bédard and Gendron (2010), having a chairman on the audit committee with financial competence is linked to better financial reporting quality and fewer financial restatements. Hence, we hypothesize the following:

H2: There is a positive relationship between the presence of the chairman of the board on the audit committee and bank performance.

2.3. Chartered accountant director and audit committee

The debates and efficacy of the audit committee can benefit from the accounting and auditing expertise brought by the presence of a CA director. Ensuring compliance with accounting standards, regulatory regulations, and internal controls, which is important for preserving investor confidence, could help the bank perform better overall (Li et al., 2014). Effective risk management techniques, fraud and error detection, and other abnormalities that can impair the functioning of the bank may be aided by them (Bedard & Johnstone, 2010). A CA director's participation on the audit committee enhances board oversight (Prawitt et al., 2009), as it enables the board to gain knowledge of the bank's operations and technical expertise in accounting and auditing issues. This knowledge enables the committee to ask pertinent questions and reach well-informed conclusions. From the discussion above, it can be concluded that having a CA director on the audit committee may enhance the quality of financial statements and, consequently, the performance of the bank. Hence, we hypothesize that:

H3: The presence of a CA director on the audit committee has a positive relationship with bank performance.

2.4. The chairman of the audit committee is an independent director

By ensuring ethical behaviour, adherence to legal requirements, efficient risk management techniques, and internal policies that may help to increase investor confidence and enhance the bank's overall performance, the independent chairman of the AC may improve governance. They could improve financial reporting transparency (Jang et al., 2019), lessen the possibility of financial misconduct and fraud, and improve the effectiveness of the bank's internal controls (Liu et al., 2017), all of which would raise the effectiveness of the audit committee (Elyasiani & Zhang, 2015). The AC can be led by an independent chairman who can also help determine the agenda for meetings and make sure the committee is doing its job well. Overall, the research points to a potential benefit for bank performance by having an independent chairman on the audit committee. Hence, we formulate the following hypothesis:

H4: The presence of an independent chairman in the audit committee has a positive relationship with bank performance.

2.5. Presence of an independent director in the audit committee

Due to the independent director's unbiased and impartial viewpoint on the bank's financial statements, the AC's financial reporting quality may be improved (Zhang et al., 2007). Providing oversight and direction on risk assessment, monitoring, and mitigation, as well as boosting the effectiveness of the bank's internal control systems, may help to improve the bank's risk management practices. By encouraging open and honest communication between the audit committee, management, and stakeholders, the presence of independent directors on the audit committee may also help to increase transparency in the bank's operations. This will result in good corporate governance practices, which will, in turn, ensure that the bank operates ethically and complies with legal and regulatory requirements (Chen et al., 2018). Overall, the research points to the possibility that having an independent director on the audit committee could offer a new, unbiased view of the bank's operations, assisting in identifying opportunities for development and fostering good change. Hence, we formulate the following hypothesis:

H5: The presence of the independent director in the audit committee has a positive relationship with bank performance.

VIRTUS

2.6. Presence of female director in audit committee

According to Terjesen et al. (2009), female directors on AC are better at managing interpersonal relationships and adopting a consensual and participatory approach, which may lead to higher ethical decision-making and, in turn, increased stakeholder trust and improved firm performance. It is essential to have a diverse group of individuals on the audit committee, including women, as they may bring different perspectives and experiences to the table and as a result, make careful, conservative decisions and employ better risk management techniques (Carter et al., 2010, in the US banks), which will enhance financial performance (Adams and Ferreira, 2009, in European banks; Ahwireng-Obeng and Ahwireng-Obeng, 2019, in Ghanaian banks). Women directors should be recommended for board committees, according to Green and Homroy (2018), who also claim that having more women on the committees improves performance. Overall, the research indicates that female directors can contribute with a holistic viewpoint and innovative abilities, which may aid in effective decision-making and improved results for banks. However, Dwyer et al. (2003) contend that having more female directors may have negative effects, such as unwarranted oversight that results in conflicts of interest among directors and a reduction in corporate value. Hence, we formulate the following hypothesis:

H6: All else equal, there is a relationship between the presence of female directors on the audit committee and bank performance.

2.7. Presence of the executive director in the audit committee

An executive director on the AC might have extensive experience, reliable financial reporting skills, and knowledge of the operations and performance of the bank (Chang et al., 2019). With better communication and comprehension between the AC and the board of directors, decision-making could become more efficient. An executive director, however, may be more likely to put the bank's management's interests ahead of those of shareholders or other stakeholders, resulting in a lack of independence on the AC (Fahlenbrach & Stulz, 2011), could have a negative which impact on the committee's performance and decision-making (In et al., 2020). Additionally, the executive director may lessen the level of oversight provided by the committee, which would limit the audit committee's ability to identify and mitigate risks because they might be involved in day-to-day operations and thus unable to offer unbiased oversight of the bank's operations. Though having an executive director on the AC may offer invaluable knowledge and insights, it is crucial to carefully weigh the risks and advantages to make sure the committee can continue to effectively carry out oversight its duties. Hence, we formulate the following hypothesis:

H7: All else equal there is a relationship between the presence of executive director on the audit committee and bank performance.

VIRTUS

2.8. Presence of the Reserve Bank of India nominee director in the audit committee

Assuring that the bank is abiding by the pertinent laws and regulations can improve its overall and improve risk management performance practises (Fariha et al., 2022). This is something that an RBI nominee director can do for the AC. The decision-making procedures and internal controls used by the AC may benefit from the skills and experience of an RBI-nominated director in risk management and supervision, which might assist in reducing possible risks and enhance the performance of the bank as a whole. Since the nationalisation of banks in 1969, the central government has appointed nominee directors to the bank board using this power exclusively. By nominating a nominee to the bank board, the RBI can also keep an eye on how the banks are operating. For instance, under Section 19(f) of the State Bank of India Act of 1955, the RBI can appoint one director to the board of the State Bank of India. The State Bank of India Subsidiary Banks Act, 1959, Section 25(1)(b), grants the RBI the authority to appoint its nominee director to the board of the State Bank of India's subsidiaries. The Bank Nationalisation Act of 1969 also allows RBI nominee directors to be appointed to the boards of public sector banks. The independence of bank boards is diminished by the appointment of nominees from the government and the RBI. The RBI serving officials who are mostly RBI nominated directors are supposed to be responsible and actively engage in bank operations. However, it is argued that the bank management and the RBI nominee directors can have a conflict of interest. According to the central government, the presence of RBI nominee directors enhances board performance, and their removal may not be acceptable given the rising NPAs and declining earnings. A conflict of interest between the two may develop, hence it is also argued that over time, RBI should strengthen the boards by removing its nominated directors. Based on the above discussion, we formulate the following hypothesis:

H8: All else equal, there is a relationship between the presence of the RBI nominee director on the audit committee and bank performance.

2.9. Presence of the Central Government of India nominee director in the audit committee

In order to ensure that the interests of the state and its stakeholders are represented in the decisionmaking processes of the bank, state government nominee directors are appointed. The presence of a central government nominee director may ensure that the audit committee is knowledgeable and fully comprehends the risks that the bank faces, as well as the regulatory environment in which it operates. This may result in better decision-making and more effective risk management practises, which may ultimately improve the bank's performance (Kumbhakar & Sarkar, 2003).

Additionally, the bank's legitimacy and dependability in the eyes of the general public, regulators, and investors are increased by having a central government nominee director. However, the inclusion of a director nominated by the central government raises the possibility of political intervention in the bank's activities, compromising the bank's independence and autonomy, and raising the possibility that decisions are taken for political rather than commercial considerations. Furthermore, the presence of a director nominated by the central government may lead to conflicts of interest because the director may have conflicting priorities and obligations to the government and bank. As a result, the audit committee's decisionmaking may lack transparency and accountability, which could eventually hurt the bank's performance. Agency theory claims that government banks witness minor disciplinary effects from the financial market, which may encourage their nominees to follow their individual interests at the cost of stakeholders' interests. Furthermore, La Porta et al. (2000) demonstrate that government shareholding in banks and the presence of government representatives is a significant contributor to inefficiency and greater non-performing loans and foresees a detrimental impact on banks' performance. The findings of the study by Hajer and Anis (2018), which support the agency theory, show that directors who represent the state, have negative and significant impact on bank а performance. Regarding institutional nominee directors in the Indian context, Sarkar and Sarkar (2009) find that their existence has a detrimental impact on bank performance, particularly on its market valuation because the market anticipates them to make cautious decisions. Hence, in congruence with earlier discussion, we hypothesize:

H9: The higher proportion of government nominee directors reduces the bank's performance.

2.10. CEO and audit committee

Since the CEO has a comprehensive understanding of the bank's operations, their membership on the audit committee may increase the committee's effectiveness. This is because the CEO can help committee identify potential risks the and weaknesses in the bank's internal controls as they align incentives and enhance board-management communication, which, in turn, results in better risk management procedures and improved financial performance (Chan et al., 2011). The audit committee's findings and recommendations may also receive more scrutiny as a result of the CEO's membership, which could enhance the bank's governance and risk management procedures. The CEO's ties to the bank's activities are too strong for him/her to oversee the audit function in a neutral and impartial manner. Additionally, the CEO might have conflicts of interest that undermine the committee's efficacy (Chan et al., 2013). The CEO might be hesitant to endorse the AC's suggestions, which might have a negative impact on the bank's performance (Habib et al., 2021), foster a culture of complacency, and lessen the audit committee's efficacy. The bank boards must build efficient governance mechanisms to reduce conflicts of interest and carefully weigh the possible risks and benefits of having the CEO serve on the audit committee. Hence, we formulate the following hypothesis:

H10: All else equal, there is a relationship between the presence of the CEO on the audit committee and bank performance.

2.11. Audit committee size

According to the resource dependence theory (RDT), larger ACs are keen to commit more resources and expertise to effectively carry out their obligations (Allegrini & Greco, 2011). To enable effective monitoring, more directors on AC are anticipated to bring a diversity of perspectives, expertise, experiences, and talents to the table (Bédard & Gendron, 2010). The RDT suggests that the large AC supplies substantial resources in the form of improved networks and knowledge, which are essential for its efficient operation and may ultimately improve performance. Therefore, it is expected that large ACs will help these committees identify and address any potential issues with corporate reporting practices. The proper size of the AC is crucial because it impacts members' willingness to monitor business operations and detect fraud because a larger size might minimise material discrepancies. Prior studies have shown varied results regarding the association between AC size and performance (Gupta & Mahakud, 2021). The impact of AC size is positive as a larger AC size improves the bank performance in line with RDT. Earlier studies (Algatamin, 2018; Zraig & Fadzil, 2018; Chandrasegaram et al., 2013; Al-Matari et al., 2014; Saleh et al., 2007) have revealed that there is a positive relationship between AC size with firm performance supporting RDT (Aldamen et al., 2012). However, the negative link between AC size and financial reporting in the studies by Lin et al. (2006) and Kipkoech and Rono (2016) may be caused by process losses and the division of responsibility due to its large size (Karamanou & Vafeas, 2005). Hence, we also expect a non-linear relationship between the AC size and bank performance.

H11: All else equal, there is a relationship between the size of the audit committee and bank performance.

3. RESEARCH DESIGN

3.1. Sample and data

We specifically targeted all of India's commercial banks. Since the foreign banks are not registered in India under the Indian Companies Act, 2013, and hence are not listed on Indian stock exchanges, we have not considered the foreign banks for our study. They are acting as a subsidiary of their parent company. Therefore, they are exempt from the listing agreement's Clause 49 requirements and are not required to submit the corporate governance report to stock markets. Therefore, their corporate governance data is not available. Finally, we create a panel data sample of 36 banks, including 21 banks from the public sector and 15 banks from the private sector. We have chosen the post-crisis period after which a lot of legal reforms took place, the crisis taught us that any regulator looking at hazards in the industry was unable to detect concerns growing throughout the financial system as a whole. To address the issue of financial stability, the Indian government established the Financial Stability and Development Committee (FSDC), a non-statutory committee of regulators. This body was supposed to conduct an overall evaluation of the system. The study's time frame is from 2009-2010

VIRTUS

to 2016-2017. We have analysed the annual reports and websites of the relevant companies are manually searched for information on AC characteristics. The CMIE ProwessIQ database and the Bloomberg database were used to collect the financial data. Different subsets of the data were used for our robustness analysis. We divided the entire sample into public and private banks based on ownership. In addition, we divided the data into groups based on the size of the audit committee (below median and above median audit committee sizes). In accordance with the tercile approach, we have also classified the banks into groups depending on size. Large banks are the banks in the upper tercile, and small banks are the banks in the lower tercile. In addition, we estimated the proposed model using the GMM approach to carry out the robustness test.

Table 1. Definition of variables

Variables	Measures	Predicted sign
	Panel A: Dependent variables	
ROA	Net Profit/Total assets	
ROE	Net Profit/Total equity	
ROCE	Net Profit/Average capital employed	
NIM	(Investment income – Interest expenses)/Average earning assets	
PPR	(Operating income – Operating expenses)/Total assets	
NPLR	Non-performing loan ratio	
NNPA	Log(Net non-performing assets)	
GNPA	Log(Gross non-performing assets)	
	Panel B: Shareholding variables	
CHAIRDUALITY(Dummy)	<i>CHAIRDUALITY</i> = 1, if the chairman of the board is occupying the chairman position of the audit committee also, otherwise 0	+/-
CHAIR(Dummy)	CHAIR = 1, if the chairman of the board is present in the audit committee, otherwise 0	+
CEO(Dummy)	CEO = 1, if the CEO of the board is present in the audit committee, otherwise 0	+/-
PCA(Dummy)	PCA = 1, if the CA director is present in the audit committee, otherwise 0	+
CI(Dummy)	CI = 1, if the chairman of the audit committee is an independent director, otherwise 0	+
PID(Dummy)	<i>PID</i> = 1, if the independent director is present in the audit committee, otherwise 0	+
PFD(Dummy)	PFD = 1, if the female director is present in the audit committee, otherwise 0	+
PED(Dummy)	PED = 1, if the executive director is present in the audit committee, otherwise 0	+/-
PRD(Dummy)	PRD = 1, if the Reserve Bank of India nominee director is present in the audit committee, otherwise 0	+/-
PGD(Dummy)	PGD = 1, if the Central Government of India nominee director is present in the audit committee, otherwise 0	-
AS	Audit committee size (Total number of members in the audit committee)	+/-
PERID	Percentage of independent directors in the audit committee	+
PERFD	Percentage of female directors in the audit committee	+
PERED	Percentage of executive directors in the audit committee	+/-
PERRD	Percentage of the Reserve Bank of India nominee directors in the audit committee	+/-
PERGD	Percentage of the Central Government of India nominee directors in the audit committee	-
	Panel C: Control variables	
FSIZE	Natural log of total assets	
FAGE	Log(Current year – year of establishment)	
ETA	Total equity capital to total asset ratio	
DG	Yearly growth of deposits	

Table 2. Number of banks and observations by bank category

	All	Public sector banks	Private sector banks
Number of banks	36	21	15
Number of observations	288	168	120
Note: The table reports the number	er of banks and the number of obs	servations by bank category.	

egory

3.2. Bank performance variables

We used the return on assets (ROA) (Chakraborty et al., 2022), return on equity (ROE), pre-provision profit ratio (PPR), net interest margin (NIM), return on capital employed (ROCE), and non-performing loan ratio (NPLR) as the performance measure for the banks according to earlier studies (Lin et al., 2009; Berger et al., 2010; Gupta & Mahakud, 2021; Gupta, Agarwal, et al., 2021; Gupta, Mahakud, et al., 2021). The ratio of net income to total assets, or ROA, measures how well a bank uses its assets to produce income. The rate of return on resources contributed by shareholders is measured by ROE (Gupta & Mahakud, 2020a, 2020b). It shows how much stock shareholders have earned on their per rupee investment. For shareholders, a larger ratio is preferable. *NIM* is calculated by dividing net interest income by total assets. Operating profit is determined by dividing operating income (operating income minus operating expenses) by total assets. According to Liang et al. (2013), the ratio of total nonperforming loans to total loans has been used to calculate NPLR. In addition, we used Gross-NPA and Net-NPA as indicators of bank performance (Gupta et al., 2022; Sahoo et al., 2022, 2023).

3.3. Audit committee characteristics

We use various AC characteristics based on previous studies. It includes chairman duality (CHAIRDUALITY), board chair (CHAIR), CEO (CEO), chairman independence (CI), presence of CA director (PCA), percentage of independent directors (PID), percentage of women directors (PFD), percentage of executive directors (PED), percentage of RBI director



(*PRD*), percentage of central government nominee director (*PGD*), and audit committee size (*AS*). Additionally, we have taken the dummy variables of independent directors, female directors, executive directors, executive directors, RBI nominee directors, and the central government nominee directors and estimated a separate model.

3.4. Control variables

In line with past studies (Lin & Zhang, 2009; Berger et al., 2010; Chakraborty et al., 2022; Gupta & Mahakud, 2021; Gupta, Agarwal, et al., 2021; Gupta et al., 2022), we took four control variables into account in our study, including bank size, bank age, deposit growth, and capital structure. The natural log of total assets is used to compute bank size (*FSIZE*) (Bhagat & Bolton, 2008). According to Smirlock (1985), increasing bank size has a favourable impact on bank profitability. Because large banks may be able to take advantage of economies of scale and improved operational efficiency, bank size has a beneficial impact on profitability.

As a result of greater agency costs, cumbersome bureaucratic procedures, and other expenses associated with managing huge organisations, extremely large banks may also have an inverse relationship with performance (Stiroh & Rumble, 2006; Pasiouras & Kosmidou, 2007). The entire impact of bank size must therefore be empirically determined. According to the "learning by doing" idea, there is a correlation between bank age and profitability, and as bank age rises, there is a greater chance that they will eventually boost their productive efficiency by drawing on their prior experience (Bahk & Gort, 1993).

We also anticipate a positive correlation between bank age and profitability, as older banks may have benefited from benefits including a longer history of business, a solid reputation, and a somewhat larger clientele. The performance of the banks may also be impacted by the larger increase in annual deposits because a bank with quick development is likely to expand its clientele and, as a result, generate better profits.

The ability of banks to turn their deposits into income earnings, which is a reflection of their operational efficiency, determines the relationship between deposit growth and performance. Since banks with greater capital ratios are thought to be more stable and secure, the capital ratio — which measures total equity to total assets — has also been viewed as a driver of bank performance. Table 1 provides a summary of the definitions for all independent variables, dependent variables, and control variables.

3.5. Models specification and empirical methods

Assuming the linear relationship between bankspecific factors, AC characteristics, and bank performance, we have specified a panel model as follows:

$$BP_{it} = \alpha_i + \beta_1 CHAIRDUALITY_{it} + \beta_2 CHAIR_{it} + \beta_3 CEO_{it} + \beta_4 PCA_{it} + \beta_5 CI_{it} + \beta_6 PID_{it} + \beta_7 PFD_{it} + \beta_8 PED_{it} + \beta_9 PRD_{it} + \beta_{10} PGD_{it} + \beta_{11} AS_{it} + \beta_{12} FSIZE_{it} + \beta_{13} FAGE_{it} + \beta_{14} ETA_{it} + \beta_{15} DG_{it} + \epsilon_{it}$$
(1)

 $BP_{it} = \alpha + \beta_1 CHAIRDUALITY_{it} + \beta_2 CHAIR_{it} + \beta_3 CEO_{it} + \beta_4 PCA_{it} + \beta_5 AS_{it} + \beta_6 CI_{it} + \beta_7 PERID_{it} + \beta_8 PERFD_{it} + \beta_9 PERED_{it} + \beta_{10} PERRD_{it} + \beta_{11} PERGD_{it} + \beta_{12} FSIZE_{it} + \beta_{13} FAGE_{it} + \beta_{14} ETA_{it} + \beta_{15} DG_{it} + \epsilon_{it}$ (2)

where, $BANKP_{it}$ = bank performance indicators measured by *ROA*, *ROE*, *NIM*, *PPR*, *NPLR*, *GNPA*, and *NNPA*; ϵ_{it} is the disturbance term; *i* is the bank from 1 to 36 and *t* is the values of years from 2010 to 2017. The β parameters capture the possible effect of explanatory variables on bank performance indicators. Control variables: *FSIZE* is firm size; *FAGE* is bank age; *DG* is yearly growth of deposits and *ETA* is the total equity to total assets ratio of the bank.

This study uses the panel data models with the standard errors clustered at the industry level. We have used panel data techniques to estimate the models, as the unobservable heterogeneity and endogeneity of AC characteristics cannot be captured through pooled regression estimation. Fixed effects and random effects models are the most commonly used static panel data models (Adams & Mehran, 2008). The fixed-effects model allows control for unobserved heterogeneity, which describes individual-specific effects not captured by observed variables. The term "fixed effects" is attributed to the idea that although the intercept differ across individuals (banks), each may individual's intercept time-invariant. is The correctness of the models is specified by the F-statistics. The Lagrange multiplier (LM) test

and Hausman test have been carried out to find a suitable panel data technique for estimating the bank performance equation. The LM test (Breusch-Godfrey test) tests for autocorrelation in the errors in a regression model. Breusch and Pagan's (1980) LM test, for random effects in a linear model, is based on pooled ordinary least squares (OLS) residuals, whilst estimation of the alternative model involves generalized least squares either based on a two-step procedure or maximum likelihood. The Hausman test (also called "Hausman the specification test") detects endogenous regressors (predictor variables) in a regression model. The Hausman test is sometimes described as a test for model misspecification. In panel data analysis, the Hausman test helps to fixed-effects model choose between the or a random-effects model. This test is also called the Durbin-Wu-Hausman (DWH) test or the augmented regression test for endogeneity. All these tests ultimately preferred the use of the fixed-effects model over the random-effect model. Additionally, we conduct robustness tests to check the strengths of the models. Finally, we also test the impact of the individual AC characteristics, the non-linear relationship of AC size and AC chairman tenure and composite AC governance index, on bank



performance by dividing all the banks' samples based on different characteristics such as ownership and time period.

4. RESULTS

4.1. Descriptive statistics

A summary of the performance, AC characteristics, and industry characteristics of the sample are reported in Table 3. Similar to trends worldwide, the RBI mandated the establishment of the AC. Additionally, Section 177 of the Companies Act, 2013, read with Rules 6 and 7 of Companies (Meetings of Board and its Powers) Rules, 2014, also makes it mandatory to establish an AC by the listed/public companies, whose paid-up capital exceeds Rs. 100 million or turnover exceeding Rs. 1,000 million or outstanding loans or borrowings or debentures or deposits exceeding Rs. 500 million. The average ROA of sample banks is 0.655, ROE is 9.189, PPR is 0.170, NIM is 2.954, and NPLR is 2.322. The private sector banks (ROA = 1.054%) are more profitable as compared to public sector banks (ROA = 0.369%). Nearly 52% of the chairman duality in the banks exists. In around 9.3% of banks, the chairperson of the bank is present in the audit committee. Additionally, in 3.1% of the banks, the CEO of the bank is present in the audit committee of the banks. In 88.6% of the public sector and 52.5% of the private sector banks, the CA director is present on the audit committee. In around 97.2% of the banks, the chairman of the audit committee is independent. In our sample, the audit committee mostly consists of independent directors. The private sector banks' audit committees are highly independent (90.668%). The public sector banks are more inclined to appoint a female director to the audit committee (11.29%). The presence of fewer independent directors in the audit committee (35.605%) of the public sector bank is due to the presence of the executive director, RBI nominee director, and the central government nominee directors. Additionally, the percentage of executive directors (29.407%), RBI nominee directors (16.52%), and central government nominee directors (26.858%) is higher as compared to the private sector banks. This supports the RBI guidelines that generally in audit committees of the public sector banks (the presence of the RBI nominee director, central government nominee director, and executive director has been made mandatory by the RBI). The public sector banks are larger in size and are older in age (90.928 years). The equity to asset ratio is higher in the public sector banks (3.70%) but the deposit growth is higher in the private sector banks (18.848%).

Table 3. Descriptive statistics of all the variables

SI.	Variable		All banks	5		Public sector b	anks	Р	rivate sector	banks
No.	variable	Obs.	Mean	Std. Dev.	Obs.	Mean	Std. Dev.	Obs.	Mean	Std. Dev.
				Panel A1: De	ependen	t variables				
1	ROA	288	0.655	0.778	168	0.369	0.670	120	1.054	0.744
2	ROE	288	9.189	12.362	168	7.473	13.834	120	11.591	9.486
3	ROCE	288	4.924	6.619	168	3.470	-21.79	120	6.961	6.223
4	NIM	288	2.954	0.718	168	2.619	0.514	120	3.422	0.704
5	PPR	288	0.170	0.073	168	0.155	0.049	120	0.190	0.093
6	NPLR	288	2.322	2.411	168	3.183	2.704	120	1.116	1.116
7	GNPA	288	76902.347	137966.6	168	116557.238	164717	120	21385.501	50038.05
8	NNPA	288	42209.08	75732.78	168	65945.95	89385.05	120	8977.458	26666.12
			Panel	A2: Shareho	olding p	attern variabl	es			
9	CHAIRDUALITY (Dummy)	288	0.052	0.222	168	0.005	0.077	120	0.125	0.332
10	CHAIR(Dummy)	288	0.093	0.093	168	0.017	0.132	120	0.2	0.401
11	CEO(Dummy)	288	0.031	0.174	168	0.053	0.225	120	0.008	0.091
12	PCA(Dummy)	288	0.736	0.441	168	0.886	0.317	120	0.525	0.501
13	CI(Dummy)	288	0.972	0.164	168	0.952	0.213	120	0.991	0.091
14	PID(Dummy)	288	0.982	0.130	168	0.970	0.170	120	0.991	0.091
15	PFD(Dummy)	288	0.413	0.493	168	0.529	0.500	120	0.25	0.434
16	PED(Dummy)	288	0.607	0.489	168	0.994	0.077	120	0.058	0.235
17	PRD(Dummy)	288	0.579	0.494	168	0.946	0.225	120	0.066	0.250
18	PGD(Dummy)	288	0.569	0.496	168	0.976	0.152	120	0.008	0.091
19	AS	288	5.430	1.190	168	5.833	0.873	120	4.86	1.340
20	PERID	288	58.548	30.330	168	35.605	12.644	120	90.668	14.517
21	PERFD	288	9.319	13.061	168	11.923	13.731	120	5.674	11.128
22	PERED	288	17.788	15.777	168	29.407	8.526	120	1.520	6.391
23	PERRD	288	10.609	9.670	168	16.520	4.580	120	2.333	8.814
24	PERGD	288	9.670	97.988	168	26.858	127.274	120	0.208	2.282
				Panel A3: 0	Control	variables				
25	FSIZE	288	2.44e+12	3.22e+12	168	3.18e+12	3.73e+12	120	1.40e+12	1.92e+12
26	FAGE	288	77.916	33.008	168	90.928	22.862	120	59.7	36.339
27	ETA	288	4.38	4.40	168	3.70	2.36	120	0.053	0.061
28	DG	288	14.56	13.207	168	11.509	11.339	120	18.848	14.441

Note: Table 3 reports descriptive statistics on the variables used in the study. The sample is panel data of public, private, and all the banks during the period 2010-2017. Panel A1 reports the summary statistics of dependent variables. Panel A2 reports the summary statistics of audit committee variables. Panel A3 reports the summary statistics of control variables. For a definition of variables please refer to Table 1.

VIRTUS

Table 4. Correlation matrix

	ROA	ROE	ROCE	NIM	PPR	NPLR	GNPA	NNPA	CHAIR DUALITY	CHAIR	CEO	PCA	CI	AS	PERID	PERFD	PERED	PERRD	PERGD	FSIZE	FAGE	ETA	DG
ROA	1.00																						
ROE	0.87 ***	1.00																					
ROCE	0.85 ***	0.90 ***	1.00																				
NIM	0.58 ***	0.36 ***	0.38 ***	1.00																			
PPR	0.68 ***	0.48 ***	0.46 ***	0.57 ***	1.00																		
NPLR	-0.80 ***	-0.80 ***	-0.75 ***	-0.45 ***	-0.37 ***	1.00																	
GNPA	-0.38 ***	-0.41 ***	-0.39 ***	-0.22 ***	0.04	0.52 ***	1.00																
NNPA	-0.43 ***	-0.45 ***	-0.42 ***	-0.26 ***	-0.003	0.58 ***	0.989 ***	1.00															
CHAIR DUALITY (Dummy)	0.29 ***	0.11 *	0.14 **	0.46 ***	0.25 ***	-0.15 **	-0.106 *	-0.11 **	1.00														
CHAIR (Dummy)	0.31 ***	0.15 *	0.26 ***	0.39 ***	0.20 **	-0.15 **	-0.08	-0.08	0.72 ***	1.00													
CEO (Dummy)	-0.05	-0.04	-0.06	-0.01	0.04	0.04	0.58 ***	0.55 ***	-0.04	0.07	1.00												
PCA (Dummv)	-0.19 **	-0.05	-0.05	-0.27 ***	-0.1 **	0.13 **	0.14 **	0.15 **	-0.39 ***	-0.34 ***	0.06	1.00											
CI (Dummy)	$0.0 \\ 4$	0.009	0.01	0.03	-0.01	-0.07	0.009	-0.004	0.03	0.05	0.03	0.04	1.00										
AS	-0.16 **	-0.001	0.01	-0.27 ***	-0.21 **	0.11 **	0.20 ***	0.21 **	-0.24 ***	-0.05	0.30 ***	0.23 **	-0.02	1.00									
PERID	0.40 ***	0.16 *	0.16	0.41 ***	0.19 **	-0.38 ***	-0.26 ***	-0.29 ***	0.26 ***	0.26 ***	-0.09 *	-0.33 ***	0.25 ***	-0.38 ***	1.00								
PERFD	-0.18 **	-0.11 *	-0.16 **	-0.15 *	-0.16 **	0.12 **	0.02	0.03	-0.06	-0.07	-0.002	0.14 **	0.02	0.03	-0.18 **	1.00							
PERED	-0.30 ***	-0.08	-0.17 **	-0.36 ***	-0.13 **	0.30 ***	0.25 ***	0.28 ***	-0.14 **	-0.18 **	0.17 **	0.32 ***	-0.16 **	0.41 ***	-0.86 ***	0.16 **	1.00						
PERRD	-0.51 ***	-0.27 ***	-0.34 ***	-0.38 ***	-0.37 ***	0.40 ***	0.21 **	0.24 ***	-0.25 ***	-0.23 **	0.05	0.27 ***	-0.12 **	0.32 ***	-0.81 ***	0.20 **	0.63 ***	1.00					
PERGD	-0.06	-0.04	-0.03	-0.12 **	-0.11 *	0.03	0.003	0.008	-0.03	-0.04	-0.004	0.06	-0.003	0.05	-0.12 **	0.12 **	0.13 **	0.10 *	1.00				
FSIZE	-0.06	-0.10 *	-0.15 **	-0.02	0.26 ***	0.15 **	0.85 ***	0.80 ***	-0.01	-0.02	0.66 ***	0.10 *	0.008	0.23 **	-0.19 **	0.003	0.24 ***	0.10 *	-0.001	1.00			
FAGE	-0.37 ***	-0.12 **	-0.01	-0.38 ***	-0.44 ***	0.26 ***	0.07	0.11	-0.31 ***	-0.15 **	-0.04	0.31 ***	-0.25 ***	0.35 ***	-0.52 ***	0.03	0.43 ***	0.49 ***	0.05	-0.08	1.00		
ETA	-0.21 **	-0.20 **	-0.21 **	0.009	-0.36	0.054	-0.21 **	-0.20 **	-0.04	-0.09	-0.15 **	0.04	0.04	-0.17 **	0.15 **	0.11	-0.20 **	-0.04	0.02	-0.33 ***	-0.06	1.00	
DG	0.44 ***	0.40 ***	0.37 ***	0.27 ***	0.25 ***	-0.42 ***	-0.20 **	-0.22 **	0.19 **	0.18 **	-0.03	-0.19 **	0.03	-0.08	0.25 ***	-0.16 **	-0.19 **	-0.28 ***	0.03	-0.07	-0.25	0.02 ***	1.00

Note: *, **, and *** show the 10%, 5%, and 1% levels of significance, respectively. For a definition of variables please refer to Table 1.

VIRTUS 16

4.2. Hypothesis testing

4.2.1. Whole sample result

The CEO-chairman duality impacts the bank's performance positively. Its impact on ROA, NIM, and PPR is positive whereas its impact on NPLR and NNPA is negative. It indicates that the presence CEO and chairman duality of improves the performance of Indian banks. Additionally, it also reduces the non-performing assets of the bank. The CEO-chairman duality can save time and reduces delay in decision-making and implementation. This supports the findings of Gupta and Mahakud (2020a, 2020b) and partially supports our hypothesis.

The chairman of the audit committee impacts the bank's performance positively. It impacts the *ROA*, *NIM*, and *PPR* positively whereas the impact on *NPLR* and *NNPA* is negative. It indicates that the presence of the chairman on the audit committee improves the performance of Indian banks. Furthermore, the chairman's presence can enhance the communication coordination between the board of directors and the audit committee, which can improve the board's overall governance and oversight of the bank. This supports the findings of Bedard and Gendron (2010).

CA director's presence on the audit committee impacts the bank's performance. Its impact on *ROA*, *NIM*, and *PPR* is positive whereas it is negative on *NPLR* and *NNPA*. It indicates that the CA director's presence on AC enhances the performance. Their presence helps in preventing and detecting frauds and errors, effective risk management practices, and other irregularities that could harm the bank's performance. This is in lieu of the earlier findings and partially supports our hypothesis.

The AC chairman's independence has a positive impact on *ROA*, *ROE*, *NIM*, and *PPR* thereby enhancing the bank's performance. The AC chairman's independence may increase transparency in financial reporting, consistent with the findings of Jang et al. (2019), reduce the risk of financial misconduct and fraud which may enhance the efficiency of the bank's internal controls (Liu et al., 2017) and ultimately its performance.

The presence of an independent director on the audit committee has a positive impact on *ROA*, *ROE*, *NIM*, and *PPR* resulting in enhanced bank performance. The independent directors' presence on the audit committee may help to promote open and honest communication between the audit committee, management, and stakeholders, thereby leading to good corporate governance practices which, in return, will ensure that the bank operates ethically and comply with legal and regulatory requirements as identified in the findings of Lu and Zhang (2018).

The presence of female directors on the audit committee bears a positive relationship with *ROA*, *ROE*, *NIM*, and *PPR* which suggests that their presence keeps a check on the discretion of top management which, in turn, may influence the AC's behaviour towards higher ethical decision-making as per the findings by (Terjesen et al., 2009), thereby leading to trust among the stakeholders, and thus enhanced firm performance (Alqatamin, 2018).

The presence of the executive director bears a positive relationship with the bank's performance. The executive directors, due to their professional expertise and experience, may contribute to quality financial reporting (Chan et al., 2013) and provide valuable insights and information about the bank's operations. This can improve communication and understanding between the AC and the board of directors, which can lead to more effective decisionmaking and thus enhanced performance.

Our findings reveal that the presence of the RBI nominee director has a negative impact on ROA, ROE, NIM, and PPR. We can infer from our findings that the presence of central government nominee directors on AC has a negative impact on ROA, ROE, NIM, and PPR. The presence of a central government nominee director can potentially lead to political interference in the bank's operations, thereby bank's undermining the independence and autonomy, and may lead to decisions being made for political rather than business reasons. Furthermore, the presence of a central government nominee director may create conflicts of interest, as the director may have competing priorities and obligations to the government and the bank, which may lead to a lack of transparency and accountability in the audit committee's decision-making, harming the bank's performance in the long run.

Our findings reveal the negative impact on the bank's performance due to the CEO's presence on the audit committee. The CEO may have conflicts of interest which undermine the effectiveness of the committee supporting the findings of Chen and Li (2013). The CEO may be reluctant to implement the recommendations of the AC which may adversely affect the bank's performance (Habib et al., 2021), and reduce the effectiveness of the audit committee.

4.2.2. Ownership effect

The structure of the AC is different in public and private sector banks. The AC in the private sector banks mostly consists of independent directors (PID = 90.66%). The AC in the public sector banks consists of executive directors, central government nominee directors, and RBI nominee directors. The executive director heading the internal inspection and audit department is a member of AC in public sector banks. The chairman of the board, if a nonexecutive director, can be appointed as a member of the AC (Reserve Bank of India, 2002). Hence, we expect that the difference in the structure of the AC may impact bank performance across different ownerships. Therefore, we have divided the banks into public-sector banks and private-sector banks to analyse the impact of AC characteristics on their performance. Tables A.1 and A.2 (see Appendix) show the results for the impact of various AC characteristics on public and private sector banks, respectively. In public sector banks, a chartered accountant director is appointed in the AC under Section 9(3)(g) of the Banking Companies (Acquisition and Transfer of Undertaking Act, 1970/1980), and the same CA director is the chairman of the AC in the public sector banks.



The structure of the audit committee is different in the public and private sectors. The CEOchairman duality bears a negative relationship with the performance of public and private sector banks. The presence of a chairman on the audit committee adversely affects the performance of the public sector banks whereas it positively affects the performance of the private sector bank. The presence of a CA director and an independent chairman is beneficial for the performance of both public and private sector banks.

The presence of independent directors, female directors, and executive directors improves the performance of both banks. The presence of the RBI nominee director is hurting the performance of both banks. The government nominee director is also negative but it is insignificant. The central government nominee directors are nominated as a director by the central government under Section 9(3)(b) of the Banking Companies (Acquisition and Transfer of Undertakings) Act, 1970. RBI nominee director is nominated as a director by the central government on the Recommendation of RBI under Section 9(3)(c) of the Banking Companies Transfer (Acquisition and of Undertakings) Act, 1970.

The impact of bank age, bank size, equity-toasset ratio, and deposit growth is consistent with the findings of whole sample banks. Overall, the result suggests that the various assets committee constituents impact the bank's performance.

4.2.3. Size effect

The size of a bank can indeed have an impact on the responsibilities of its audit committee. Generally, larger banks tend to have more complex operations, higher levels of risk, and a larger number of stakeholders. As a result, the responsibilities of the audit committee in a larger bank may be more extensive and demanding compared to those in a smaller bank. Larger banks typically have more extensive financial reporting requirements due to their complex operations and regulatory obligations. The audit committee is responsible for overseeing accuracy and transparency of financial the statements and disclosures, ensuring compliance with accounting standards and regulatory requirements. The size and complexity of a bank often necessitate robust internal control systems to manage risks effectively. The audit committee plays a crucial role in overseeing the adequacy and effectiveness of these systems. They monitor the bank's internal controls, assess their reliability, and ensure appropriate measures are in place to identify and address control deficiencies. Larger banks face a wider range of risks, including credit risk, market risk, operational risk, and compliance risk. The audit committee is responsible for overseeing the bank's risk management framework, ensuring that risks are appropriately identified, measured, monitored, and managed. This includes evaluating the effectiveness of risk management and policies, procedures, processes. Audit committees are responsible for overseeing both internal and external audit activities. In larger banks, the complexity and scale of operations may require engaging external auditors with specialized expertise. The audit committee ensures the independence, objectivity, and effectiveness of the external audit process. They also interact with internal auditors, reviewing their work plans, evaluating the scope of internal audits, and monitoring the implementation of audit recommendations. Larger banks are subject to a wide range of regulatory requirements and oversight. The audit committee is responsible for overseeing the bank's compliance with applicable laws, regulations, and industry standards. They may review compliance reports, monitor regulatory developments, and ensure that appropriate policies and procedures are in place to address compliance obligations.

Tables A.4 and A.5 show the results regarding the impact of various audit committee characteristics on Indian listed bank performance. The findings reveal that the CEO-chairman duality is beneficial for large banks while it hurts the performance of small banks. The presence of the CEO on the audit committee adversely affects the performance of the banks. Whereas the presence of a chairman, CEO, government nominee director, independence is beneficial for CA director, and chairman the performance of the small banks. The presence of the RBI nominee director is inversely related to the small bank's performance. For large banks, the presence of female directors and executive directors and the large size of the audit committee enhances the large bank's performance. Additionally, the large bank should refrain from appointing the nominee director and the central government nominee director. The effect of bank age, bank size, equity-to-asset ratio, and deposit growth is more or less consistent with the findings of the whole sample result.

4.2.4. Audit committee size effect

A larger audit committee can potentially bring a broader range of expertise and skills to oversee the bank's financial reporting and internal controls. This can enhance the committee's ability to understand complex financial matters, assess risks, and provide valuable insights and recommendations. Consequently, a well-equipped and knowledgeable audit committee is more likely to contribute to improved bank performance. A larger committee may provide a more robust system of checks and balances, reducing the risk of conflicts of interest and enhancing independence. However, it is crucial to maintain an appropriate balance to ensure that the committee remains nimble and efficient as it may face challenges in reaching consensus and coordinating actions, potentially leading to slower decision-making processes. Additionally, larger committees may need to establish efficient communication mechanisms to ensure the free flow of information and effective decision-making. In terms of cost, larger committees may require additional resources, such as compensation for committee members and increased administrative support. Banks need to weigh the potential benefits of a larger committee against the associated costs. Smaller committees may be more agile, enabling quicker decision-making and efficient coordination.

Tables A.6 and A.7 show the result regarding the impact of various audit committee characteristics on Indian listed banks on audit committee size. The findings reveal that chairman duality, the presence of the chairman on the audit committee, and the RBI nominee director is beneficial whereas the presence of the government nominee director and the executive director hurts the performance of above median audit committee. On the other hand, the presence of the CEO, chairman, chartered accountant director, and the government nominee director enhances the performance whereas the presence of the executive director and RBI nominee director leads to reduced performance in case of below median audit committee.

The findings regarding the control variables bank age, bank size, equity to asset ratio, and deposit growth are more or less consistent with the findings of the whole sample result. Overall findings reveal that audit committee constituents affect the bank's performance.

5. CONCLUSION

We examined whether the appointment of various nominee directors makes a difference in the functioning of the AC and thus affects the bank's performance. Additionally, it also analyses the impact of different AC characteristics on the banks with varying ownerships and size of the bank and audit committee. This has been rarely discussed in the Indian context earlier. We argue that the AC characteristics are vital. We have taken various AC characteristics based on earlier studies. The principal argument is that the AC enhances the quality of financial reporting, risk evaluation, and monitoring, and thus ultimately improves bank performance. Earlier studies have revealed that quality financial reporting improves performance (Wild, 1996). Hence, we hypothesize that the various constituents of the audit committee explain the performance of the Indian listed banks. Following the earlier studies (Aldamen et al., 2012), we use the fixed effects estimation model to identify the impact of various AC characteristics on bank This study performance. evidence regarding the impact of AC characteristics on the performance of 36 banks functioning in the Indian banking sector

from 2009–2010 to 2016–2017. We divide the data based on ownership, bank size, and AC size. Four control variables moderated the analysis, bank size, bank age, deposit growth, and equity-to-asset ratio. We find that CEO duality, presence of CA director, AC chairman independence positively affects bank performance. The findings are more or less consistent across the various bank performance measures and subsamples classified based on the ownership, size of AC, and the bank.

The study makes several contributions to the literature. The study investigates the impact of the nominee director on the bank's performance across different ownership, bank size, and AC size. Finally, our study has several implications. Our finding supports the earlier studies that the AC characteristics bear a significant relationship with performance. The CA director should be present in the audit committee. The result suggests that the policymaker should think about enhancing the independence of ACs in public-sector banks. Additionally, our study provides evidence that AC characteristics are material for bank performance in India and provides some better insight that will help the board of directors in structuring the AC in such a way that enhances its effectiveness and contributes to overall performance.

The study has some limitations. The study does not apply to foreign banks operating in India. Secondly, the data is hand-collected and is limited to the eight years only from 2009-2010 to 2016-2017, and hence the longer-term effects of AC characteristics on bank performance cannot be studied through this data. Future researchers can further explore by investigating the data of different periods of financial recession to better comprehend which AC features and when they matter most. The results support the view in the literature that knowledge and experience on the AC improve the quality of the financial reporting and, in turn, all else equal, increase firm performance. Our study partially supports the resource dependency theory and ultimately concludes that AC characteristics play an important role in bank performance.

REFERENCES

- 1. Adams, R. B., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics*, *94*(2), 291–309. https://doi.org/10.1016/j.jfineco.2008.10.007
- 2. Adams, R. B., & Mehran, H. (2008). *Corporate performance, board structure, and their determinants in the banking industry* (FRB of New York Staff Report No. 330). https://doi.org/10.2139/ssrn.1150266
- 3. Adekanmi, A. D., Ololade, B. M., Adeoye, E. T., & Bojuwon, M. (2022). The relationship between corporate social responsibility and market share: Evidence from Nigeria in West Africa. *Annals of Spiru Haret University. Economic Series, 22*(2), 267–281. https://doi.org/10.26458/22215
- 4. Ahwireng-Obeng, A. S., & Ahwireng-Obeng, F. (2019). Macroeconomic determinants of sovereign bond market development in African emerging economies. *International Journal of Emerging Markets*, *15*(4), 651-669. https://doi.org/10.1108/IJOEM-07-2018-0400
- 5. Aldamen, H., Duncan, K., Kelly, S., McNamara, R., & Nagel, S. (2012). Audit committee characteristics and firm performance during the global financial crisis. *Accounting and Finance*, *52*(4), 971-1000. https://doi.org/10 .1111/j.1467-629X.2011.00447.x
- 6. Allegrini, M., & Greco, G. (2011). Corporate boards, audit committees and voluntary disclosure: Evidence from Italian listed companies. *Journal of Management & Governance, 17,* 187–216. https://doi.org/10.1007/s10997-011-9168-3
- 7. Al-Matari, E. M., Al-Swidi, A. K., & Fadzil, F. H. B. (2014). The effect of board of directors characteristics, audit committee characteristics and executive committee characteristics on firm performance in Oman: An empirical study. *Asian Social Science*, *10*(11), 149–171. https://doi.org/10.5539/ass.v10n11p149
- 8. Alqatamin, R. M. (2018). Audit committee effectiveness and company performance: Evidence from Jordan. *Accounting and Finance Research*, *7*(2), 48–60. https://doi.org/10.5430/afr.v7n2p48
- 9. Bahk, B.-H., & Gort, M. (1993). Decomposing learning by doing in new plants. *Journal of Political Economy*, 101(4), 561-583. https://doi.org/10.1086/261888

VIRTUS

- 10. Bedard, J. C., & Johnstone, K. M. (2010). Audit partner tenure and audit planning and pricing. *Auditing: A Journal of Practice & Theory, 29*(2), 45–70. https://doi.org/10.2308/aud.2010.29.2.45
- 11. Bédard, J., & Gendron, Y. (2010). Strengthening the financial reporting system: Can audit committees deliver? *International Journal of Auditing*, *14*(2), 174–210. https://doi.org/10.1111/j.1099-1123.2009.00413.x
- 12. Berger, A. N., Hasan, I., & Zhou, M. (2010). The effects of focus versus diversification on bank performance: Evidence from Chinese banks. *Journal of Banking and Finance, 34*(7), 1417–1435. https://doi.org/10.1016/j .jbankfin.2010.01.010
- 13. Bhagat, S., & Bolton, B. (2008). Corporate governance and firm performance. *Journal of Corporate Finance, 14*(3), 257–273. https://doi.org/10.1016/j.jcorpfin.2008.03.006
- 14. Bhuiyan, A. B., Siwar, C., Ismail, A. G., & Omar, N. (2017). The experiences of the Grameen and Islamic bank microfinance on the poverty alleviation in Bangladesh. *Journal of Islamic Economics, Banking and Finance, 13*(3), 64–81. https://ibtra.com/pdf/journal/v13_n3_article4.pdf
- 15. Breusch, T. S., & Pagan, A. R. (1980). The Lagrange multiplier test and its applications to model specification in econometrics. *Review of Economic Studies*, *47*(1), 239–253. https://doi.org/10.2307/2297111
- Bronson, S. N., Carcello, J. V., Hollingsworth, C. W., & Neal, T. L. (2009). Are fully independent audit committees really necessary? *Journal of Accounting and Public Policy*, 28(4), 265–280. https://doi.org/10.1016/j.jaccpubpol .2009.06.001
- 17. Carter, D. A., D'Souza, F., Simkins, B. J., & Simpson, W. G. (2010). The gender and ethnic diversity of US boards and board committees and firm financial performance. *Corporate Governance: An International Review, 18*(5), 396–414. https://doi.org/10.1111/j.1467-8683.2010.00809.x
- Chakraborty, D., Gupta, N., Mahakud, J., & Tiwari, M. K. (2022). Corporate governance and investment decisions of retail investors in equity: Do group affiliation and firm age matter? *Managerial Auditing Journal*, 38(1), 1–34. https://doi.org/10.1108/MAJ-06-2021-3177
- 19. Chan, A. M. Y., Liu, G., & Sun, J. (2013). Independent audit committee members' board tenure and audit fees. *Accounting & Finance*, *53*(4), 1129–1147. https://doi.org/10.1111/j.1467-629X.2012.00490.x
- Chan, K. C., & Li, J. (2008). Audit committee and firm value: Evidence on outside top executives as expertindependent directors. *Corporate Governance: An International Review*, 16(1), 16–31. https://doi.org/10.1111/j .1467-8683.2008.00662.x
- 21. Chan, R. S. Y., Lau, C. K. S., & Ng, A. W. (2011). Compliance and value relevance of audit committees: Evidence from Hong Kong. *Journal of Financial Reporting and Accounting*, *9*(1), 74-97. https://doi.org/10.1108 /19852511111139813
- 22. Chandrasegaram, R., Rahimansa, M. R., Rahman, S. K. A., Abdullah, S., & Mat, N. N. (2013). Impact of audit committee characteristics on earnings management in Malaysian public listed companies. *International Journal of Finance and Accounting*, *2*(2), 114–119. http://article.sapub.org/10.5923.j.ijfa.20130202.11.html
- 23. Chen, F., & Li, Y. (2013). Voluntary adoption of more stringent governance policy on audit committees: Theory and empirical evidence. *The Accounting Review, 88*(6), 1939–1969. https://doi.org/10.2308/accr-50541
- 24. Chen, X., Yi, N., Zhang, L., & Li, D. (2018). Does institutional pressure foster corporate green innovation? Evidence from China's top 100 companies. *Journal of Cleaner Production, 188,* 304–311. https://doi.org/10 .1016/j.jclepro.2018.03.257
- Chen, X., You, X., & Chang, V. (2021). FinTech and commercial banks' performance in China: A leap forward or survival of the fittest? *Technological Forecasting and Social Change*, 166, Article 120645. https://doi.org/10 .1016/j.techfore.2021.120645
- 26. Dwyer, S., Richard, O. C., & Chadwick, K. (2003). Gender diversity in management and firm performance: The influence of growth orientation and organizational culture. *Journal of Business Research*, *56*(12), 1009–1019. https://doi.org/10.1016/S0148-2963(01)00329-0
- Elyasiani, E., & Zhang, L. (2015). Bank holding company performance, risk, and "busy" board of directors. *Journal of Banking & Finance*, 60, 239–251. https://doi.org/10.1016/j.jbankfin.2015.08.022
- 28. Fahlenbrach, R., & Stulz, R. M. (2011). Bank CEO incentives and the credit crisis. *Journal of Financial Economics*, 99(1), 11–26. https://doi.org/10.1016/j.jfineco.2010.08.010
- 29. Fariha, R., Hossain, M. M., & Ghosh, R. (2022). Board characteristics, audit committee attributes and firm performance: Empirical evidence from emerging economy. *Asian Journal of Accounting Research*, *7*(1), 84-96. https://doi.org/10.1108/AJAR-11-2020-0115
- Firth, M., Fung, P. M. Y., & Rui, O. M. (2007). Ownership, two-tier board structure, and the informativeness of earnings — Evidence from China. *Journal of Accounting and Public Policy*, 26(4), 463-496. https://doi.org/10.1016/j.jaccpubpol.2007.05.004
- 31. Green, C. P., & Homroy, S. (2018). Female directors, board committees and firm performance. *European Economic Review*, *102*(3), 19–38. https://doi.org/10.1016/j.euroecorev.2017.12.003
- 32. Gupta, N., & Mahakud, J. (2021). Audit committee characteristics and bank performance: evidence from India. *Managerial Auditing Journal*, *36*(6), 813–855. https://doi.org/10.1108/MAJ-04-2020-2622
- 33. Gupta, N., & Mahakud, J. (2020a). CEO characteristics and bank performance: Evidence from India. *Managerial Auditing Journal*, *35*(8), 1057–1093. https://doi.org/10.1108/MAJ-03-2019-2224
- 34. Gupta, N., & Mahakud, J. (2020b). Ownership, bank size, capitalization and bank performance: Evidence from India. *Cogent Economics and Finance, 8*(1), Article 1808282. https://doi.org/10.1080/23322039.2020.1808282
- 35. Gupta, N., Agarwal, T., & Jagwani, B. (2021). Exploring non-linear relationship between foreign ownership and firm performance [Special issue]. *Corporate Ownership & Control, 18*(3), 257–274. https://doi.org/10.22495 /cocv18i3siart3
- 36. Gupta, N., Mahakud, J., Tripathi, P. M., Agarwal, T., & Bakhshi, P. (2021). Do nominee directors influence bank performance? *Corporate Ownership & Control*, *19*(1), 121–145. https://doi.org/10.22495/cocv19i1art10
- 37. Gupta, N., Mittal, S., Agarwal, T., Bhakshi, P., & Sahoo, M. (2022). Ownership concentration and bank performance: Evidence from India. *Cogent Economics & Finance, 10*(1), Article 2114177. https://doi.org/10.1080/23322039 .2022.2114177
- 38. Habib, A., Bhuiyan, M. B. U., & Wu, J. Y. H. (2021). Audit committee ownership and the cost of equity capital. *Managerial Auditing Journal*, *36*(5), 665–698. https://doi.org/10.1108/MAJ-05-2020-2671

VIRTUS

- 39. Hajer, C., & Anis, J. (2018). Analysis of the impact of governance on bank performance: Case of commercial Tunisian banks. *Journal of the Knowledge Economy*, *9*, 871–895. https://doi.org/10.1007/s13132-016-0376-6
- 40. In, C.-Y., Kim, T., & Park, S. (2020). Key audit matters for production-to-order industry and conservatism. *International Journal of Financial Studies, 8*(1), Article 5. https://doi.org/10.3390/ijfs8010005
- 41. Jang, S. S., Ko, H., Chung, Y., & Woo, C. (2019). CSR, social ties and firm performance. *Corporate Governance*, *19*(6), 1310–1323. https://doi.org/10.1108/CG-02-2019-0068
- 42. Karamanou, I., & Vafeas, N. (2005). The association between corporate boards, audit committees, and management earnings forecasts: An empirical analysis. *Journal of Accounting Research*, *43*(3), 453–486. https://doi.org/10.1111/j.1475-679X.2005.00177.x
- 43. Kipkoech, S. R., & Rono, L. (2016). Audit committee size, experience and firm financial performance: Evidence Nairobi Securities Exchange, Kenya. *Research Journal of Finance and Accounting*, *7*(15), 87–95. https://core.ac.uk/reader/234631580
- 44. Klein, A. (1998). *Economic determinants of audit committee composition and activity* (New York University, Center for Law and Business, Working Paper No. 98-011). https://doi.org/10.2139/ssrn.164494
- 45. Krishnan, H. A., & Park, D. (2005). A few good women On top management teams. *Journal of Business Research*, 58(12), 1712–1720. https://doi.org/10.1016/j.jbusres.2004.09.003
- 46. Krishnan, J. (2005). Audit committee quality and internal control: An empirical analysis. *The Accounting Review*, *80*(2), 649–675. https://doi.org/10.2308/accr.2005.80.2.649
- 47. Kumbhakar, S., & Sarkar, S. (2003). Deregulation, ownership, and productivity growth in the banking industry: Evidence from India. *Journal of Money, Credit, and Banking*, *35*(3), 403–424. https://doi.org/10.1353/mcb.2003.0020
- 48. La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (2000). Investor protection and corporate governance. *Journal of Financial Economics*, 58(1-2), 3-27. https://doi.org/10.1016/S0304-405X(00)00065-9
- 49. Li, Z. F. (2014). Mutual monitoring and corporate governance. *Journal of Banking & Finance, 45,* 255–269. https://doi.org/10.1016/j.jbankfin.2013.12.008
- 50. Liang, Q., Xu, P., & Jiraporn, P. (2013). Board characteristics and Chinese bank performance. *Journal of Banking and Finance*, *37*(8), 2953–2968. https://doi.org/10.1016/j.jbankfin.2013.04.018
- 51. Lin, J. W., Li, J. F., & Yang, J. S. (2006). The effect of audit committee performance on earning quality. *Managerial Auditing Journal*, *21*(9), 921–933. https://doi.org/10.1108/02686900610705019
- 52. Lin, P. T., Hutchinson, M. R., & Percy, M. (2009). The role of the audit committee and institutional investors in constraining earnings management: Evidence from Chinese firms listed in Hong Kong. In *Proceedings of Accounting & Finance Association of Australia & New Zealand Annual Conference 2009* (pp. 1-40). AFAANZ. https://core.ac.uk/download/pdf/10900973.pdf
- 53. Liu, C., Lin, B., & Shu, W. (2017). Employee quality, monitoring environment, and internal control. *China Journal of Accounting Research*, *10*(1), 51–70. https://doi.org/10.1016/j.cjar.2016.12.002
- 54. Mallin, C. (2007). Corporate governance. Oxford University Press.
- 55. Noman, A. H. M., Pervin, S., Chowdhury, N. J., Hossain, M. A., & Banna, H. (2015). Comparative performance analysis between conventional and Islamic banks in Bangladesh An application of binary logistic regression. *Asian Social Science*, *11*(21), 248–257. https://doi.org/10.5539/ass.v11n21p248
- 56. Pasiouras, F., & Kosmidou, K. (2007). Factors influencing the profitability of domestic and foreign commercial banks in the European Union. *Research in International Business and Finance, 21*(2), 222–237. https://doi.org/10.1016/j.ribaf.2006.03.007
- 57. Prawitt, D. F., Smith, J. L., & Wood, D. A. (2009). Internal audit quality and earnings management. *The Accounting Review*, *84*(4), 1255–1280. https://doi.org/10.2308/accr.2009.84.4.1255
- 58. Reserve Bank of India. (2002). *Report of the Consultative Group of Directors of Banks/Financial Institutions*. https://rbidocs.rbi.org.in/rdocs//PublicationReport/Pdfs/27762.pdf
- 59. Sahoo, M., Srivastava, K. B. L., Gupta, N., Mittal, S. K., Bakhshi, P., & Agarwal, T. (2022). Promoter ownership, institutional ownership, and firm performance. *Corporate Ownership & Control, 20*(1), 162–175. https://doi.org/10.22495/cocv20i1art15
- 60. Sahoo, M., Srivastava, K. B. L., Gupta, N., Mittal, S. K., Bakhshi, P., & Agarwal, T. (2023). Board meeting, promoter CEO and firm performance: Evidence from India. *Cogent Economics & Finance*, 11(1), Article 2175465. https://doi.org/10.1080/23322039.2023.2175465
- 61. Saleh, N. M., Iskandar, T. M., & Rahmat, M. M. (2007). Audit committee characteristics and earnings management: Evidence from Malaysia. *Asian Review of Accounting*, *15*(2), 147–163. https://doi.org/10.1108 /13217340710823369
- 62. Sarkar, J., & Sarkar, S. (2009). Multiple board appointments and firm performance in emerging economies: Evidence from India. *Pacific-Basin Finance Journal*, *17*(2), 271–293. https://doi.org/10.1016/j.pacfin.2008.02.002
- 63. Simpson, W. G., Carter, D., & D'Souza, F. P. (2010). What do we know about women on boards? *Journal of Applied Finance (Formerly Financial Practice and Education), 20*(2). https://ssrn.com/abstract=2693058
- 64. Smirlock, M. (1985). Evidence on the (non) relationship between concentration and profitability in banking. *Journal of Money, Credit and Banking, 17*(1), 69–83. https://doi.org/10.2307/1992507
- 65. Stiroh, K. J., & Rumble, A. (2006). The dark side of diversification: The case of US financial holding companies. *Journal of Banking and Finance, 30*(8), 2131–2161. https://doi.org/10.1016/j.jbankfin.2005.04.030
- 66. Terjesen, S., Sealy, R., & Singh, V. (2009). Women directors on corporate boards: A review and research agenda. *Corporate Governance: An International Review, 17*(3), 320–337. https://doi.org/10.1111/j.1467-8683.2009.00742.x
- 67. Wild, J. J. (1996). The audit committee and earnings quality. *Journal of Accounting, Auditing & Finance, 11*(2), 247–276.
- 68. Zhang, Y., Zhou, J., & Zhou, N. (2007). Audit committee quality, auditor independence, and internal control weaknesses. *Journal of Accounting and Public Policy*, *26*(3), 300–327. https://doi.org/10.1016/j.jaccpubpol.2007.03.001
- 69. Zraiq, M. A., & Fadzil, F. H. (2018). The impact of audit committee characteristics on firm performance: Evidence from Jordan. *Scholar Journal of Applied Sciences and Research*, *1*(5), 39–42. https://innovationinfo.org/articles/SJASR-5-154.pdf

VIRTUS

APPENDIX

	RC	DA	R	OE	RC	DCE	N	IM	Р	PR	NF	PLR	GN	IPA	NN	IPA
	Ι	II	Ι	II	Ι	II	Ι	II	Ι	II	Ι	II	Ι	II	Ι	II
CHAIR	0.115*	0.048*	1.592	2.444	1.284	1.615	0.263	0.352*	0.008*	0.0002*	-0.274*	-0.035*	-0.034	-0.117	-0.551	-0.602*
DUALITY	(0.49)	(0.21)	(0.34)	(0.52)	(0.56)	(0.71)	(1.27)	(1.69)	(0.51)	(0.02)	(-0.32)	(-0.04)	-(0.13)	-(0.43)	-(1.59)	-(1.71)
CHAID	0.154	0.195	0.278	1.143	1.818	2.011	0.044	0.025	0.017	0.013	-0.751	-0.833	-0.169	-0.153	-0.318	-0.331
CHAIK	(0.74)	(0.91)	(0.07)	(0.27)	(0.91)	(0.97)	(0.24)	(0.14)	(1.14)	(0.89)	-(1.99)	(-1.06)	(-0.72)	(-0.63)	(-1.04)	(-1.05)
CEO	-0.674**	-0.773	-10.556*	-11.325*	-6.633**	-7.125**	-0.533*	-0.557*	-0.038*	-0.038*	1.044	0.993	0.491	0.494	0.648	0.633
CLO	(-2.07)	(-2.29)	(-1.67)	(-1.73)	(-2.12)	(-2.22)	(-1.88)	(-1.93)	(-1.66)	(-1.62)	(0.89)	(0.82)	(1.34)	(1.31)	(1.37)	(1.29)
DC A	0.198**	0.188**	2.444	2.484	1.789**	1.715*	0.154*	0.168**	0.002	0.002	-0.351	-0.397	-0.154	-0.131	-0.167	-0.148
ICA	(2.12)	(1.97)	(1.35)	(1.34)	(1.99)	(1.87)	(1.89)	(2.05)	(0.41)	(0.36)	(-1.03)	(-1.15)	(-1.46)	(-1.22)	(-1.22)	(-1.07)
CI	0.241	0.281*	3.889	4.562	1.965	2.349	0.268	0.221	0.017	0.007	-0.914	-0.801	-0.235	-0.131	-0.224	-0.036
CI	(0.94)	(1.18)	(0.78)	(0.99)	(0.79)	(1.03)	(1.21)	(1.08)	(0.94)	(0.45)	(-0.98)	(-0.93)	(-0.81)	(-0.49)	(-0.61)	(-0.11)
PID	0.139		3.094		1.345		0.153		0.018		-0.001*		-0.291*		-0.378*	
	(0.45)		(0.52)		(0.45)		(0.57)		(0.83)		(-0.01)		(-0.84)		(-0.84)	
PFD	0.096		2.318		0.266		0.059		0.001		-0.564**		-0.135*		-0.176*	
112	(1.34)		(1.65)		(0.38)		(0.94)		(0.38)		(-2.15)		(-1.66)		(-1.67)	
PED	0.185		2.949		0.503		0.375*		0.041**		-0.138		-0.093		-0.026	
TLD	(0.74)		(0.61)		(0.2)1		(1.72)		(2.32)		(-0.15)		(-0.33)		(-0.07)	
PRD	-0.637**		-6.611*		-5.856**		-0.807***		-0.007*		0.184*		0.427*		0.641**	
1100	(-3.08)		(-1.64)		(-2.94)		(-4.47)		(-0.48)		(0.25)		(1.84)		(2.12)	
PGD	-0.998**		-18.938*		-2.647*		-0.031*		-0.005*		4.496***		1.141**		0.931*	
102	(-2.95)		(-2.88)		(-1.81)		(-0.11)		(-0.22)		(3.67)		(3.01)		(1.88)	
AS	0.048*	0.004*	0.691*	0.061*	0.391*	0.107*	0.032*	0.053*	0.002	0.001	-0.393**	-0.241*	-0.077*	-0.041*	-0.054*	-0.015*
	(1.26)	(0.11)	(0.93)	(0.08)	(1.06)	(0.27)	(0.97)	(1.49)	(0.78)	(0.57)	(-2.84)	(-1.61)	(-1.81)	(-0.89)	(-0.98)	(-0.26)
PERID		0.009		0.006		0.002		0.001		0.0002		-0.003		-0.002		0.001
		(0.21)		(0.08)		(0.06)		(0.31)		(0.81)		(-0.24)		(-0.62)		(0.23)
PERFD		0.001		0.064		0.002		0.00002		0.00008		-0.021**		-0.004*		-0.005*
		(0.64)		(1.12)		(0.11)		(0.01)		(0.42)		(-1.99)		(-1.42)		(-1.32)
PERED		0.011*		0.101		0.036		0.008*		0.0001		-0.037*		-0.006		-0.004
		(1.91)		(0.97)		(0.71)		(1.86)		(0.38)		(-1.93)		(-1.03)		(-0.63)
PERRD		-0.013*		-0.195*		-0.124*		-0.025***		-0.0002*		0.005*		0.006*		0.012*
		(-1.83)		(-1.35)		(-1.75)		(-3.93)		(-0.38)		(0.21)		(0.54)		(1.17)
PERGD		-0.001*		-0.006*		-0.001*		-0.0003*		-0.00003*		0.0003*		0.0001^		0.0001*
	1 1 4 0 * *	(-0.59)	10.205	(-1.09)	0.1.00	(-0.61)	0.050	(-1.14)	0.102**	(-1.63)	0.701	(0.33)	1.051**	(0.48)	1 70.0*	(0.36)
BAGE	1.142**	1.351^	12.395	12.756	9.162	9.948	0.658	0.739	(2, 72)	0.094**	0.701	0.062	1.051^^	1.311°	1.782*	1.053°
	(1.62)	(2.03)	(1.01)	(0.99)	(1.51)	(1.57)	(1.21)	(1.51)	(2.73)	(2.01)	(0.51)	(0.03)	(2.33)	(1.75)	(1.94)	(1.72)
BSIZE	-0.814	-0.651	$(-7.401^{-10.00})$	(-7.27)	(-7.41)	-6.027	-0.241	-0.265***	-0.056	(-2.054)	(6.24)	5.095	(1150)	(11.60)	(10.86)	(10.78)
	(-0.76)	(-0.01)	(-7.43)	(-7.27)	(-7.41)	(-7.23)	(-2.31)	(-2.46)	(-4.29)	(-2.93)	(0.24)	(0.60)	(11.39)	(11.09)	(10.60)	(10.76)
ETA	-0.104	-0.107***	-1.0/4****	-1.912"**	-0.835"**	-0.640	-0.020*	-0.023	-0.001	-0.001	(6.24)	(6.51)	(5.70)	(5.01)	(3.62)	(3.77)
	(-0.31)	0.013***	(-3.01)	0.267***	(-3.22)	(-J.24) 0.121***	(-1.01)	(-1.39)	(-1.43)	(-1.31)	-0.045***	-0.044***	-0.014***	-0.012***	-0.016***	-0.016***
DG	(5.27)	(5.08)	(5.54)	(5.36)	(5.24)	(5.20)	(1.35)	(1.26)	(3.87)	(4.03)	(-4.97)	(-4.81)	(-4.91)	(-4.75)	(-4.30)	(-4.31)
	19.6/9***	19.086***	461 146***	(5.50)	211 336***	207 475***	6 1/1**	6.655**	0.686***	0.771***	-82 033***	-83 /03***	(-4.31) -/11177***	-41 166***	-51 680***	(-4.31) -52 272***
Const.	(7.47)	(7.07)	(0.02)	(8.60)	(8 36)	(8.06)	(2.76)	(2.88)	(3.66)	(4.04)	(-8.71)	(-8 57)	(-13.01)	(13.54)	(13.46)	(-13.34)
	(1.47)	(1.07)	(9.04)	(0.09)	(0.30)	(0.00)	(2.70)	(2.00)	(0.00)	(4.04)	(-0./1)	(-0.37)	(-13.91)	(-13.34)	(13.40)	(-13.34)

	ROA		R	OE	ROCE		N	IM	P	PR	NF	PLR	GN	IPA	NNPA	
	Ι	II														
	$\chi^{2}(1) =$															
LM test	30.79	28.63	7.27	6.58	13.11	12.44	113.27	124.52	157.82	146.12	4.94	7.76	34.85	44.93	48.69	59.67
	(0.0001)	(0.0002)	(0.0035)	(0.0052)	(0.0001)	(0.0002)	(0.0001)	(0.0003)	(0.0002)	(0.0001)	(0.0131)	(0.0027)	(0.0004)	(0.0003)	(0.0002)	(0.0001)
Houseman	$\chi^2(15) =$															
Tausman	293.27	36.78	144.12	54.22	82.32	45.06	196.62	39.79	55.51	64.51	141.81	28.87	52.81	20.43	179.77	-3.04
test	(0.0001)	(0.0008)	(0.0005)	(0.0003)	(0.0001)	(0.0004)	(0.0006)	(0.0003)	(0.0008)	(0.0001)	(0.0002)	(0.0067)	(0.0001)	(0.0001)	(0.0001)	(0.0002)
	F(35,237)															
F-test	= 5.27	= 4.21	= 4.14	= 3.36	= 4.13	= 3.69	= 7.73	= 9.15	= 11.71	= 10.97	= 3.96	= 3.64	= 4.36	= 3.87	= 5.36	= 4.98
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
N	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288
Adj-R ²	0.0244	0.0097	0.0515	0.0383	0.1275	0.0922	0.2257	0.1616	0.3344	0.3198	0.2542	0.1086	0.6921	0.8033	0.7400	0.7702

Note: This table presents a regression estimation of the impact of AC characteristics on performance of all banks. See Table 1 for variable definition and description. We estimate all models controlling for heteroscedasticity and firm-level clustering. T-values are reported in parentheses below the coefficient estimates. * Significance at the 10% level. ** Significance at 5% level. *** Significance at 1% level.

Table A.2. Audit characteristics and bank performance (Fixed effects estimation results for the public sector banks) (Part 1)

	RC) A	R	OE	RC	DCE	N	IM	Р	PR	NF	PLR	GN	IPA	NN	IPA
	Ι	II	Ι	II	I	II	Ι	II	Ι	II	Ι	II	Ι	II	Ι	II
CHAIR	-0.118	-0.172	-0.841	-0.737	-2.206	-1.903	-0.052	-0.012	-0.014	-0.0002	3.481**	3.439**	0.866*	0.764*	0.984*	0.746*
DUALITY	(-0.25)	(-0.38)	(-0.09)	(-0.08)	(-0.49)	(-0.42)	(-0.13)	(-0.03)	(-0.42)	(-0.01)	(2.17)	(2.21)	(1.93)	(1.72)	(1.68)	(1.27)
CHAID	-0.188	-0.248	-1.094	-1.419	-2.925	-3.912	-0.238	-0.276	- 0.015	-0.011	1.839*	1.741*	0.763**	0.763**	0.348*	0.335*
CHAIK	(-0.49)	(-0.67)	(-0.14)	(-0.19)	(-0.81)	(-1.06)	(-0.73)	(-0.84)	(-0.57)	(-0.44)	(1.43)	(1.37)	(2.11)	(2.09)	(0.74)	(0.70)
CEO	-0.171	-0.158	-2.592	-2.235	-0.634	-0.729	-0.533*	-0.577**	-0.021	-0.018	0.897	0.659	0.312	0.257	0.213	0.172
CEO	(-0.51)	(-0.48)	(-0.38)	(-0.33)	(-0.20)	(-0.22)	(-1.85)	(-1.98)	(-0.88)	(-0.74)	(0.79)	(0.58)	(0.98)	(0.79)	(0.51)	(0.40)
DC A	0.062*	0.002*	0.505*	0.603*	0.823*	0.095*	0.051*	0.069*	0.005	0.002	-0.089*	-0.003*	-0.015*	-0.049*	-0.076*	-0.122*
ICA	(0.49)	(0.02)	(0.20)	(0.24)	(0.69)	(0.08)*	(0.47)	(0.64)	(0.62)	(0.31)	(-0.21)	(-0.01)	(-0.13)	(-0.41)	(-0.48)	(-0.77)
CI	0.012*	0.008*	0.963*	0.506*	0.413	0.498	0.168	0.188	0.007	0.0008	-0.118	-0.188	-0.020	-0.163	-0.005	-0.228
CI	(0.05)	(0.04)	(0.20)	(0.11)	(0.18)	(0.23)	(0.83)	(0.98)	(0.41)	(0.05)	(-0.15)	(-0.25)	(-0.09)	(-0.76)	(-0.02)	(-0.80)
	0.280*		5.844*		-2.431		-0.067		0.004		-0.116*		-0.139*		-0.274*	
ΠD	(0.98)		(1.02)		(-0.90)		(-0.28)		(0.24)		(-0.12)		(-0.52)		(-0.78)	
PED	0.0005		0.776		0.641		0.0004		0.003		-0.182		-0.026		-0.038	
IID	(0.01)		(0.51)		(0.90)		(0.01)		(0.61)		(-0.72)		(-0.36)		(-0.41)	
DED	0.021*		6.184*		0.629		0.338		0.034		-1.176		-0.393		-0.488	
TLD	(0.05)		(0.67)		(0.15)		(0.86)		(1.05)		(-0.76)		(-0.91)		(-0.86)	
PRD	-0.196		-2.261		-1.056		-0.003		-0.008		0.203		0.437		0.742	
TRD	(-0.44)		(-0.25)		(-0.25)		(-0.01)		(-0.25)		(0.14)		(1.04)		(1.36)	
PCD	-0.196		-8.626		-10.289		0.414		-0.044		-1.361		-0.612		-1.019	
TGD	(-0.59)		(-1.29)		(-3.26)		(1.45)		(-1.84)		(-1.20)		(-1.93)		(-2.46)	
45	0.053	0.015	0.339	0.188	0.204	0.552	0.102**	0.115**	0.004	0.002	-0.336**	-0.250*	-0.068	-0.043	-0.050	-0.028
715	(1.09)	(0.25)	(0.35)	(0.15)	(0.44)	(0.89)	(2.46)	(2.07)	(1.28)	(0.46)	(-2.04)	(-1.16)	(-1.48)	(-0.70)	(-0.84)	(-0.35)
PFRID		0.012**		0.220*		0.130**		0.0002		0.0006*		-0.018		-0.008*		-0.013*
TLKID		(2.17)		(1.89)		(2.33)		(0.04)		(1.66)		(-0.97)		(-1.49)		(-1.82)
PFRFD		0.0005		0.0161		0.027		0.001		0.00007		-0.008		-0.001		-0.002
		(0.18)		(0.27)		(0.93)		(0.51)		(0.34)		(-0.88)		(-0.37)		(-0.72)
DEDED		0.005		0.022		0.008		0.0001		0.0004		-0.032*		-0.006*		-0.002*
FERED		(0.96)		(0.20)		(0.16)		(0.03)		(1.02)		(-1.67)		(-1.14)		(-0.38)

VIRTUS NTERPRESS® 23

	RC	0A	R	OE	RC	OCE	N	IM	Р	PR	NF	PLR	GN	IPA	NN	IPA
	Ι	II														
DEDDD		-0.005		-0.201		-0.042		-0.002		-0.00009		0.005		0.008		0.020
FLAND		(-0.29)		(-0.51)		(-0.22)		(-0.15)		(-0.07)		(0.08)		(0.45)		(0.82)
PERCD		-0.0002		-0.1073		-0.002		-0.1003*		-0.003**		0.003		0.001		0.001
TLKUD		(-1.04)		(-1.38)		(-0.95)		(-1.72)		(-2.04)		(0.39)		(0.04)		(0.00)
PACE	18.071***	17.478***	401.616***	375.979***	192.368	163.249***	7.689***	6.405**	0.642***	0.528**	85.208***	80.727***	31.199***	29.217***	35.276***	32.074***
DAGL	(7.51)	(8.22)	(8.34)	(8.66)	(8.48)	(7.79)	(3.74)	(3.43)	(3.71)	(3.38)	(10.49)	(11.11)	(13.68)	(14.08)	(11.87)	(11.69)
RSIZE	0.239*	0.211*	4.348*	3.220*	2.793*	1.228*	0.132*	0.077*	0.003*	0.001*	1.729**	1.418**	0.127	0.006	0.132	0.070
DJILL	(1.26)	(1.21)	(1.14)	(0.90)	(1.56)	(0.71)	(0.82)	(0.50)	(0.23)	(0.15)	(2.70)	(2.37)	(0.71)	(0.04)	(0.56)	(0.31)
ETA	-0.011	-0.007	-0.857	-0.779	-0.034	-0.051	-0.032	-0.040	- 0.004*	-0.004*	0.388**	0.351**	0.089**	0.099**	0.133**	0.145**
LIA	(-0.34)	(-0.21)	(-1.25)	(-1.13)	(-0.11)	(-0.16)	(-1.11)	(-1.36)	(-1.79)	(-1.94)	(3.35)	(3.04)	(2.75)	(3.02)	(3.14)	(3.34)
DC	0.009**	0.011**	0.175**	0.212**	0.075*	0.100**	0.007**	0.009**	0.005**	0.007**	-0.025**	-0.028**	-0.006**	-0.007**	-0.004*	-0.007*
DG	(3.01)	(3.48)	(2.66)	(3.22)	(2.42)	(3.14)	(2.64)	(3.18)	(2.21)	(3.09)	(-2.30)	(-2.59)	(-2.00)	(-2.48)	(-1.15)	(-1.81)
Const	74.406***	72.805***	1675.551***	1610.625***	776.875	699.623***	31.944***	28.347***	2.886***	2.608***	-325.996***	-316.961***	-123.537***	-119.376***	-141.84**	-134.817***
Collst.	(10.98)	(12.06)	(12.35)	(13.07)	(12.16)	(11.77)	(5.51)	(5.35)	(5.92)	(5.88)	(-14.25)	(-15.38)	(-19.24)	(-20.27)	(-16.94)	(-17.31)
	$\chi^{2}(1) =$															
LM test	3.56	1.06	2.38	1.05	6.90	2.30	50.73	39.69	46.90	33.75	8.05	4.37	0.65	1.58	0.03	0.49
	(0.0096)	(0.0001)	(0.0003)	(0.0003)	(0.0003)	(0.0006)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0023)	(0.0003)	(0.0001)	(0.0003)	(0.0004)	(0.0004)
Haueman	$\chi^2(15) =$															
tost	87.88	77.48	77.06	21.08	105.86	9.84	30.54	26.58	65.06	53.29	115.97	127.63	214.35	217.56	180.34	178.06
iesi	(0.0000)	(0.0000)	(0.0000)	(0.0007)	(0.0000)	(0.0004)	(0.0001)	(0.0008)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
	F(20, 132)															
F-test	= 7.64	= 7.65	= 8.36	= 8.20	= 9.28	= 7.60	= 7.95	= 7.39	= 10.87	= 9.33	= 11.42	= 11.55	= 12.94	= 13.06	= 11.44	= 10.55
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Ν	168	168	168	168	168	168	168	168	168	168	168	168	168	168	168	168
Adj. R ²	0.0093	0.0079	0.0047	0.0038	0.0146	0.0114	0.0210	0.0210	0.0155	0.0150	0.0000	0.0001	0.0006	0.0001	0.0002	0.0000

Table A.2. Audit characteristics and bank	performance (Fixed effects estimat	ion results for the public sector banks) (Part 2
	P	

Note: This table presents a regression estimation of the impact of AC characteristics on the performance of all banks. See Table 1 for variable definition and description. We estimate all models controlling for heteroscedasticity and firm-level clustering. T-values are reported in parentheses below the coefficient estimates. * Significance at the 10% level. ** Significance at 5% level. *** Significance at 1% level.

Table A.3. Audit characteristics and bank performance (Fixed effects estimation results for the private sector banks) (Part 1)

								Private se	ctor banks							
	R	OA	R	OE	RC	DCE	N	IM	PI	PR	NF	LR	GN	IPA	NN	IPA
	Ι	II	Ι	II	Ι	II	Ι	II	Ι	II	Ι	II	Ι	II	Ι	II
CHAIR	-0.022	-0.086	-3.898	-5.259	-2.421	-3.038	-0.075	-0.164	-0.009	-0.004	0.618*	0.635*	0.254*	0.298*	0.765**	0.728**
DUALITY	(-0.10)	(-0.38)	(-1.15)	(-1.56)	(-1.14)	(-1.37)	(-0.35)	(-0.77)	(-0.45)	(-0.22)	(1.31)	(1.30)	(1.17)	(1.41)	(2.16)	(2.04)
CHAID	0.461**	0.515**	4.877*	6.534*	4.883**	5.323**	0.226	0.147	0.023	0.017	-0.523*	-0.484*	-0.220*	-0.233*	-0.653*	-0.606*
CHAIK	(2.16)	(2.29)	(1.50)	(1.98)	(2.40)	(2.45)	(1.09)	(0.71)	(1.20)	(0.89)	(-1.16)	(-1.01)	(-1.06)	(-1.13)	(-1.92)	(-1.73)
CEO	-0.167	-0.029	-1.275	-0.032	-1.486	-0.187	-0.215	-0.290	-0.015	-0.017	0.009	0.300	0.053	0.237	0.042	0.340
CEU	(-0.36)	(-0.06)	(-0.18)	(-0.00)	(-0.33)	(-0.04)	(-0.48)	(-0.64)	(-0.37)	(-0.41)	(0.01)	(0.29)	(0.12)	(0.53)	(0.06)	(0.45)
DCA	0.290**	0.212*	1.893*	1.593*	2.456**	1.622*	0.223*	0.337**	0.011	0.017	-0.256	-0.431	-0.005	-0.177	-0.155	-0.341
ICA	(2.45)	(1.61)	(1.05)	(0.83)	(2.17)	(1.27)	(1.94)	(2.76)	(1.02)	(1.48)	(-1.02)	(-1.54)	(-0.05)	(-1.46)	(-0.82)	(-1.66)
CI	0.049	0.071	4.940	3.431	0.324	0.982	0.427	0.520	0.056	0.058	-0.303	-0.627	-0.209	-0.505	-0.479	-0.769
CI	(0.11)	(0.15)	(0.70)	(0.49)	(0.07)	(0.21)	(0.95)	(1.17)	(1.34)	(1.38)	(-0.31)	(-0.62)	(-0.46)	(-1.14)	(-0.65)	(-1.03)
רות	0.449		6.030		1.815		0.016		0.009		-0.074		-0.134		-0.406	
ΠD	(0.99)		(0.87)		(0.42)		(0.04)		(0.22)		(-0.08)		(-0.30)		(-0.56)	
DED	0.036		1.319		0.299		0.051		0.0005		-0.143		-0.091*		-0.364*	
FFD	(0.28)		(0.66)		(0.24)		(0.40)		(0.05)		(-0.52)		(-0.71)		(-1.75)	

Private sector banks																
	RC	DA	R	OE	RC	DCE	N	IM	P	PR	NI	PLR	GN	IPA	NN	VPA
	Ι	II	Ι	II	Ι	II	Ι	II	Ι	II	Ι	II	Ι	II	Ι	П
PED	0.241 (1.08)		4.724 (1.39)		0.982 (0.46)		0.470** (2.17)		0.039* (1.92)		-0.355 (-0.75)		-0.024 (-0.11)		-0.216 (-0.61)	
PRD	-0.955*** (-4.65)		-11.896*** (-3.80)		-8.939*** (-4.56)		-0.734*** (3.68)		-0.014 (-0.79)		1.271** (2.91)		0.571** (2.85)		0.642* (1.96)	
PGD	-0.058 (-0.13)		-4.289 (-0.61)		-0.246 (-0.06)		-0.546 (-1.22)		-0.045 (-1.08)		0.349 (0.36)		0.208 (0.46)		0.472 (0.64)	
AS	0.015 (0.32)	0.011 (0.23)	0.220 (0.30)	0.070 (0.10)	0.212 (0.46)	0.143 (0.30)	0.035 (0.75)	0.039 (0.85)	0.0004 (0.11)	0.0006 (0.14)	-0.122 (-1.19)	-0.126 (-1.20)	-0.015 (-0.34)	-0.030 (-0.66)	-0.064 (-0.83)	-0.030 (-0.39)
PERID		0.006 (1.12)		0.064 (0.82)		0.055 (1.07)		0.005 (1.16)		0.0004 (1.05)		-0.012* (-1.10)		-0.013** (-2.82)		-0.015* (-1.90)
PERFD		0.003		0.093		0.027		0.010**		0.0006*		-0.004*		-0.008*		-0.013*
PERED		0.016*		0.250*		0.082		0.018** (2.28)		0.001**		-0.017		-0.002		-0.007
PERRD		-0.017*		-0.305**		-0.150*		0.014*		-0.0004		0.008		0.002		0.007
PERGD		-0.008		-0.306		-0.037		-0.017		-0.001		0.027		0.017		0.025
BAGE	0.807*	1.229*	5.738* (0.53)	8.257* (0.68)	8.293* (1.23)	12.021* (1.49)	0.401*	0.635*	0.066	0.045	-0.156* (-1.10)	-0.844* (-0.48)	-1.407**	-0.401^{*}	-0.158* (-0.14)	-1.018*
BSIZE	0.327	0.263	3.722	2.239	4.424**	4.516*	0.404*	0.563**	-0.008	-0.006	0.674*	0.867*	1.163***	1.443***	2.106***	2.375***
ETA	-0.067**	-0.054**	-0.523*	-0.356*	-0.456**	-0.411**	-0.012	-0.024	-0.0007	-0.0001	0.078*	0.080^{*} (1.79)	0.079***	0.087*** (4.47)	0.095**	0.097**
DG	0.006**	0.007**	0.140**	0.141**	0.074**	0.084**	0.006**	0.007**	0.0005*	0.0005**	-0.012* (-1.82)	-0.014**	-0.009**	-0.010**	-0.015**	-0.016**
Const.	7.254	3.030	100.424 (1.45)	37.183	96.090**	79.066*	6.473 (1.46)	9.527**	0.093	0.186	-17.915*	-18.479*	-28.554***	-31.243***	-51.407***	-52.585***
LM test	$\chi^{2}(1) = 10.01$ (0.0001)	$\chi^{2}(1) = 10.33$ (0.0007)	$\chi^{2(1)} = 10.15$ (0.0003)	$\chi^{2(1)} = 10.26$ (0.0006)	$\chi^{2(1)} = 10.23$ (0.0009)	$\chi^{2}(1) = 20.12$ (0.0002)	$\chi^{2(1)} = 33.71$ (0.0000)	$\chi^{2(1)} = 27.11$ (0.0000)	$\chi^{2(1)} = 35.25$ (0.0000)	$\chi^{2(1)} = 36.22$ (0.0000)	$\chi^{2(1)} = 11.28$ (0.0006)	$\chi^{2(1)} = 10.01$ (0.0001)	$\chi^{2(1)} = 40.93$ (0.0001)	$\chi^{2}(1) = 53.71$ (0.0002)	$\chi^{2}(1) = 54.87$ (0.0004)	$\chi^{2(1)} = 53.27$ (0.0005)
Hausman test	$\chi^2(15) = 24.47$	$\chi^2(15) = 45.87$	$\chi^2(15) = 574.08$	$\chi^2(15) = 64.78$	$\chi^2(15) = 25.89$	$\chi^2(15) = 51.07$	$\chi^2(15) = 20.29$	$\chi^2(15) =$ 14.68 (0.0008)	$\chi^2(15) =$ -105.32 (0.0000)	$\chi^2(15) = -457.88$	$\chi^2(15) = 27.24$	$\chi^2(15) = 38.60$	$\chi^2(15) =$ 9.19 (0.0004)	$\chi^2(15) = -62.04$	$\chi^2(15) = 2.44$	$\chi^2(15) = 5.48$
F-test	$F(14, 90) = 10.55 \\ (0.0021)$	$F(14, 90) = 2.14 \\ (0.0002)$	$\begin{array}{c} (0.0000) \\ F(14, 90) \\ = 1.88 \\ (0.0007) \end{array}$	$\begin{array}{r} (0.0000) \\ F(14, 90) \\ = 2.10 \\ (0.0007) \end{array}$	$F(14, 90) = 1.63 \\ (0.0051)$	$F(14, 90) = 1.62 \\ (0.0016)$	$F(14, 90) = 7.62 \\ (0.0000)$	$\begin{array}{r} (0.0003) \\ F(14, 90) \\ = 7.23 \\ (0.0000) \end{array}$	$\begin{array}{r} (0.0000) \\ F(14, 90) \\ = 7.93 \\ (0.0000) \end{array}$	$\begin{array}{c} (0.0000) \\ F(14, 90) \\ = 7.68 \\ (0.0000) \end{array}$	$\begin{array}{r} \text{(0.0003)} \\ \text{F(14, 90)} \\ = 2.47 \\ \text{(0.0013)} \end{array}$	$\begin{array}{r} \text{F}(14, 90) \\ = 2.69 \\ (0.0024) \end{array}$	$\begin{array}{r} (0.0004) \\ F(14, 90) \\ = 7.59 \\ (0.0000) \end{array}$	$F(14, 90) = 8.57 \\ (0.0000)$	$\begin{array}{r} (0.0003) \\ F(14, 90) \\ = 7.95 \\ (0.0000) \end{array}$	$\begin{array}{c} (0.0012) \\ F(14, 90) \\ = 8.31 \\ (0.0000) \end{array}$
N	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
Adj. R ²	0.0245	0.0769	0.0457	0.0291	0.1194	0.0734	0.2882	0.2734	0.3420	0.1554	0.0690	0.0147	0.3676	0.7879	0.5316	0.3622

Table A.3. Audit characteristics and bank performance (Fixed effects estimation results for the private sector banks) (Part 2)

Note: This table presents a regression estimation of the impact of AC characteristics on the performance of all banks. See Table 1 for variable definition and description. We estimate all models controlling for heteroscedasticity and firm-level clustering. T-values are reported in parentheses below the coefficient estimates. * Significance at the 10% level. ** Significance at 5% level. *** Significance at 1% level.

VIRTUS 25

								Large	banks							
	R	OA	R	OE	RC	DCE	N	IM	P	PR	NF	PLR	GN	IPA	NN	IPA
	Ι	II	Ι	II	Ι	П	Ι	II	Ι	II	Ι	II	Ι	II	Ι	II
CHAIR	0.198	0.324	3.549	2.686	0.504	0.916	0.839**	0.441*	0.006	0.012	-0.495	-0.069	-0.417*	-0.414	-0.714**	-0.646*
DUALITY	(0.77)	(1.21)	(0.70)	(0.53)	(0.24)	(0.44)	(2.34)	(1.16)	(0.28)	(0.53)	(-0.45)	(-0.06)	(-1.51)	(-1.49)	(-2.01)	(-1.84)
CHAIR	0.164	0.304	0.893	1.786	1.231	1.363	0.295	0.076	0.028	0.011	-0.090	-0.208	-0.011	-0.094	-0.126	-0.231
CILIN	(0.77)	(1.40)	(0.21)	(0.43)	(0.71)	(0.80)	(1.00)	(0.25)	(1.53)	(0.63)	(-0.10)	(-0.23)	(-0.05)	(-0.42)	(-0.43)	(-0.81)
CEO	-0.349*	-0.555**	-5.504*	-5.052*	-3.862**	-3.875**	-0.113*	-0.569*	-0.042**	-0.070**	0.787*	0.311*	0.084*	0.118	0.013*	0.100*
CLO	(-1.50)	(-2.46)	(-1.21)	(-1.18)	(-2.05)	(-2.20)	(-0.35)	(-1.78)	(-2.10)	(-3.57)	(0.79)	(0.33)	(0.034)	(0.50)	(0.04)	(0.34)
PCA	0.142	0.096	0.397	0.105	0.559	0.765	0.0001	0.107	0.009	0.003	-0.168	-0.034	-0.045	-0.064	-0.046	-0.040
	(1.39)	(0.91)	(0.20)	(0.05)	(0.67)	(0.93)	(0.00)	(0.72)	(1.06)	(0.39)	(-0.38)	(-0.08)	(-0.42)	(-0.59)	(-0.33)	(-0.29)
CI	0.179	0.170	6.297	6.502	2.832	2.706	0.356	0.311	0.015	0.012	-0.024	-0.035	-0.189	-0.209	-0.205	-0.197
-	(0.69)	(0.62)	(1.23)	(1.24)	(1.34)	(1.25)	(0.99)	(0.79)	(0.680	(0.53)	(-0.02)	(-0.03)	(-0.68)	(-0.73)	(-0.58)	(-0.54)
PID	0.189		3.545		1.599		0.263		0.016		-0.868		-0.187		-0.263	
	(0.56)		(0.53)		(0.58)		(0.56)		(0.56)		(-0.59)		(-0.51)		(-0.56)	
PFD	(1.80)		2.919^		1.014^		(2.00)		0.003		-0.498*		-0.212**		-0.063*	
	(1.60)		(1.61)		(1.52)		(2.09)		(0.51)		(-1.41)		(-2.40)		(-0.56)	
PED	(1.08)		3.527°		1.075*		$1.813^{\circ\circ}$		(3.30)		-2.705		-0.248		-0.296	
	(1.58)	-	0.47)		(0.33)		0.146	-	0.045**		(-1.00)		0.285*		0.517*	
PRD	(-0.000)		(-0.22)		(-1.36)		(-0.52)		-0.043		(1.16)		(1.32)		(1.87)	
	-0.452*		-9.260*		-0.915		-0.081		-0.012		2 327**		0.663**		0.146*	
PGD	(-1.85)		(-1.93)		(-0.46)		(-0.24)		(-0.59)		(2.22)		(254)		(0.44)	
	0.051*	0.017*	1 833*	0.698*	0.985**	0.746*	0.207**	0.336***	0.005*	0.008*	-0.328	-0.027	-0.063	-0.043	-0.068	-0.009
AS	(0.92)	(0.27)	(1.68)	(0.59)	(2.18)	(1.52)	(2.69)	(3.77)	(1.21)	(1.57)	(-1.37)	(-0.10)	(-1.07)	(-0.67)	(-0.89)	(-0.12)
	(0.02)	0.007	(1100)	0.039	(2110)	0.006	(2100)	0.001	(1121)	0.0002	(1101)	-0.002	(1101)	-0.002	(0.00)	-0.002
PERID		(0.01)		(0.41)		(0.16)		(0.17)		(0.06)		(-0.10)		(-0.44)		(-0.41)
		0.001		0.047		0.019		0.0002		0.0002		-0.015		-0.006**		-0.001*
PERFD		(0.47)		(0.83)		(0.84)		(0.06)		(1.10)		(-1.21)		(-2.07)		(-0.32)
DEDED		0.001		0.011		0.032		0.014		0.0008		-0.042		-0.0001		-0.003
PERED		(0.16)		(0.08)		(0.56)		(1.44)		(1.32)		(-1.39)		(-0.02)		(-0.34)
תתחח		-0.003		-0.185		-0.136		-0.019		-0.001		0.003*		0.030**		0.030*
PEKKD		(-0.28)		(-0.84)		(-150)		(-1.17)		(-1.35)		(0.07)		(2.51)		(1.97)
PFRCD		-0.013		-0.312		-0.045		-0.006		-0.003		0.038*		0.016*		0.005*
TLKOD		(-1.19)		(-1.46)		(-0.52)		(-0.38)		(-0.32)		(0.81)		(1.44)		(0.39)
BAGE	0.065*	0.418**	1.420*	0.782*	1.851*	1.539*	0.283*	0.692**	0.006**	0.049* *	2.312*	1.419^{*}	0.056	0.045	0.161	0.442
DITOL	(0.23)	(2.00)	(0.26)	(0.20)	(0.81)	(0.94)	(0.73)	(2.34)	(0.28)	(2.75)	(1.91)	(1.62)	(0.19)	(0.21)	(0.42)	(1.61)
BSIZE	0.091*	0.003*	2.681*	1.615*	1.606*	1.219*	0.142*	0.083*	0.043**	0.028* *	1.354**	0.897*	1.590***	1.527***	1.515***	1.533* **
DOILL	(0.63)	(0.03)	(0.94)	(0.57)	(1.37)	(1.04)	(0.71)	(0.39)	(3.46)	(2.19)	(2.18)	(1.43)	(10.25)	(9.76)	(7.62)	(7.76)
ETA	-0.136**	-0.195***	-3.160***	-2.976***	-1.830***	-1.707***	-0.042*	-0.155**	-0.009***	-0.016***	0.745***	0.609***	0.216***	0.200***	0.217***	0.236***
	(-3.28)	(-5.39)	(-3.87)	(-4.33)	(-5.42)	(-6.05)	(-0.73)	(-3.03)	(-2.56)	(-5.17)	(4.16)	(4.03)	(4.85)	(5.34)	(3.79)	(4.98)
DG	0.023***	0.022***	0.414***	0.373**	0.195***	0.183***	0.018**	0.018**	0.001**	0.001***	-0.054**	-0.046**	-0.025***	-0.023***	-0.026***	-0.025**
-	(4.36)	(4.13)	(3.97)	(3.59)	(4.55)	(4.29)	(2.53)	(2.44)	(3.97)	(3.83)	(-2.41)	(-2.04)	(-4.53)	(-4.21)	(-3.65)	(-3.55)
Const.	1.793	2.262	84.473	51.644	52.572	40.420	3.134	6.420	1.033	0.438	-45.480**	-29.794	-34.847***	-33.513***	-34.504***	-36.153***
	(0.39)	(0.52)	(0.93)	(0.62)	(1.40)	(1.19)	(0.49)	(1.04)	(2.56)	(1.15)	(-2.29)	(-1.63)	(-7.02)	(-7.38)	(-5.42)	(-6.30)

Table A.4. Audit characteristics and bank performance (Fixed effects estimation results for large banks) (Part 1)

								Large	banks							
	RC	0A	R	OE	RC	OCE	N	IM	P	PR	NF	PLR	GN	IPA	NN	IPA
	Ι	П	Ι	II												
	$\chi^{2}(1) =$															
LM test	10.02	20.01	20.04	10.15	10.27	10.38	10.45	10.54	10.46	10.23	10.16	10.25	10.16	10.17	10.28	10.36
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Hausman	$\chi^2(15) =$															
Tausillall	40.81	47.05	36.50	56.29	33.77	40.15	3.07	1.10	151.60	53.42	33.94	17.49	16.66	25.61	27.02	28.34
test	(0.0000)	(0.0000)	(0.0015)	(0.0000)	(0.0037)	(0.0004)	(0.0005)	(0.0001)	(0.0001)	(0.0001)	(0.0005)	(0.0004)	(0.0009)	(0.0003)	(0.0006)	(0.0006)
	F(7,73)															
F-test	= 8.19	= 6.60	= 7.74	= 9.55	= 6.75	= 7.52	= 10.51	= 10.22	= 14.58	= 13.26	= 13.86	= 13.99	= 12.94	= 13.64	= 13.87	= 14.23
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0004)	(0.0005)	(0.0003)	(0.0006)	(0.0013)	(0.0011)	(0.0090)	(0.0021)	(0.0012)	(0.0006)
Ν	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96
Adj-R ²	0.6139	0.6568	0.4891	0.4237	0.5797	0.5704	0.7034	0.6840	0.7691	0.7943	0.5923	0.5438	0.8903	0.8786	0.8443	0.8484

Table A.4. Audit characteristics and bank performance (Fixed effects estimation results for large banks) (Part 2)

Note: This table presents a regression estimation of the impact of AC characteristics on the performance of all banks. See Table 1 for variable definition and description. We estimate all models controlling for heteroscedasticity and firm-level clustering. T-values are reported in parentheses below the coefficient estimates. * Significance at the 10% level. ** Significance at 5% level. *** Significance at 1% level.

Table A.5. Audit characteristics and bank performance (Fixed effects estimation results for small banks) (Part 1)

								Small	banks							
	RC)A	R	OE	RC	DCE	N	IM	P	PR	NF	PLR	GN	IPA	NN	IPA
	I	II	Ι	II	I	II	Ι	II	I	II	Ι	II	I	II	I	II
CHAIR	-0.038	-0.079	-0.524	-1.126	-1.504	-0.277	-0.257	-0.340	-0.003	-0.026	0.368*	0.272*	0.363*	0.230*	0.929**	0.606*
DUALITY	(-0.12)	(-0.23)	(-0.11)	(-0.23)	(-0.49)	(-0.09)	(-0.78)	(-0.99)	(-0.09)	(-0.77)	(0.45)	(0.31)	(1.20)	(0.75)	(2.10)	(1.36)
CHAID	0.894***	1.050***	9.845**	12.187***	9.033***	10.757***	0.819***	0.776**	0.087***	0.089***	-0.859*	-0.909*	-0.224*	-0.340*	-0.707**	-0.751**
CHAIK	(4.27)	(4.78)	(3.10)	(3.80)	(4.56)	(5.31)	(3.86)	(3.50)	(3.98)	(4.08)	(-1.63)	(-1.62)	(-1.16)	(-1.72)	(-2.50)	(-2.63)
CEO	0.902*	1.392**	12.038*	21.448**	8.360*	14.061**	0.246	0.226	0.086*	0.130**	-1.839*	-3.311**	-0.946*	-1.487**	-1.775**	-2.450**
CEU	(1.57)	(2.20)	(138)	(2.32)	(1.53)	(2.41)	(0.42)	(0.35)	(1.440	(2.06)	(-1.27)	(-2.05)	(-1.77)	(-2.61)	(-2.28)	(-2.98)
DC A	0.395**	0.417**	5.775**	6.419**	3.773**	4.115**	0.263**	0.247*	0.043**	0.047***	-0.906**	-0.987**	-0.244**	-0.281**	-0.460**	-0.515**
PCA	(3.30)	(3.37)	(3.18)	(3.55)	(3.33)	(3.61)	(2.17)	(1.98)	(3.49)	(3.86)	(-3.01)	(-3.12)	(-2.20)	(-2.52)	(-2.84)	(-3.20)
CI	0.349*	0.811*	3.036	6.261*	0.041*	5.133*	1.502**	1.347**	0.003*	0.037*	-0.813	-0.490	-1.111**	-0.620*	-1.728**	-1.207*
CI	(0.59)	(1.32)	(0.34)	(0.69)	(0.01)	(0.90)	(2.51)	(2.16)	(0.06)	(0.61)	(-0.55)	(-0.31)	(-2.02)	(-1.12)	(-2.16)	(-1.51)
סות	0.294		13.459		3.991		1.042*		0.001		-0.907		-0.544		-0.101	
PID	(0.55)		(1.66)		(0.79)		(1.93)		(0.02)		(-0.68)		(-1.10)		(-0.14)	
	-0.173		-5.690**		-2.710**		-0.146		-0.012		0.464		0.091		0.001	
IID	(-1.24)		(-2.68)		(-2.05)		(-1.03)		(-0.84)		(1.32)		(0.70)		(0.01)	
DED	-0.052		-0.849		-1.313		-0.401		-0.003		0.262		0.314		0.197	
TLD	(-0.19)		(-0.20)		(-0.50)		(-1.43)		(-0.14)		(0.38)		(1.22)		(0.52)	
ם מת	-1.263***		-13.640***		-10.073***		-0.270*		-0.039*		0.970*		0.650**		0.399*	
TKD	(-5.65)		(-4.03)		(-4.77)		(-1.20)		(-1.71)		(1.73)		(3.14)		(1.32)	
PCD	0.228*		0.770*		0.148		2.190***		0.129**		-3.035**		-0.428*		-0.801	
TGD	(0.54)		(0.12)		(0.04)		(5.12)		(2.94)		(-2.86)		(-1.09)		(-1.41)	
4.6	0.059	0.048	1.164	0.852	0.740	0.569	0.069	0.078	0.003	0.002	-0.109	-0.148	-0.016	-0.008	-0.048	-0.052
AS	(1.26)	(1.01)	(1.62)	(1.22)	(1.65)	(1.29)	(1.44)	(1.62)	(0.70)	(0.50)	(-0.91)	(-1.21)	(-0.38)	(-0.19)	(-0.75)	(-0.84)
		0.005		0.147**		0.101**		0.002		0.0002		-0.003		-0.007*		-0.0001*
TEND		(1.20)		(2.09)		(2.25)		(0.54)		(0.56)		(-0.32)		(-1.78)		(-0.02)
DEDED		-0.012**		-0.288***		-0.157**		-0.007*		-0.001**		0.020		0.005		0.006
FERID		(-2.41)		(-3.67)		(-3.17)		(-1.46)		(-2.34)		(1.48)		(1.05)		(0.93)

								Small	banks							
	RC) A	R	OE	RC	DCE	N	IM	P	PR	NF	PLR	GN	IPA	NN	IPA
	Ι	II	I	II	Ι	II	Ι	II	Ι	II	I	II	I	II	Ι	II
DER ED		-0.012		-0.223		-0.141		-0.012		-0.001		0.037*		0.021**		0.027**
TLALD		(-1.19)		(-1.46)		(-1.45)		(-1.16)		(-1.40)		(1.41)		(2.24)		(2.04)
PERRD		-0.023**		-0.191*		-0.119		-0.003		-0.1008		0.004		0.004		0.002
Think		(-2.88)		(-1.60)		(-1.58)		(-0.48)		(-1.06)		(0.19)		(0.55)		(0.23)
PERGD		-0.007*		-0.008*		-0.082*		-0.106***		-0.007***		0.133**		0.021*		0.041*
	0.40.01	(-0.41)		(-0.03)	0.0.4.0.1	(-0.46)		(-5.48)		(-3.77)		(2.71)		(1.23)		(1.66)
BAGE	0.126*	0.049*	2.644*	3.007*	3.246**	4.079**	0.287**	0.232	0.010	0.015	0.239	0.235	0.361**	0.338**	-0.131*	0.097*
	(0.91)	(0.35)	(1.26)	(1.47)	(2.48)	(3.16)	(2.05)	(1.64)	(0.75)	(1.08)	(0.69)	(0.66)	(2.81)	(2.68)	(-0.70)	(0.54)
RSIZE	0.219*	0.437**	4.205*	7.048**	2.001*	4.417**	0.344*	0.317*	0.110***	0.122***	0.070*	0.291*	1.295***	1.132***	0.684**	0.516*
DOILL	(1.14)	(2.15)	(1.44)	(2.37)	(1.10)	(2.35)	(1.76)	(1.54)	(5.46)	(6.01)	(0.14)	(0.56)	(7.24)	(6.18)	(2.62)	(1.96)
FTA	0.006	0.009	0.057	0.157	0.141	0.038	0.030*	0.028	0.003**	0.004**	-0.016*	-0.008*	-0.042**	-0.031*	-0.003*	-0.007*
LIM	(0.42)	(0.56)	(0.23)	(0.61)	(0.90)	(0.24)	(1.80)	(1.58)	(2.14)	(2.62)	(-0.39)	(-0.20)	(-2.75)	(-1.99)	(-0.16)	(-0.33)
DG	0.011**	0.013**	0.205**	0.237**	0.089^{*}	0.116**	0.008*	0.007*	0.1005*	0.1007*	-0.025**	-0.031**	-0.020***	-0.021***	-0.022**	-0.024***
20	(2.21)	(2.77)	(2.75)	(3.28)	(1.91)	(2.56)	(1.78)	(1.56)	(1.08)	(1.50)	(-2.09)	(-2.50)	(-4.41)	(-4.87)	(-3.34)	(-3.73)
Const	-5.204*	-12.749**	-108.148*	-222.706**	-62.311*	-149.896**	-7.194*	-5.201*	-2.913***	-3.267***	2.786*	11.294*	28.906***	22.596***	12.597*	7.290*
Collist.	(-0.90)	(-2.05)	(-1.23)	(-2.44)	(-1.14)	(-2.61)	(-1.23)	(-0.83)	(-4.81)	(-5.24)	(0.19)	(0.71)	(5.37)	(4.02)	(1.61)	(0.90)
	$\chi^{2(1)} =$	$\chi^{2}(1) =$	$v^{2}(1) =$	$v^{2}(1) =$	$v^{2}(1) =$	$v^{2}(1) =$	$v^{2}(1) =$	$v^{2}(1) =$	$v^{2}(1) =$	$v^{2}(1) =$	$v^{2}(1) =$					
LM test	0.00	0.00	0.00	0.00	0.00	0.00	0.00	(0,0000)	(0,0000)	(0,0000)	(0,0000)	(0,0000)	(0,0000)	(0,0000)	(0,0000)	(0,0000)
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Hausman	$\chi^2(15) =$	$\chi^{2}(15) =$	$\chi^2(15) =$	$\chi^{2}(15) =$	$\chi^2(15) =$	$\chi^{2}(15) =$	$\chi^2(15) =$	$\chi^2(15) =$	$\chi^2(15) =$	$\chi^2(15) =$	$\chi^{2}(15) =$					
test	8.25	3.37	27.54	10.80	5.84	6.52	3.49	3.53	11.66	23.55	17.47	3.90	18.37	6.02	46.66	51.64
1031	(0.0032)	(0.0002)	(0.0006)	(0.0009)	(0.0001)	(0.0006)	(0.0009)	(0.0009)	(0.0001)	(0.0002)	(0.0004)	(0.0008)	(0.0007)	(0.0003)	(0.0000)	(0.0000)
	F(7,73)	F(7,73)	F(7,73)	F(7,73)	F(7,73)	F(7,73)	F(7,73)	F(7,73)	F(7,73)	F(7,73)						
F-test	= 11.08	= 10.61	= 11.34	= 11.26	= 10.89	= 10.95	= 10.59	= 10.61	= 12.12	= 12.68	= 12.08	= 11.89	= 11.64	= 11.20	= 13.30	= 13.60
	(0.0027)	(0.0022)	(0.0052)	(0.0027)	(0.0091)	(0.0038)	(0.0088)	(0.0055)	(0.0024)	(0.0008)	(0.0009)	(0.0001)	(0.0008)	(0.0004)	(0.0002)	(0.0002)
Ν	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96
Adj. R ²	0.7184	0.7163	0.6544	0.6530	0.7095	0.6907	0.6899	0.6670	0.6276	0.6109	0.6431	0.6068	0.8557	0.8635	0.7614	0.7513

Table A.5. Audit characteristics and bank performance (Fixed effects estimation results for small banks) (Part 2	2)
--	----

Note: This table presents a regression estimation of the impact of AC characteristics on the performance of all banks. See Table 1 for variable definition and description. We estimate all models controlling for heteroscedasticity and firm-level clustering. T-values are reported in parentheses below the coefficient estimates. * Significance at the 10% level. ** Significance at 5% level. *** Significance at 1% level.

 Table A.6. Audit characteristics and bank performance (Fixed effects estimation results for large audit committee) (Part 1)

								Above	median							
	R	OA	R	OE	RC	DCE	N	IM	P	PR	NI	PLR	GN	IPA	NN	IPA
	Ι	II	Ι	II	Ι	II	Ι	II	I	II	Ι	II	Ι	II	I	II
CHAIR	0.058*	0.331*	1.931*	3.447*	0.276*	1.970*	0.744*	0.874*	0.029*	0.046*	-1.118	-0.484	-0.162	-0.036	-0.453	-0.359
DUALITY	(0.11)	(0.66)	(0.15)	(0.39)	(0.06)	(0.41)	(1.39)	(1.64)	(0.57)	(0.90)	(-0.68)	(-0.29)	(-0.30)	(-0.07)	(-0.71)	(-0.54)
CHAIR	0.377*	0.349*	1.260	3.808*	5.170*	4.994**	0.138*	0.085*	0.013	0.010	-0.056	-0.136	-0.254*	-0.262*	-0.476*	-0.453*
	(1.89)	(1.85)	(0.26)	(1.16)	(2.74)	(2.74)	(0.67)	(0.43)	(0.69)	(0.56)	(-0.09)	(-0.22)	(-1.20)	(-1.25)	(-1.92)	(-1.83)
CEO	-0.415*	-0.287*	-1.218*	-5.019*	-3.403*	-2.879*	-0.216*	-0.138*	-0.042**	-0.037*	0.507*	0.350*	0.826***	0.789**	1.072***	1.050***
CEO	(-1.97)	(-1.36)	(-0.24)	(-1.37)	(-1.71)	(-1.42)	(-0.99)	(-0.62)	(-2.03)	(-1.77)	(0.75)	(0.51)	(3.69)	(3.39)	(4.10)	(3.80)
DCA	0.046	0.007	1.565	0.146	0.376	0.720	0.048	0.063	0.013	0.013	-0.456	-0.341	-0.018	-0.031	-0.065	-0.047
PCA	(0.38)	(0.06)	(0.51)	(0.07)	(0.33)	(0.65)	(0.38)	(0.52)	(1.07)	(1.15)	(-1.17)	(-0.91)	(-0.14)	(-0.25)	(-0.43)	(-0.31)
CI	0.178	0.279	0.304	5.597	2.774	2.766	0.147	0.044	0.018	0.007	-0.823	-0.950	-0.075	-0.207	-0.207	-0.365
CI	(0.70)	(1.31)	(0.05)	(1.51)	(1.16)	(1.34)	(0.56)	(0.20)	(0.71)	(0.35)	(-1.01)	(-1.36)	(-0.28)	(-0.88)	(-0.66)	(-1.30)

								Above	median							
	R	0A	R	OE	RO	CE	N	IM	P	PR	NI	PLR	GN	IPA	NN	IPA
	Ι	II	Ι	II	Ι	II	Ι	II	Ι	II	Ι	II	Ι	II	Ι	II
PID	0.415		4.09		3.874		0.184		0.024		-0.750		-0.097		-0.164	
	(1.42)		(0.57)		(1.40)		(0.61)		(0.82)		(-0.80)		(-0.31)		(-0.45)	
PFD	0.083		1.670		0.230		0.051		(0.004)		-0.382*		-0.045*		-0.066*	
	-0.152*		-5.275*		-2.562		-0.268		-0.049		0.795		0.009		0.422	
PED	(-0.42)		(-0.58)		(-0.74)		(-0.71)		(-1.36)		(0.68)		(0.02)		(0.93)	
PRD	0.266*		1.888* (0.41)		0.107* (0.06)		0.379*		0.006		-0.630 (-1.07)		-0.086 (-0.44)		-0.008	
PGD	-1.126**		-3.985*		-8.739**		-1.150**		-0.088*		4.106**		1.259**		1.990**	
	-0.048	-0.094	-0.858	-0.682	-0.302	-0.809	-0.091	-0.052	-0.001	-0.004	(2.83)	0.357*	(2.01)	0.110*	0.080**	0.164**
AS	(-0.85)	(-1.54)	(-0.67)	(-0.64)	(-0.56)	(-1.37)	(-1.54)	(-0.82)	(-0.19)	(-0.70)	(0.97)	(1.79)	(0.87)	(1.64)	(1.14)	(2.05)
PERID		0.015**		0.280**		0.096**		0.008		0.0009*		-0.025		-0.009*		-0.011*
TLKID		(3.04)		(3.20)		(1.99)		(1.60)		(1.87)		(-1.52)		(-1.69)		(-1.77)
PERFD		0.006		0.022		0.023		0.005		0.006		-0.004*		-0.0003*		-0.005*
		(0.19)		(0.41)		(0.76)		(1.65)		(1.91)		(-0.41)		(-0.09)		(-1.32)
PERED		-0.004		-0.102		-0.040 (-0.69)		-0.002		-0.00006		0.005		0.003		0.002
PFRRD		0.004		0.042		0.030		0.003		0.001		-0.017		-0.005		-0.013
Think		(0.48)		(0.300		(0.38)		(0.41)		(1.21)		(-0.64)		(-0.57)		(-1.22)
PERGD		-0.060***		-0.883**		-0.460**		-0.044**		-0.003**		0.194***		0.066***		0.087***
	0.010**	(-4.22)	E 000*	(-3.55)	0.422*	(-3.34)	0.147*	(-2.92)	0.022**	(-2.30)	0.550*	(4.17)	0.220**	(4.20)	0 515**	(4.64)
BAGE	(2.36)	(2.97)	5.622"	4.892***	(0.35)	(0.09)	(1.07)	(1.26)	(2.53)	(2.98)	(1.32)	(2.03)	(2.40)	(2.91)	(3.13)	(3.50)
B 0175	-0.103*	-0.041*	-8.013***	-0.510*	-0.457*	-0.384*	-0.150*	-0.049*	-0.028**	-0.018**	0.210*	0.146*	0.825***	0.968***	0.664***	0.862***
BSIZE	(-1.10)	(-0.48)	(-4.02)	(-0.34)	(-0.52)	(-0.47)	(-1.55)	(-0.55)	(-3.07)	(-2.16)	(0.71)	(0.52)	(8.34)	(10.22)	(5.74)	(7.68)
FTA	-0.111***	-0.118***	-3.156***	-1.700***	-0.840**	-0.880***	-0.025*	-0.034*	-0.009***	-0.009***	0.318***	0.359***	0.052*	0.065**	0.057*	0.073**
LIA	(-4.28)	(-4.81)	(-5.14)	(-3.98)	(-3.43)	(-3.71)	(-0.93)	(-1.31)	(-3.69)	(-3.92)	(3.84)	(4.48)	(1.92)	(2.42)	(1.78)	(2.28)
DG	0.005*	0.007**	0.341***	0.130**	0.046	0.058	0.001	0.0001	0.0002	0.0004	-0.011	-0.014	-0.0008	-0.002	-0.005*	-0.002*
	(1.51)	(2.11)	(3.99)	(2.03)	(1.32)	(1.65)	(0.40)	(0.05)	(0.75)	(1.17)	(-0.97)	(-1.23)	(-0.20)	(-0.70)	(-1.15)	(-0.47)
Const.	0.396	5.639**	(4.03)	(1.61)	(0.461)	32.138	0.575	2.966	0.390	(0.034)	-1.853	-11.420	-15.668***	-20.767***	-13.114***	-19.968***
	$\chi^{2}(1) =$	$\chi^2(1) =$	$\chi^{2}(1) =$	$\chi^2(1) =$	$\chi^2(1) =$	$\chi^{2}(1) =$	$\chi^{2}(1) =$	$\chi^2(1) =$	$\chi^{2}(1) =$	$\chi^2(1) =$	$\chi^{2}(1) =$	$\chi^{2}(1) =$	$\chi^2(1) =$	$\chi^2(1) =$	$\chi^{2}(1) =$	$\chi^{2}(1) =$
LM test	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.0001)	(0.0011)	(0.0002)	(1.0013)	(0.0017)	(0.0006)	(0.0004)	(0.0005)	(0.0003)	(0.0009)	(0.0008)	(0.0006)	(0.0001)	(0.0004)	(0.0007)	(0.0008)
Hausman	$\chi^2(15) =$	$\chi^{2}(15) =$	$\chi^{2}(15) =$	$\chi^{2}(15) =$	$\chi^2(15) =$	$\chi^{2}(15) =$	$\chi^{2}(15) =$	$\chi^2(15) =$	$\chi^2(15) =$	$\chi^2(15) =$	$\chi^{2}(15) =$	$\chi^2(15) =$	$\chi^2(15) =$	$\chi^{2}(15) =$	$\chi^2(15) =$	$\chi^{2}(15) =$
test	357.75	117.11	506.52	+281.29	2913.07	305.70	7.61	16.32	113.53	106.91	308.39	686.14	6710.15	269.32	275.08	2945.62
	(0.0008)	(0.0000)	(0.0008)	(0.0008)	(0.0000)	(0.0000)	(0.0004)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
F-tost	F(7,121) = 12.93	F(7,121) = 10.32	F(7,121) = 18.82	F(7,121) = 20.43	F(7,121) = 15.07	F(7,121) = 12.87	r(7,121) = -4.67	F(7,121) = 4.70	F(7,121) = 6.20	F(7,121) = 5.95	F(7,121) = 21.53	r(7,121) = -1853	r(7,121) = 15.63	r(7,121) = 12.48	F(7,121) = 21.43	r(7,121) = 16.47
1 ((3)	(0.0000)	(0.0000)	(0.0000)	(0,0000)	(0,0000)	(0.0000)	(0.0001)	(0.0001)	(0.0000)	(0,0000)	(0.0000)	(0.0000)	(0.0000)	(0,0000)	(0,0000)	(0,0000)
Ν	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144
Adj. R ²	0.2588	0.3614	0.1275	0.2824	0.2289	0.2903	0.1458	0.1689	0.2815	0.3066	0.1556	0.2258	0.7998	0.8204	0.7131	0.7472

Table A.6. Audit characteristics and bank performance (Fixed effects estimation results for large audit committee) (Part 2)

Note: This table presents a regression estimation of the impact of AC characteristics on the performance of all banks. See Table 1 for variable definition and description. We estimate all models controlling for heteroscedasticity and firm-level clustering. T-values are reported in parentheses below the coefficient estimates. * Significance at the 10% level. ** Significance at 5% level. *** Significance at 1% level.

VIRTUS R 29

								Below	median							
	RC	0A	R	OE	RC)CE	N	IM	P	PR	NP	LR	GN	IPA	NN	(PA
	I	II	Ι	II	I	II	Ι	II	Ι	II	I	II	I	II	Ι	П
CHAIR	-0.037	-0.006	-0.358	0.569	-0.930	-0.899	-0.530	-0.430	-0.019	-0.017	0.252	0.202	0.033	0.059	0.249	0.369
DUALITY	(-0.12)	(-0.02)	(-0.07)	(0.10)	(-0.33)	(-0.30)	(-1.27)	(-1.01)	(-0.60)	(-0.53)	(0.25)	(0.20)	(0.09)	(0.16)	(0.52)	(0.76)
CHAIR	0.438	0.397	3.835	2.602	5.006**	4.587*	0.539	0.604	0.021	0.021	-0.171	-0.298	-0.182	-0.202	-0.539	-0.629
	(1.59)	(1.37)	(0.81)	(0.54)	(2.06)	(1.74)	(1.49)	(1.63)	(0.77)	(0.78)	(-0.20)	(-0.35)	(-0.56)	(-0.62)	(-1.30)	(-1.49)
CEO	0.395	0.272	5.538	6.854	1.280	0.208	0.823	0.842	0.014	0.006	-0.533	-0.702	-1.228**	-1.296**	-2.503**	-2.598**
	(0.81)	(0.53)	(0.66)	(0.79)	(0.30)	(0.04)	(1.28)	(1.28)	(0.208)	(0.14)	(-0.34)	(-0.46)	(-2.11)	(-2.24)	(-3.39)	(-3.48)
PCA	(2.84)	(2.02)	4.069**	4.359^^	2.301**	(2.410^{**})	(1.05)	0.104	(2.18)	(2.18)	-0.752^{**}	-0.756°	-0.265**	-0.259**	-0.418^*	-0.391**
	(2.64)	(2.93)	(2.42)	(2.33)	(2.00)	(2.36)	(1.03)	0.604	(3.16)	(3.18)	(-2.41)	-2.003*	(-2.20)	-0.630*	(-2.03)	(-2.02)
CI	(0.13)	(0.29)	(0.48)	(0.68)	(0.75)	(0.89)	(0.59)	(0.93)	(0.70)	(0.56)	(-1.28)	(-1.92)	(-0.82)	(-1.12)	(-0.34)	(-0.93)
	0.178	(0.23)	5 383	(0.00)	2 939	(0.05)	0.456	(0.55)	0.017	(0.50)	-0.375	(1.52)	-0.202	(1.12)	-0.305	(0.55)
PID	(0.38)	1	(0.67)		(0.72)	1	(0.75)		(0.37)		(-0.25)		(-0.37)		(-0.44)	
	0.060		0.139		0.215		0.020		0.001		-0.571**		-0.292**		-0.431**	
PFD	(0.65)	1	(0.09)		(0.26)	1	(0.17)		(0.15)		(-1.94)		(-2.66)		(-3.09)	
DED	-0.399**		-5.064*		-4.770**		-0.366*		-0.054**		1.120**		0.528**		1.116***	
PED	(-2.30)	1	(-1.69)		(-3.10)	1	(-1.60)		(-30.7)		(2.02)		(2.56)		(4.26)	
רותת	-1.741***		-20.474***		-14.703***		-0.325*		-0.094***		0.663*		0.460*		0.414*	1
PKD	(-7.54)		(-5.15)		(-7.19)		(-1.07)		(-3.99)		(0.90)		(1.67)		(1.19)	
PCD	1.637***		22.458***		16.058***		0.420*		0.086**		-0.280		-0.656*		-0.626*	
TGD	(5.45)		(4.34)		(6.04)		(1.06)		(2.82)		(-0.29)		(-1.83)		(-1.38)	
AS	0.063	0.108	1.461	2.335**	0.516*	0.996	0.134	0.166*	0.003	0.002	-0.198*	-0.202*	-0.201**	-0.248**	-0.197**	-0.235**
710	(0.96)	(1.56)	(1.28)	(2.00)	(0.88)	(1.57)	(1.54)	(1.87)	(0.54)	(0.41)	(-0.94)	(-0.97)	(-2.56)	(-3.18)	(-1.98)	(-2.34)
PERID		0.004		0.048		0.031	l	0.003		0.0007**		-0.004		-0.0001	l l	-0.002
	ļ!	(1.25)		(0.77)	ļ!	(0.91)	l	(0.66)		(2.03)		(-0.35)	-	(-0.03)	ļ!	(-0.54)
PERFD	1 1	0.002		0.037		0.019		0.0002		0.0001		-0.025**		-0.010**		-0.014**
	ļ	(0.78)		(0.66)		(0.62)		(0.06)		(0.31)		(-2.51)		(-2.84)		(-3.00)
PERED	1 1	(-1.005)		(-0.045)		-0.052		(-1.54)		(-2.45)		(3.05)		(2.22)		(3.86)
	├ ────┦	-0.040***		-0.440)		-0.298***		-0.007		-0.003***		0.037		0.003		(3.80)
PERRD	1 1	(-5.27)		(-3.42)		(-4.24)		(-0.76)		(-4.44)		(1.62)		(0.44)		(0.98)
		-0.0002		-0.001		-0.0008		-0.0011		-0.004		0.0009		0.007		0.001
PERGD	1 1	(-0.68)		(-0.34)		(-0.30)		(-0.49)		(-1.40)		(0.10)		(0.21)		(0.36)
	0.384***	0.292**	2.059	0.338*	0.464*	1.490*	0.310**	0.385***	0.030***	0.029***	0.259*	0.400*	0.514***	0.475***	0.556***	0.563***
BAGE	(4.66)	(3.50)	(1.45)	(0.24)	(0.64)	(1.96)	(2.86)	(3.60)	(3.60)	(3.60)	(0.98)	(1.61)	(5.24)	(5.07)	(4.47)	(4.64)
DOITE	-0.100	-0.012	-2.058*	-0.528	-1.585**	-0.636	-0.108	-0.190**	-0.034***	-0.034***	0.242*	0.325*	1.301***	1.239***	1.196***	1.174***
BSIZE	(-1.56)	(-0.19)	(-1.86)	(-0.49)	(-2.79)	(-1.09)	(-1.28)	(-2.31)	(-5.24)	(-5.52)	(1.18)	(1.70)	(17.01)	(17.18)	(12.33)	(12.58)
ET A	-0.042***	-0.038** *	-0.753***	-0.690***	-0.493***	-0.452***	-0.010	-0.012	-0.001*	-0.001*	0.096***	0.097**	0.064***	0.059***	0.059***	0.053**
EIA	(-4.30)	(-3.70)	(-4.41)	(-3.95)	(-5.62)	(-4.76)	(-0.790)	(-0.96)	(-1.82)	(-1.77)	(3.04)	(3.14)	(5.48)	(5.04)	(3.96)	(3.51)
DC	0.006**	0.009**	0.133**	0.179**	0.061**	0.093**	0.001*	0.0003*	0.0002	0.0003	-0.031***	-0.027**	-0.015***	-0.016***	-0.018***	-0.018***
DG	(2.03)	(2.76)	(2.35)	(3.11)	(2.10)	(2.98)	(0.43)	(0.07)	(0.76)	(0.98)	(-3.03)	(-2.70)	(-3.94)	(-4.26)	(-3.67)	(-3.61)

 Table A.7. Audit characteristics and bank performance (Fixed effect estimation results for small audit committee) (Part 1)

-								Below	nedian							
	R	0A	R	OE	RC	OCE	N	IM	P	PR	NF	PLR	GN	IPA	NN	IPA
	I	II	Ι	II	I	II	I	II	Ι	II	Ι	П	Ι	II	Ι	II
Const	5.184**	2.461	78.305**	25.624	52.505**	20.348	7.113**	10.375***	0.610**	0.543**	-3.476*	-5.363*	-26.760***	-24.707***	-25.033***	-24.401***
Collst.	(2.46)	(1.14)	(2.16	(0.70)	(2.82)	(1.03)	(2.56)	(3.73)	(2.84)	(2.57)	(-0.52)	(-0.83)	(-10.67)	(-10.13)	(-7.87)	(-7.73)
	$\chi^{2}(1) =$	$\chi^{2(1)} =$	$\chi^{2}(1) =$	$\chi^{2}(1) =$	$\chi^{2}(1) =$	$\chi^{2(1)} =$	$\chi^{2}(1) =$	$\chi^{2}(1) =$	$\chi^{2}(1) =$	$\chi^{2}(1) =$	$\chi^{2(1)} =$	$\chi^{2}(1) =$	$\chi^{2}(1) =$	$\chi^{2(1)} =$	$\chi^{2}(1) =$	$\chi^{2}(1) =$
LM test	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.0001)	(0.0004)	(0.0007)	(0.0009)	(0.0002)	(0.0004)	(0.0006)	(0.0008)	(0.0007)	(0.0003)	(0.0001)	(0.0002)	(0.0004)	(0.0005)	(0.0001)	(0.0002)
Hausman	$\chi^{2}(15) =$	$\chi^2(15) =$	$\chi^{2}(15) =$	$\chi^{2}(15) =$	$\chi^2(15) =$	$\chi^{2}(15) =$	$\chi^2(15) =$	$\chi^2(15) =$	$\chi^2(15) =$	$\chi^2(15) =$	$\chi^2(15) =$	$\chi^{2}(15) =$	$\chi^2(15) =$	$\chi^2(15) =$	$\chi^{2}(15) =$	$\chi^{2}(15) =$
toet	8.08	-5.99	71.87	719.79	38.38	50.14	2.37	5.96	69.79	16.88	16.88	-607.53	89.72	55.80	795.51	-376.17
iesi	(0.9203)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0009)	(0.0005)	(0.0000)	(0.0007)	(0.0002)	(0.0002)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
	F(7,121)	F(7,121)	F(7,121)	F(7,121)	F(7,121)	F(7,121)	F(7,121)	F(7,121)	F(7,121)	F(7,121)	F(7,121)	F(7,121)	F(7,121)	F(7,121)	F(7,121)	F(7,121)
F-test	= 2.12	= 2.73	= 6.02	= 7.53	= 3.77	= 9.26	= 10.41	= 10.88	= 3.25	= 2.54	= 7.93	= 8.45	= 4.25	= 5.10	= 9.26	= 8.95
1 1051	(0.0046)	(10.0016)	(0.0001)	(0.0002)	(0.0011)	(0.0001)	(0.0005)	(0.0004)	(0.0034)	(0.0178)	(0.0000)	(0.0000)	(0.0003)	(0.0000)	(0.0000)	(0.0000)
Ν	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144
Adj. R ²	0.6944	0.6474	0.4217	0.3524	0.5514	0.4550	0.5518	0.5115	0.6885	0.7009	0.3901	0.4047	0.8598	0.8560	0.7849	0.7878

Table A.7. Audit characteristics and bank performance (Fixed effect estimation results for small audit committee) (Part 2)

Note: This table presents a regression estimation of the impact of AC characteristics on the performance of all banks. See Table 1 for variable definition and description. We estimate all models controlling for heteroscedasticity and firm-level clustering. T-value are reported in parentheses below the coefficient estimates.

*Significance at the 10% level. **Significance at 5% level. *** Significance at 1% level.

