

The drivers of audit quality: auditors' perceptions

About ACCA

ACCA (the Association of Chartered Certified Accountants) is the global body for professional accountants. We aim to offer business-relevant, first-choice qualifications to people of application, ability and ambition around the world who seek a rewarding career in accountancy, finance and management.

Founded in 1904, ACCA has consistently held unique core values: opportunity, diversity, innovation, integrity and accountability. We believe that accountants bring value to economies in all stages of development. We aim to develop capacity in the profession and encourage the adoption of consistent global standards. Our values are aligned to the needs of employers in all sectors and we ensure that, through our qualifications, we prepare accountants for business. We work to open up the profession to people of all backgrounds and remove artificial barriers to entry, ensuring that our qualifications and their delivery meet the diverse needs of trainee professionals and their employers.

We support our 162,000 members and 428,000 students in 173 countries, helping them to develop successful careers in accounting and business, with the skills needed by employers. We work through a network of over 89 offices and centres and more than 8,500 Approved Employers worldwide, who provide high standards of employee learning and development.

About IGAP

The International Governance and Performance (IGAP) Research Centre provides a dynamic, outward-looking research platform that addresses contemporary issues in international governance and performance. IGAP is a recognised interdisciplinary research hub that aims to influence the international governance agenda through rigorous, independent and applicable research.

Based in the Faculty of Business and Economics, Macquarie University, Sydney, Australia, IGAP forges robust networks, and partners with business, government and professional communities. It aims to bring the best minds together to respond to critical and emerging business issues in governance processes, reporting regimes and performance, including research and thought leadership on:

- reporting on performance and risk (financial/non-financial information)
- use of information for ethical/operational decision-making
- auditing, assurance and verification processes
- stewardship and accountability (structures, practices and stakeholder engagement)
- environmental/social/organisational sustainability
- international governance (reporting) standards/business legal frameworks
- financial and non-financial performance measurement and relationships
- performance management (operational/behavioural, etc)
- links between performance evaluation and action (eg policy/strategy)
- risk identification, assessment and control.

IGAP also calls on an extended international network of academic and professional expertise through its visiting academic and executive-in-residence programmes.

This report summarises the findings of an online survey conducted by ACCA and Macquarie University into auditors' perceptions about the drivers of audit quality.

It forms part of a three-part project investigating perceptions of CFOs, auditors and company director's.

ABOUT THE AUTHORS

Alan Kilgore

International Governance and Performance (IGAP) Research Centre, Department of Accounting and Corporate Governance, Macquarie University, Sydney, Australia.

Nonna Martinov-Bennie

International Governance and Performance (IGAP) Research Centre, Department of Accounting and Corporate Governance, Macquarie University, Sydney, Australia.

1. Introduction

Much-publicised audit failures such as the Enron collapse, along with the global financial crisis of 2007–8, have highlighted the importance of audit quality (AQ) and its role in upholding the stability of financial markets. Given these events, there is renewed awareness that the reliability of financial reporting by individual firms is crucial to their economic well-being, and that a high AQ promotes overall market confidence (Wallman 1996; Monroe and Tan 1997;). This awareness has reinvigorated academic research and debate on ways of improving AQ. The present study – an investigation of auditors’ perceptions about the main drivers of AQ – is a contribution to this growing body of literature, and continues a series of investigations of AQ by the present researchers.

Apart from reinvigorating academic research and debate on ways of improving AQ, the financial upheavals since the turn of the century have led to the introduction of new regulatory measures to promote AQ, such as the Sarbanes–Oxley Act (2002) in the US and the Economic Reform Program (Audit Reform and Corporate Disclosure) Act (2004) (CLERP 9) in Australia. More recently, the International Auditing and Assurance Standards Board (IAASB) released *A Framework for Audit Quality: Key Elements that Create an Environment for Audit Quality* (2014) with the purpose of promoting an awareness of how best to achieve high AQ on a systemic basis. For this study special attention was given to this guidance.

2. Literature review

Although there is no universally agreed definition of AQ, a useful starting point is DeAngelo's definition (1981), in which AQ is defined as a combination of the probability that the auditor will discover a material misstatement in the client's financial statements and the probability that they will report it. AQ, viewed from this perspective, is seen as a function of both auditor competence (in discovering misstatements) and auditor independence (in reporting them).

In practice, because both these elements of AQ are unobservable, some researchers have approached AQ using one of two 'indirect' approaches to AQ. One of these indirect approaches measures audit quality using proxies or surrogates for AQ. A range of factors associated with AQ have been investigated using this 'proxy' approach. Research of particular relevance to the present study are investigations of audit firm size (see for example Rusmin 2010 and Karjalainen 2011); the duration of the audit partner's tenure (Carey and Simnett 2006; Chen et al. 2008, and Chi et al. 2009); the provision of non-audit services (Elstein 2001; Bedard et al. 2008); the audit firm's experience of the client's industry (Knechel et al. 2007; Lowensohn et al. 2007); the audit partner or manager's attention to the audit (Carcello et al. 1992; Kilgore et al. 2011); communication between the audit team and client's management (Behn et al. 1997); the audit partner's knowledge of the client's industry (Zerni 2012); the senior manager or manager's knowledge of the client's industry (Carcello et al. 1992); and a very knowledgeable audit team (Li and Chen 2011).

Researchers using the second indirect approach – usually called the behavioural approach – assume that AQ comprises a set of attributes valued by audit market participants, and examine those attributes perceived by various stakeholders to have a significant impact upon AQ. Examples of studies of this kind are Beattie and Fearnley (1995), Warming-Rasmussen and Jensen (1998), Goodwin and Seow (2002), Duff (2004), Kilgore et al. (2011), and Beattie et al. (2013).

The present study uses the second approach, for two reasons. First, proxy-based studies are best suited to examining attributes of the audit firm, whereas the intention here is to include a wider range of attributes, including team attributes. Second, proxy-based studies tend to focus on a single attribute, whereas this study examines a range of attributes as part of an investigation that considers the perceived relative importance of different attributes when compared with one another.

As indicated above, the present study investigates factors perceived as important drivers of AQ from the viewpoint of the auditors, also giving attention to the implications of these perceptions for the IAASB's newly released *Framework for Audit Quality* (2014) (hereafter the Framework), the purpose of which is to promote an awareness of the most important factors contributing to AQ. The Framework discusses these factors under the categories Inputs, Process, Outputs, Key Interactions and Contextual Factors. The present study addresses some of the issues included

under the Framework's Inputs, Process and Interaction factors.

The factors falling under Inputs are concerned with what the auditor brings to the audit process. The Framework discusses these factors under two headings, 'Values, Ethics and Attitudes' and 'Knowledge, Experience and Time', and within these two headings it further organises the factors into those applying at three different 'levels' – engagement, firm and national levels. Process, on the other hand, is concerned with the engagement process itself, and in particular, with the rigour of that process and the quality-control procedures that are in place. Process factors are also organised in the Framework under engagement, firm and national levels. Finally, Key Interactions are concerned with the way in which stakeholder interaction can have a particular impact on AQ. In the context of this study these interactions include both formal and informal communication between the auditor and client management. In the present study, attention will be given to the extent to which auditors' views about AQ support the stance taken by the Framework on the most important Input, Process and Key Interaction factors influencing AQ. Among these factors, the study has particular relevance to those at the engagement and firm levels, so the focus will be on these levels.

In previous behavioural studies, significant differences have emerged between the perceptions of different stakeholders – for example, between the perceptions of auditors and directors (Goodwin and Seow 2002) and

the perceptions of auditors, preparers and users (Carcello et al.1992). Beattie et al. (2013) have drawn attention to the practical importance of studies of this kind in pointing out that the three most important triggers for changing auditors all concern the current audit firm – in particular, the integrity of the firm, its technical competence and the quality of its working relationship with clients.

There is an important distinction in studies of AQ between those that investigate what drives client demand for AQ and what drives auditor supply of AQ (see De Fond and Zhang 2013). Both kinds of study make a significant contribution to the audit industry. Studies of what drives the demand for AQ are important because the perceptions about the main drivers of AQ held by those on the 'demand' side of the industry – those who rely on the services and products of auditors such as CFOs, stockbrokers and investors – provide a way of determining whether the suppliers of audit services are giving their clients and other industry stakeholders what they want. Studies of the 'supply' side of the industry are important, on the other hand, because they reveal whether the suppliers' – that is, the auditors' – perceptions about what constitutes AQ are properly aligned with the demand.

In a previous study the present researchers focused on the 'demand' side of AQ, surveying and analysing the perceptions of CFOs about the main factors driving AQ (Martinov-Bennie and Kilgore 2014). The present study turns to the 'supply' side of AQ, in this case investigating the views of auditors

on the factors they perceive as important to AQ. More specifically, the research question is:

Do auditors perceive some attributes to be more important than others as drivers of AQ, and if so, how do these attributes rank relative to one another in perceived importance?

3. Research method

This study is based on an online survey of auditors in Australia. Data was gathered and analysed using Sawtooth Software’s Adaptive Conjoint Analysis (ACA) method developed by Johnson (1987). ACA is a technique used to determine how individuals value different attributes that, in combination, constitute an object or a concept. ACA is premised on the idea that an object or concept can be broken down into component attributes. For example, as a concept, ACA can be viewed as a set of attributes and, further, that individuals evaluate the utility of ACA by evaluating and combining the utility of its various attributes. The value of AQ is therefore equivalent to the sum of the utilities of the attributes within it.

The ACA system is ‘adaptive’ and ‘dynamic’ in that the answers provided by respondents at earlier points in the questionnaire are used to construct questions introduced in later stages, so

that questions are customised for each respondent. This method enables researchers to obtain information on the relative rather than the absolute importance of AQ attributes, and provides information on the extent to which an attribute is regarded as more important than others – a significant factor in the choice of the ACA system for use in this study.

An ACA questionnaire comprises four stages, namely the ‘importance’, ‘ratings’, ‘trade-off’ and ‘calibration’ stages. The ‘importance’ stage establishes which audit quality attributes each respondent considers most important for AQ. In the ‘ratings’ stage respondents rate their preferences for a particular audit quality attribute. In the ‘trade-off’ stage respondents are provided with combinations of two to three attributes in each combination, which they are asked to rate. In the ‘calibration’ stage a

series of ‘calibration concepts’ are created for those attributes that respondents have identified as most important. These are then used to calibrate the data obtained in earlier sections of the questionnaire.

The survey also collected demographic information from respondents: their age, gender, education, membership of professional bodies, their rank or position in their audit firm, and the size of the audit firm.

The ACA system requires the selection of a range of relevant attributes making up the object/concept under study. The present study uses the 10 attributes of AQ that were used by Kilgore et al. (2011: 257) (see Table 3.1). The attributes were chosen because of the importance accorded them in the established literature on perceptions of AQ (for example, Francis 1984; Schroeder et al. 1986; and Craswell et al. 1995) and in the best-known behavioural studies of perceptions of AQ (for example, those by Shroeder et al. 1986 and Carcello et al. 1992). To aid accuracy of response in the survey, respondents were provided with relevant definitions to accompany each AQ attribute. These definitions are provided in summarised form in Table 3.1.

In the preparation of the survey instrument, use was made of an ACA system tool that automatically checks the completed survey for errors. In addition, a small team of experienced audit researchers examined the wording of the survey. To ensure that the survey instrument was free of technical errors, ambiguities and any other forms of unclarity, it was pilot tested by 19 accounting and auditing academics in a large university accounting department. The survey took, on average, 20 minutes to complete.

Table 3.1: Audit quality attributes and their operational definitions

Attribute	Operational definition
Audit firm size	Big 4 /mid-tier/local firm
Audit partner tenure	Duration of auditor–client relationship
Provision of non-audit services (NAS)	Proportion of total fees attributable to non-audit services (NAS)
Audit firm industry experience	Industry specialisation
Audit quality-assurance review	Audit quality-control review
Partner/manager attention to audit	Activity level of partner/manager
Communication between audit team and client management	Nature and frequency of communication
Partner knowledgeable about client industry	Years of experience in client industry
Senior manager/manager knowledgeable about client industry	Years of experience in client industry
Very knowledgeable audit team	Years of experience in accounting and auditing

Source: Kilgore et al. 2011: 257

4. Demographics

The respondents were senior members of Australian audit firms. Initially, a senior partner in each of a number of large audit firms was approached to assist in recruiting participants. Following their agreement, each one then emailed partners and senior managers in the same firm, requesting their participation. Three of the 'Big 4' Australian audit firms and a number of mid-tier firms participated in the study. In this way 53 audit partners/managers agreed to take part.

The final section of the ACA questionnaire asked a number of demographic questions. Table 4.1 displays the demographic data for the surveyed auditors. It reveals that approximately two-thirds of the respondents are male (65.3%) and below the age of 45 (80%). Over three-quarters (77.54%) have a Bachelor's degree or graduate diploma; 70% are members of a professional auditing or accounting body, of which a significant majority (73.46%) are members of the Institute of Chartered Accountants in Australia. Well over half (61.21%) are partners and about one-third (32.64%) are managers. The large majority (87.75%) are members of very large audit firms (more than 50 partners).

Table 4.1: Demographics for all respondents (n = 53)

		%
Gender	Male	65.3
	Female	34.7
Age	18–24	0.0
	25–34	38.8
	35–44	40.8
	45–54	20.4
	55–64	0.0
	65–74	0.0
	75 and over	0.0
Highest educational Level	High school	0.0
	Bachelor's degree (commerce/business/economics)/graduate diploma	77.5
	Bachelor's degree (Other)	2.1
	Master's degree (commerce/business/economics)/MBA	8.2
	Other qualification	12.2
Professional body membership*	Association of Chartered Certified Accountants (ACCA)	10.2
	Institute of Chartered Accountants in Australia (ICAA)	73.5
	CPA Australia (CPA)	4.1
	Other (AICD, AICS, NZICA, IIA, IPA)	12.2
Firm size (number of partners)	1–4 partners	8.2
	10–20 partners	2.0
	20–50 partners	2.0
	More than 50 partners	87.8
Position in firm	Audit partner	44.9
	Associate audit director/principal/executive director	16.3
	Senior audit manager	22.5
	Audit manager	8.2
	Assistant audit manager/audit supervisor	2.0
	Other	6.1

* Some respondents indicated membership of more than one professional body. Consequently, the total number of respondents registered here is 65 and the percentages sum to more than 100.

5. ACA results

A feature of collecting and analysing data using ACA is the calculation of a 'relative importance score' (RIS). The relative importance of an attribute is the degree of importance attached to that attribute relative to all the other attributes. RISs are calculated by averaging the relative importance that each respondent attaches to each attribute relative to the other attributes. Relative importance scores measure how much influence an attribute has on a person's choices. An attribute with a high importance score is more influential because the difference between the average utility values at the 'best level' and the 'worst level' for such an attribute is high.

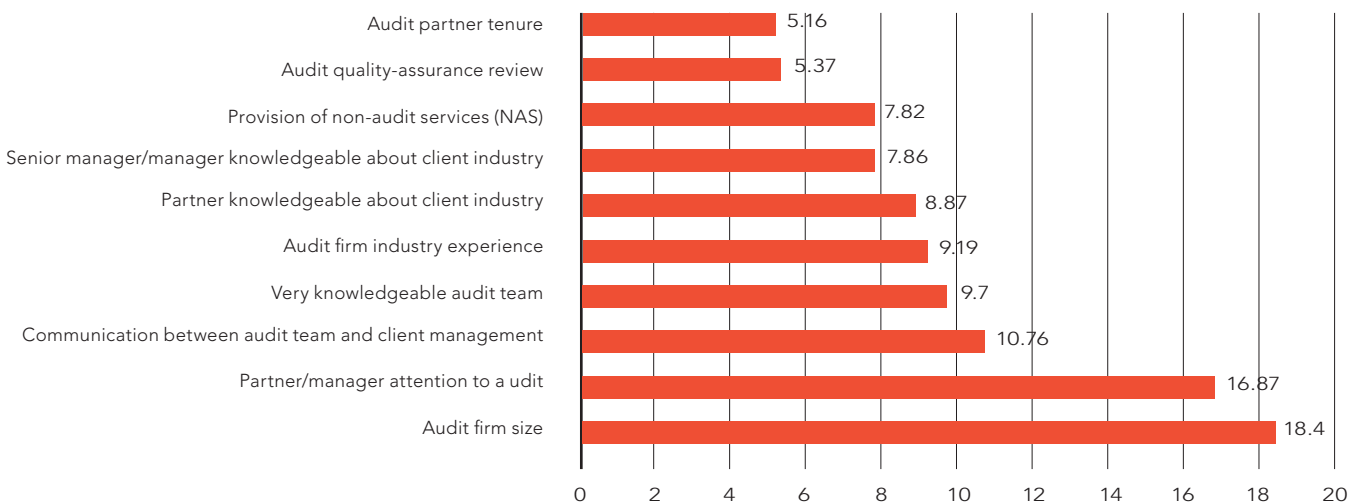
The survey results capture relative importance scores (RIS) for each AQ attribute. These are presented graphically in Figure 5.1. An RIS indicates how strongly, relative to the other attributes, a given attribute

influences a respondent's choices. The ACA method scales the RISs so that the total score for all attributes is equal to 100. Thus if all 10 surveyed attributes had been considered equally important they would all have had an RIS of 10. RISs are ratios: the higher the score, the more influential the attribute, hence an attribute with a score of 10 can be considered twice as important as an attribute with a score of 5.

The results show that the AQ attribute perceived to be most important is 'Audit firm size' (RIS 18.40). In order to understand how to interpret these scores, compare the RIS for 'Audit firm size' (18.40) with the RIS for 'Audit firm industry experience' (9.19). The former score is almost exactly twice the latter, so we can conclude that the survey respondents perceive 'Audit firm size' to be twice as important for AQ as 'Audit firm industry experience'.

As can readily be seen, the attributes that the surveyed respondents view as relatively important for AQ (RIS greater than 10) are 'Audit firm size', 'Partner/manager attention to audit' (RIS 16.87) and 'Communication between audit team and client management' (RIS 10.76), while the three attributes viewed as least important for AQ are 'Audit partner tenure' (RIS 5.16), 'Audit quality assurance review' (RIS 5.37) and 'Provision of NAS' (RIS 7.82). Other attributes considered relatively unimportant (RIS below 10) are 'Senior manager/manager knowledgeable – client industry' (RIS 7.86), 'Partner knowledgeable about client industry' (RIS 8.87), 'Audit firm industry experience' (RIS 9.19) and 'Very knowledgeable audit team' (RIS 9.70).

Figure 5.1: RIS scores for the investigated attributes (n=53)



6. Discussion

The results for all 10 surveyed attributes' RISs are discussed in this section, in the order in which they are listed in Tables 3.1 and 5.1. The relative importance that auditors attach to the various attributes associated with AQ is discussed in the light of previous research on AQ.

The surveyed auditors' perceptions are also discussed in the context of the IAASB's Framework document. The Framework stresses both competence and independence as two of the key factors influencing AQ – an influence they have at both engagement and firm levels – hence the discussion includes analyses of how auditors rank competence versus independence attributes as factors affecting AQ.

6.1 AUDIT FIRM SIZE

It has been noted that the results indicate that auditors perceive 'Audit firm size' to be the most important attribute contributing to AQ (RIS 18.40). This is consistent with the findings of previous studies investigating the perceptions of other audit market stakeholders – for example, Teoh and Wong (1993); Krishnan (2003); Kim et al. (2003); Khurana and Raman (2004); Francis (2004); Pittman and Fortin (2004); Mansi et al. (2004); Francis and Wang (2008); Francis and Yu (2009); Rusmin (2010), and Karjalainen (2011).

As might be expected, the financial resources of large firms enable them to attract and retain talent, initiate extensive training programmes and acquire the latest technology (Simunic and Stein 1987). They are also likely to invest more in R&D and audit methodology, and to be subject to more extensive internal and external quality assurance procedures and reviews – all factors conducive to greater overall competence. Their

greater financial resources are also likely to enable them to be more independent by reducing their financial dependence upon particular clients. Large audit firms also have more to lose if their reputation is called into question, giving them an added incentive to exhibit independence in their audits (DeAngelo 1981). For these reasons 'Audit firm size' can be viewed as both a 'competence' and an 'independence' attribute.

Further, in both respects, 'Audit firm size' resonates with factors associated with AQ in the IAASB's Framework document. For example, on the question of independence, factor 1.2.3 states: 'Financial considerations do not drive actions and decisions that impair audit quality'. Competence is also emphasised in the Framework – for example under factors 1.2.4 ('The firm emphasizes the importance of providing partners and staff with continuing professional development opportunities and access to high-quality technical support'); 1.5.4 ('Sufficient training is given to audit partners and staff on audit, accounting and, where appropriate, specialized industry issues') and 1.8.1 ('The audit methodology is adapted to developments in professional standards and to findings from internal quality control reviews and external inspections'). Professional development, training and keeping abreast of 'new developments in professional standards' all demand resources, and hence are more likely to be within the capacities of larger firms than smaller ones.

6.2 AUDIT PARTNER TENURE

This attribute has the lowest RIS (5.96) of the 10 surveyed attributes. In other words, as might be expected, auditors see value in longer- rather than shorter-

term tenure. While regulators have attempted to limit audit partner tenure on the grounds of a perception that it reduces the partner's independence by creating a close relationship with clients (see, for example, the International Ethics Standards Board for Accountants (IESBA) Code), the low RIS the surveyed auditors gave this attribute suggests that in their eyes these measures are not central to AQ. Alternatively, given that audit tenure is already mandated, they may view it as no longer a consideration worthy of concern.

A number of researchers have investigated the connection between 'Audit partner tenure' and AQ, with mixed results. Some studies (Hills 2002; Carey and Simnett 2006) support placing limits on audit partner tenure. Others, such as Chen et al. (2008) and Chi et al. (2009), have suggested that longer tenure actually improves AQ, possibly because it leads to greater knowledge of a client's business. The present findings would tend to support the latter group of studies.

Since longer tenure is considered to undermine a partner's independence, it can be regarded as an 'independence' attribute and has relevance to the Framework's factors 1.1.3 and 1.2.1, both of which emphasise the importance of auditor independence. Nonetheless, the preference for longer tenure is consistent with the view that longer tenure promotes AQ by benefiting the audit partner's knowledge of the client's business – that is, it is a 'competence' attribute – and this viewpoint is reflected in the Framework's factors 1.4.1 and 1.4.2, which emphasise, respectively, the importance of competence and the partner's knowledge of an entity's business. The most important consideration here is, however, that auditors gave 'Audit partner tenure' the

lowest RIS of all attributes surveyed, suggesting that they do not perceive its overall value, either as an 'independence' factor or as a 'competence' factor, to be as high as that of other attributes.

6.3 PROVISION OF NON-AUDIT SERVICES

This attribute is associated with the perception that the provision of non-audit services may compromise the auditor's independence by increasing the financial benefits the audit firm receives from the client. In the present study this attribute received the third-lowest RIS (7.82) of all the surveyed attributes.

Empirical evidence to date for the claim that provision of NAS has a negative effect on AQ is mixed, with some studies finding a lack of convincing evidence for it (eg Bedard et al. 2008), other studies supporting it (Kanagaretnam et al. 2011; Schmidt 2012), and a third group of studies finding against it (Knechel and Sharma 2011; Svanström and Sundgren 2012). The present findings offer moderate support for the second group.

'Provision of NAS' is traditionally seen as a potential threat to an audit firm's independence. It is therefore an 'independence' attribute, and links to the Framework's independence factors – especially 1.1.2, 1.1.3, 1.2.1 and 1.2.3, the last of which states: 'Financial considerations do not drive actions and decisions that may impair audit quality'. A more important consideration here is that auditors attached relatively little significance to 'Provision of NAS' (RIS 7.82) as a factor affecting AQ, indicating that the respondents see this attribute as relatively unimportant as a driver of AQ.

6.4 AUDIT FIRM INDUSTRY EXPERIENCE

The surveyed auditors gave this attribute an RIS of 9.19, placing it fifth among the 10 surveyed attributes for its perceived impact upon AQ.

This result accords with most research examining the relation between AQ and an auditor's knowledge of the client's industry (for example, Deis and Giroux 1992; Hogan and Jeter 1999; and Solomon et al. 1999) as well as research investigating stakeholders' perceptions of the importance of this attribute for AQ (Craswell et al. 1995, Knechel et al. 2007, and Lowensohn et al. 2007).

This 'competence' attribute links with a number of the competence-related factors in the Framework – in particular, 1.4.2 ('Partners and staff understand the entity's business'), and 1.5.4 ('Sufficient training is given to audit partners and staff on audit, accounting and, where appropriate, specialized industry issues').

6.5 AUDIT QUALITY ASSURANCE REVIEW

This attribute received the second-lowest RIS (5.37) of the 10 attributes featured in this study. This attribute is concerned with the effect upon AQ of mandatory quality controls and reviews under ASQC1¹ and inspections of audit firms by regulatory bodies such as the Australian Securities and Investments Commission (ASIC) and the Public Company Accounting Oversight Board (PCAOB) in the US. These inspections

1. *Quality Control for Firms that Perform Audits and Reviews of Financial Reports and Other Financial Information, and Other Assurance Engagements* (2009), issued by the Australian government's Auditing and Assurance Standards Board and is equivalent to ISQC 1 issued by the IAASB.

impose significant time and financial burdens on audit firms. Given the low RIS accorded to 'Audit quality assurance review' in this study, it appears that auditors perceive these reviews and inspections as having only a relatively limited positive effect on AQ. This conflicts with most of the research to date, which finds a significant and positive relationship between quality controls and reviews and AQ – for example, Epps and Messier (2007) and Schneider and Messier (2007).

The Framework deals with quality assurance under its 'Audit Process and Quality Control Procedures' section. The relevant factors falling under this heading are 2.1.1, 2.2.1, 2.2.5 and 2.2.6, of which the most relevant to the attribute 'Audit quality assurance review' are 2.2.5 ('Rigorous quality control procedures are established and audit quality is monitored and appropriate consequential action is taken') and 2.2.6 ('Where required, effective engagement quality control reviews are undertaken'). The low RIS attributed to 'Audit quality assurance review' in this study suggests that auditors do not appear to place the same level of emphasis upon these considerations as the Framework or the regulators.

6.6 PARTNER/MANAGER ATTENTION TO AUDIT.

This attribute received the second highest RIS (16.87) of all the attributes featured in the study – evidence that the surveyed auditors believe it has a highly significant impact upon AQ. This

result supports previous research. For example, Schroeder et al. (1986) found that Big 8 audit firm partners and Fortune 500 company chairpersons rated this the most important attribute among 15 they investigated for its impact upon AQ, while Carcello et al. (1992) and Kilgore et al. (2011) also found that senior stakeholders in the audit industry rank this attribute very highly for its positive impact upon AQ.

'Partner/manager attention to audit' is an 'interaction' attribute covered by the Framework – for example, it is relevant to its Input factors under the heading 'Values, Ethics, and Attitudes' (eg 1.1.4) and 'Knowledge, Experience and Time' (eg 1.4.4), and also has a strong connection with its Process factors under the heading 'Audit Process and Quality Control Procedures' (see 2.1.4). In these respects the strong emphasis placed on 'Partner/manager attention to audit' in the present study offers support for the Framework. For example, 1.4.4 states: 'The audit engagement partner is actively involved in risk assessment, planning, supervising, and reviewing the work performed' – a proposition which the surveyed auditors would clearly endorse.

6.7 COMMUNICATION BETWEEN AUDIT TEAM AND CLIENT MANAGEMENT

The surveyed auditors viewed 'Communication between audit team and client management' as the third most important influence upon AQ (RIS 10.76) among the 10 attributes investigated. This result supports other studies focusing on this question – for example, Schroeder et al. (1986), Behn et al. (1997), and Murray (2013).

This is another 'interaction' attribute that is reflected in the Framework in both its Input and Process factors. For example, among the former, under the heading 'Knowledge, Experience and Time', is 1.4.7: 'The audit engagement partner and other experienced members of the audit team are accessible to management and those charged with governance', while under Process factors, under the heading 'Audit Process and Quality Control Procedures', 2.1.3 states: 'There is effective interaction with others involved in the audit including, where applicable, internal auditors'. In these places the present study reinforces the Framework.

6.8 PARTNER KNOWLEDGEABLE ABOUT CLIENT INDUSTRY

With an RIS of 8.87, this attribute is perceived by the surveyed auditors to have a moderate impact upon AQ.

The research to date suggests that auditors attach less importance to the audit partner's knowledge of the client's industry than most stakeholders in the audit industry. Zerni (2012: 314), for example, finds that financial statement users and corporate insiders attach substantial significance to this factor.

'Partner knowledgeable about client industry' is a 'competence' attribute covered by the Framework among its Input factors under the heading 'Knowledge, Experience and Time' – for example: 1.4.2: 'Partners and staff understand the entity's business'. While the present study offers some support for this objective, the relatively low RIS (8.87) the surveyed auditors attribute to 'Partner knowledgeable about client industry' means that this support is modest at best.

6.9 SENIOR MANAGER/MANAGER KNOWLEDGEABLE ABOUT CLIENT INDUSTRY

As in the case of the attribute 'Partner knowledgeable about client industry', the attribute 'Senior manager/manager knowledgeable about client industry' received a low RIS (7.86) in the present study, showing that it too is accorded a relatively modest influence upon AQ by auditors.

There has been little research focusing on the impact upon AQ of managers' knowledge of their client's industry, although Carcello et al. (1992) found some evidence of a positive impact. The present results suggest that although it is a factor, auditors regard it as relatively unimportant as a driver of AQ.

As in the case of 'Partner knowledgeable about client industry', 'Senior manager/manager knowledgeable about client industry' is a 'competence' attribute that receives some attention in the Framework, at least by implication. For example, among its Input factors, under the heading 'Knowledge, Experience and Time', 1.4.2 states: 'Partners and staff understand the entity's business'. The low RIS received by 'Senior manager/manager knowledgeable – client industry' (7.86) suggests that auditors ascribe relatively little importance to this attribute as a driver of AQ.

6.10 VERY KNOWLEDGEABLE AUDIT TEAM

It is worth noting that the 'Very knowledgeable audit team' attribute is broad in nature, referring not only to the sum of knowledge possessed by individual members of the audit team but also to knowledge embodied in the

techniques, methodology and other resources employed by the team. The RIS received by this attribute (9.70) indicates that the surveyed auditors perceived it to have at least a moderate impact upon AQ. This supports research by Carcello et al. (1992) and Li and Chen (2011), who argue for a positive relationship between AQ and an audit team's knowledge of their client's industry.

This 'competence' attribute is included in the Framework among its Input factors under the headings 'Values, Ethics, and Attitudes' (1.1.4) and 'Knowledge, Experience and Time' (1.4.1, 1.4.2, 1.4.3 and 1.4.5). For example, 1.4.1 states: 'The engagement team exhibits professional competence and due care', and 1.4.5 states: 'Staff performing detailed "on-site" audit work have sufficient experience, their work is appropriately directed, supervised and reviewed, and there is a reasonable degree of staff continuity'. The fourth highest RIS score attributed to 'Very knowledgeable audit team' in the present study can be seen as an endorsement of the emphasis placed on this attribute in the Framework.

It is of some interest to compare the results for the four 'team' attributes obtained in this study that focus on 'team' versus individual team members – namely 'Partner/manager attention to audit' (RIS 16.87), 'Partner knowledgeable about client industry' (RIS 8.87), 'Senior manager/manager knowledgeable – client industry' (RIS 7.86) and 'Very knowledgeable audit team' (RIS 9.70). The first of these attributes receives a very high RIS – the second highest of all the attributes investigated – while the others receive relatively low scores. Since it is the partners whose perceptions are under

investigation, the question arises as to why they attribute such great importance to their attention to the audit process, relative to the other three attributes. The answer is probably that this reflects the weight of responsibility audit partners personally carry for ensuring a successful audit. If the process were to go wrong, their personal reputation would be at stake. Given the responsibility they carry for the quality of the audits they oversee, it is of further interest to see that they attach relatively little importance to their own knowledge of the client's industry, or to that of the senior manager or manager. What they perceive as significantly more important than either of these factors is a very knowledgeable audit team. Given the responsibility they carry for a successful audit outcome, great weight can be attached to their judgement that it is the team's knowledge that counts.

6.11 SUMMARY OF THE FINDINGS

The results suggest that auditors perceive competence factors as an important contributor to AQ. This is shown in the very high RIS (18.40) received by 'Audit firm size' – an attribute strongly associated with good staff training programmes and up-to-date audit methods. It is safe to conclude, therefore, that auditors would be sympathetic to the Framework's endorsement of these factors in 1.2.4, 1.5.4, 1.8.1. For example, 1.2.4 states: 'The firm emphasizes the importance of providing partners and staff with continuing professional development opportunities and access to high-quality technical support'. As previously reported, auditors also place a high value on another competence factor – 'Very knowledgeable audit team' – as a driver of AQ (RIS 9.70), so it can be

expected that they would agree with the Framework's stress on this factor (for example in 1.4.1. and 1.4.2). Even so, other competence attributes, such as 'Partner knowledgeable about client industry' (RIS 8.87) and, in particular, 'Audit quality assurance review' (RIS 5.16), were attributed relatively little significance by the surveyed auditors.

Independence factors are also emphasised in the Framework – for example at 1.1.3 ('The engagement team is independent') and 1.2.3 ('Financial considerations do not drive actions and decisions that impair audit quality'). Consideration of the surveyed auditors' views on attributes associated with independence – for example, 'Audit partner tenure' (RIS 5.16) and 'Provision of non-audit services' (RIS 7.82) – suggests that they have relatively little significance in the eyes of the auditors as factors that affect audit quality.

The surveyed auditors would, on the other hand, appear to support the emphasis on interaction factors found in the Framework – a concern evident at, for example, 1.4.4 ('The audit engagement partner is actively involved in risk assessment, planning, supervising, and reviewing the work performed') and 2.1.3 ('There is effective interaction with others involved in the audit including, where applicable, internal auditors'). The auditors' support can be inferred from the fact that the attributes 'Partner/manager attention to audit' (RIS 16.87) and 'Communication between audit team and client management' (RIS 10.76) received the second- and third-highest RISs, respectively, of all the investigated attributes.

7. Conclusions

The 10 investigated attributes are categorised into ‘competence’, ‘independence’ and ‘interaction’ factors, and matched against their relative ranking in Table 7.1 below. The following picture emerges from an examination of Table 7.1. The ‘competence’ factors were ranked first (Audit firm size), fourth (Very knowledgeable audit team), fifth (Audit firm industry experience), sixth (Partner/manager attention to audit) and seventh (Senior manager/manager knowledgeable – client industry) in importance; the two ‘interaction’ factors – ‘Partner/manager attention to audit’ and ‘Communication between audit team and client management’ – were ranked second and third respectively; and the two ‘independence’ factors – ‘Provision of NAS’ and ‘Audit partner tenure’ – were ranked eighth and tenth in importance, respectively. These rankings indicate that both the ‘competence’ and ‘interaction’ factors examined in this study were perceived as significant drivers of AQ by the surveyed auditors, and that relatively little importance was attached to the ‘independence’ factors.

While the IAASB’s new Framework has been introduced with the admirable purposes of promoting AQ by focusing on the factors that underpin it, and enhancing confidence in the audit industry, its success in these aims will depend significantly on whether its content and emphases have the support of the industry’s key stakeholders. This study suggests that some of the Framework’s emphasis accords with auditors’ perceptions and concerns.

Table 7.1: Categorisation of attributes and their relative ranking (1 is highest)

Independence	Ranking	Competence	Ranking	Interaction	Ranking
Audit firm size	1	AQ assurance reviews	9	Communication between audit team and client management	3
Provision of NAS	8	Audit firm size	1	Partner/manager attention to audit	2
Audit partner tenure	10	Partner knowledge of client industry	6		
		Very knowledgeable audit team	4		
		Audit firm industry experience	5		
		Partner/manager attention to audit	2		
		Senior manager/manager knowledgeable – client industry	7		

References

- Auditing and Assurance Standards Board (2009), *Quality Control for Firms that Perform Audits and Reviews of Financial Reports and Other Financial Information, and Other Assurance Engagements*.
- Beattie, V. and Fearnley, S. (1995) 'The Importance of Audit Firm Characteristics and the Drivers of Auditor Change in UK Listed Companies', *Accounting and Business Research*, 25 (100): 227–239.
- Beattie, V., Fearnley, S. and Hines, T. (2013), 'Perceptions of Factors Affecting Audit Quality in the Post-SOX UK Regulatory Environment', *Accounting & Business Research*, 43 (1): 56–81.
- Bedard, J., Deis, D., Curtis, M. and Jenkins, J. G. (2008), 'Risk Monitoring and Control in Audit Firms: A Research Synthesis', *Auditing: A Journal of Practice and Theory*, 27 (1): 187–218.
- Behn, B.K., Carcello, J.V., Hermanson, D.R. and Hermanson, R. H. (1997), 'The Determinants of Audit Client Satisfaction among Clients of Big 6 Firms', *Accounting Horizons*, 11 (1): 7–24.
- Carcello, J.V., Hermanson, R.H. and McGrath, N.T. (1992), 'Audit Quality Attributes: The Perceptions of Audit Partners, Preparers, and Financial Statement Users', *Auditing: A Journal of Practice and Theory*, 11 (1): 1–15.
- Carey, P. and Simnett, R. (2006), 'Audit Partner Tenure and Audit Quality', *The Accounting Review*, 81 (3): 653–76.
- Chen, C., Lin, C. and Lin, Y. (2008), 'Audit Partner Tenure, Audit Firm Tenure, and Discretionary Accruals: Does Long-term Auditor Tenure Impair Earnings Quality?' *Contemporary Accounting Research*, 25 (2): 415–45.
- Chi, W., Huang, H., Liao, Y. and Xie, H. (2009), 'Mandatory Audit Partner Rotation, Audit Quality, and Market Perception: Evidence from Taiwan', *Contemporary Accounting Research*, 26 (4): 359–91.
- Craswell, A. T., Francis, J. R. and Taylor, S. L. (1995), 'Auditor Brand Name Reputations and Industry Specialisations', *Journal of Accounting and Economics*, 20 (3): 297–322.
- DeAngelo, L. E. (1981), 'Auditor Size and Audit Quality', *Journal of Accounting and Economics*, 3 (3): 183–99.
- De Fond, M. and Zhang, J. (2013), 'A Review of Archival Auditing Research', Working paper (University of Southern California).
- Deis, D.R. and Giroux, G.A. (1992), 'Determinants of Audit Quality in the Public Sector,' *The Accounting Review*, 67 (3): 462–79.
- Duff, A. (2004), *Auditqual: Dimensions of Audit Quality* (Edinburgh: The Institute of Chartered Accountants, Scotland).
- Elstein, A.V. (2001), 'Study Faults Work of Auditors Who Consult', *Wall Street Journal – Eastern Edition*, 1 August, Column 18.
- Epps, K.K. and Messier, W.F. (2007), 'Engagement Quality Reviews: A Comparison of Audit Firm Practices', *Auditing: A Journal of Practice & Theory*, 26 (2): 167–81.
- Francis, J. (1984), 'The Effect of Audit Firm Size on Audit Prices: A Study of the Australian Market', *Journal of Accounting and Economics*, 6 (2): 133–51.
- Francis, J. (2004), 'What Do We Know About Audit Quality?' *The British Accounting Review*, 34 (4): 345–68.
- Francis, J. and Wang, D. (2008), 'The Joint Effect of Investor Protection and Big 4 Audits on Earnings Quality Around the World', *Contemporary Accounting Research*, 25 (1): 157–91.
- Francis, J. and Yu, M. (2009), 'The Effect of Big 4 Office Size on Audit Quality', *The Accounting Review*, 84 (5): 1521–52.
- Goodwin, J. and Seow, J.L. (2002), 'The Influence of Corporate Governance Mechanisms on the Quality of Financial Reporting and Auditing: Perceptions of Auditors and Directors in Singapore', *Accounting and Finance*, 42: 195–223.
- Hills, R.M. (2002), 'Oversight Hearing on "Accounting and Investor Protection Issues Raised by Enron and Other Public Companies"'. US Senate Committee on Banking, Housing and Urban Affairs' 107th Cong., 2nd sess. 12 February.
- Hogan, C.E. and Jeter, D.C. (1999), 'Industry Specialisation by Auditors', *Auditing: A Journal of Practice and Theory*, 18 (1): 1–17.
- IAASB (International Auditing and Assurance Standards Board) (2013), *A Framework for Audit Quality*, <<http://www.ifac.org/publications-resources/framework-audit-quality>>, accessed April 2014.
- Johnson, R.M. (1987), 'Adaptive Conjoint Analysis', in Metegrano, M (ed.), *Sawtooth Conference on Perceptual Mapping, Conjoint Analysis and Computer Interviewing*, 253–65 (Ketchum, ID: Sawtooth Software).
- Kanagaretnam, K., Krishnan, G. and Lobo, G. (2010), 'An Empirical Analysis of Auditor Independence in the Banking Industry', *The Accounting Review*, 85 (6): 2011–46.

- Karjalainen, J. (2011), 'Audit Quality and Cost of Debt Capital for Private Firms: Evidence from Finland', *International Journal of Auditing*, 15 (1): 88–108.
- Khurana, I. and K. Raman (2004), 'Litigation Risk and the Financial Reporting Credibility of Big 4 Versus Non-Big 4 Audits: Evidence from the Anglo-American Countries', *The Accounting Review*, 79 (2): 473–95
- Kilgore, A., Radich, R. and Harrison, G. (2011), 'The Relative Importance of Audit Quality Attributes', *Australian Accounting Review*, 21 (3): 253–65.
- Kim, J., Chung, R. and Firth, M. (2003), 'Auditor Conservatism, Asymmetric Monitoring, and Earnings Management', *Contemporary Accounting Research*, 20 (2): 353–59.
- Knechel, W. R., Naiker, V. and Pacheco, G. (2007), 'Does Audit Industry Specialization Matter? Evidence from Market Reaction to Auditor Switches', *Auditing: A Journal of Practice and Theory*, 26 (1): 19–46.
- Knechel, W. R. and Sharma, D. (2012), 'Auditor-Provided Non-Audit Services and Audit Effectiveness and Efficiency: Evidence From Pre- and Post-SOX Audit Report Lags', *Auditing: A Journal of Theory and Practice*, 32 (4): 85–114.
- Krishnan, G. (2003), 'Does Big 6 Auditor Industry Expertise Constrain Earnings Management?', *Accounting Horizons* (Supplement): 1–16.
- Li, K. and Chen, Y. (2011), 'The Effects of Pre-client Industry Experience on Restatement at the Audit Partner Level and Audit Team Level', Working paper, Ming-Chuan University and National Taiwan University.
- Lowensohn, S., Johnson, L.E., Elder, R.J. and Davies, S.P. (2007), 'Auditor Specialization, Perceived Audit Quality and Audit Fees in the Local Government Audit Market', *Journal of Accounting and Public Policy*, 26 (6): 705–32.
- Mansi, S., Maxwell, W. and Miller, D. (2004), 'Does Auditor Quality and Tenure Matter to Investors? Evidence from the Bond Market', *Journal of Accounting Research*, 42 (4): 755–93.
- Martinov-Bennie, N. and Kilgore, A. (2014), 'Driving Audit Quality', *Accountancy Futures*, Edition 8: 71–3.
- Monroe, G.S. and Tan, E. (1997), 'The Relationship Between Audit Firm Size and Audit Quality: An Empirical Investigation of Australian Audits', *Perspectives on Contemporary Auditing*, 1 (1): 35–47.
- Murray, Z. (2013), 'Audit Quality: The Role of Management', *Chartered Accountants Journal*, 92 (5): 34–5.
- Pittman, J. and Fortin, S. (2004), 'Auditor Choice and the Cost of Debt Capital for Newly Public Firms', *Journal of Accounting and Economics*, 37 (1): 113–36.
- Rusmin, R. (2010), 'Auditor Quality and Earnings Management: Singaporean Evidence', *Managerial Auditing Journal*, 25 (7): 618–38.
- Schmidt, J. (2012), 'Perceived Auditor Independence and Audit Litigation: The Role of Non-audit Services Fees', *The Accounting Review*, 87 (3): 1033–65.
- Schneider, A. and Messier, W. (2007), 'Engagement Quality Review: Insights from Academic Literature', *Managerial Auditing Journal*, 22 (8): 823–39.
- Schroeder, M., Solomon, I. and Vickery, D. (1986), 'Audit Quality: The Perceptions of Audit-Committee Chairpersons and Audit Partners', *Auditing: A Journal of Practice and Theory*, 5 (2): 86–94.
- Simunic, D.A. and Stein, M.T. (1987), *Product Differentiation in Auditing: Auditor Choice in the Market for Unseasoned New Issues* (Vancouver: Canadian Certified General Accountants' Research Foundation Monograph).
- Solomon, I., Shields, M.D. and Whittington, O.R. (1999), 'What Do Industry-Specialist Auditors Know?', *Journal of Accounting Research*, 37 (1): 191–208.
- Svanström, T. and Sundgren, S. (2012), 'The Demand for Non-audit Services and Auditor-Client Relationships: Evidence from Swedish Small and Medium-sized Enterprises', *International Journal of Auditing*, 16 (1): 54–78.
- Teoh, S. and Wong, T.J. (1993), 'Perceived Auditor Quality and the Earnings Response Coefficient', *The Accounting Review*, 68 (2): 346–66.
- Wallman, S.M.H. (1996), 'The Future of Accounting, Part III: Reliability and Auditor Independence', *Accounting Horizons*, 10 (4): 76–97.
- Warming-Rasmussen, B. and Jensen, L. (1998), 'Quality Dimensions in External Audit Services – An External User Perspective', *European Accounting Review*, 7 (1): 65–82.
- Zerni, M. (2012), 'Audit Partner Specialization and Audit Fees: Some Evidence from Sweden', *Contemporary Accounting Research*, 29 (1): 312–40.

POL-TP-DAQ2(AUDITORS)