

PalArch's Journal of Archaeology of Egypt / Egyptology

INTERNAL AUDIT COMPETENCE AND EFFECTIVENESS: LESSON FROM INDONESIA

Adam Zakaria¹, Unggul Purwohed², Maqsood Memon³

^{1,2}Departement of accounting, Faculty of Economics, Universitas Negeri Jakarta, Jakarta,
Indonesia, Email address:

³College of Business, Zayed University, Abu Dhabi, United Arab Emirates.

¹adamzakaria@unj.ac.id. ²upurwohed@unj.ac.id. ³maqsood.memon@zu.ac.ae

Adam Zakaria, Unggul Purwohed, Maqsood Memon. Internal Audit Competence And Effectiveness: Lesson From Indonesia-- PalArch's Journal Of Archaeology Of Egypt/Egyptology 17(4), 192-200. ISSN 1567-214x

Keywords: Internal Auditor Competence, Internal Audit Effectiveness, Indonesia.

ABSTRACT

The aim of this study is to investigate the effect of internal auditor's competence on the internal audit effectiveness in the public sector. Prior studies have conducted this research topic mostly on the private sector, and there is still limited study on the public sector especially on the higher education sector. The units of analysis for the study are the semi-autonomous universities in Indonesia. We distributed questionnaires for top management and Chief of Audit Executive (CAE) for each university. We asked top management about the effectiveness of the internal audit while the CAE answered the internal audit competence instrument. Our findings show that there is a positive effect of auditor's competence on the internal audit effectiveness. Hence, it is evidenced that in the public sector, auditor competence is one of the determinants of internal audit effectiveness as in the private.

INTRODUCTION

Governance in the public sector has been the main attention of public administration scholars for decades. Prior literatures have been underlined that one of the key determinants of good governance in this sector is internal audit especially in public universities (Christopher, 2015; Mihret and Yismaw, 2007). The focus of Internal audit in the public sector has been shifting from 'financial performance legitimacy' *per se*, to the effectiveness and efficiency of the 'machinery of the government' and its capability to deal with change and improvement (Schillemans *et al.*, 2018). Therefore, the recent studies of internal audit are attempting to find out how this transformation process will be successfully implemented in the organization (Ahmad & Shabbir, 2020; Ali *et al.*, 2020; Salman *et al.*, 2019; Shabbir *et al.*, 2020).

According to The Institute of Internal Auditors (IIA) (2015), internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance process. This definition is related to the concept of internal audit effectiveness, which underlined the internal audit function in helping the organization to achieve its objectives (Lenz and Hahn, 2015). Ridley (2008) stated that the modern Internal audit has three important "E's" of Effectiveness, Efficiency, and Economy where Chambers (1992) views effectiveness as "*doing the right thing*", efficiency means "*doing them well*" and economy means "*doing them cheaply*". However, in terms of helping the organization to achieve its objectives, there is still a growing debate on whether an internal audit should be stick to its core professional standard or to be more adaptive organization's strategic issues.

Moreover, Schillemans *et.al.* (2018) have discussed this as a 'holding on' and 'breaking out' strategy. Holding on strategy means that the auditor profession should 'holding on' to the current professional basis, and focuses on retaining the classical principles of the profession, standards, maintains a distance, does not adjust to the developments in the outside world, and does not show understanding for the dynamics and complexities in the public administration. On the other hand, the 'breaking out strategy' believes that internal auditors should embrace the complexity and dynamics of the contemporary public sector. The internal auditor should move forward from just a 'financial legitimacy' assurance to be a more strategic role such as evaluate the performance of the policy-makers and leadership and to challenge their potentially outdated opinions and ideas. Another similar idea also has been long appeared in Gouldner's work (1957; 1958) which distinguished internal auditing function into 'cosmopolitan-local distinction'. Local mindset refers to individuals who see the institution in which they work as their reference. They have a strong loyalty towards their employing organization and low identification with their profession. In the opposite term, cosmopolitan refers to the internal auditor's perception that they are committed to maintaining the skills and values of the profession to which they belong. They tend to use external professional groups as their frame of reference and are less loyal to the specific organization that employs them.

Hence, there is still an avenue for future research to clarify the position of internal auditor in the perspective of internal audit effectiveness. This study aims to fill this gap and contribute to the literature by providing evidence in addressing this issue. As mentioned by Schillemans (2018) "*this is not necessarily a matter of choosing one of the two camps but, rather, of looking for coping strategies and accompanying practices through which the complex and also changing requirements can be made manageable*" (p.533). Therefore, this research will develop a conceptual framework that includes different standpoints as we previously mentioned. This study focus on investigating the effect of several strategic factors as a reflection of a broader

internal audit function together with some 'core' professional principles on internal audit effectiveness.

This research will be conducted at public universities in Indonesia due to several reasons. Firstly, notwithstanding scholars have been mentioned the importance of governance in public universities, there is still limited research in this area. There is still an opportunity to more understand the uniqueness of internal auditing in public universities compared to private universities (Zakaria et. al. (2006). There is also an inconsistency in the way internal auditing is practiced in the public university sector, for instance in the Australian context (Christopher, 2015). Thus, he suggested that further study in this area is required. Secondly, over the last five years, there were several corruption scandals in Indonesia public universities. Most of the cases involved a high-rank person in the parliament who have a strong connection to the government. They manipulated the project budget, through a fictitious mark-up price, and provide a kickback fee for that member-of-parliament. In total, there were 37 corruption cases in public universities during the period 2006-2016 with a total loss of approximately £12Millions. These cases indicated that public universities could have a serious problem with their governance. The lack of an internal control process can cause a severe accountability issue that can demolish stakeholders' trust in the institution. Thus, we are interested to investigate how governance is implemented in the public university through the lens of internal audit effectiveness.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

As the scope of the internal audit has developed recently, the function of internal audit is not only related to basic internal control functions such as financial control audit and fraud prevention but also addressed some strategic issues. It helps the organization in achieving its strategic objectives, adapting to current business competition and dynamics as some scholars identified this as consulting or helper for the organization. This strategic position has shaped the current core principles of internal audit which have been stated by the IIA (2017) such as: aligns with strategies, objectives, and risks of the organization, demonstrates the quality and continuous improvement, communicates effectively, to be insightful, proactive, and future-focused, and promotes organizational improvement. These principles are the reflection of the new era of internal audit function where internal auditors have a more strategic role to the organization and are not limited to the 'core' professional function *per se*. Prior studies have captured that the discussion of being more strategic is to ensure the internal auditor to stay relevant in the current business situation. Researchers found that internal auditors are facing the reality that 'external factors' are something to deal with. The traditional focus of internal audit has been replaced by a focus on internal audit as a helpful mechanism in stimulating organizational performance. Thus, internal auditors are responsible not only for signal issues and risk mitigation, but also to guide quite divergent sets of government tasks. In the public sector area, prior literatures have been found that the role of internal audit was extended to assuring the board and management about the adequacy of risk management, controls, and the governance process (Christopher, 2012). There is a further concern by executives or top management on internal audit to provide a value-added role

(Sarens and De Beelde, 2006) and to have a more value-adding function (Hermanson, et.al, 2008).

Prior studies have shown that the quality of the audit work and professional proficiency both are important for internal audit effectiveness. Schillemans et.al. (2018) described the 'holding on' strategy as the traditional perspective of internal audit function which focuses on the standard compliance, maintains a distance to the management, and does not adjust to the development in the outside world, and does not show understanding for the dynamics and complexities that characterize the practice of public administration. They believe that stick to the predetermined standard is a key element of their professional requirements instead of being adaptive to the dynamic of business situations. Therefore, the quality of audit work based on standard and professional competence are two prominent factors in this strategy. Glazer and Jaenike (1980) argued that performing auditing work according to internal auditing standards contributes significantly to the effectiveness of auditing. Moreover, Ridley and D'Silva (1997) found in the UK that complying with professional standards is the most important contributor to internal audit's added value. The quality means that the auditor should perform the basic requirement that needs to be delivered according to audit standards. On the other hand, the appropriate staffing of an internal audit department and good management of that staff are keys to the effective operation of an internal audit. An audit requires a professional staff that collectively has the necessary education, training, experience, and professional qualifications to conduct the full range of audits required by its mandate (Al-Twajjry, Brierley and Gwillian, 2003). Auditors must comply with minimum continuing education requirements and professional standards published by their relevant professional organizations and the IIA (2008). Prior researchers have revealed that professional competence also related to the success of internal audit function such as communication skills and personal authority (Van Peurse, 2005); communication, listening, and influencing skills (Chambers, 2008); or the ability to make the 'tough' recommendations without fear or favor (Mihret, et.al. 2010). According to these literatures, we hypothesize that:

The internal auditor competence has a positive effect on internal audit effectiveness.

RESEARCH METHODS

The unit of analysis for this study are semi-autonomous public universities under The Ministry of Education and Culture and Ministry of Finance, The Republic of Indonesia. These universities must provide education to the public and the authority to manage its revenue and expenses which complies with efficient and productivity principles. This university is not profit-oriented, but the government allows it to have a certain business unit to generating income. We focused on the universities which are located in Java and Sumatera Islands, as these universities are mostly located in. In total there are 19 universities in this category, and we plan to conduct a survey to the internal audit unit on those universities. Thus, those universities as our unit of analysis where for each university are represented by Chief Audit Executive (CAE) for the competence variable and The University's Rector or Vice-Rector for the effectiveness variable. Our questionnaires were distributed by post mail and

google form. By conducting several data collection methods, we are expecting that the data collection stage will be more effective and efficient. This study adopts an internal auditor competence instrument as has been developed by The Institute of Internal Audit (IIA) which consists of ten items. The instrument is measured by a 5-point scale (1= Weak, 2=Below Average, 3=Average, 4=Above Average, 5=Extraordinary). The CAE was asked on his or her perception on how they evaluate themselves in the following areas: (1) Professional ethics; (2) Internal audit management; (3) Government audit standard; (4) Governance, risk, and control; (5) Business capability; (6) Communication; (7) Persuasion and collaboration; (8) Critical thinking; (9) Audit internal implementation; (10) Improvement and innovation. We adopted Cohen and Sayag's (2010) instrument on internal audit effectiveness. Respondents were asked about their perceptions of the effectiveness of their current IA functions. Thus respondents were requested to rate 22 statements about their organizations' IA effectiveness by placing them on a five-point Likert scale in which 1 meant "strongly disagree", 2 "disagree", 3 "neither agreeing nor disagree", 4 "agree" and 5 "strongly agree".

RESULTS AND DISCUSSION

We distributed questionnaires to 19 public liability universities across Sumatera and Java Island. For the internal audit effectiveness, we asked the top management level which consists of the university's rector or president and the vice-rector of finance and administration. On the other hand for auditor competence, we have responses from CAE. We conducted Partial Least Squares (PLS) for our structural model. PLS is a new approach to calculate Structural Equation Modeling (SEM), which is more suitable for small data set compared to Covariance-based SEM. PLS-SEM is more appropriate for a new developed-model to predict the causality among latent variables (constructs). For this study purpose, we used WarpPLS software to develop and test our model. We adopt Hair et.al (2001) suggestions on steps to analyze SEM data. Firstly, developing a theoretically based model using a confirmatory analysis. Secondly, constructing a path diagram causal relationships. And thirdly, converting the path diagram into a set of structural and measurement models. For the first stage, we are doing a confirmatory factor analysis for each latent variable (construct). There are some indicators that we dropped due to lower loading factor (less than 0,6) and the significance level (more than 0.001). We dropped 5 indicators (out of 10) for competence construct and 16 indicators (out of 22) for internal audit effectiveness. Hence, we improved the reliability and the validity of our measurement model as shown in the following table.

Table 1. Validity and reliability of the construct

No	Construct Name	Cronbach Alpha	Composite Reliability	Average Variance Extracted (AVE)
1	Auditor Competence	0.926	0.944	0.773
2	Internal Audit Effectiveness	0.882	0.912	0.634

Source: PLS analysis, 2020

Table 1 shows that each construct has AVE score of more than 0.5 (Hair *et al.*, 1998), and the composite reliability more than 0.7, which indicates that all the constructs have reached the internal validity and the consistency for further study. We also conducted discriminant validity analysis by using Fornell-Larcker Model as shown in Table 2 below. The diagonal line scores are drawn from the square-root of AVE for each construct, and the remaining cells are the correlation score between constructs. According to Fornell-Larcker (1981), a good discriminate construct is when its square-root of AVE is higher than the correlation score to other constructs. Table 2 shows that all the diagonal scores are higher than the correlation score, which concludes that the discriminant validity has been attained.

Table 2. Fornell-Larcker Table

	Comp	Effect
Comp	(0.879)	0,233
Effect	0.233	(0.796)

Source: PLS analysis, 2020

For the second and the third stage of Hair. *et.al.*, (1998) we developed our measurement and structural model. Before we test our hypothesis, it is important to analyze the goodness-of-fit of the model. As we used WarpPLS, there are two critical goodness-of-fit parameters *i.e.* Average Path coefficient (APC), and Average full collinearity Variance Inflation Factor (AVIF) (Hair *et al.*, 2011; Hair *et al.*, 2012; Kock, 2020). In terms of APC, our model is acceptable due to the significance level for the parameter is 0.024 or below 0.05 (Hair *et al.*, 2011; Hair *et al.*, 2012; Kock, 2020). The AFVIF scores for our model are 1.056 respectively, which are below 3.3 as the cut-off, and this indicates that there are no vertical and lateral correlations in our model. Besides calculating the R^2 and the adjusted R^2 for predictive accuracy, we also calculated the Stone & Geisser Q^2 predictive relevance of our model. The Q^2 represents the cross-validated predictive relevance of the PLS path model where a value larger than zero for a certain endogenous latent variable (construct) indicates that the PLS path model has predictive relevance for this construct (Harrison and Hair, 2017). Our model shows a positive Q^2 score, 0.116, which means that our model has a predictive relevance on the endogenous variable. Overall, our model has fulfilled all the goodness-of-fit requirements for further analysis.

Table 3. Model Goodness-of-fit

No	Parameters	Score (significance)	Cut-off
	<i>Goodness-of-fit</i>		
1	Average Path Coefficient (APC)	0.329 (0.024)	< 0.05
2	Average full collinearity VIF(AFVIF)	1.057	=< 3.3
3	Tanenhau GoF	0.276	Small \geq 0.1, Medium \geq 0.25, Large \geq

			0.36
	R^2	0.108	
	$Adj. R^2$	0.056	
	$Stone-Geisser Q^2$	0.116	> 0 (Positive)

Source: PLS analysis, 2020

Moreover, according to our model, we find that internal auditor competence has a positive effect on internal audit effectiveness ($p < 0.048$). In other words, this result confirms that internal auditor competence has a positive effect on internal audit effectiveness. This finding supports the argument the effectiveness of the internal auditing which is perceived by the top management is the result of the competence improvement by the auditor. Auditors should embrace various skills to support their routine tasks as well as facing the challenges ahead. According to IIA, the internal auditors should possess the knowledge, skills, and competencies needed to conduct an audit (The Institute of Internal Auditors (IIA), 2015). Gramling and Meyers (1997) find that certification of internal auditors is an indicator of IA's competence. Twaijry *et al.* (2003) argue that internal auditors could not have power unless they possess the necessary competencies.

Table 4. Path Coefficient, p Significance Table.

	Path Coefficient	P Values	Hypothesis Testing
Comp → Effect	0.33	0.048	Supported

Source: PLS analysis, 2020

CONCLUSION, LIMITATION, AND SUGGESTION

This study aims to investigate the influence of auditor competence on internal audit effectiveness across Indonesian universities. Prior literatures have been mentioned that internal auditors should have various skills to conduct their tasks in the current circumstances, not only related to their technical expertise but also a number of soft skills such as communication and collaboration skills. Moreover, this research becomes important since we analyzed this phenomenon in public universities, which has different characteristics from the private sector. Our finding supports our argument that internal auditor competence is positively influenced the effectiveness of the internal audit. According to this, we are expecting that universities' top management could allocate more resources in improving auditors' skills, and not only focused on hard but also soft skills. Last but not least, we recognize that the sample size could be improved for the next study. As during the pandemic situation, data collection is more complicated than in the normal period.

REFERENCES

- Ali, M., Ali, B., Rana, S., & Shabbir, M. S. (2020). *Oman 's Ability to Attract FDI : Dunning Instrument Survey Analysis Capacidad de Omán para atraer IED : análisis de la encuesta de.* 8(2).
- Ahmad, Z., & Taylor, D. (2009), Commitment to independence by internal auditor: the effects of role ambiguity and role conflict. *Managerial Auditing Journal*, 24, 9, pp. 899-925.

- Ahmad, N. R., & Shabbir, M. S. (2020). *Moderating effect of access to finance of the gem and jewelry industry*. 264–279.
- Al-Twajjry, A.A.M., Brierley, J.A. and Gwillian, D.R. 2003, 'The Development of Internal Audit in Saudi Arabia: An Institutional Theory Perspective', *Critical Perspectives on Accounting*, 14: 507–531.
- Al-Twajjry, A. A. M., Brierley, J. A. and Gwilliam, D. R. (2003), "The development of internal audit in Saudi Arabia: an institutional theory perspective", *Critical Perspectives on Accounting*, Vol. 14 No. 5, pp. 507-531.
- Chambers, A. (1992) *Effective internal audits, how to plan and implement*, Pitman Publishing.
- Christopher, J. (2015), "Internal audit: Does it enhance governance in the Australian public university sector?", *Educational Management Administration & Leadership*, Vol. 43 No. 6, pp. 954-971.
- Fornell, C. and Larcker, D. F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of marketing research*, Vol. 18 No. 1, pp. 39-50.
- Gouldner, A. W. (1957), "Cosmopolitans and locals: toward an analysis of latent social roles", *Administrative Science Quarterly*, Vol. 2 No. 281-306.
- Gouldner, A. W. (1958), "Cosmopolitans and locals: toward an analysis of latent social identity", *Administrative Science Quarterly*, Vol. 3 No. 444-480.
- Gramling, A. A., and Myers, P. M. (1997), "Practitioners' and users' perceptions of the benefits of certification of internal auditors", *Accounting Horizons*, Vol. 11 No. 1, pp. 39-53.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E. and Tatham, R. L. (1998) *Multivariate data analysis*, Prentice Hall Upper Saddle River, NJ.
- Hair, J. F., Ringle, C. M. and Sarstedt, M. (2011), "PLS-SEM: Indeed a Silver Bullet", *Journal of Marketing Theory and Practice*, Vol. 19 No. 2, pp. 139-152.
- Hair, J. F., Sarstedt, M., Ringle, C. M. and Mena, J. A. (2012), "An assessment of the use of partial least squares structural equation modeling in marketing research", *Journal of the Academy of Marketing Science*, Vol. 40 No. 3, pp. 414-433.
- Harrison, D. E., and Hair, J. F. (2017), "The use of technology in direct-selling marketing channels: Digital avenues for dynamic growth", *Journal of Marketing Channels*, Vol. 24 No. 1-2, pp. 39-50.
- Kock, N. (2020) *WarpPLS User Manual: Version 7.0.*, Laredo, TX: ScriptWarp Systems.
- Lenz, R. and Hahn, U. (2015), "A synthesis of empirical internal audit effectiveness literature pointing to new research opportunities", *Managerial Auditing Journal*, Vol. 30 No. 1, pp. 5-33.
- Mihret, D. G. and Yismaw, A. W. (2007), "Internal audit effectiveness: an Ethiopian public sector case study.", *Managerial Auditing Journal*, Vol. 22 No. 5, pp. 470-484.
- Ridley, J. (2008) *Cutting Edge Internal auditing*, John Wiley & Sons, Ltd.

- Schillemans, T., Twist, M. v., Steen, M. v. d. and Jong, I. d. (2018), "New development: Breaking out or hanging on? Internal audit in government", *Public Money & Management*, Vol. 38 No. 7, pp. 531-534.
- Salman, M., Ahmed, S., & Normalini, F. S. (2019). A Child Labour Estimator : A Case of Bahawalpur Division. *Social Indicators Research*, 0123456789. <https://doi.org/10.1007/s11205-019-02146-4>
- Shabbir, M. S., Ali, M., Ali, B., Al-kumaim, N. H., Mahmood, A., & Abbas, M. (2020). *Green Marketing Approaches and Their Impact on Consumer Behavior towards the Environment — A Study from the UAE*.
- The Institute of Internal Auditors (IIA) (2015) The IIA's International Professional Practices Framework (IPPF).
- Zakaria, Z., Devi Selvaraj, S. and Zakaria, Z. (2006), "Internal auditors: their role in the institutions of higher education in Malaysia", *Managerial Auditing Journal*, Vol. 21 No. 9, pp. 892-904.