

Determinants of Audit Effectiveness in Malaysia Cooperatives

Khairul Anuar Abdul Rashid¹, Intan Salwani Mohamed²

¹Suruhanjaya Koperasi Malaysia

²Faculty of Accountancy & Accounting Research Institute, University Teknologi MARA, Cawangan Selangor, Kampus Puncak Alam, Selangor, Malaysia

DOI: <https://dx.doi.org/10.47772/IJRISS.2025.9010400>

Received: 22 December 2024; Accepted: 26 December 2024; Published: 25 February 2025

ABSTRACT

Malaysia's cooperative sector, the third contributor to the country's GDP, is vital for socio-economic development. The National Cooperative Policy (NCP) highlights the government's commitment to enhancing the cooperative business model, especially for the benefit of marginalized communities. However, limited research on Malaysian cooperatives, particularly concerning their internal audit effectiveness, necessitates investigation. Given the pressing governance issues on trust violations and money laundering, this study is timely. It aims to supplement the Malaysian Cooperative Societies Commission's (MCSC) guidelines by identifying factors influencing internal audit effectiveness, such as management support, internal auditor traits, auditee characteristics, and cooperative age. Data from 336 usable responses collected via questionnaires distributed to cooperatives in the Klang Valley reveal that internal audit attributes and auditee characteristics positively impact internal audit effectiveness. However, the study finds an insignificant relationship between two predictors, management support and cooperative age, on internal audit effectiveness. These findings can guide the MCSC in enhancing the role and function of internal audits within cooperatives.

Keywords: Cooperative, Governance, Internal audit, Governance

INTRODUCTION

Cooperatives contribute towards socio-economic development, which has been an agenda of national development globally and locally. In 2010, the Malaysian government launched the National Cooperative Policy 2020 (NCP, 2020), which focuses on strengthening the cooperative sector and, most notably, making Malaysia's cooperative sector a significant contributor to the country's GDP. Based on NCP 2020, one of the objectives is that the government targeted a contribution by the Malaysian cooperative sector to be 10 percent of the GDP. It shows the Malaysian government's high recognition of the cooperative sector.

The question is how Malaysia will achieve the target of NCP 2020 without overcoming some significant problems in the cooperative sector. Because of that, one of the strategies in NCP 2020 that MCSC runs is strengthening internal factors in cooperatives, where focus is given to accountability and integrity of the Board of Directors and the effectiveness of the Internal Audit function. The function of internal auditors in cooperatives is crucial as an independent party that plays a role in the "check and balance" mechanism. In other words, internal auditors should become more effective.

This study empirically tests factors influencing the internal audit effectiveness (IAE) in the cooperative setting to fulfil the members' needs. It is important to identify these factors when revising or amending current practices, rules, and regulations to ensure the effectiveness of Malaysian cooperatives.

LITERATURE REVIEW

This section discusses the literature review of conceptual information for this study. It comprises several parts. The first part discusses agency theory and its relevance in cooperatives and internal audit functions. Afterward, the relationship between internal audit effectiveness and factors relevant to cooperatives will be discussed.

Agency Theory

Agency theory is mainly used and argued to be relevant for corporate governance research. The agency relationship is an agreement involving the principal (owner) and the agent acting on behalf of the principal in performing a service (Jensen & Meckling, 1976). This relationship implicates the principal delegating power to the agent in deciding for the organization. However, the agent may not constantly act in the principal best interest of maximizing wealth, thus suggesting an agency problem. Agency problems occur due to the principal's dependency on the agent's action, which affects the accomplishment of welfare. To limit such disagreements, the principal can establish an appropriate incentive for the agent, thus incurring some costs. The so-called monitoring costs can help ensure that the agent's actions match the principal's and organization's interests and objectives. Using agency theory, Pelayo-Maciel, Calderón-Hernández, and Serna-Gomez (2012) claimed that in large businesses, ownership is spread across various shareholders who transfer the control and decision-making power to the chief executive officer in accomplishing optimal business performance.

A cooperative is controlled and owned by members of the cooperative. Therefore, directors act as the agents in a cooperative, while members are the principals. The directors have to serve the members' interests and fulfil their needs. Agency theory contends that the essential role in protecting shareholders' welfare lies on the board of directors. Agency theory also points out the board's role of conformance, in which their actions portray the members' best interest, and they become the gatekeepers of the available cooperative resources (Cornforth, 2004). It was argued that cooperative successes rested on members' active participation in its operation. Cooperative directors should be autonomous from the management, and their responsibility is to ensure that the management displays obedience and adherence. Directors should monitor and control the behavior of management to ensure that their actions and decisions are made for the members' best interests and desires.

Neto, Barroso, and Rezende (2012) investigated apparent issues in Brazilian agricultural cooperatives' management and transaction costs. They claimed that agency problems had caused higher management costs and governance problems. The three costs include monitoring costs caused by the agent's actions to reduce effects from losses, pledged costs due to the agent's obligation to the principal, and divergence costs resulting from the agent making a decision that reduces the principal's revenue.

Agency Theory and Internal Audit Function

Agency theory highlights the contractual relationship between the principal owners of economic resources and the managers (agents) conducting the organization's operation. The manager is responsible for using and monitoring those resources made available to a company by a group of principals (Jensen & Meckling, 1976). Agency theory theorizes that principals have less information compared to agents. This information asymmetry adversely affects the principals' ability to monitor if the agents have served the principals' interests. Moreover, agency theory assumes that principals and agents act rationally and use the contracting mechanism to maximize their wealth, which may result in a 'moral hazard' problem (Jensen & Meckling, 1976). The dilemma agents face in decision-making may be against the principals' interests of maximizing their wealth. As principals may have limited access to all available information when the agent decides, they may be unable to conclude whether the agent's act is in the organization's and the principal's best interest. Because of these problems of adverse selection and moral hazard, principals and agents are involved in contractual relationships to reach Pareto-optimality and reduce the issues raised. Part and parcel of the agreement include monitoring process formation, such as an internal audit function (IAF) (Adams, 1994). An IAF is a connection cost that agents (managers) bear to satisfy the owners' accountability demands (Sherer & Kent, 1983).

The principals of an organization are usually represented by the board of directors, who invest and initiate the business. Connection cost is any business running cost owners pay to protect their economic interests. Investment in the IAF indicates that managers have the organization under the board of directors (principals) control. Explicitly, managers want to demonstrate that the organization has placed satisfactory and effective risk management and internal control systems to protect the principals' interests. IAF plays an essential role in reducing information asymmetries between principals and agents. More people will need to be hired for the monitoring role if there is more information asymmetry, which means more investment in the IAF. It may

result in the organization having more staff (as a proportion of total staff) whose key responsibility is continuously and actively checking and monitoring the organization's internal affairs.

Hypothesis Development

Management support (MS) is among the three most important internal audit effectiveness factors. Previous studies have argued positively about the influence that management support has on internal audit effectiveness. For example, Mihret, Yismaw, Getie Mihret, and Wondim Yismaw (2007) and Ahmad, Othman, Othman, and Jusoff (2012) studied the Ethiopian and Malaysian public sector, where each had respectively viewed the demand-driven organizational or so-called managerial characteristics is the most significant and central element to internal audit effectiveness. Managerial characteristics are said to be more significant than the supply-led qualifications and internal audit staff work situation. Hence, the first hypothesis is developed as follows:

H1: There is a significant positive relationship between management support (MS) and internal audit effectiveness (IAE) in Malaysian cooperatives

A study conducted by Endaya and Hanefah (2016) supported the fact that the characteristics of internal audits substantially influence internal audit effectiveness among Libyan organizations. They even suggested Libyan businesses focus on matters affecting internal audit effectiveness and reinforce internal audit ability in public organizations. The support of senior management in the organization could further improve such efficiency. A second hypothesis is postulated as follows:

H2: There is a significant positive relationship between internal auditor characteristics (IAC) and internal audit effectiveness (IAE) in Malaysian cooperatives

To achieve internal audit effectiveness, internal auditors are obliged to have complete and unlimited access to all activities, records, and properties and be given ample assistance from the auditee. Access to required documentation and activities among units or departments being audited varies. Every unit may have different ways of keeping their documents and handling activities. A study showed that the human resource department maintains its records properly and provides auditor's full access. In contrast, other units, such as the finance department, do not offer full access to records. However, the completion of records may not be at par with auditors' expectations. Some departments, such as procurement, may be reluctant to cooperate with auditors as their activities may involve private and confidential information. Auditees' capability to meet their purposes also reflects the audit quality. Some studies revealed that the management's poor recording system in several areas is more prominent than the struggle to access records. Auditees' cooperation level and capability are part of the proven criteria that positively affect internal audit effectiveness. The third hypothesis for this study is as follows:

H3: There is a significant positive relationship between auditee attributes (AA) and internal audit effectiveness (IAE) in Malaysian cooperatives

Organisations' age is generally associated with performance and governance. The older the organization is, the better its performance will be, and governance issues will be better managed. Findings from a study by Sarens, Allegrini, D'Onza, and Melville (2011) indicated that the profile of organizations varies significantly between clusters, for which the internal audit function size is related to the age of internal audit function. Internal audit functions set up when IIA was established in 1941 have a high probability of using IIA Standards. Hence, the internal audit office would generally consist of more internal auditors with better internal auditing qualifications. Quality assurance and enhancement programs are more common in older internal audit functions as they tend to have broader internal audit programs and perform forward-thinking internal audit activities more regularly. It may contrast with newer established organizations, especially those with less funding. The last hypothesis is developed as follows:

H4: There is a significant positive relationship between cooperative age (Age) and internal audit effectiveness (IAE) in Malaysian cooperatives

The discussion above has led the study to propose a theoretical framework presented in Figure 1 below.

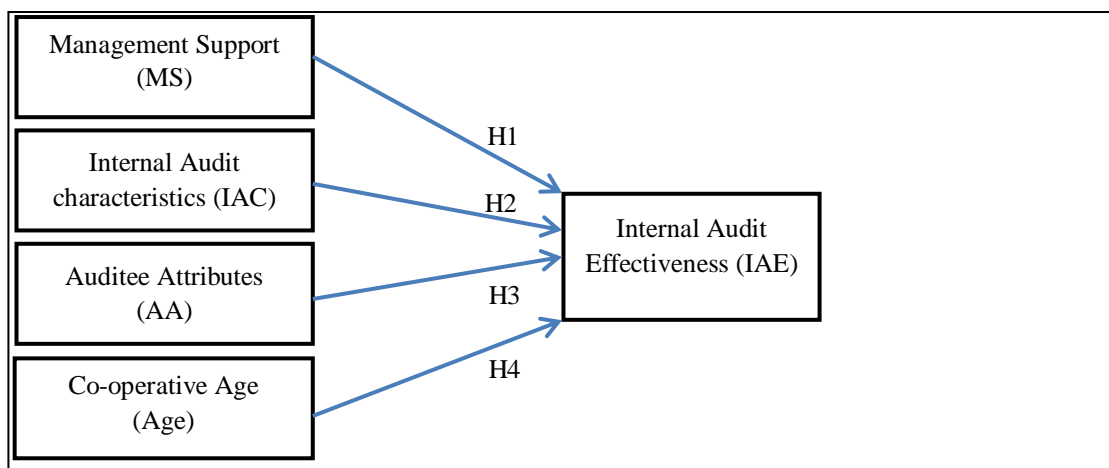


Figure 1: Proposed Theoretical Framework

METHODOLOGY

The population for this study comprises cooperatives in Klang Valley, Malaysia. As guided by the MCSC, every cooperative must have at least one internal auditor (if it is a small-sized cooperative), with three as an ideal requirement to ensure that cooperative operation is effective and efficient. As of 31 December 2016, there were 2,700 registered cooperatives in Klang Valley (Selangor and Kuala Lumpur).

The targeted respondents for the study comprised internal audit committees of various sizes and functions of cooperatives operating in Klang Valley. Primary data was used, and a questionnaire survey was distributed for data collection and analysis. Questionnaires were directly distributed to respondents during a seminar conducted at MCSC with the assistance of MCSC's Internal Audit Department. During the workshop, participants given the questionnaire were subsequently invited to attend a seminar on internal audit courses. The advantages of using direct distribution as a medium of distributing questionnaires are the ability to reach respondents, which in this case, the cooperatives, and allowing respondents to complete them at their convenience, as well as providing guaranteed returns (Sekaran & Bougie, 2016). A total of 336 responses were completed and usable for analysis of the study.

There are five (5) sections in the questionnaire. Section A covered respondents' demographic information, which includes the cooperatives' main activity and year of establishment, as well as the respondent's gender, age, working experience, race, and education level. Section B required respondents to provide opinions on the cooperative's internal audit effectiveness, consisting of 22 statements explaining the five elements of internal audit effectiveness – expertise, scope of audit service, audit planning, fieldwork and controlling communication skills, and competency. Section C focused on management support for cooperatives in the internal audit function. This section consisted of nine statements covering four items – organization of internal audit, policies and procedures, management response to audit findings, and their commitment to strengthening the internal audit function. Section D consisted of 14 statements that represent internal audit characteristics in cooperatives. They were elaborated under four elements: internal auditor independence, focus, competency, and size. The final section, E, covered auditee attributes with the least statements of five. The section includes three elements – proficiency, attitude, and level of cooperation. Every section, except for the demographic section (Section A), was structured using a 5-point Likert Scale – strongly agree (SA), agree (A), neutral (N), disagree (D), or strongly disagree (SD). Participants were required to select the most suitable responses perceived by them on individual statements.

This study used the latest SPSS or Statistical Package for the Social Sciences software version 24 to analyze collected data. Descriptive statistics, validity tests, and normality tests were established first. This was followed by correlation analysis to check on the multicollinearity of the data, reliability analysis, and

regression analysis. A set of multiple regression analyses is performed to assess the relationship between the variables presented, i.e., the management support (MS), internal audit characteristics (IAC), auditee attributes (AA), and age towards internal audit effectiveness (IAE) among performing cooperatives in Malaysia.

FINDINGS

Frequency distribution of demographic variables

Table 1 below shows the respondents' profiles based on their workplace, i.e., the cooperatives. Most respondents worked in consumer-based cooperatives (48.5%), followed by credit and services cooperatives. Consumer cooperatives aim to assist their members in acquiring quality goods at reasonable prices. Activities commenced include mini markets, supermarkets, grocery shops, petrol kiosks, and convenience shops. Regarding cooperatives' age (measured by year of establishment), most cooperatives have been operating for at least 20 years (46.4%). Five cooperatives had an age equal to or more than 90 years, and the oldest respondent had been in operation for the last 95 years. It showed that the cooperative sector in Malaysia is mature enough and thus can be at par with other private and public sectors.

Table 1: Demographic profile of respondents

	Frequency	Percentage	Cumulative Percentage
Cooperative Function			
Credit/Banking	78	23.2	23.2
Consumer	163	48.5	71.7
Services	59	17.6	89.3
Plantation/Agriculture	17	5.1	94.3
Housing/Construction	16	4.8	99.1
Transportation	2	0.6	99.7
Industrial	1	0.3	100.0
	336	100.0	
Cooperative Age			
≤ 10 years	92	27.4	27.4
11 - 20 years	64	19.0	46.4
21 – 30 years	41	12.2	58.6
31 - 40 years	80	23.8	82.4
41 - 50 years	33	9.8	92.3
> 50 years	26	7.7	100.0
	336	100.0	

Table 2, on the other hand, tabulated individual respondents' profiles. Only 23.5 percent of the respondents were female, and the remaining 76.5 percent were male, showing that men were actively and dominantly managing the cooperative sector. Although the UN and ICA have promoted female entrepreneurs and directorship, the motion has not materialized since many females were afraid to take up the challenge. This is evident in an interview with the MCSC internal auditor officer, stating that during Cooperatives' Annual General Meeting, female candidates tend to reject the appointment as Board members upon election by members. Most respondents (73.2%) were Malay, followed by 17.6 percent Chinese and 8.9 percent Indian. Respondents were mature individuals, as most of them were between 41 and 50 years old (56.0%) and 31 to 40 years old (24.7%), and they also had working experience between 6 and more than ten years (91.4%). Only 3.6 percent were young, and 15.8 percent were aged more than 50 years old. Those with working experience of 5 years and below only accounted for 8.6 percent. The majority of these respondents (58.3%) have either a degree or a Master's degree qualification, followed by a Diploma (40.8%) to allow them to hold the position of

either internal auditor or manager of cooperatives. A small portion (0.9%) of them have the essential qualification of a Certificate or have finished their SPM and STPM secondary exams. These demographics (age, working experience, and education level) indicated that cooperatives have matured, skilled, and knowledgeable teams of human capital in managing cooperatives in Malaysia.

Table 2: Demographic profile of individual respondents

		Frequency	Percentage	Cumulative Percentage
Sex				
	Male	257	76.5	76.5
	Female	79	23.5	100.0
		336	100.0	
Race				
	Malay	246	73.2	73.2
	Chinese	59	17.6	90.8
	Indian	30	8.9	99.7
	Other	1	0.3	100.0
		336	100.0	
Age				
	≤ 30 years	12	3.6	3.6
	31 - 40 years	83	24.7	28.3
	41 – 50 years	188	56.0	84.2
	> 50 years	53	15.8	100.0
		336	100.0	
Working Experience				
	< 2 years	3	0.9	0.9
	2 - 5 years	26	7.7	8.6
	6 - 10 years	131	39.0	47.6
	> 10 years	176	52.4	100.0
		336	100.0	
Education Level				
	Master	68	20.2	20.2
	Degree	128	38.1	58.3
	Diploma	137	40.8	99.1
	Certificate / STPM / SPM	3	0.9	100.0
		336	100.0	

Regression Analysis

Multiple linear regression analysis was conducted to forecast the internal audit effectiveness (IAE) outcome as the dependent variable from the independent variables (MS, IAC, AA, and cooperative age). The analysis's results were used to interpret the influence of independent variables on cooperative internal audit effectiveness. Details of these results are shown in Table 3, Table 4, and Table 5 below.

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.265 ^a	0.070	0.059	0.30877	0.070	6.231	4	331	0.000

a. Predictors: (Constant), Age, IAC, MS, AA

Table 4: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.376	4	0.594	6.231	0.000 ^b
	Residual	31.556	331	0.095		
	Total	33.932	335			

a. Dependent Variable: IAE

b. Predictors: (Constant), Age, IAC, MS, AA

Table 5: Multiple Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.951	0.284		10.389	0.000		
	MS	0.060	0.047	0.071	1.283	0.200	0.929	1.076
	IAC	0.110	0.056	0.110	1.979	0.049	0.909	1.100
	AA	0.122	0.036	0.186	3.355	0.001	0.913	1.095
	Age	0.0000981	0.001	0.006	0.109	0.913	0.991	1.009

a. Dependent Variable: IAE

Multiple linear regression analysis presented individual variables' influence in predicting cooperatives' internal audit effectiveness. The state of influence of individual variables and constant values were shown as beta values (B), whereby all four factors showed positive linear relationships with internal audit effectiveness. A positive linear relationship portrays that these independent variables (MS, IAC, AA, and cooperative age) will positively influence the dependent variable (IAE) outcome, whereby an increment in internal audit effectiveness will also increase all the independent variables. The most significant influence factors are auditee attributes (AA) and internal audit characteristics (IAC), with a value of $p < 0.05$.

Based on the results shown above, the regression model for this study can be built as follows:

$$IAE = 2.951 + 0.060MS + 0.110IAC + 0.122AA + 0.0000981AGE + \epsilon t$$

Where:

IAE = Internal Audit Effectiveness

MS = Management support

IAC = Internal Audit Characteristics

AA = auditee attributes

Age = Cooperative Age

et = Error term

The analysis showed a relationship between management support, internal audit characteristics, auditee attributes, and cooperative age with internal audit effectiveness. Two variables, internal audit characteristics, and auditee attributes, were found to have significant positive relationships with internal audit effectiveness. However, management support and cooperative age had an insignificant relationship with internal audit effectiveness. Two out of four hypotheses' statements were accepted as they show a significant positive relationship with internal audit effectiveness. The summary of the hypotheses results was as per Table 6.

Table 6: Hypotheses Results

	Hypothesis Statement	Result
H1	There is a significant positive relationship between management support (MS) and internal audit effectiveness (IAE) in Malaysian cooperatives.	Rejected
H2	There is a significant positive relationship between internal auditor characteristics (IAC) and internal audit effectiveness (IAE) in Malaysian cooperatives.	Accepted
H3	There is a significant positive relationship between auditee attributes (AA) and internal audit effectiveness (IAE) in Malaysian cooperatives.	Accepted
H4	There is a positive relationship between cooperative age (Age) and internal audit effectiveness (IAE) in Malaysian cooperatives.	Rejected

The present study showed that internal audit effectiveness (IAE) is strongly predicted by auditee attributes (AA), followed by internal audit characteristics (IAC). Having said so, cooperative management needs to be more committed and attentive to the importance of the Internal Audit function. As described, Internal Audit is an intra-organizational function that helps management control the business's operation to reduce some agency costs (Jensen & Meckling, 1976; Neto et al., 2012).

Management support was found to have a non-significant positive relationship with internal audit effectiveness. The finding proved that management support did not affect internal audit effectiveness. This could be due to a lack of commitment by the leaders to react to the internal audit findings and recommendations. Cooperative age has no significant relationship with Internal Audit Effectiveness. Although in a profit-oriented organization, the longer the firm's age, the better the function and effectiveness of internal audit, it seems to be contrary to the cooperative.

SUMMARY AND CONCLUSIONS

This study aims to empirically test factors that would influence internal audit effectiveness (IAE) in cooperative settings that fulfill the members' needs. Management support (MS), internal audit characteristics (IAC), auditee attributes (AA), and cooperative age were the factors that had been discussed that may influence the effectiveness of internal audit. The objective set in this study was said to have been satisfactorily achieved. It also enhanced knowledge in the Malaysian cooperative setting, considered Malaysia's third most important sector, aiming to benefit the social economy rather than maximize profit. The study identified potential influences that may affect the internal audit effectiveness of cooperatives. Future research on internal audit should consider other variables that could affect its effectiveness. Particular attention may need to be given to studies conducted in the setting of not-for-profit organizations to allow comparison between organizations. For further analysis, it may be good if other factors are also considered and looked into to maximize the effectiveness of the internal audit. Future researchers may, for instance, consider the competencies of personnel who plan, implement, and/or manage internal audits within the organization.

ACKNOWLEDGMENT

The Authors extend their appreciation to the Accounting Research Institute (ARI HICoE), University Teknologi MARA, Malaysia, for the research Funding (600-RMC/ARI 5/3(010/2023))

REFERENCES

1. Jensen, MC and Meckling, WH 1976, 'Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure,' *Journal of Financial Economics*, Vol. 3, pp. 305–360.
2. Pelayo-maciel, J, Calderón-hernández, G and Serna-gómez, HM 2012, 'Corporate Governance Structure and Its Impact on Human Resource Management and Financial Performance', Vol. 11, No. 8, pp. 1133–1145.
3. Cornforth, C (2004). 'The Governance of cooperatives and mutual associations: a paradox perspective', *Annals of Public and Cooperative Economics*, Vol. 75, No. 1, pp. 11–32.
4. Neto, SB, Barroso, MFG and Rezende, AJ (2012). 'Cooperative Governance and Management Control Systems: An Agency Costs Theoretical Approach', *Brazilian Business Review*, Vol. 9, No. 2, pp. 68–87.
5. Adams, M. (1994). 'Agency Theory and the Internal Audit', *Managerial Auditing Journal*, Vol. 9, No. 8, pp. 8–12.
6. Sherer, M & Kent, D (1983). *Auditing and accountability*. Pitman.
7. Mihret, DG, Yismaw, AW., Getie Mihret, D and Wondim Yismaw, A (2007). 'Internal audit effectiveness: an Ethiopian public sector case study', *Managerial Auditing*, Vol. 22, No. 5, pp. 470–484.
8. Ahmad, NH, Othman, R, Othman, R and Jusoff, K (2012). 'The Effectiveness of Internal Audit in Malaysian Public Sector', *Journal of Modern Accounting and Auditing*, Vol. 5, No. 9, pp. 53–62.
9. Endaya, KA and Hanefah, MM 2016, 'Internal auditor characteristics, internal audit effectiveness, and the moderating effect of senior management,' *Journal of Economic and Administrative Sciences*, Vol. 32, No. 2, pp. 160–176.
10. Sarens, G, Allegrini, M, D'Onza, G and Melville, R (2011). 'Are internal auditing practices related to the age of the internal audit function?', *Managerial Auditing Journal*, Vol. 26, No. 1, pp. 51–64.
11. Sekaran, U and Bougie, R (2016). *Research methods for business: A skill-building approach* (7 ed.). John Wiley & Sons.