

Drivers Affecting Internal Audit Consulting Services: Contrasting Views from Demand-Side and Supply-Side Perspectives

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ABSTRACT

Research aim: The purpose of this study is to determine if there are differences between the demand-side (external auditors and audit committees) and supply-side (chief audit executive and senior and middle-level internal auditors) perspectives on the drivers of internal auditor consulting services.

Design/ Methodology/ Approach: An independent sample t-test was conducted using the SPSS to determine views on the differences between the two groups. The study collected the perceptions of 258 respondents, including 123 on the demand side (57 audit committee members and 66 external auditors) and 135 respondents on the supply side (60 heads of internal audit and 75 internal auditors).

Research finding: On the demand side, there are significant differences in the perceptions of audit committee members and external auditors, except on senior management support, risk-based internal audits, and auditor skills and competencies. On the supply side, there are no significant differences between chief audit executives and internal auditors' views, except on organisational culture and data analytics.

Theoretical contribution/ Originality: This study extends internal audit research based on the resource-based view (RBV) theory, considering various influencing drivers (internal resources) from the perspectives of various stakeholders that affect internal auditors consulting services.

Practitioner/ Policy implication: To improve the consulting services of the internal auditors, audit committees, external auditors, chief audit executives and internal auditors should develop an understanding of these conflicting views.

Research limitation: Only listed companies in Bangladesh, which are better governed and regulated, were considered for data collection. Future research can focus on other developing countries and on unlisted companies. In addition, perceptions of other stakeholders, such as regulators and senior management, can also be taken into consideration.

Keywords: Internal auditors, Consulting services, Audit committee, External auditors, Chief audit executive.

Type of article: Research paper

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1. Introduction

Businesses are facing unprecedented challenges particularly in risk management and strategic development (Mio, Panfilo, & Blundo, 2020; Musumali & Qutieshat, 2022). Internal auditors' consulting services play a critical role in solving business problems by providing objective insights and recommendations that enhance an organisation's processes, risk management, and overall performance (Chen et al., 2020). Consequently, the definition of internal audit has been broadened to include consulting services alongside auditing services (IPPF, 2017). Today, internal audit functions are involved in a variety of consulting activities that go beyond financial reporting and compliance (Anderson, 2003; Mennicken, 2013). Management believes that the strategic support provided by internal auditors, such as advice on strategy development and risk management, is mainly related to the operational activities of the organisation (PWC, 2014).

However, despite recognition of the consulting services provided by internal auditors, research on the consulting role of internal auditors has increased significantly in recent years, but is still in its early stages (Alqudah, Amran, & Hassan, 2019; Jiang, Messier, & Wood, 2017). For example, Alqudah, Amran, and Hassan (2019) note that consulting services that have a direct impact on good corporate governance. Similarly, Jiang, Messier, and Wood (2017) examine the relationship between the consulting services of internal auditors and the economic benefit to companies, and find that the involvement of internal auditors in consulting services has a significantly positive association with economic benefit.

Turetken, Jethofer, and Ozkan (2020) and Lenz and Hahn (2015) provide an overview of the literature on internal audit functions from two different viewpoints, the demand side and supply side. The demand side deals with the driving forces from the perspective of internal auditors like senior management, audit committees and external auditors, whereas the supply side looks at the driving forces from the perspective of internal auditors like chief audit executives, senior audit staff, and junior audit staff. Lenz and Hahn (2015) recommend that for internal audit functions to be considered effective, it is important to meet both the internal auditor's priorities and the internal audit customers' priorities.

Among the various customers of internal audit functions (from a demand side perspective), audit committees are the executive authority to which internal audit reports are submitted. External auditors make their decisions seeking the direct support of internal audit functions (Abdolmohammadi, Ramamoorti, & Sarens, 2013; Čular, Slapničar, & Vuko, 2020). Internal auditors provide regular updates on emerging risks, control weaknesses and areas requiring attention, enabling audit committees to make informed decisions about risk management strategies (Wilkinson & Coetzee, 2015). Additionally, internal auditors often serve in an advisory capacity to audit committees, providing direction on complex issues, such as new regulations, accounting standards, or emerging risks. This consulting role assists audit committees in making informed decisions that are consistent with the organisation's strategic goals. Similarly, Messier et al. (2011) state that internal auditors share their findings, working papers and analyses with external auditors, which can help reduce duplication and focus on higher risk areas.

Therefore, the expectations of audit committees must be met, along with those of external auditors, to demonstrate the performance of internal audit functions (Lenz & Hahn, 2015).

It is also suggested by Lenz and Hahn (2015) that chief audit executives and other internal auditors should have a common understanding of their own work. The consulting engagement helps internal auditors self-align their activities with the company's strategic objectives, sharing and gaining knowledge across different functions, resulting in a deeper understanding of the company's operations with insights into emerging risks and operational challenges (Burton et al., 2015). This knowledge can be used to tailor audit plans more effectively and focus on areas that are most important to the organisation. However, soft factors can influence different thinking and behaviour and may affect the functions of internal auditors. Hence, it is important for chief audit executives and internal auditors (supply-side perspective) to understand the drivers of consulting service, and what internal audit customers, like external auditors and audit committees, perceive in order to determine the effectiveness of internal auditors' consulting services.

Nevertheless, previous studies have shown that the expectations of these two groups—demand-side and supply-side perspectives—may conflict with each other (Erasmus & Coetzee, 2018; Hoos, Kochetova, & d'Arcy, 2015; Lenz, Sarens, & Hoos, 2017; Roussy, 2013). For instance, Yee et al. (2008) find that mid-level managers in Singaporean firms think internal audit functions are just 'watchdog' activities in their study of the perceptions of auditees from different departments. Erasmus and Coetzee (2018) find differences in senior management and audit committee members' concerns on the factors affecting internal audit function effectiveness for South African firms. The divergence in opinion of external auditors, from the demand side of internal audit services, may affect how internal auditors tailor their services, thereby influencing its effectiveness. Yet, no studies compare the perceptions of other stakeholders, like audit committees and external auditors (demand-side perspective) and chief audit executives and internal auditors (supply-side perspective) on internal audit function consulting services.

Although there may be differences in views between a service provider (supply side) and a user (demand side), this perception gap can usually be bridged through effective communication during the service process. When there are differences between groups on the same side (either supply or demand), this divergence can lead to misalignment of goals and lead to conflicts over the scope and focus of internal audit consulting activities. Therefore, the aim of this study is to determine the differences in the perception of supply-side perspective (chief audit executives versus internal auditors) and demand-side perspective (external auditors versus audit committees) with regard to the drivers of internal audit function consulting services. If the perceptions of these two groups do not differ, these consulting services can have a common framework to satisfy both groups.

On the other hand, when there are differences between the perceptions of two groups, internal auditors can discuss how internal auditors can provide the best organisational improvement consulting services to reduce the information gap between the two groups. If internal auditors meet the expectations of both stakeholders, they will give value and use their advisory services in strategic

decisions and corresponding risk management processes, which will strengthen organisational operations and result in corresponding audit reports from external auditors. When chief audit executives and internal auditors meet their own expectations, they become motivated and strengthen accountability.

The remainder of the present study is structured as follows: Section 2 contains the literature review, which will be followed by the research methodology in Section 3, the results in Section 4, and finally the discussion of the findings and conclusion in Section 5.

2. Literature Review

Previous studies confirm that two particular services are associated with consulting services: strategy development and risk management (Carcello et al., 2020; Ojo, 2019; Pike, 2012; Protiviti, 2007). Internal audit can identify operational inefficiencies and provide advice on improving resource allocation and cost savings to develop overall business strategy. Jiang, Messier, and Wood (2020) find a significant positive relationship between the advisory performance of internal auditors and economic benefit to the organisation. In addition, internal audit plays a proactive role and has a significant impact on business risk management (Sarens & De Beelde, 2006). Internal audit functions contribute to the risk management process that helps management implement strategy development to ensure organisational goals (Vijayakumar & Nagaraja, 2012).

This section also discusses the various drivers of consulting services and how this service has been measured using previous studies. In this study, the research question is considered based on the resource-based view (RBV) theory. Usang and Salim (2016) and Alkebsi and Aziz (2017) use RBV theory to determine the different triggers of internal audit functions. This study simply uses the results of previous studies to identify the various drivers of internal auditors' consulting services.

2.1 Senior management support (SMS)

According to Onumah and Yao Krah (2012), internal auditors need to maintain good relations with management to achieve their objectives. Management support can assist internal audit functions by participating in the internal audit plan and providing important information (Alzeban & Gwilliam, 2014; Salehi, 2016). Similarly, Bednarek (2018) states that all the suggestions and advice given by internal auditors and implemented by management incrementally helps internal auditors work. Moreover, management helps auditors approve adequate budget and gives audit access in all departments (Sawan, 2013). In the context of RBV theory, senior management support plays a crucial role in enhancing the effectiveness of internal auditors' consulting services by ensuring that they have access to the necessary resources that improve their efficiency in the engagement of risk management (Alkebsi & Aziz, 2017).

2.2 Organizational status (OS)

Desai and Desai (2010) state that internal auditors' organisational status is an important driver that impacts the reliance level of external auditors on internal audit work. Organisational status helps them to stay in touch with top

management and create opportunities to work in all departments. Kabuye (2017) also finds that organisational position or status is important for internal auditors to enhance their functions, especially anti-fraud measures in the organisation, which helps them to give strategic advice about how to control such fraud. Based on RBV theory, organisational status provides internal auditors with intangible resources, such as authority, influence, and access, which enable them to provide consulting services that enhance decision-making and risk management engagement (Mahzan & Hassan, 2015).

2.3 In-house sourcing arrangement (IHSA)

In-house sourcing arrangement of internal audit functions is more preferable than outsourcing for professional and consulting services (Abdolmohammadi, 2013). In case of in-house internal audit arrangements, internal auditors have more knowledge about the nature of business operations, which enables them to give appropriate suggestions to mitigate earnings management (Ghaleb, Kamardin, & Al-Qadasi, 2020). Similarly, Abbott et al. (2016) claim that more investment in in-house internal audit functions has a significant positive impact on reporting quality. The RBV framework suggests that in-house auditors, with their intimate knowledge of the company, can offer proactive risk management consulting that helps the organisation avoid disruptions and optimise performance (Papageorgiou, 2013).

2.4 Organisational culture (OC)

Organisational culture is also an important dimension of internal audit functions. For example, Sarens and Abdolmohammadi (2010) find that countries with lower power distance are associated with higher levels of internal audit uniformity. Similarly, Alzeban and Gwilliam (2014) report that the quality of internal audit functions will be lower when the power distance is high. That is, when the internal auditor has the opportunity to meet with management and top officials to discuss important issues, it is easier to exchange ideas on how to achieve the organisation's ultimate goals. Under RBV theory, organisational culture serves as a strategic resource that enhances the effectiveness of internal auditors' consulting services by fostering an environment of trust, innovation, ethical behaviour, and collaboration (Dicle & Usluer, 2016).

2.5 Data analytics (DA)

Data analysis (DA) is also considered an effective tool of internal audit functions (Kopotienko, 2015). Li et al. (2018) find a significant positive association between data analysis and internal audit performance. However, internal audit offers exclusive opportunities to identify operational inefficiencies through the use of data analytics, since internal auditors have more access to data collection (Schneider et al., 2015). It is possible for internal auditors to use data analytics to identify risks in any area of the organisation and provide advisory services to management, who can then control that risk by making various strategic decisions.

2.6 Risk-based assurance (RBIA)

Risk-based assurance serves as an important tool for the advisory services of internal auditors (Koutoupis & Tsamis, 2009). Moreover, RBIA emphasises the significance of detecting inherent risks and testing efficiency management capabilities regarding mitigation of such risk (Coetzee & Lubbe, 2014). Internal auditors become key contributors to strategic discussions, helping management understand potential risks and opportunities. Koutoupis and Tsamis (2009) state that this strategic alignment makes the RBIA approach both rare and non-substitutable, providing unique insights that others without this perspective cannot offer.

2.7 Continuous audit (CA)

Continuous audit is appropriate technique to assess the nature of risks (Chan & Vasarhelyi, 2011). Continuous audit is a useful tool of internal audit functions, especially in providing consulting services (Chan & Vasarhelyi, 2011). Church and Schneider (1992) find that implementation of continuous audit could improve its effectiveness. Brown, Wong, and Baldwin (2007) state that continuous auditing enables the use of predictive analytics, helping auditors anticipate potential risks and suggest preventive actions. This ability to forecast risks and advise on future scenarios makes internal audit functions a forward-looking, strategic partner to management.

2.8 Internal auditors' skills and competencies (IASC)

Different characteristics of internal auditors help with the efficacy of internal audit functions (Ma'Ayan & Carmeli, 2016). Skilled and competent auditors are more capable of giving advisory service regarding internal controls and solutions to deal conflicting situations (Zain, Subramaniam, & Stewart, 2006). Alternatively, internal auditors will disregard their advisory performance if they do not have sufficient competent and useful knowledge, thereby reducing the effectiveness of their functions (Van Peurse, 2005). If the skills and competencies of the internal auditors are high, it is possible to better meet the expectations of auditees (Arena & Azzone, 2009). From the RBV theory perspective, Ahmad (2015) states that internal auditors' specific skills, competencies, and knowledge serve as strategic resources. These resources enable internal auditors to deliver high-quality consulting services, supporting the organisation in building a sustainable competitive advantage by improving processes, managing risks, and enhancing governance.

2.9 Leadership style (LS)

The leadership styles of chief audit executives also affect the performance of internal audit functions (Nusran, 2021). According to Erasmus and Coetzee (2018), quality leadership effects subordinates emotional responses, inspires work, and helps achieve the internal audit functions objectives. They also conclude that this creates value by ensuring that internal auditors can engage meaningfully with other departments, understand their challenges, and offer relevant and actionable consulting insights. The leadership style supports auditors in presenting their findings and recommendations in ways that resonate with the organisation's goals and strategies (Dal Mas & Barac, 2018).

2.10 Auditor independence (AI)

The independence of auditors is vital, as it enables them to give their opinions and advice without any form of threat (Asiedu & Deffor, 2017). Previously, auditor independence was considered one of the main drivers of internal audit functions (Getie Mihret, 2007; Prawitt, Sharp, & Wood, 2011). When the auditor provides independent consulting services, management can then use the information to make various strategic decisions. Ahmad (2015) states that auditor independence is a non-substitutable resource, especially in the context of consulting on governance and risk management issues. Without independence, the consulting services offered by internal auditors could be compromised by internal biases, leading to suboptimal or skewed advice.

Two individual limitations have been identified in the literature to date. First, variables were not used consistently in the regression model, and second, limited studies considered the perceptions of internal audit customers. No study was identified as to whether there is a difference between the perspectives of internal audit customers, particularly audit committees and external auditors (demand-side perspective) and between chief audit executives and internal auditors (supply-side perspective) when determining the drivers of the consulting function. In this study, it is considered that the perceptions of these two groups may differ, and that this difference is due to the functional shift of internal auditors. The main reason for this is that audit committees view internal audit functions as the level of coverage of the organisation's risk management and governance processes (Anderson & Svare, 2023), whereas external auditors' audit plans, programmes and audit fees depend on the performance of internal audit functions. From the supply-side perspective, chief audit executives are responsible for confirming that internal audit functions continuously improve. Internal auditors themselves believe that they must meet the different expectations of different stakeholders by benefiting from a high salary range and greater career opportunities (Haig, 2018). Therefore, it is also assumed that these contradictions could have an impact on the drivers of advisory functions. As such, the following research questions are developed:

- RQ1 Is there any significant difference in the perceptions of audit committees and external auditors on the consulting services of internal auditors?
- RQ2 Is there any significant difference in the perceptions of chief audit executives and internal auditors on the consulting services of internal auditors?

3. Method

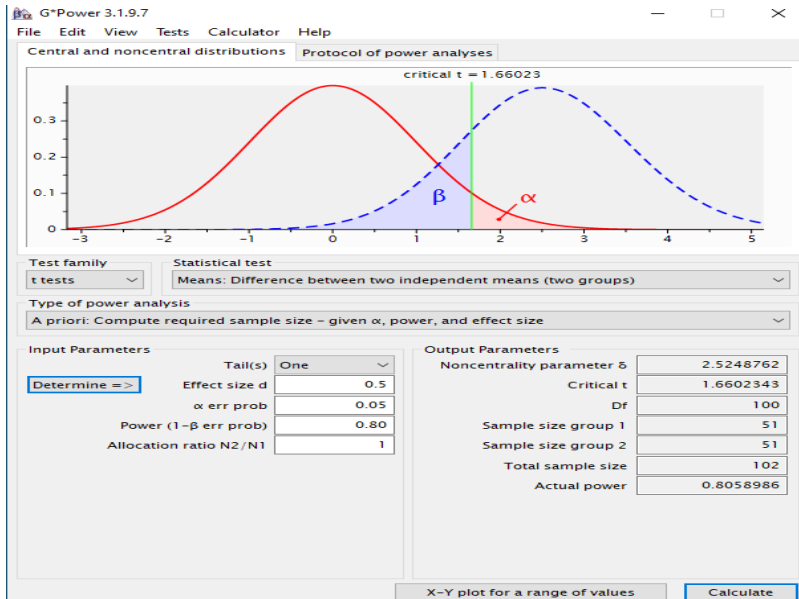
3.1 Sampling and data collection

This study focuses on developing and emerging economies, which can provide additional insights to the literature and enhance the understanding of the global conformity of the internal audit profession, particularly in Bangladesh. All listed companies in Bangladesh are registered and governed by the Bangladesh Securities and Exchange Commission Act 1993 (amended in 2012), the Companies Act 1994, the Financial Institutions Act 1993, the Bank Company Act 1991 and the Bankruptcy Act 1997. As per the Code of Corporate Governance for Bangladesh

(CGC), all listed companies must have an internal audit functions within the organisation. Private companies should consider establishing an internal control system if they do not have an internal audit department. Further, Section 33 of the Securities and Exchange Rules 1987 states that all companies listed on the Dhaka Stock Exchange (DSE) and Chittagong Stock Exchange (CSE) must incorporate IAF to provide audit and advisory services that ensure the effectiveness of organisational operations. Based on this rule, all listed companies must also establish an audit and risk management committee to review the adequacy of IAF. Therefore, in Bangladesh, listed companies have been found to be more dominant than the private limited companies.

The unit of analysis is the company. On the supply side, chief audit executives and internal auditors (senior managers and managers of the internal audit department) and in the demand-side, audit committees and external auditors, are considered as respondents in this study. Data was collected from the listed companies and external audit firms in Bangladesh. Before data collection, pre-testing was done with the perceptions of three academicians and two industry experts (Jansen & Hak, 2005). Some questionnaire items were modified based on feedback from the pre-testing. To determine the minimum sample size, this study used G* Power version 3.1.9.7 software (for one-tailed t test input parameter; medium effect size, $d = 0.50$; p value = 0.05; power = 0.80 and allocation ratio = N_2/N_1-1) and found the minimum sample size was 102, with 51 in group one and 51 in group two.

Figure 1. Determination of Minimum Sample Size



A non-probability sampling technique (purposive sampling) was used to select respondents. Responses were only collected from audit committee members,

external auditors, chief audit executives and internal auditors. To confirm this, mandatory requirements were indicated at the beginning of the questionnaire: those who work at internal audit departments as internal auditors or chief audit executives, are currently or have been members of the audit committee, and those who are currently or have been working as external auditors.

For the supply side, a total of 290 questionnaires were sent in-person and via email to chief audit executives (150 total, 30% sent via email) and internal auditors (140 total, 20% sent via email). Likewise, on the demand side, a total of 260 questionnaires were distributed to audit committees (120 total, 60% sent by email) and external auditors of various accounting firms (140 total, 55% sent by email). In total, 60 usable responses were received from chief audit executives (40% response rate, of which 90% in-person and 10% via email) and 75 from internal auditors (53.57% response rate, of which 100% in-person). On the demand side, a total of 57 audit committee members returned their responses (47.5% response rate, of which 30% in-person and 70% via email), and 66 external auditors (47.85% response rate, of which 73% in-person and 27% via email). Table 1 lists the details of the respondents.

Table 1. Respondent Details

	Designation	In-person	Email	Total	% of total
Demand side	Audit committee member	17	40	57	46%
	External auditors	49	17	66	54%
	Total	66	57	123	100%
Supply side	Chief audit executives	54	6	60	45%
	Internal auditors	75	-	75	55%
	Total	129	6	135	100%
	Total	195	64	258	

3.2 Variable measurement and analytical tools

A survey questionnaire was developed to specify the latent variables and general information of the participants. All latent variables were measured based on previous literature. First, SMS was measured using eight items: six items were taken from Alzeban and Gwilliam (2014) and two from Ma'Ayan and Carmeli (2016). Second, for OS of internal auditors, seven items were used, all taken from Kabuye (2017). Third, IHSA was measured by using eight items based on a modified version of Salameh et al. (2011) (11 items were used, with five items related to each other and merged with related items). Fourth, OC (power distance only) was assessed using five items from Alzeban (2015). Seven items were taken from Li et al. (2018) to assess DA. To measure RBIA, only nine items were taken (excluding six items due to similarity) from Zainal Abidin (2017). In the case of CA, seven items were used from Marx (2009), and seven items were adopted for AI (three items relate to reporting and are considered individual items) from Alzeban and Gwilliam (2014). Next, IASC was measured using seven items (two items were merged with related items) from Kabuye (2017). For LS, nine items

were considered (excluding two items due to similarity) from Dal Mas and Barac (2018). To capture SD, five items were used by following Scholes, Johnson, and Whittington (2002). Finally, to assess RM, seven items were taken from the Institute of Internal Auditors (IIA, 2004).

All items were rated on a seven-point Likert scale, with 1 indicating ‘strongly disagree’ and 7 indicating ‘strongly agree’. To assess the normality, reliability and validity of data, we used PLS-SEM (Hair et al., 2017) and an independent sample t-test was conducted by using IBM SPSS Statistics version 26 to determine the significance of the differences between the perceptions of supply-side and demand-side perspectives. For the independent sample t-test, the important assumption is approximate normal distribution of the dependent variable of each group. Non-normal population distribution, particularly those with a highly skewed population, significantly reduces the power of the test. To ensure the normality of the data, the values of skewness and kurtosis are used in this study by following Cain, Zhang, and Yuan (2017). The rule of thumb for the value of skewness is ± 2 , which means that the distribution is highly skewed (Hulland, Ryan, & Rayner, 2010). The skewness value of this study is within range. In the case of kurtosis, the default value of the normal distribution is 3 (Brown, 2011), and the excess kurtosis value (substring 3 from the kurtosis value) is very close to 0, indicating that the data is normally distributed.

4. Results

Based on the criteria for evaluating the measurement model by Hair, Howard, and Nitzl (2020), we assessed construct reliability and convergent validity and finally discriminant validity. Table 2 below shows that the outer loading of each element exceeded the recommended value (0.70), except AI6 (0.21), CA3 (0.38), RM2 (0.15), RM4 (0.27) and RM5 (0.35). These five elements were deleted. All CR values exceeded the recommended value (> 0.70). AVE is also above the recommended value (> 0.50), and thus convergent validity was confirmed (Table 3).

Table 2. Outer Loading

Constructs	Items	Outer loading	Constructs	Items	Outer loading
Senior management support (SMS)	SMS1	0.785	In-house sourcing arrangement (IHSA)	IHSA1	0.785
	SMS2	0.792		IHSA2	0.784
	SMS3	0.752		IHSA3	0.816
	SMS4	0.732		IHSA4	0.773
	SMS5	0.798		IHSA5	0.803
	SMS6	0.811		IHSA6	0.777
	SMS7	0.811		IHSA7	0.807
	SMS8	0.776		IHSA8	0.756
Organisational status (OS)	OS1	0.757	Data analytics (DA)	DA1	0.806
	OS2	0.809		DA2	0.807
	OS3	0.771		DA3	0.794
	OS4	0.813		DA4	0.771
	OS5	0.792		DA5	0.782
	OS6	0.757		DA6	0.818
	OS7	0.767		DA7	0.817
	OC1	0.828		SD1	0.826

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	OC2	0.836		SD2	0.837
Organisational culture (OC)	OC3	0.831	Strategy development (SD)	SD3	0.841
	OC4	0.783		SD4	0.781
	OC5	0.845		SD5	0.829
Risk-based internal audit (RBIA)	RBIA1	0.768	Leadership style (LS)	LS1	0.860
	RBIA2	0.775		LS2	0.791
	RBIA3	0.751		LS3	0.806
	RBIA4	0.751		LS4	0.845
	RBIA5	0.774		LS5	0.819
	RBIA6	0.809		LS6	0.791
	RBIA7	0.759		LS7	0.763
	RBIA8	0.754		LS8	0.790
	RBIA9	0.752		LS9	0.813
Continuous auditing (CA)	CA1	0.776	Auditor independence (AI)	AI1	0.806
	CA2	0.770		AI2	0.801
	CA4	0.733		AI3	0.765
	CA5	0.779		AI4	0.792
	CA6	0.779		AI5	0.771
	CA7	0.798		AI7	0.752
Internal auditor skills and competencies (IASC)	IASC1	0.772	Risk management (RM)	RM1	0.830
	IASC2	0.776		RM3	0.843
	IASC3	0.760		RM6	0.806
	IASC4	0.825		RM7	0.838
	IASC5	0.779			
	IASC6	0.770			
	IASC7	0.724			

Table 3. Cronbach's Alpha, CR and AVE

First-order construct	Cronbach's α	CR	AVE
Senior management support (SMS)	0.909	0.927	0.612
Organisational status (OS)	0.893	0.916	0.61
In-house sourcing arrangement (IHSA)	0.913	0.929	0.621
Organisational culture (OC)	0.882	0.914	0.68
Data analytics (DA)	0.906	0.925	0.639
Risk-based internal audit (RBIA)	0.912	0.927	0.587
Continuous auditing (CA)	0.865	0.899	0.597
Internal auditor skills and competencies (IASC)	0.887	0.912	0.597
Auditor independence (AI)	0.872	0.904	0.61
Leadership style (LS)	0.934	0.945	0.655
Strategy development (SD)	0.881	0.913	0.677
Risk management (RM)	0.848	0.898	0.688

Discriminant validity is measured in two ways: the Fronell-Larcker criterion (Fronell & Larcker, 1981), and the heterotrait-monotrait ratio (HTMT) of correlation (Henseler, Ringle, & Sarstedt, 2015). Table 4 shows that all the square roots of the AVE of each latent variable are higher than other latent variables, thus meeting the Fronell-Larcker criterion. In the case of the HTMT ratio, Table 5 shows

that all values do not exceed the threshold (0.90), thus confirming discriminant validity.

Table 4. Discriminant Validity: Fronell-Larcker criterion

	AI	CA	DA	IASC	IHSA	LS	OC	OS	RBIA	RM	SD	SMS
AI supply side	0.718											
AI demand side	0.839											
CA supply side	0.388	0.737										
CA demand side	0.646	0.806										
DA supply side	0.345	0.648	0.769									
DA demand side	0.632	0.863	0.831									
IASC supply side	0.613	0.469	0.398	0.742								
IASC demand side	0.685	0.677	0.662	0.804								
IHSA supply side	0.496	0.471	0.434	0.565	0.742							
IHSA demand side	0.586	0.663	0.637	0.631	0.830							
LS supply side	0.613	0.420	0.333	0.608	0.598	0.785						
LS demand side	0.715	0.698	0.605	0.692	0.553	0.835						
OC supply side	0.474	0.562	0.512	0.555	0.650	0.539	0.793					
OC demand side	0.562	0.691	0.712	0.624	0.758	0.620	0.856					
OS supply side	0.499	0.376	0.345	0.550	0.598	0.428	0.468	0.759				
OS demand side	0.616	0.710	0.716	0.634	0.824	0.559	0.728	0.806				
RBIA supply side	0.443	0.615	0.535	0.448	0.398	0.405	0.454	0.353	0.714			
RBIA demand side	0.626	0.913	0.860	0.696	0.645	0.690	0.737	0.721	0.816			
RM supply side	0.472	0.393	0.431	0.506	0.640	0.552	0.611	0.427	0.381	0.816		
RM demand side	0.573	0.807	0.777	0.623	0.670	0.601	0.629	0.678	0.775	0.840		
SD supply side	0.516	0.518	0.487	0.579	0.566	0.385	0.614	0.600	0.397	0.531	0.775	
SD demand side	0.615	0.800	0.773	0.714	0.688	0.657	0.671	0.688	0.806	0.845	0.864	
SMS supply side	0.444	0.479	0.414	0.556	0.577	0.540	0.593	0.583	0.310	0.520	0.536	0.751
SMS demand side	0.558	0.657	0.679	0.648	0.771	0.558	0.605	0.815	0.671	0.666	0.681	0.820

Table 5. Discriminant Validity: HTMT Ratio

	AI	CA	DA	IASC	IHSA	LS	OC	OS	RBIA	RM	SD	SMS
AI												
CA supply side	0.469											
CA demand side	0.712											
DA supply side	0.405	0.742										
DA demand side	0.686	0.848										
IASC supply side	0.715	0.546	0.444									

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IASC demand side	0.744	0.744	0.712								
IHSA supply side	0.577	0.537	0.472	0.646							
IHSA demand side	0.633	0.722	0.677	0.681							
LS supply side	0.696	0.474	0.364	0.677	0.661						
LS demand side	0.763	0.753	0.639	0.738	0.584						
OC supply side	0.558	0.655	0.581	0.633	0.748	0.605					
OC demand side	0.611	0.760	0.765	0.683	0.819	0.661					
OS supply side	0.585	0.422	0.374	0.612	0.656	0.454	0.533				
OS demand side	0.675	0.786	0.774	0.691	0.891	0.599	0.797				
RBIA supply side	0.517	0.704	0.591	0.519	0.445	0.444	0.507	0.394			
RBIA demand side	0.677	0.878	0.823	0.745	0.684	0.727	0.792	0.781			
RM supply side	0.561	0.462	0.487	0.578	0.734	0.621	0.722	0.47	0.429		
RM demand side	0.637	0.811	0.860	0.693	0.740	0.654	0.701	0.760	0.852		
SD supply side	0.622	0.598	0.552	0.665	0.652	0.429	0.724	0.679	0.452	0.629	
SD demand side	0.671	0.883	0.836	0.775	0.740	0.699	0.731	0.751	0.866	0.851	
SMS supply side	0.517	0.534	0.448	0.618	0.642	0.585	0.668	0.643	0.342	0.587	0.602
SMS demand side	0.600	0.709	0.722	0.693	0.825	0.595	0.653	0.880	0.711	0.732	0.728

After ensuring the reliability and validity of the constructs, an independent sample t-test was conducted to determine whether there are differences in perception between the demand and supply sides. Due to the ordinal measurement scale of the survey questionnaire, the average score of specific constructs was used to conduct an independent sample t-test (Heeren & D'Agostino, 1987). On the demand side, the results showed that audit committees considered CA, LS, IHSA as the important drivers for consulting services (see Table 7). From the external auditor's perspective, they looked at OC, OS, and IASC as the key drivers for internal auditor consulting services. The results also showed that two drivers, SMS and AI, are considered important drivers by both groups (see Table 6). In between two consulting services (SD and RM), both audit committees and external auditors considered SD as the most important consulting services for internal auditors.

To test the research question, Table 7 shows that there are significant differences in case of OS (mean $df = -0.348$, $p = 0.015$) in scores, with the mean score for audit committees (mean = 4.934, SD = 0.875) being lower than that of external auditors (mean = 5.281, SD = 0.650). The magnitude of the differences in the mean (mean difference -0.348, 95% BCaCI [-0.627; -0.068]) was significant. Similarly, there were also significant differences between the perceptions of audit committees and external auditors for IHSA, OC, DA, CA and LS. However, there are no significant differences between audit committees and external auditors in the case of SMS, RBIA and IASC. Moreover, there are no significant differences between audit committees and external auditors in determining the consulting services such as SD (mean $df = -0.055$, $p = 0.682$, 95% BCaCI [-0.322; 0.211]) and RM (mean $df = 0.210$, $p = 0.144$, 95% BCaCI [-0.073; 0.494]).

Table 6. Group Statistics (Audit Committees and External Auditors)

Variables	Group	N	Mean	Std. dev.	Std. error mean
SMS	Audit committees	57	5.333	0.877	0.116
	External auditors	66	5.233	0.816	0.100
OS	Audit committees	57	4.934	0.875	0.116
	External auditors	66	5.281	0.650	0.080
IHSA	Audit committees	57	5.487	0.905	0.120
	External auditors	66	4.907	0.763	0.094
OC	Audit committees	57	4.772	0.938	0.124
	External auditors	66	5.330	0.756	0.093
DA	Audit committees	57	5.125	0.844	0.112
	External auditors	66	4.604	0.706	0.087
RBIA	Audit committees	57	5.123	0.646	0.086
	External auditors	65	5.074	0.546	0.068
CA	Audit committees	57	5.561	0.629	0.083
	External auditors	66	5.096	0.621	0.076
IASC	Audit committees	57	5.119	0.802	0.106
	External auditors	66	5.205	0.752	0.093
LS	Audit committees	57	5.402	0.756	0.100
	External auditors	66	4.979	0.673	0.083
SD	Audit committees	57	5.305	0.805	0.107
	External auditors	66	5.361	0.688	0.085
RM	Audit committees	57	5.237	0.839	0.111
	External auditors	66	5.027	0.748	0.092
AI	Audit committees	57	5.237	0.891	0.118
	External auditors	66	5.568	0.612	0.075

Table 7. Independent Samples Test (Audit Committees and External Auditors)

	Leven's test for equality of variances				t-test for equality of means					
	F	Sig.	t	df	Sig. (2-tailed)	Mean diff.	Std. error diff.	95% con. in. of the diff.		Mean diff. sig?
								Lower	Upper	
SMS	1.813	0.181	0.657	121.00	0.512	0.100	0.153	-0.202	0.403	No
OS	7.695	0.006	-2.469	102.10	0.015	-0.348	0.141	-0.627	-0.068	Yes
IHSA	0.333	0.565	3.854	121.00	0.001	0.580	0.150	0.282	0.877	Yes
OC	9.859	0.002	-3.596	107.33	0.004	-0.558	0.155	-0.866	-0.251	Yes

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DA	0.577	0.449	3.728	121.00	0.002	0.521	0.140	0.244	0.798	Yes
RBIA	1.453	0.230	0.454	120.00	0.651	0.049	0.108	-0.165	0.263	No
CA	0.758	0.386	4.121	121.00	0.000	0.465	0.113	0.242	0.689	Yes
IASC	1.979	0.162	-0.617	121.00	0.539	-0.086	0.140	-0.364	0.191	No
LS	2.524	0.115	3.280	121.00	0.001	0.423	0.129	0.168	0.678	Yes
SD	1.678	0.198	-0.411	121.00	0.682	-0.055	0.135	-0.322	0.211	No
RM	1.302	0.256	1.469	121.00	0.144	0.210	0.143	-0.073	0.494	No
AI	5.687	0.019	-2.366	97.00	0.020	-0.331	0.140	-0.609	-0.053	Yes

On the supply side, Table 8 confirms that both chief audit executives and internal auditors identified OC, OS and DA as the top three drivers for consulting services. Furthermore, when identifying consulting services, both chief audit executives and internal auditors also believe that RM is a highly important consulting service provided by internal auditors. However, to test the second research question, Table 9 shows there are no significant differences in the case of SMS (mean $df = 0.050$, $p = 0.754$) in scores with the mean score for chief audit executives (mean = 5.10, SD = 0.76) being lower than that of internal auditor's (mean = 5.05, SD = 1.07). The magnitude of the differences in the mean (mean difference = 0.050, 95% BCaCI [-0.263; 0.363]) was not significant. Similarly, there were no significant differences between the perceptions of chief audit executives and internal auditors for OS, IHSA, RIBA, CA, IASC, LS and. However, there were significant differences between chief audit executives and internal auditors only for OC (mean $df = 0.100$, $p = 0.512$, 95% BCaCI [-0.202; 0.403]), and DA (mean $df = 0.100$, $p = 0.512$, 95% BCaCI [-0.202; 0.403]). Furthermore, in identifying consulting services, there are no significance differences between the perceptions of chief audit executives and internal auditors in case of SD, but significant differences between this group in case of RM.

Table 8. Group Statistics (Chief Audit Executives and Internal Auditors)

Variables	Group	N	Mean	Std. dev.	Std. error mean
SMS	Chief audit executives	60.00	5.10	0.76	0.10
	Internal auditors	75.00	5.05	1.07	0.12
OS	Chief audit executives	60.00	5.44	0.69	0.09
	Internal auditors	75.00	5.23	1.18	0.14
IHSA	Chief audit executives	60.00	5.36	0.67	0.09
	Internal auditors	75.00	5.21	1.28	0.15
OC	Chief audit executives	60.00	5.60	0.76	0.10
	Internal auditors	75.00	5.21	1.27	0.15
DA	Chief audit executives	60.00	5.60	0.79	0.10
	Internal auditors	75.00	5.23	1.18	0.14
RBIA	Chief audit executives	60.00	5.15	0.61	0.08

	Internal auditors	75.00	4.91	1.03	0.12
CA	Chief audit executives	60.00	5.05	0.56	0.07
	Internal auditors	75.00	4.91	0.99	0.11
IASC	Chief audit executives	60.00	5.14	0.81	0.11
	Internal auditors	75.00	5.02	1.03	0.12
LS	Chief audit executives	60.00	5.17	0.64	0.08
	Internal auditors	75.00	5.12	1.16	0.13
SD	Chief audit executives	60.00	5.01	0.71	0.09
	Internal auditors	75.00	4.99	1.25	0.14
RM	Chief audit executives	60.00	5.64	0.79	0.10
	Internal auditors	75.00	5.35	1.26	0.15
AI	Chief audit executives	60.00	4.33	0.59	0.08
	Internal auditors	75.00	4.68	0.89	0.10

Table 9. Independent Samples Test (Chief Audit Executives and Internal Auditors)

	Leven's test for equality of variances		t-test for equality of means							
	F	Sig.	t	df	Sig. (2-tailed)	Mean diff.	Std. error diff.	95% con. in. of the diff.		Mean diff. sig?
								Lower	Upper	
SMS	6.665	0.011	0.314	131.291	0.754	0.050	0.158	-0.263	0.363	No
OS	16.832	0.000	1.301	123.000	0.196	0.212	0.163	-0.111	0.534	No
IHSA	25.268	0.000	0.913	116.715	0.363	0.156	0.171	-0.183	0.495	No
OC	17.598	0.000	2.209	123.643	0.029	0.389	0.176	0.040	0.738	Yes
DA	5.369	0.022	2.151	129.248	0.033	0.365	0.170	0.029	0.701	Yes
RBIA	11.735	0.001	1.666	123.804	0.098	0.237	0.142	-0.045	0.519	No
CA	13.878	0.000	1.007	120.554	0.316	0.137	0.136	-0.132	0.405	No
IASC	4.423	0.037	0.713	132.977	0.477	0.113	0.159	-0.201	0.428	No
LS	23.810	0.000	0.103	120.709	0.918	0.018	0.171	-0.321	0.356	No
SD	9.227	0.003	1.621	126.783	0.107	0.288	0.178	-0.064	0.640	No
RM	5.991	0.016	-2.721	128.989	0.007	-0.347	0.128	-0.600	-0.095	Yes
AI	19.023	0.000	0.299	118.812	0.765	0.047	0.158	-0.265	0.359	No

5. Discussion and Conclusion

Using the independent sample t-test, this study is more concerned with determining whether differences exist between the perceptions of different stakeholders on both the demand side (audit committees and external auditors) and the supply side (chief audit executives and internal auditors). To make internal auditing effective, internal auditors must meet the expectations of all stakeholders, including themselves. Therefore, it is necessary to know what expectations the different stakeholders have, especially for consulting services,

and which factors are most important to them. It is easier for internal auditors to meet the expectations of different stakeholders when all stakeholders are focused on the same issues.

However, when different stakeholders have different expectations and specify different factors, meeting different expectations becomes a problem for internal auditors. In order to make internal audit effective, all stakeholder expectations should be met (Lenz & Hahn, 2015). On the demand side (RQ1), the results show that audit committees are more focused on CA, LS, DA and IHSA compared to external auditors that influence consulting services, whereas external auditors are more focused on OC, OS, and IASC compared to audit committees for consulting services. The mean difference between these two groups are statistically significant except for IASC. The results also show that both audit committees and external auditors consider SMS, AI and RBIA for internal auditors' consulting services, with insignificant differences between these two groups. In addition, both groups also agree that both RM and SD are the two important consulting services provided by internal auditors and there are no significant differences between these two groups.

On the supply side (RQ2), the results show that both chief audit executives and internal auditors are more concerned with SMS, OS, IHSA, CA, RBIA, IASC, LS, and AI, with insignificant mean differences between the two groups. In the case of OC and DA, chief audit executives are more concerned in compared to internal auditors, and the mean difference between these groups is statistically significant. For consulting services such as SD and RM, chief audit executives focus more on this service than internal auditors. The results show that the mean difference of SD is not statistically significant, whereas the mean difference of RM between these two groups is statistically significant.

In fact, consulting performance depends entirely on the intention and support of management (Jiang et al., 2017). Senior management contributes to providing adequate budgets, sufficient resources, and appropriate staff to enable internal auditors to adequately perform consulting services. In addition, these consulting services depend on the willingness of management. Internal auditors have no leeway to provide consulting services when management expects none. In RBV, these resources are considered valuable when they help the organisation achieve better performance through the contributions of internal audits.

In addition to SMS, AI helps internal auditors to perform their tasks without pressure from internal and external parties, reduce conflicts of interest, and not face frequent management interference while carrying out their work. Similarly, RBIA assesses risks associated with the organisation's strategic objectives, key business processes, and also its own risk assessment activities by developing an annual work plan that helps provide advisory services, such as strategy development and risk management engagement, that help organisations to achieve their objectives. According to RBV theory, when internal auditors incorporate risk-based thinking into their consulting services, they help embed a stronger risk culture throughout the organisation. A strong risk-aware culture is a valuable and non-substitutable organisational resource, as it enhances long-term resilience and strategic decision-making capabilities.

IASC helps internal auditors understand the organisation's rules and regulations and the services management expects from them, which in turn facilitates the achievement of the organisation's objectives. Previous studies (Arena & Azzone, 2009) show that IASC helps to deliver services in line with stakeholder expectations. Moreover, OS helps to close the gap between management and internal auditors, making it easier for the latter to provide their services; OC provides a good working environment for internal auditors (Alzeban, 2015); and IHSA helps internal auditors learn more about organisational processes, which is very important for their services (Ghaleb, Kamardin, & Al-Qadasi, 2020). According to RBV theory, IASC, OS and IHSA are the intangible internal resources that play a significant role in shaping internal auditors' consulting services. Previous studies also demonstrate that internal auditors can easily measure organisational performance and risk assessments by using DA (Schneider et al., 2015); CA helps to understand the development of certain risks, which helps management to make strategic risk management decisions (Chan & Vasarhelyi, 2011), and LS of chief audit executives helps internal auditors work sincerely and effectively (Erasmus & Coetzee, 2018).

Yet, these differences between the supply and demand sides are not desirable. This distinction limits the advisory services provided by internal auditing. The results of this study indicate that internal auditors place more emphasis on support (OS, OC, IHSA) for consulting services, while chief audit executives focus on the audit process and auditor characteristics (DA, CA, LS, IASC). From the demand-side perspective, audit committees are more focused on organisational characteristics like SMS, OC and OS whereas external auditors are more focused on auditors' characteristics like IASC, AI and LS. Therefore, it is important to address the needs of both groups (on both sides) that influence internal audit consulting services. From an RBV perspective, all the factors are considered as internal resources that help to ensure organisational goals.

The findings indicate several ways to optimise internal auditors' consulting services. Internal auditors should meet AC expectations by focusing on CA, LS, DA and IHSA. Internal auditors should focus on CA instead of traditional audits, use data analytics tools such as trend analysis, profit analysis and ratio analysis. Chief audit executives should use transformational leadership, and management should use in-house internal audit functions instead of outsourcing. Due to the different expectations of external auditors, management should also pay attention to a low power distance culture and place greater emphasis on open communication across all levels of the organisation. Internal auditors should interact freely with employees at all levels, including senior management, to make it easier to collect information, discuss results, and share findings without fear of retaliation. In addition, management should be granted a high status within the organisation that allows them to carry out their duties with authority and independence, and allows auditors to evaluate risks and controls without undue influence. Likewise, from the supply-side perspective, OC and DA should focus more on meeting the expectations of chief audit executives, and in addition, management should focus on ensuring OS that meet internal auditors' expectations. Additionally, internal auditors should also engage in the risk management process.

The findings of this research have important implications for both internal audit theory and practice, particularly regarding the role differentiation between chief audit executives and internal auditors. From an academic standpoint, these findings reinforce the consensus that internal auditing as a function is evolving towards a broader and more integrated approach, where both leadership and operational auditors align on key tasks and risk factors.

This study contributes to the common body of knowledge (CBOK) in several ways. First, the literature to date tends to focus on drivers related to internal auditor performance. This study focuses on drivers for internal auditor advisory services. Second, previous studies examined the views of internal audit customers, like management and AC, to identify the drivers of internal audit functions. This study focuses on whether there is a difference between the views of the demand and supply sides on consulting services. Third, the RBV theory assumes that internal resources influence the achievement of competitive advantages. Various drivers were used in this study, all of which are internal resources and cannot be duplicated by other competitors, to provide the consulting capabilities of internal auditors.

This study has some limitations. First, following RBV theory, it focuses exclusively on internal resources that influence advisory services, and overlooks possible effects of external factors, such as government regulations and national culture. Second, the study exclusively examines consulting performance drivers in listed companies. Third, the results are specific to the recent economic development context of Bangladesh. Finally, this study only focuses on the perceptions of a specific group on both demand and supply sides, such as AC, external auditors, chief audit executives, and internal auditors.

The results and limitations of this study open up a lot of scope for future research. Qualitative studies, such as in-depth interviews, could be conducted on the reasons behind the drivers from each of the two groups. This will provide detailed evidence of conflicting views between two groups, and find appropriate solutions on how to resolve these differing views. Future studies can also consider other perspectives, such as senior versus junior internal auditors, and management versus regulators. In addition, this study focuses on listed companies in Bangladesh, which are well-regulated. Further studies can be conducted to explore the drivers of consulting services from different perspectives in other developing countries, and provide generalisable insights to include governmental versus unlisted organisations (listed versus unlisted or governmental versus non-governmental views). In addition, future research can also examine the views of two groups from developed and developing countries.

References

- Abbott, L. J., Daugherty, B., Parker, S., & Peters, G. F. (2016). Internal Audit Quality and Financial Reporting Quality: The Joint Importance of Independence and Competence. *Journal of Accounting Research*, 54(1), 3–40. <https://doi.org/10.1111/1475-679x.12099>
- Abdolmohammadi, M. (2013). Correlates of Co-Sourcing/Outsourcing of Internal Audit Activities. *Auditing*, 32(3), 69–85. <https://doi.org/10.2308/ajpt-50453>
- Abdolmohammadi, M. J., Ramamoorti, S., & Sarens, G. (2013). *Chief audit executives Strategic Relationships: Building Bridges to the C-suite*. IIA Research Foundation.

- Ahmad, H. N. (2015). Internal Audit (IA) Effectiveness: Resource-based and Institutional Perspectives. *Australian Journal of Basic and Applied Sciences*, 9(9), 95-104. <https://repo.uum.edu.my/id/eprint/16184>
- Anderson, R. J., & Svare, C. (2023). *10 Key Internal Audit Topics for Audit Committee Consideration*. AICPA. <https://us.aicpa.org/content/dam/aicpa/forthepublic/auditcommitteeeffectiveness/auditcommitteebrief/downloadabledocuments/10-key-internal-audit-topics-for-audit-committee.pdf>
- Alkebsi, M., & Aziz, K. A. (2017). Information Technology Usage, Top Management Support and Internal Audit Effectiveness. *Asian Journal of Accounting and Governance*, 8(1), 123-132. <https://doi.org/10.17576/AJAG-2017-08SI-11>
- Alqudah, H. M., Amran, N. A., & Hassan, H. (2019). Extrinsic Factors Influencing Internal Auditors' Effectiveness in Jordanian Public Sector. *Review of European Studies*, 11(2), 67-79. <https://doi.org/10.5539/res.v11n2p67>
- Alzeban, A. (2015, 2015/01/01). The Impact of Culture on the Quality of Internal Audit: An Empirical Study. *Journal of Accounting, Auditing & Finance*, 30(1), 57-77. <https://doi.org/10.1177/0148558X14549460>
- Alzeban, A., & Gwilliam, D. (2014). Factors Affecting the Internal Audit Effectiveness: A Survey of the Saudi Public Sector. *Journal of International Accounting, Auditing and Taxation*, 23(2), 74-86. <https://doi.org/10.1016/j.intaccudtax.2014.06.001>
- Anderson, U. L. (2003). Assurance and Consulting Services: Research Opportunities in Internal Auditing. Institute of Internal Auditors Research Foundation. <https://ecommons.udayton.edu/cgi/viewcontent.cgi?article=1029&context=books>
- Arena, M., & Azzone, G. (2009). Identifying Organizational Drivers of Internal Audit Effectiveness. *International Journal of Auditing*, 13(1), 43-60. <https://doi.org/10.1111/j.1099-1123.2008.00392.x>
- Asiedu, K. F., & Deffor, E. W. (2017). Fighting Corruption by Means of Effective Internal Audit Function: Evidence from the Ghanaian Public Sector. *International Journal of Auditing*, 21(1), 82-99. <https://doi.org/10.1111/ijau.12082>
- Bednarek, P. (2018). Factors Affecting the Internal Audit Effectiveness: A Survey of the Polish Private and Public Sectors. In T. Dudycz, G. Osbert-Pociecha, & B. Brycz (Eds.), *Efficiency in Business and Economics* (pp. 1-16). Springer.
- Brown, C. E., Wong, J. A., & Baldwin, A. A. (2007). A Review and Analysis of the Existing Research Streams in Continuous Auditing. *Journal of Emerging Technologies in Accounting*, 4(1), 1-28. <https://doi.org/10.2308/jeta.2007.4.1.1>
- Burton, F. G., Starliper, M. W., Summers, S. L., & Wood, D. A. (2015). The Effects of Using the Internal Audit Function as a Management Training Ground or as a Consulting Services Provider in Enhancing the Recruitment of Internal Auditors. *Accounting Horizons*, 29(1), 115-140. <https://doi.org/10.2308/acch-50925>
- Cain, M. K., Zhang, Z., & Yuan, K.-H. (2017). Univariate and Multivariate Skewness and Kurtosis for Measuring Nonnormality: Prevalence, Influence and Estimation. *Behavior Research Methods*, 49, 1716-1735. <https://doi.org/10.3758/s13428-016-0814-1>
- Carcello, J. V., Eulerich, M., Masli, A., & Wood, D. A. (2020). Are Internal Audits Associated With Reductions in Perceived Risk? *Auditing*, 39(3), 55-73. <https://doi.org/10.2308/ajpt-19-036>
- Chan, D. Y., & Vasarhelyi, M. A. (2011). Innovation and Practice of Continuous Auditing. *International Journal of Accounting Information Systems*, 12(2), 152-160. <https://doi.org/10.1108/978-1-78743-413-420181013>
- Chen, Y., Lin, B., Lu, L., & Zhou, G. (2020). Can Internal Audit Functions Improve Firm Operational Efficiency? Evidence from China. *Managerial Auditing Journal*, 35(8), 1167-1188. <https://doi.org/10.1108/MAJ-01-2019-2136>
- Church, B. K., & Schneider, A. (1992). Internal Auditor Involvement In Internal Control System Design? Is Objectivity Impaired? *Journal of Applied Business Research (JABR)*, 8(4), 15-24. <https://doi.org/10.19030/jabr.v8i4.6120>

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- Coetzee, P., & Lubbe, D. (2014). Improving the Efficiency and Effectiveness of Risk-based Internal Audit Engagements. *International Journal of Auditing*, 18(2), 115-125. <https://doi.org/10.1111/ijau.12016>
- Čular, M., Slapničar, S., & Vuko, T. (2020). The Effect of Internal Auditors' Engagement in Risk Management Consulting on External Auditors' Reliance Decision. *European Accounting Review*, 29(5), 999-1020. <https://doi.org/10.1080/09638180.2020.1723667>
- Dal Mas, L. O., & Barac, K. (2018). The Influence of the Chief Audit Executive's Leadership Style on Factors Related to Internal Audit Effectiveness. *Managerial Auditing Journal*, 33(8), 807-835. <https://doi.org/10.1108/MAJ-12-2017-1741>
- Desai, R., & Desai, V. (2010). Towards a Decision Aid for External Audit Evaluation of the Internal Audit Function. *Journal of Global Business Issues*, 4(1), 69. <https://www.proquest.com/openview/53e4c4de5ce34c2bed5daff3d23920cf/1?pq-origsite=gscholar&cbl=39974>
- Dicle, Ü., & Usluer, T. (2016). The Relationship Between Culture and Effectiveness of Internal Auditing, an Empirical Study. *International Journal of Contemporary Applied Sciences*, 3(1), 34-52. <http://ijcar.net/assets/pdf/Vol3-No1-January2016/03.pdf>
- Erasmus, L., & Coetzee, P. (2018). Drivers of Stakeholders' View of Internal Audit Effectiveness: Management Versus Audit Committee. *Managerial Auditing Journal*, 33(1), 90-114. <https://doi.org/10.1108/MAJ-05-2017-1558>
- Fronell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39-50. <https://doi.org/10.1177/002224378101800104>
- Getie Mihret, D. (2007). Internal Audit Effectiveness: An Ethiopian Public Sector Case Study. *Managerial Auditing Journal*, 22(5), 470-484. <https://doi.org/10.1108/02686900710750757>
- Ghaleb, B. A. A., Kamardin, H., & Al-Qadasi, A. A. (2020). Internal Audit Function and Real Earnings Management Practices in an Emerging Market. *Meditari Accountancy Research*, 28(6), 1209-1230. <https://doi.org/10.1108/MEDAR-02-2020-0713>
- Haig, N. (2018). Your Personal Brand: Building a Professional Identity, and Promoting It Effectively, Can Be Vital to an Internal Auditor's Career. *Internal Auditor*, 75(1), 54-60. <https://openurl.ebsco.com/EPDB%3Aagcd%3A13%3A11251453>
- Hair, J., Hollingsworth, C. L., Randolph, A. B., & Chong, A. Y. L. (2017). An Updated and Expanded Assessment of PLS-SEM in Information Systems Research. *Industrial Management and Data Systems*, 117(3), 442-458. <https://doi.org/10.1108/IMDS-04-2016-0130>
- Hair Jr, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing Measurement Model Quality in PLS-SEM Using Confirmatory Composite Analysis. *Journal of Business Research*, 109, 101-110. <https://doi.org/10.1016/j.jbusres.2019.11.069>
- Heeren, T., & D'Agostino, R. (1987). Robustness of the Two Independent Samples T-Test When Applied to Ordinal Scaled Data. *Statistics in Medicine*, 6(1), 79-90. <https://doi.org/10.1002/sim.4780060110>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A New Criterion for Assessing Discriminant Validity in Variance-based Structural Equation Modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135. <https://doi.org/10.1007/s11747-014-0403-8>
- Hoos, F., Kochetova, N., & d'Arcy, A. C. (2015). 'Serving Two Masters' and the Chief Audit Executive's Communication: Experimental Evidence About Internal Auditors' Judgments. *HEC Research Paper*, 995. <https://ideas.repec.org/p/ebg/heccah/0995.html>
- Hulland, J., Ryan, M. J., & Rayner, R. K. (2010). Modeling Customer Satisfaction: A Comparative Performance Evaluation of Covariance Structure Analysis Versus Partial Least Squares. In V. E. Vinzi, W. W. Chin, J. Henseler, & H. Wang (Eds.), *Handbook of Partial Least Squares* (pp. 307-325). Springer. https://doi.org/10.1007/978-3-540-32827-8_15
- Institute of Internal Auditors (IIA) (2004). *The Role of Internal Audit in Enterprise-Wide Risk Management*. IIA. <https://www.theiia.org/en/content/position-papers/2009/the-role-of-internal-auditing-in-enterprise-wide-risk-management/>
- Jansen, H., & Hak, T. (2005). The Productivity of the Three-step Test-Interview (TSTI) Compared to an Expert Review of a Self-administered Questionnaire on Alcohol Consumption. *Journal of Official Statistics*, 21(1), 103-120. <http://hdl.handle.net/1765/20960>

- Jiang, L., Messier Jr, W. F., & Wood, D. A. (2020). The Association between Internal Audit Operations-related Services and Firm Operating Performance. *Auditing*, 39(1), 101-124. <https://doi.org/10.2308/ajpt-52565>
- Kabuye, F. (2017). Internal Audit Organisational Status, Competencies, Activities and Fraud Management in the Financial Services Sector. *Managerial Auditing Journal*, 32(9), 924-944. <https://doi.org/10.1108/MAJ-09-2016-1452>
- Kopotienko, T. Y. (2015). The Use of Analytical Procedures in the Internal Audit of the Restaurant Business Expenses. *Visnik Žitomirškogo Deržavnogo Tehnoložičnogo Universitetu. Ekonomični Nauki*, 2(72), 127-136. <http://visnik.knteu.kiev.ua/files/2015/06/13.pdf>
- Koutoupis, A. G., & Tsamis, A. (2009). Risk Based Internal Auditing Within Greek Banks: A Case Study Approach. *Journal of Management and Governance*, 13(1-2), 101-130. <https://doi.org/10.1007/s10997-008-9072-7>
- Lenz, R., & Hahn, U. (2015). A Synthesis of Empirical Internal Audit Effectiveness Literature Pointing to New Research Opportunities. *Managerial Auditing Journal*, 30(1), 5-33. <https://doi.org/10.1108/MAJ-08-2014-1072>
- Lenz, R., Sarens, G., & Hoos, F. (2017). Internal Audit Effectiveness: Multiple Case Study Research Involving Chief Audit Executives and Senior Management. *EDPACS*, 55(1), 1-17. <https://doi.org/10.1080/07366981.2017.1278980>
- Li, H., Dai, J., Gershberg, T., & Vasarhelyi, M. A. (2018, 2018/03/01/). Understanding Usage and Value of Audit Analytics for Internal Auditors: An Organizational Approach. *International Journal of Accounting Information Systems*, 28, 59-76. <https://doi.org/10.1016/j.accinf.2017.12.005>
- Ma' Ayan, Y., & Carmeli, A. (2016). Internal Audits as a Source of Ethical Behavior, Efficiency, and Effectiveness in Work Units. *Journal of Business Ethics*, 137(2), 347-363. <https://doi.org/10.1007/s10551-015-2561-0>
- Mahzan, N., & Hassan, N. (2015). Internal Audit of Quality in SS Environment: Perceptions on Critical Factors Effectiveness and Impact on Organizational Performance. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 5 (1), 92, 102. <https://doi.org/> <https://www.researchgate.net/publication/272833713>
- Marx, G. C. B. (2009). An Investigation into the Impact of Continuous Auditing on the External Auditors of the Four Largest Banks in South Africa. *South African Journal of Accounting Research*, 23(1), 45-65. <https://doi.org/10.1080/10291954.2009.11435139>
- Mennicken, A., and M. Power. (2013). Auditing and Corporate Governance. In M. Wright, D. S. Siegel, K. Keasey, & I. Filatotchev (Eds.), *The Oxford Handbook of Corporate Governance* (pp. 308-327). Oxford University Press. <https://doi.org/10.1093/oxfordhpb/9780199642007.013.0014>
- Messier, W. F., Reynolds, J. K., Simon, C. A., & Wood, D. A. (2011). The Effect of Using the Internal Audit Function as a Management Training Ground on the External Auditor's Reliance Decision. *Accounting Review*, 86(6), 2131-2154. <https://doi.org/10.2308/accr-10136>
- Mio, C., Panfilo, S., & Blundo, B. (2020). Sustainable Development Goals and the Strategic Role of Business: A Systematic Literature Review. *Business Strategy and the Environment*, 29(8), 3220-3245. <https://doi.org/10.1002/bse.2568>
- Musumali, M., & Qutieshat, A. (2022). A Brief Review of Literature on Issues and Challenges of Business Continuity Management for Small and Medium-Sized Enterprises in Developing Countries. *International Journal of Business Continuity and Risk Management*, 12(4), 362-382. <https://doi.org/10.1504/IJBCRM.2022.128025>
- Nusran, N. (2021). Can Leadership Style, Individual Ability and Motivation Improve Banking Internal Auditor Performance? *Point of View Research Accounting and Auditing*, 2(1), 100-108. <https://doi.org/10.47090/povraa.v2i1.121>
- Ojo, A. (2019). Internal Audit And Risk Management in Nigeria's Public Sector. *International Journal of Business and Law Research*, 7(2), 1-15. <https://www.seahipublications.org/wp-content/uploads/2024/05/IJBLR-J-1-2019.pdf>
- Onumah J. M., & Yao Kraah, R. (2012). Barriers and Catalysts to Effective Internal Audit in the Ghanaian Public Sector. In T. Venancio & M. Musa (Eds.), *Accounting in Africa* (pp. 177-207). Emerald Group Publishing. [https://doi.org/10.1108/S1479-3563\(2012\)000012A012](https://doi.org/10.1108/S1479-3563(2012)000012A012)

Drivers Affecting Internal Audit Consulting Services: Contrasting Views from Demand-Side and Supply-Side Perspectives

- Papageorgiou, E. (2013). The Impact of Decisions to Outsource the Internal Audit Function in South Africa. *Journal of Economic and Financial Sciences*, 6(3), 593-610. <https://hdl.handle.net/10520/EJC145354>
- Pike, R., Neale, B. and Linsley, P. (2012). *Corporate Finance and Investment: Decisions and Strategies*. Pearson Education.
- Prawitt, D. F., Sharp, N. Y., & Wood, D. A. (2011). Reconciling Archival and Experimental Research: Does Internal Audit Contribution Affect the External Audit Fee? *Behavioral Research in Accounting*, 23(2), 187-206. <https://doi.org/10.2308/bria-10065>
- Protiviti. (2007). Guide to Internal Audit: Frequently Asked Questions about Developing and Maintaining an Effective Internal Audit Function. Protiviti. <https://www.protiviti.com/sg-en/whitepaper/frequently-asked-questions-about-developing-and-maintaining-effective-internal-audit>
- PWC. (2014). 2014 *State of the Internal Audit Profession Study: Higher Performance by Design: A Blueprint for Change*. http://www.pwc.com/en_M1/m1/publications/documents/pwc-state-of-the-internal-audit-profession-2014.pdf
- Roussy, M. (2013, 2013/11/01/). Internal Auditors' Roles: From Watchdogs to Helpers and Protectors of the Top Manager. *Critical Perspectives on Accounting*, 24(7), 550-571. <https://doi.org/10.1016/j.cpa.2013.08.004>
- Salameh, R., Al-Weshah, G., Al-Nsour, M., & Al-Hiyari, A. (2011). Alternative Internal Audit Structures and Perceived Effectiveness of Internal Audit in Fraud Prevention: Evidence from Jordanian Banking Industry. *Canadian Social Science*, 7(3), 40-50. <http://doi.org/10.3968/j.css.1923669720110703.007>
- Salehi, T. (2016). Investigation Factors Affecting the Effectiveness of Internal Auditors in the Company: Case Study Iran. *Review of European Studies*, 8(2), 224-235. <https://doi.org/10.5539/res.v8n2p224>
- Sarens, G., & Abdolmohammadi, M. J. (2010). *Cultural Dimension and Professionalism and Uniformity of Internal Auditing Practice* [Conference presentation]. CAAA Annual Conference 2010, Toronto, Canada. <https://doi.org/10.2139/ssrn.1529033>
- Sarens, G., & De Beelde, I. (2006). Internal Auditors' Perception About Their Role in Risk Management. *Managerial Auditing Journal*, 21(1), 63-80. <https://doi.org/10.1108/02686900610634766>
- Sawan, N. (2013). The Role of Internal Audit Function in the Public Sector Context in Saudi Arabia. *African Journal of Business Management*, 7(6), 443-454. <https://researchonline.ljmu.ac.uk/id/eprint/5681>
- Schneider, G. P., Dai, J., Janvrin, D. J., Ajayi, K., & Raschke, R. L. (2015). Infer, Predict, and Assure: Accounting Opportunities in Data Analytics. *Accounting Horizons*, 29(3), 719-742. <https://doi.org/10.2308/acch-51140>
- Scholes, K., Johnson, G., & Whittington, R. (2002). *Exploring Corporate Strategy*. Financial Times Prentice Hall.
- Turetken, O., Jethefer, S., & Ozkan, B. (2020). Internal Audit Effectiveness: Operationalization and Influencing Factors. *Managerial Auditing Journal*, 35(2), 238-271. <https://doi.org/10.1108/MAJ-08-2018-1980>
- Usang, O. U. E., & Salim, B. (2016). Performance Effects of Internal Audit Characteristics and Relationships in Nigerian Local Governments. *Mediterranean Journal of Social Sciences*, 7(3), 110. <https://doi.org/Doi:10.5901/mjss.2016.v7n3p110>
- Van Peurse, K. (2005). Conversations with Internal Auditors: The Power of Ambiguity. *Managerial Auditing Journal*, 20(5), 489-512. <https://doi.org/10.1108/02686900510598849>
- Vijayakumar, A., & Nagaraja, N. (2012). Internal Control Systems: Effectiveness of Internal Audit in Risk Management at Public Sector Enterprises. *BVIMR Management Edge*, 5(1). <https://openurl.ebsco.com/EPDB%3Aagcd%3A7%3A19587671/detailv2?sid=ebsco%3Aplink%3Ascholar&id=ebsco%3Aagcd%3A70504372&crl=c>
- Wilkinson, N., & Coetzee, P. (2015). Internal Audit Assurance or Consulting Services Rendered on Governance: How Does One Decide. *Journal of Governance and Regulation*, 4(1-2), 186-200. <https://virtusinterpress.org/IMG/pdf/10-22495>

- Yee, C. S., Sujan, A., James, K., & Leung, J. K. (2008). Perceptions of Singaporean Internal Audit Customers Regarding the Role and Effectiveness of Internal Audit. *AJBA*, 1(2), 147-174. <https://ajba.um.edu.my/article/view/2211>
- Zain, M. M., Subramaniam, N., & Stewart, J. (2006). Internal Auditors' Assessment of their Contribution to Financial Statement Audits: The Relation with Audit Committee and Internal Audit Function Characteristics. *International Journal of Auditing*, 10(1), 1-18. <https://doi.org/10.1111/j.1099-1123.2006.00306.x>
- Zainal Abidin, N. H. (2017). Factors Influencing the Implementation of Risk-based Auditing. *Asian Review of Accounting*, 25(3), 361-375. <https://doi.org/10.1108/ARA-10-2016-0118>