

## Determinants of Auditor Choice: Evidence from Sharia Commercial Banks in Indonesia

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### Abstract

*This research aims to determine the impact of corporate governance, firm complexity, foreign ownership, and ownership concentration towards auditor choice for Sharia commercial banks in Indonesia in 2016-2023. Firm size is also accounted for as a control variable. This research was conducted using a quantitative approach using the logit logistic regression analysis method through the Eviews 13 software. The sampling method was carried out using a purposive sampling method, which produced a sample of 9 Sharia commercial banks in Indonesia with a total of 72 observations. This study aims to provide an overview of the factors that Sharia commercial banks in Indonesia consider in choosing their external auditors, namely between Big 4 and non-Big Four auditors, which differ from other companies and industries. The results show that in partial analysis, corporate governance mechanisms and ownership concentration significantly and negatively affect auditor choice. Meanwhile, firm complexity and foreign ownership do not affect auditor choice. Low demands cause the negative influence of ownership concentration due to the private nature of the banks and efforts to achieve efficiency in audit fees while maintaining the same quality standards.*

**Keywords:** Auditor Choice, Sharia Commercial Banks, Accountability, Governance.

### Introduction

Since the issuance of Law No. 10 of 1998 about Banking, Indonesia has enforced a dual banking system which acknowledged the existence of Shariah banks in the country. It can be argued that there has been a significant growth in the performance of Shariah commercial banks, one of which is driven by the influence of the Muslim population (Imam & Kpodar, 2013). However, data from Indonesia shows that per January 2024, the total assets of Shariah commercial banks were merely about 4,98% of the total assets of conventional commercial banks (OJK, 2024a, 2024b). This shows that compared to conventional banks, the growth of Shariah banks is still falling behind.

Banking growth is closely related to customers' trust towards how the bank carries out its functions in collecting and distributing funds. Gaining customers' trust is important because it leads to customers' loyalty towards the banks (Utami et al., 2019; Wahyuni, 2021). Banks must be able to account for their mandate in managing customers' money, one of which is through issuing quality financial statements. These reports are known as a tool for companies to convey important information regarding their general and financial conditions to stakeholders. They could also be used to measure the company's performance because it contains plenty of data for comparison with other periods, companies, and industries. To guarantee the quality of information, audits are done to those statements before they are published to the public. According to Article 68 Law No. 40 of 2007 about Limited Liability Company, audit of financial reports is mandatory for companies that have met the requirements mentioned. This includes all the Shariah commercial banks in Indonesia. Furthermore, Fan & Wong (2005) stated that the decision to hire an auditor could increase the credibility of a company, namely by ensuring the quality of accounting information

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conveyed to the public and limiting the company's ability to manipulate information. Other studies also show that higher-quality auditors provide a higher quality and completeness of information presented in financial statements (Alzeban, 2020; Hrazdil et al., 2024). Therefore, auditor choice is a crucial decision for a company because the decision itself and the results of the auditor's performance can be used as a quality signal for the company.

Previous research has been done by Knechel et al. (2008), which stated that each sample group in the research has different variables that influence the choice of an external auditor. The research concluded that the need for a quality external auditor increases with the size and complexity of the company. As a company grows, the decision is also affected by debt and equity financing. A study by Ngo et al. (2020) found that auditor choice is positively influenced by ownership concentration and foreign ownership but negatively influenced by board size. A similar result was found by Kim et al. (2019), which stated that the correlation between foreign ownership and auditor choice strengthens when the investor's country has better governance mechanisms, whereas the investee's country has high information asymmetry. Another study came from Trisnawati (2015), which concluded that only corporate governance affects the selection of a high-quality auditor, but with a negative correlation. Darmadi (2016) found that companies with high ownership concentration are likelier to hire Big Four auditors, but the correlation becomes negative when applied to companies with family ownership. On the other hand, Van et al. (2023) conducted qualitative research and found that legal environment factors, audit fees, size and reputation of the audit firm, bank governance, audit experience and relationship influence auditor choice.

With that being said, this research aims to determine the factors affecting companies in choosing their auditor in the context of Shariah commercial banks in Indonesia. The variables accounted for in this research are corporate governance, firm complexity, foreign ownership and ownership concentration, and firm size as a control variable, whereas auditor choice will be measured by a dummy variable that differentiates between Big 4 and non-Big Four auditing firms.

## Literature Review

### *Agency Theory*

The agency theory analyses the relationship between the principal and agent in a company due to a separation of ownership and power (Panda & Leepsa, 2017). Jensen and Meckling (1976) argue that an agency relationship is established between the two parties in which the principal is entitled to delegate authority to the agent to act and make decisions on their behalf. However, agency problems may occur when agents are driven by opportunism or self-interest rather than the principal's best interest, as well as the issue of information asymmetry where the principal lacks information compared to agents, which ends up disadvantaging them (Mallin, 2016). Aligned with previous theory, Levy & Sarnat (1988) concluded that there are three main conflicts related to agency theory. The conflicts are when managers use the company's resources for personal gains, have preferences over projects that benefit them more, and have different assessments and evaluations of risks from shareholders.

Companies enforce strict supervision and control to mitigate losses due to agency problems to avoid undesirable crises. One of the ways is through the involvement of an independent external auditor as an extension of supervision to ensure the accuracy and quality of the issued information (Jensen & Meckling, 1976). Ultimately, an external auditor will ensure the quality of the company's financial reports to reduce the level of information asymmetry between the principal and the agent and reduce further potential agency costs.

### *Signaling Theory*

This theory was first introduced by Spence (2002) to recognise information gaps found in the market. These gaps are caused by an information asymmetry between the sender who sends the information and the receiver who receives the information. Connelly et al. (2011) summarise that the signalling theory studies the behaviours of those two parties in how they react to the informational gaps, specifically in how the

sender chooses to communicate or signal the information they have and how the receiver chooses to interpret those signals.

Concerning the research, it was found in previous studies that auditor choice can be used as a signal of the quality of a company's financial reports (Alzeban, 2020; Fan & Wong, 2005; Hrazdil et al., 2024). This is because high-quality auditors are known to have good audit standards and mechanisms, so they can provide better assurance and credibility for the financial reports that they audit. Large audit firms, such as the Big 4, are also known to have better resources in terms of incentives, quality control systems, human resource expertise, and advanced audit methodologies (Che et al., 2020). Thus, auditor choice can signal investors and other stakeholders about the quality of financial reports issued by a company.

### *Audit Theory*

The American Accounting Association defined audit as a systematic approach in objectively collecting and assessing evidence regarding assertions about a company's economic actions and events, ensuring they align with relevant criteria as well as communicating the results to stakeholders (Defliese et al., 1987). On the other hand, Elder et al. (2020) defined audit as an evaluation done by a competent and independent body towards evidence regarding the information collected to determine and report the level of conformity between the information and established criteria. The final results of an audit are in the form of the auditor's opinion on the financial reports that provide the highest level of assurance that can be provided. This opinion indicates that the audit procedure has been carried out on the company's statements and practices and that they are acceptable and reliable with a level of error that is still within reasonable limits (Abdel-Khalik, 1993).

In general, there are three categories of audits. The first is an audit of financial statements, which is done towards a company's financial statements to verify that they have been prepared in compliance with the generally accepted accounting principles and standards (Whittington & Pany, 2016). To determine whether these reports are fairly presented under the standards, the auditor will collect evidence to decide whether the statements contain material errors or other misrepresentations (Elder et al., 2020). The second audit category is compliance audit, which evaluates whether the company has complied with certain procedures, rules, or provisions set by the authorities (Elder et al., 2020). This audit is closely related to available legislation, government policies, related legal regulations, and other laws that concern the company. The last audit category is the operational audit, which refers to evaluating a particular unit within an organisation aiming to measure its performance (Whittington & Pany, 2016). This type of audit is subjective because it is not based on generally accepted standards but on criteria made by the organisation or auditor to suit the nature and characteristics of the unit being audited.

### *Auditor Choice*

Auditor choice refers to the auditing firm chosen by a company as an external auditor to perform audit mechanisms towards the company. The company's requirements for selecting an auditor are regulated in POJK No. 9 of 2023, which concerns the use of public accountant services and public accounting firms for financial services activities. However, the requirements are only limited to the obligation to use services from public accountants and firms registered and actively recorded in the Financial Services Authority (OJK) and having the competencies according to the company's operational complexity (OJK, 2023).

Furthermore, the Islamic Financial Services Board (IFSB) and the Accounting and Auditing Organization of Islamic Financial Institutions (AAOIFI) stated on Principle 9 of the Shariah Governance Framework about Independent External Shariah Audit (IESA), that external auditors of Islamic financial institutions must meet these requirements: (1) having the necessary regulatory approvals to act as such, as applicable, (2) having the necessary auditing experience as an internal/external auditor or internal/external Shariah auditor, (3) having been approved by the Shariah supervisory board (SSB) regarding the necessary knowledge and understanding of Shariah principles and rules applicable to the institutions offering Islamic financial services (IIFS) and *fiqh al-muamalat* and the suitability to the operations of the IIFS, (4) having adequate resources, qualitatively (in terms of knowledge base, methodology and tools) and quantitatively (in terms

of the number of eligible human resources that can devote sufficient time) for the IESA assignment, and (5) maintaining compliance of the applicable professional standards, quality assurance processes and codes of ethics including, in particular, the independence and confidentiality requirement (AAOIFI, 2022).

In previous studies, auditor choice as a variable refers to the choice of external auditor differentiated by quality. Because it has been proven that the presence of external auditors can be used as a quality signal (Alzeban, 2020; Fan & Wong, 2005; Hrazdil et al., 2024), it is believed that auditing firms with better reputations provide better assurance to a company's financial statement. Previous studies represented quality external auditors by the Big 4 firms, which are the four audit firms with the best rankings in the world. Accounting firms in Indonesia that are affiliated with these Big 4 are the (1) Tanudiredja, Wibisana, Rintis and Partners affiliated with PricewaterhouseCoopers (PwC), (2) Purwantono, Sungkoro and Surja affiliated with Ernst & Young (EY), (3) KAP Imelda & Partners affiliated with Deloitte Touche Tohmatsu (Deloitte), and (4) KAP Siddharta Widjaja & Partners affiliated with Klynveld Peat Marwick Goerdeler (KPMG).

### *Hypothesis Development*

Qomariyah (2019) stated that industry characteristics could influence auditor choice, the company's characteristics, institutional factors of a particular country, industry and country level factors, political economy, recognised accounting institutions, shareholder ownership, national cultural values, legal environment and ownership structure. The study also concluded that auditor choice can be influenced by internal factors, such as accounting standards, the number of affiliates owned by the company, the type of company ownership, and company characteristics, as well as by external factors, such as audit firm reputation, audit fees, audit firm's history with clients, and environmental context. In the research, four variables are tested to determine their influence on auditor choice: corporate governance, firm complexity, foreign ownership, and ownership concentration.

### *Corporate Governance*

Claessens (2006) defined corporate governance as a mechanism used by an organisation to operate when ownership is separated from management. Sutedi (2011), on the other hand, stated that corporate governance is the process and framework utilised by a company's governing bodies to enhance business success and accountability, aiming to achieve long-term shareholder value while considering the interest of other stakeholders, all in accordance with legal requirements and ethical principles. The concept of corporate governance has become a global phenomenon due to the increasing number of scandals and crises in the corporate environment, in the sense that the corporate governance mechanisms serve as a solution in mitigating those problems. Essentially, corporate governance has five main components: transparency, accountability, responsibility, independence, and fairness (Sutedi, 2011). Organisations must pay attention to these components and actively implement them to perform good corporate governance. When an organisation succeeds in doing so, it can bring positive impacts such as facilitating access to external financing, reducing the cost of capital required due to the readiness of shareholders to accept smaller returns, positively encouraging company performance and reducing the risk of contracting financial difficulties (Claessens, 2006).

Dechow et al. (1996) found that a lack of management independence often indicates profit manipulation in companies. Other agency problems may also arise as the level of supervision and control decreases. Therefore, corporate governance mechanisms are expected to prevent these problems, especially those related to the disclosure of company information, by increasing the transparency and quality of a company's financial statements. This is aligned with the functions of high-quality audits, so it is hypothesised that these two variables have a linear relationship as follows:

H<sub>1</sub>: Corporate governance has a positive influence on auditor choice.

### *Firm Complexity*

According to Loughran & McDonald (2023), firm complexity can be measured in organisational framework, product logistics, financial reporting, information dissemination, or financial structuring. These factors can influence a company's structure and operations, contributing to its complexity. In regards to auditing, supervision and control can be done directly and easily for small-scale companies. This is not the same for large-scale companies, where the increasing number of employees, locations, and activities can reduce organisational efficiency and induce moral hazards, which demand stricter supervision (Knechel et al., 2008). In line with this statement, Abdel-Khalik (1993) argued that supervision is more difficult to do for larger companies due to the reduction of organisational control. External auditors can benefit from overcoming problems related to firm complexity, including increasing the effectiveness and efficiency of the process, increasing compliance with regulations, and reducing internal information asymmetry (Knechel et al., 2008). In other words, the demand for quality external auditors is hypothesised to be aligned with the increasing complexity of the firm, which is as follows.

H<sub>2</sub>: Firm complexity has a positive influence on auditor choice.

### *Foreign Ownership*

In addition to seeking funding from within the country, it is common for companies to receive capital injections from foreign investors or be acquired by foreign companies. Therefore, the proportion of shares owned by these foreign entities and/or individuals can be understood as foreign ownership. Being affiliated with foreign parties can affect how a company operates, such as having higher levels of productivity compared to domestic companies (Yudaeva et al., 2003) as well as gaining more benefits, like having more accessible access to technology, capital, knowledge, and other resources from the parent company (Kronborg & Thomsen, 2009).

The presence of foreign ownership can increase a firm's complexity, and as previously explained, complexity may lead to certain preferences towards auditor choice. This is due to the fact that foreign shareholders may experience a higher level of information asymmetry caused by differences in distance and language (Ngo et al., 2020). Therefore, they will have higher requirements for the reliability of published financial statements. Foreign-affiliated companies are also more likely to prefer audit firms that are affiliated with globally known audit firms to align their preferred standards and thus provide additional assurance for foreign investors (Ngo et al., 2020). Consequently, this research proposes the following hypothesis.

H<sub>3</sub>: Foreign ownership has a positive influence on auditor choice.

### *Ownership Concentration*

Ownership is considered concentrated when the largest shareholder effectively controls the company (Darmadi, 2016). High ownership determines the amount of rights and power the shareholder has over the company, enabling them to influence and make company decisions. Fan and Wong (2005) argued that controlling shareholders can gain power and incentives to negotiate and establish contracts with various stakeholders through ownership concentration. This could lead to the company being prone to agency problems due to a high proportion of power being concentrated in one certain party. For example, they could take over company resources for personal benefit (Darmadi, 2016) or decide on unfair profit sharing (Fan & Wong, 2005).

Regarding external auditor's supervision, this could lead to two possibilities. First, companies may choose a low-quality auditor to reduce their ability to strictly monitor their operations and thus prevent controlling shareholders from fulfilling their interests (Lin & Liu). This means that the controlling shareholder is trying to abuse their power over the company for their benefit. On the contrary, controlling shareholders may also believe they are responsible towards minority shareholders and other potential investors. In this case, controlling shareholders should be able to convince them about the reliability of corporate governance mechanisms and financial statements, giving them reassurance that their profits are well protected. These

concerns will lead to the appointment of high-quality auditors to perform audits towards the company's financial statements (Darmadi, 2016; Fan & Wong, 2005; Ngo et al., 2020); hence this research proposes the following hypothesis.

H<sub>4</sub>: Ownership concentration has a positive influence on auditor choice.

#### *Simultaneous Effect*

External auditors can be utilised by companies as additional monitors towards their operations. The three variables, namely firm complexity, foreign ownership, and ownership concentration, all have the potential to contribute to a company's agency problems. The presence of an external auditor will be expected to mitigate these problems, which is to assure the accuracy of financial information published by the company to stakeholders. In line with this, corporate governance also acts as a solution to mitigate the emergence of agency problems. Therefore, good corporate governance mechanisms should be aligned with high-quality audits.

H<sub>5</sub>: Corporate governance, firm complexity, foreign ownership, and ownership concentration positively influence auditor choice.

## **Materials and Methods**

### *Population and Sample*

The population targeted in this research are the Shariah commercial banks that OJK officially lists per January 2024 with a period of 2016-2023, which is the most recent period from when the research was conducted. Selecting a period of eight years is also decided by considering the probabilities of banks switching auditor choices during the period so that it may provide variation in the data. Due to limitations, this research carefully selected a number of samples from the population by using the purposive sampling method. The criteria that have been determined are that banks must (1) be listed as Shariah commercial banks (BUS) by OJK from 2016-2023, (2) published audited annual reports from 2016-2023, and (3) provide all the needed data for the research in their annual reports from 2016-2023. Eventually, ten banks are selected as samples, as shown in Table 1 thus obtaining 72 observations for the research analysis.

**Table 1. Research Sample Selection**

Descriptions	Number of Banks
Listed Shariah commercial banks per January, 2024	14
Banks that were not listed as BUS between 2016-2023	(4)
Banks with incomplete data from 2016-2023	(1)
Number of samples	9

### *Data Collection Technique*

This research entirely used a secondary type of data, which came from the annual reports of each bank that are officially published on their respective websites. The raw data is then processed to adjust the measurement needs for each variable so that it can be tested further for research purposes.

*Operational Definition and Measurement of Variables*

The dependent variable in this research is auditor choice (AUDITOR). The independent variables are corporate governance (GCG), firm complexity (SALEGROW), foreign ownership (FOREIGN), and ownership concentration (OWNER), while firm size (SIZE) is accounted for as a control variable. Operational definitions, measurements, and sources for each respective variable are presented in Table 2.

**Table 2. Research Variables**

Variable	Operational Definition	Measurement	Source
<b>A. Independent Variable</b>			
Corporate Governance (GCG)	PBI No. 11/33/PBI/2009 about Implementation of Good Corporate Governance for BUS and UUS instructed that banks must conduct self-assessments periodically towards their corporate governance mechanisms. This assessment covers 11 evaluation factors based on the 5 GCG values, which are transparency, accountability, responsibility, independence, and fairness.	SEOJK No. 10/SEOJK.03/2014 about Health Level Assessment of BUS and UUS defined an evaluation matrix for GCG self-assessment as follows: 1: Very good 2: Good 3: Fairly good 4: Not good 5: Bad	OJK (2014)
Firm Complexity (SALEGROW)	Firm complexity refers to the level of complexity of a company due to its increases in size, number of employees, activities and other aspects (Knechel et al., 2008). One of the ways to measure firm complexity is through a company's sales growth. Rapid growth can generally cause stress or disruption, which can potentially increase a company's complexity and risks (Knechel et al., 2008).	Growth of sales from the previous year divided by the total sales of the previous year. Sales in this research is substituted by the bank's income as a <i>Mudharib</i> .	Knechel et al. (2008)
Foreign Ownership (FOREIGN)	Foreign ownership is the proportion of shares owned by foreign entities and/or individuals.	Ratio of shares owned by foreign investors and total outstanding shares of the company.	Kim et al., 2019; Ngo et al., 2020
Ownership Concentration (OWNER)	Ownership concentration refers to the proportion of shares owned by the largest shareholder, which can be seen in the banks' ownership structure.	Ratio of shares owned by the largest shareholder and total outstanding shares of the company.	Darmadi, 2016; Ngo et al., 2020
<b>B. Dependent Variable</b>			

Auditor Choice	Auditor choice refers to the choice of external auditor made by a company after going through all considerations regarding audit fees, qualitative factors, etc. and eventually prioritising them over other available options (Knechel et al., 2008).	Dummy variable as described: 1: if a bank selects a Big 4 affiliated firm as their external auditor. 0: if a bank selects otherwise.	(Darmadi, 2016; Kim et al., 2019; Ngo et al., 2020)
C. Control Variable			
Firm Size (SIZE)	Firm size refers to the size of a company based on its quantitative data (Shalit & Sankar, 1977).	Natural logarithm of total asset.	Knechel et al., 2008; Ngo et al., 2020; Trisnawati, 2015

### Research Model

The research model is presented in Figure 1. A logit logistic regression model was used, as follows:

$$Auditor = P_{ogit}(P) = \ln\left(\frac{P_i}{1-P_i}\right) = \alpha + \beta_1 GCG_{it} + \beta_2 SALEGROW_{it} + \beta_3 FOREIGN_{it} + \beta_4 OWNER_{it} + \beta_5 SIZE_{it} + \varepsilon$$

Where:

AUDITOR = Auditor Choice;  $\alpha$  = Regression Coefficient;  $\beta_1, 2, \dots, 5$  = Variable Coefficient;  $i = 9$  Shariah commercial banks (samples);  $t = 2016-2023$ ; GCG = Corporate Governance; SALEGROW = Firm Complexity; FOREIGN = Foreign Ownership; OWNER = Ownership Concentration; SIZE = Firm Size



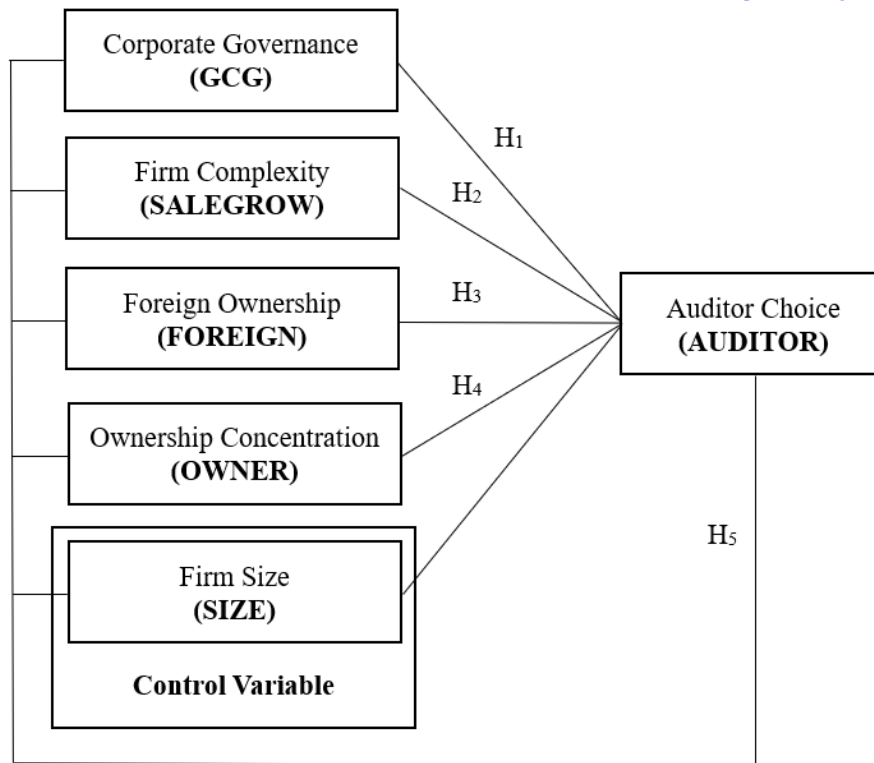


Figure 1. Research Model

## Results and Analysis

A total of 72 observations are collected from 9 Shariah commercial banks in Indonesia over the period 2016-2023. The banks observed are Bank Aceh Syariah, Bank Central Asia (BCA) Syariah, Bank Jabar Banten Syariah, Bank Mega Syariah, Bank Muamalat Indonesia, Bank Panin Dubai Syariah, Bank Syariah Bukopin, Bank Tabungan Pensiunan Nasional (BTPN) Syariah, and Bank Victoria Syariah. The data were processed by the software Eviews 13.

### *Descriptive Statistical Analysis*

Based on the descriptive statistical analysis results, it was possible to determine the number of observations and the minimum, maximum, mean, and standard deviation for each respective variable. These results are shown in Table 3.

Table 3. Descriptive Statistical Analysis Test Result

	Mean	Max.	Min.	Std. Dev.	Obs.
AUDITOR	0.236111	1.000000	0.000000	0.427672	72
GCG	2.152778	3.000000	1.000000	0.597170	72
SALEGROW	0.112083	2.510000	-0.330000	0.236861	72
FOREIGN	0.116944	0.870000	0.000000	0.236861	72
OWNER	0.811528	1.000000	0.330000	0.210222	72
SIZE	30.04639	31.840000	28.12000	0.898575	72

Table 3 shows that auditor choice as the dependent variable that used a dummy variable has 0.00 as its minimum value, which refers to banks that use non-Big Four auditors and 1.00 as its maximum value, which refers to banks that use Big 4 auditors. It also shows an average value of 0.24 and a standard deviation of 0.43. From the results, it can be concluded that only around 24% of the observations use the audit services

from Big 4 affiliated firms. Corporate governance, as the first independent variable, recorded 1.00 as its minimum value and 3.00 as its maximum value after using the self-assessment matrix. Corporate governance has an average value of 2.15 and a standard deviation of 0.60. The second independent variable, firm complexity, recorded -0.33 as its minimum value and 2.51 as its maximum value after measuring yearly sales growth. Firm complexity has an average value of 0.11 and a standard deviation of 0.39. Foreign ownership, as the third independent variable, recorded 0.00 as its minimum value and 0.87 as its maximum value after rationing the proportion of shares owned by foreign investors. Foreign ownership has an average value of 0.12 and a standard deviation of 0.24. Ownership concentration, as the fourth independent variable, recorded 0.33 as its minimum value and 1.00 as its maximum value after rationing the proportion of shares owned by the largest shareholder. Ownership concentration has an average value of 0.81 and a standard deviation of 0.21. Additionally, firm size as a control variable recorded 28.12 as its minimum value and 31.84 as its maximum value after measuring the natural logarithm of total assets. Firm size has an average value of 30.05 and a standard deviation of 0.90.

#### *Hypothesis Test Result*

A logit logistic regression model was used to analyse the influence of corporate governance, firm complexity, foreign ownership, and ownership concentration towards auditor choice. The results of the test are shown in Table 4.

**Table 4. Logit Logistic Regression Test Result**

Dependent Variable: AUDITOR				
Sample: 2016-2023				
Variable	Coefficient	Std. Error	z-Statistics	Prob.
C	39.20589	17.93324	2.186213	0.0288
GCG	-1.896826	0.868640	-2.183673	0.0290
SALEGROW	0.486553	0.816925	0.595591	0.5514
FOREIGN	-0.659133	2.055059	-0.320736	0.7484
OWNER	-10.40203	3.464270	-3.002663	0.0027
SIZE	-0.947525	0.529742	-1.788653	0.0737
McFadden R-Squared	0.253256		LR Statistics	19.93227
Observations	72		Prob. (LR)	0.001287

#### *McFadden's R Square Test*

R Square Test is run as a determination test to calculate the regression model's ability to explain the dependent variable. Based on Table 4, it is known that the McFadden R-squared value for this research model is 0.2533 or equivalent to 25.33%. It can be interpreted from these results that 25.33% of the variability in Auditor Choice is explained by the independent variables used in the model, that is, corporate governance, firm complexity, foreign ownership, ownership concentration as well as firm size as a control variable. However, the remaining 74.67% of the variability is explained by other independent variables outside of the research model.

#### *z-Test*

The z-Test is used to calculate the partial significance and influence of each independent variable towards the dependent variable based on the level of significance of 5%. This study conducted the test by comparing the p-value obtained through the z-test with the Sig. value of 0.05. The variable hypothesis is accepted if  $H_0 < \text{Sig. } 0.05$  and rejected if  $H_0 > \text{Sig. } 0.05$ . In relation to hypothesis 1 to hypothesis 4, Table 4 shows the partial significance test indicates that the probability value of each variable is as follows:

- GCG has a coefficient of -1.8968 and a probability value of 0.0290. This value indicates that corporate governance has a significant influence towards auditor choice. Additionally, the negative coefficient value indicates a negative influence. Therefore, corporate governance has a significant negative effect on auditor choice.
- SALEGROW has a coefficient of 0.4866 and a probability value of 0.5514. This value indicates that firm complexity does not influence auditor choice.
- FOREIGN has a coefficient of -0.6591 and a probability value of 0.7484. This value indicates that foreign ownership does not influence auditor choice.
- OWNER has a coefficient of -10.4020 and a probability value of 0.0027. This value indicates that ownership concentration has a significant influence towards auditor choice. Additionally, the negative coefficient value indicates a negative influence. Therefore, corporate governance has a significant negative effect on auditor choice.
- SIZE as a control variable has a coefficient of -0.9475 and a probability value of 0.0737. This value indicates that firm size does not influence auditor choice.

#### *LR test*

The LR test calculates the simultaneous significance and influence of all independent variables on the dependent variable based on the significance level of 5%. This study conducted the test by comparing the p-value obtained through the LR test with the Sig. value of 0.05. The variable hypothesis is accepted if  $H_0 < \text{Sig. } 0.05$  and rejected if  $H_0 > \text{Sig. } 0.05$ . Based on Table 4 and its relation to Hypothesis 5, the probability value of LR is 0.001287, which means that the independent variables significantly influence auditor choice.

#### *Goodness-of-Fit Test*

A Hosmer-Lemeshow test was conducted to test the goodness-of-fit of the observed data. The regression model can be declared fit if the Chi-square p-value is above the significant level, which is Sig. 0.05. The results are shown in Table 5, the Hosmer-Lemeshow test resulted in a H-L Statistic of 10.7222 and a Chi-square probability value of 0.2179. This can be interpreted that the regression model is considered fit.

**Table 5. Hosmer-Lemeshow Test Result**

H-L Statistic	d(F)	Prob. Chi-Sq
10.7222	8	0.2179

#### *Corporate Governance Negatively Affects Auditor Choice*

Based on the hypothesis tested in Table 4, it can be concluded that corporate governance has a significant and negative influence on auditor choice. By its coefficient, it can be interpreted that the higher the level of corporate governance, the less likely a bank will choose a Big Four auditor. However, considering the nature of the good corporate governance self-assessment matrix instructed in SEOJK No. 10/SEOJK.03/2014, regarding the Health Level Assessment of BUS and UUS, the results actually show the opposite. An increase in the corporate governance level means that the mechanism is worse. Therefore, it can be reinterpreted as banks with worse corporate governance tend to choose non-Big Four auditors, whereas banks with better corporate governance tend to choose Big Four auditors.

Both corporate governance and external auditors function to mitigate potential agency problems in a company (Claessens, 2006; Jensen & Meckling, 1976). Companies with a high level of awareness towards good corporate governance will strive to pay attention to its implementation in many aspects of their

organisation. This includes providing reliable financial information, which supports the five main components of good corporate governance. Thus, it can be understood that the research results show an aligned relationship between good corporate governance mechanisms and the tendency to choose a high-quality auditor, namely the Big Four firms. This result supports the findings in the research conducted by Trisnawati (2015) and Van et al. (2023).

#### *Firm Complexity Does Not Affect Auditor Choice*

Based on the hypothesis testing in Table 4, it can be concluded that firm complexity does not play a significant role towards auditor choice. The study by Francis and Gunn (2015) confirms that banking industries are complex; however, Butar-Butar & Indarto (2018) followed up on the research in the Indonesian market and found that auditors with industry expertise do not affect complex industries. This is due to the uncertain business environment, making it difficult for auditors to assess whether or not the company has complied with the standards accordingly. Khalil (2022) also added that the regulations and internal controls that strictly regulate the banking sectors limit auditors' roles.

Regarding Shariah commercial banks, it can be assumed that their complexity lies in their compliance with Shariah law; this is what differentiates them from conventional commercial banks. However, Law No. 21 of 2008 about Shariah Banking arranged that compliance is the responsibility of the SSB, whereas the external auditor is only responsible for the financial statements. Consequently, external auditors are not given additional demands concerning the assumed increased complexity of Shariah banks and are only required to comply with the generally accepted accounting principles and standards. Thus, auditor choice is not influenced by firm complexity.

#### *Foreign Ownership Does Not Affect Auditor Choice*

Based on the hypothesis tested in Table 4, it can be concluded that foreign ownership does not play a significant role in auditor choice. This statement rejects findings from Darmadi (2016), Ngo et al. (2020), and Kim et al. (2019) that auditor choice is influenced by foreign ownership in an effort to mitigate information asymmetry. However, the research results can be explained by the fact that most of these foreign ownerships are below the threshold of being considered as a controlling shareholder. This means that they do not have the power to influence a company's decisions and activities, which is not an important aspect to consider when auditing their financial statements. This statement supports a previous Wardani et al. (2021) study.

#### *Ownership Concentration Negatively Affects Auditor Choice*

Based on the hypothesis testing in Table 4, it can be concluded that ownership concentration has a significant and negative influence towards auditor choice. This statement rejects previous research conducted by Darmadi (2016) and Ngo et al. (2020) but supports the findings of Rahman et al. (2023). By its coefficient, it can be interpreted that banks with highly concentrated ownership are less likely to choose a Big Four auditor. It can be understood that this relationship exists because, based on POJK No. 9 of 2023 About the Use of Public Accountant Services and Public Accounting Firms for Financial Services Activities, the decision is made through the General Shareholders' Meeting, where the largest shareholders have the highest power to influence company decisions. It should also be considered that most Shariah commercial banks in Indonesia are privately owned, which demands to reduce agency costs, produce high-quality financial statements, and insure against litigation risks are not as high as in public banks (Hall et al., 2020). Therefore, auditor choice depends on the largest shareholders' preferences.

A negative influence may indicate that the controlling shareholder does not think of a high-quality auditor as an urgency. Audit fees for Big 4 firms are known to be expensive compared to non-Big Four firms (Nurjanah & Diyanty, 2019), but the quality difference between the two may not be significant (Khalil, 2022) considering that they both follow the same set of rules and regulations. Therefore, the negative results indicate that the controlling shareholder does not think that the quality difference is significant enough to choose one over the other, especially regarding a higher price. In conclusion, a negative relationship can be

interpreted as controlling shareholders prioritising cost efficiency in their auditor choice since urgency is low and the difference is not significant.

### *Corporate Governance, Firm Complexity, Foreign Ownership and Ownership Concentration Simultaneously Affect Auditor Choice*

Based on the LR test results in Table 4, it can be concluded that all of the independent variables in the model simultaneously affect auditor choice. This is interpreted from the p-value of 0.001287, which is lower than the Sig. 0.05. The coefficient of determination test conducted with McFadden's R-squared also confirms that 25.33% of the variability in choosing a Big Four firm over a non-Big Four firm is explained through the independent variables used in this model.

## Conclusion

The study aimed to analyse the relationship between corporate governance, firm complexity, foreign ownership, and ownership concentration towards auditor choice, with firm size as a control variable in the context of Shariah commercial banks in Indonesia from 2016-2023. The results indicate that corporate governance and ownership concentration partially influence auditor choice significantly and negatively. Meanwhile, firm complexity and foreign ownership have no influence on auditor choice. The results also indicate that all the independent variables included in the model have a significant simultaneous influence on auditor choice.

It should be taken into consideration that this study has its limitations. For instance, this study uses data from 9 Shariah commercial banks even though there are 14 Shariah commercial banks in Indonesia. This is due to the unavailability of required data and non-compliance with established sampling criteria. It is suggested that future research acknowledge the other banks to provide a more comprehensive representation. Future research should also consider using qualitative methods to investigate in-depth how the Shariah commercial banks choose their external auditors.

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