

The drivers of audit quality: company directors' 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 170,000 members and 436,000 students in 180 countries, helping them to develop successful careers in accounting and business, with the skills required by employers. We work through a network of 92 offices and centres and more than 8,500 Approved Employers worldwide, who provide high standards of employee learning and development. Through our public interest remit, we promote appropriate regulation of accounting and conduct relevant research to ensure accountancy continues to grow in reputation and influence.

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 company directors' perceptions about the drivers of audit quality.

It forms the final 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

Audit quality (AQ) has since the turn of the millennium become a major concern for regulators and standard setters, partly as a result of the series of globally reported corporate collapses that marked the early years of the new millennium, many of which were associated with audit failure. Along with the global financial crisis of 2007–8, these events have served to remind audit industry stakeholders of the importance of AQ both for corporate stability and, more generally, for healthy capital markets (Wallman 1996; Coffee 2001; Chang et al. 2009). This has resulted in a substantial body of new literature on the nature of AQ, the means of achieving it, and the attributes that promote it (Francis et al. 2011; Knechel et al. 2013).

Close scrutiny by regulatory bodies, both governmental and professional, over the past decade has led to the introduction of a range of important initiatives and reforms intended to heighten awareness of the importance of AQ and to improve it. The Corporate Law Economic Reform Program Act 2004 (CLERP 9) in Australia, the Sarbanes–Oxley Act (2002) in the US, and the Combined Code (2003) in the UK are examples of government regulatory initiatives intended to improve standards of corporate governance and audit quality. Regulatory and standard-setting bodies within the audit industry have also developed a number of important documents giving guidelines for improving AQ, such as, in the UK, *The Audit Quality Framework* (Financial Reporting Council 2008); in Australia, *Audit Quality in Australia – A Strategic Review* (Australian Treasury 2010); in the US, *Strategic Plan: Improving the Relevance and Quality of the Audit for the Protection and Benefit of Investors* (Public Company Accounting Oversight Board 2012); and more generally, *A Framework for Audit Quality*

(International Auditing and Assurance Standards Board 2014).

These regulatory changes and guidelines have been introduced despite the fact that evidence identifying the factors that are important for AQ is inconclusive (Francis et al. 2011). The present work responds to this need by investigating the perceptions of company directors (directors) about the attributes they view as relatively important for AQ. A number of previous studies investigating audit industry stakeholders' perceptions of AQ have focused on the perceptions of the suppliers of audit services – the individuals who in various roles and levels of seniority represent the firms that supply audit services – while others have been concerned with the perceptions of users of audit services, such as audit committee chairs, financial analysts and audit industry regulators. Regarding the supply of audit services, a number of earlier studies have investigated the perceptions of the partners and managers of audit firms (eg Schroder et al. 1986), while studies researching the demand for audit services have investigated perceptions of AQ held by audit committee chairs, financial analysts and fund managers (eg Kilgore et al. 2014).

The present study, in investigating directors' views on the relative importance of various AQ attributes, focuses on the demand for audit services – ie on the users/purchasers of audit services, using the concept of credence goods to investigate directors' perceptions of AQ. Credence goods are goods or services bought 'on trust', in the sense that the quality of the good or service purchased is unobservable to the buyer both before and after purchase. The notion of credence goods is closely associated

with the concept of information asymmetry. When customers purchase credence goods, they lack the knowledge about the quality or value of the good or service but the supplier has detailed knowledge, hence a situation of 'information asymmetry': the supplier knows what the purchaser does not.

Directors' perceptions of factors important to AQ are particularly interesting because they stand on the 'demand' side of the audit transaction, hence are subject to information asymmetry. In fact, information asymmetry takes a particularly strong form in their case. For example, while both directors and CFOs are consumers of audit services, and therefore subject to a degree of information asymmetry, the role of CFOs gives them some contact with the audit process and audit team, while directors' contact is generally limited to infrequent and brief interactions with the audit partner at board or audit committee meetings.

The purpose of the present research is to examine the attributes directors consider relatively important in their assessment of AQ, given that they are purchasing a credence good within a context of strong information asymmetry. This is a question of particular interest given the fundamental responsibility directors carry as the primary representatives of shareholders in the modern corporation and, in particular, the fact that in some jurisdictions, such as Australia, they are responsible for managing the process of appointing an auditor and for ensuring AQ (ASIC 2014). It is of great importance to establish which factors directors regard as the most important indicators of AQ, and whether information about these factors is readily available to them; if it is not, this is of some concern and needs to be addressed.

2. Literature review and hypothesis development

2.1 CREDECE GOODS

Any purchased good or service possesses one of a number of attributes that economists refer to as search attributes, experience attributes and credence attributes (Nelson 1970; Dulleck and Kerschbamer 2006; Leland 1979; Spiegler 2006). Search attributes can be directly¹ observed by a buyer before purchase and therefore result in minimum information asymmetry. On the other hand, experience attributes cannot be directly observed prior to purchase but are observable afterwards, hence there is information asymmetry before purchase but this is resolved following the purchase. Credence attributes, however, are not directly observable either before and after purchase and therefore give rise to information asymmetry in its strongest form: both before and after purchase there are important attributes of the good or service which, while fully known to the seller, cannot be determined by the buyer.

The resulting uncertainty for the purchaser can take three forms:

- uncertainty about whether the good or service they receive fully meets their needs
- uncertainty about whether they actually need the good or service, or the quantity of the good or service, they pay for, and

- uncertainty as to whether they actually receive what they have contracted to receive (Akerlof 1970; Francis 2004; Causholli and Knechel 2012).

In each case the uncertainty is only on the buyer's side; the seller knows the buyer's needs and the quantity and quality of the good or service being sold. Consequently, this information asymmetry can be used to the seller's own advantage, since the seller can exploit this uncertainty by undertreating, overtreating or overcharging the buyer for the goods or services supplied (Causholli and Knechel 2012: 633–4).

2.2 AUDIT SERVICES AS CREDECE GOODS

As Lizzeri (1999), Causholli and Knechel (2012) and van Buuren et al. (2014) argue, the provision of audit services can be considered a credence good. This is so because, as van Buuren et al. (2014: 10) comment, 'only the audit partner is likely to understand the actual audit effort and audit quality delivered'. The basis of the claim that audit services are a credence good is, firstly, that the outcome of an audit is unobservable (Causholli and Knechel 2012). The possibility of failing to detect a material misstatement can never be eliminated (Knechel et al. 2009), hence the actual level of assurance achieved after the completion of an audit can never be known, and it is difficult even

to determine whether minimum standards have been met. Secondly, given the complexity of the audit process, the auditor's professional judgement is required to determine the extent and cost of the audit required (Knechel et al. 2009), and it is generally the auditor who provides both the assessment and the actual service. Furthermore, the client depends on the auditor's expertise in making these judgements.

Given these considerations, all three of the above-mentioned types of uncertainty apply to the users of audit services, and these correspond, in turn, to the possibility of market inefficiencies that can have significant economic consequences for these users – in particular, undertreatment, overtreatment or overcharging (or combinations thereof, such as undertreatment plus overcharging) (Causholli and Knechel 2012; van Buuren et al. 2014). The client cannot tell whether a prescribed level of audit effort is sufficient for their needs, or necessary for those needs, or whether the level of assurance provided actually matches the level that was promised: a situation of significant information asymmetry with potentially serious consequences. For example, undertreatment exposes the client to the risk of financial failure, while overtreatment, overcharging and combinations thereof result, at the very least, in substantial additional expenses incurred for no benefit at all.

1. The quality of a good is directly observable when the purchaser can verify it through their own experience of the purchased good or service. This excludes cases where the purchaser 'verifies' the quality of the good by using a stand-in for experience, such as noting the good name or brand image of the seller, or by taking account of the assurances of an 'expert' prepared to recommend the good's quality or effectiveness.

These insights into the information asymmetry characterising the audit process highlight a number of common assumptions about audit services, the most important being that the quality of an audit can be discerned by the 'auditee' after its completion: an assumption to be found in many studies of AQ, such as Brown and Raghunandan (1995), Colbert and Murray (1998), Balsam et al. (2003) and Krishnan (2003). This brings into question an assumption that underservicing, overservicing or overcharging by auditors will be noticed and penalised (Causholli and Knechel 2012: 645). This also affects relative complacency about the dual role of the auditor as both assessor and provider of the client's audit requirements, and obscures the need for the nature of audit contracting to be re-evaluated.

2.3 HYPOTHESIS DEVELOPMENT

As discussed above, there is a difference between a buyer's perspective in the exchange of goods and a seller's perspective – a distinction which, in studies of AQ, separates those who investigate client demand for audit services from those who investigate the supply of audit services (see De Fond and Zhang 2013). This study investigates buyers' perceptions of AQ: specifically, those of directors. What is of particular interest about directors' perceptions of AQ is that they are purchasing a credence good in a context of strong information asymmetry. The purpose of this report is to shed light on directors' perceptions of the relative importance of selected AQ attributes. Given the information asymmetry to which they are subject, it is expected that they are likely to assign the greatest importance to attributes of AQ about which they have information, in preference to attributes about which information is unavailable.

Based on the foregoing discussion the following hypotheses are developed.

H1: Directors perceive attributes for which information is available as relatively important in their assessment of AQ.

H2: Directors perceive attributes for which information is not readily available as relatively unimportant in their assessment of AQ.

3. Methodology

3.1. SURVEY QUESTIONNAIRE

Data for this study was collected using an online survey of Australian directors of companies listed on the Australian Securities Exchange (ASX), for which audits are mandated. The study used Sawtooth Software's Adaptive Conjoint Analysis (ACA) system, developed by Johnson (Johnson 1987; Sawtooth Software 2007). An advantage of ACA is that it is 'adaptive', in the sense that it tailors later questions in the questionnaire by taking into account the respondent's replies to earlier questions, thus creating a unique series of questions customised to each respondent. ACA is in this way able to obtain information on the relative importance a respondent attaches to an attribute compared with other attributes, as distinct from their absolute importance. ACA makes it possible to investigate a concept such as AQ by breaking it down into component attributes and then determining how individuals value those attributes relative to each other. The underlying assumption is that the value the individual attaches to the concept under investigation – in this case AQ – is the sum of the values he or she attaches to its component attributes (eg firm size, the engagement team's knowledge of the client's industry, the audit partner's attention to the audit process, and so on). The number of attributes was limited to 10 for two reasons. First, there is a need to maintain subjects' interest in the task, and second, there were time constraints. Having too many attributes creates issues in both areas.

3.2. ATTRIBUTES INVESTIGATED

A set of 10 attributes of AQ were selected, drawing on the results from some of the best-known studies of perceptions of AQ. Apart from the already-mentioned work of Schroeder et al. (1986), Carcello et al. (1992), and Warming-Rasmussen and Jensen (1998), other studies used in selecting the 10 attributes were Francis (1984), Craswell et al. (1995), Kilgore et al. (2011) and Kilgore et al. (2014).

Information about some of the attributes investigated is readily available to directors, but this is not true for others. Of the attributes falling into the first category, information about three of them is publicly available. For example, 'Audit firm size' is common knowledge, while information regarding 'Provision of non-audit services (NAS)' is disclosed in the financial statements, and 'Audit firm industry experience' is usually available on the audit firm's website. The remaining attributes falling into the first category are 'Partner knowledgeable about client industry' and 'Senior manager/manager knowledgeable about client industry'. Information about these is available to directors through interaction at board or audit committee meetings or from audit tender/proposal documentation.

Information about the remaining attributes is not readily available to directors. Among these, information about 'Audit partner tenure' on continuing audits can only be ascertained by making inquiries or by checking audit reports over recent years, while information about 'Audit

quality assurance reviews' is confidential: something that applies to both internal or external regulatory reviews of individual audit engagements and to reviews of audit firms. Finally, information about the attributes 'Partner/manager attention to audit', 'Communication between audit team and client management' and 'Very knowledgeable audit team' is not readily available to directors because acquiring that information calls for direct observation of the audit process.

3.3. PARTICIPANTS

Participants for the study were recruited from ASX 300 companies using the Boardroom and Data Analysis Premium databases. Invitations to participate were mailed to directors, along with information about the study, an expression-of-interest form and a reply-paid envelope. Forty-five positive replies were received, upon receipt of which a link to the online survey was emailed to participants.

The survey gathered demographics on respondents' gender, age, education, membership of professional bodies, type of directorship, size of the firm measured by revenue, assets and number of employees. Most respondents were male (76%) and aged 55 or above (71%). All but two had tertiary-level qualifications, and half of these also held postgraduate degrees. Almost all were non-executive directors (90%), and 16 of these (42%) were chairmen of their firm's board. Thirty of the firms in question had assets exceeding \$250m, 24 (63%) generated revenue exceeding \$500m and 27 (71%) employed more than 250 staff.

4. Results

ACA calculates relative importance scores (RISs) for each AQ attribute. An RIS indicates the importance of the attribute relative to other attributes in respondents' assessments of AQ. ACA scales the RISs so that the total score for all attributes equals 100. (If all were considered equally important, each would have an RIS score of 10.) RISs are ratios and so the higher the score, the more influential the attribute. Thus an attribute with a score of 20 can be considered twice as important as an attribute with a score of 10, and so on.

The RISs are reported in Table 4.1. To understand how these results should be interpreted, compare, for example, the RIS score for 'Audit firm size' (14.60) with the RIS score for 'Audit quality assurance review' (5.03). The former score is almost three times greater than

the latter, indicating that the surveyed directors perceive 'Audit firm size' to be almost three times more important for AQ than 'Audit quality assurance review'.

Table 4.1 shows that 'Audit firm size', with an RIS of 14.60, was perceived by the directors to be by far the most important indicator of AQ among the 10 attributes investigated. Information about this attribute is publicly available, hence easily accessible to directors. Given that directors operate in a context of strong information asymmetry, it is not surprising that they regard this attribute as such an important indicator of AQ. What is more surprising about the results is that, as Table 4.1 shows, two of the top five attributes, ranked in the order of their relative importance for directors as indicators of AQ – in fact, the attributes

ranked second and third – are ones about which information is not readily available to the directors. Similarly, two of the remaining five attributes, ranked by directors in the bottom five for relative importance for AQ, are ones about which information is readily available to directors, yet directors assessed them as of relatively little importance as indicators of AQ. These results are therefore only marginally in line with the expectations as expressed in the hypotheses outlined in section 2.3. As regards H1, there was only a slight preference in favour of indicators of AQ about which information is readily available to directors, and as regards H2, conversely, directors have only a slight inclination to assess attributes about which information is not readily available as being relatively unimportant indicators of AQ.

Table 4.1: Relative importance scores (RIS), ranking and information availability to directors (n=45) of attributes tested

Attribute	RIS	Ranking	Readily available (RA) / Not readily available (NRA)
Attributes about which information is readily available to directors			
Audit firm size	14.66	1	RA
Provision of non-audit services (NAS)	10.07	5	RA
Audit firm industry experience	9.68	8	RA
Partner knowledgeable about client industry	10.04	6	RA
Senior manager/manager knowledgeable about client industry	10.27	4	RA
Attributes about which information is not readily available to directors			
Audit partner tenure	4.97	10	NRA
Audit quality assurance review	5.09	9	NRA
Partner/manager attention to audit	14.18	2	NRA
Communication between audit team and client management	11.30	3	NRA
Very knowledgeable audit team	9.74	7	NRA

5. Discussion

5.1. AUDIT FIRM SIZE

Directors perceived this attribute, with an RIS of 14.66, as by far the most important indicator of AQ among the 10 attributes investigated. As previously indicated, information about audit firm size is publicly available, so the high RIS received for this attribute confirms the expectation that, because of strong information asymmetry, directors would deem relatively important those AQ attributes about which information is readily available. This result therefore supports research hypothesis H1.

The result is also consistent with previous studies of stakeholders' perceptions of AQ; audit firm size has regularly emerged, in assessments of AQ, as the attribute perceived as the most important of the attributes investigated (Kilgore et al. 2011; Kilgore et al. 2014). There are a number of explanations for the importance attached to 'Audit firm size' as an indicator of AQ: for example, that large firms give their clients' financial statements greater credibility (Dopuch and Simunic 1980; Francis et al. 1999); that large firms are better resourced and can therefore offer clients a better service (Simunic and Stein 1987); and that large firms have a brand name and reputation to protect and therefore have more to lose if they produce a low-quality audit (Simunic and Stein 1987; Francis and Wilson 1988).

5.2. AUDIT PARTNER TENURE

This attribute received the lowest RIS (4.97) among those surveyed, indicating that directors attach relatively little importance to it in their assessments of AQ. This suggests that directors do not strongly support measures taken by regulators to limit audit partner tenure (see for example the IESBA code), and the rationale for this measure, namely,

the contention that longer tenure creates unhealthy relations between the client firm and the audit partner, reducing the latter's independence and objectivity, as suggested by Carey and Simnett (2006). The directors' position appears to be consistent with the findings of other research, that longer tenure benefits AQ by enhancing the partner's knowledge of the client's industry (Chi et al. 2009; Lin and Hwang 2010). Nonetheless, it is important to note an alternative possible explanation: that the directors no longer see tenure as an issue because it is legislated and therefore out of their control.

Since 'Audit partner tenure' is an AQ attribute about which information is not readily available to directors, the low RIS it received in this study is consistent with the expectation that because directors operate in a context of information asymmetry, they are likely to rate such an attribute as relatively unimportant as an indicator of AQ. This result supports research hypothesis H2.

5.3. PROVISION OF NON-AUDIT SERVICES (NAS)

This attribute received an RIS of 10.07, placing it just above the mean among the 10 investigated attributes of AQ. The moderate relative importance assigned to this attribute suggests that directors agree with research that argues that AQ declines relative to the percentage of income auditors receive from clients for NAS. This view is supported, for example, by Kanagaretnam et al. (2011) and Schmidt (2012), but some researchers have argued that the research results are inconclusive (eg Bedard et al. 2008) while others argue that NAS benefits AQ, perhaps by virtue of what Knechel et al. (2013) and others have called a 'knowledge spillover' (Knechel and Sharma 2011; Svanström and Sundgren

2012). The present results offer modest support for the argument that the AQ declines relative to percentage of income auditors receive from NAS.

Information on provision of NAS is readily available to directors, so the moderate importance directors attribute to 'Provision of NAS' is not inconsistent with the expectation that because directors operate in a context of information asymmetry, they can be expected to assess such attributes as relatively important indicators of AQ. That directors attach only moderate importance to this attribute may be because they have control over the level of NAS, and furthermore, are required to provide an annual independence statement. This result offers some level of support for research hypothesis H1.

5.4. AUDIT FIRM INDUSTRY EXPERIENCE

This attribute received an RIS of 9.68, indicating that it is less important in directors' assessments of AQ. Although this finding is contrary to expectations about the level of this attribute's relative importance, it is nevertheless in line with most of the research in this area. Craswell et al. (1995), Knechel et al. (2007) and Lowensohn et al. (2007) have found that stakeholders regard industry specialisation as a driver of AQ, and Deis and Giroux (1992), Hogan and Jeter (1999) and Solomon et al. (1999) point to evidence supporting a positive relation between an auditor's knowledge of their clients' industry and AQ.

Since information about an audit firm's industry experience is available to directors, the fact that this attribute scored below the mean in directors' perceptions of its relative importance as an indicator of AQ fails to support the expectation that because directors work in a context of strong information

asymmetry, they will favour attributes such as this as indicators of AQ. This result does not support research hypothesis H2.

5.5. AUDIT QUALITY ASSURANCE REVIEW

This attribute received the second-lowest RIS (5.09) of the 10 investigated attributes. The low RIS indicates that, overall, directors attach relatively little importance to audit quality reviews. This result conflicts with existing research. For example, Epps and Messier (2007) and Schneider and Messier (2007) report a positive relation between external quality reviews and AQ. Therefore the relative lack of significance that directors attach to these reviews in this study suggests that further research on the question of their perceived effectiveness would be of value. Clarity on this question is of some importance, given that these reviews – particularly mandatory inspections of audit firms by regulatory bodies – are extremely costly in both money and time.

Information about the results of quality assurance reviews of individual audit engagements is not publicly available, so this information is unavailable to directors. Hence the very low RIS received by this attribute conforms to the expectation that because directors operate in a context of strong information asymmetry, they are less likely to assign relative importance to attributes about which information is unavailable to them. This result supports research hypothesis H1.

5.6 PARTNER/MANAGER ATTENTION TO AUDIT

This attribute received the second highest RIS (14.18) of the investigated attributes. The study's finding that directors place a high value on an audit

partner's attention to the engagement process is consistent with previous studies, which show a widespread perception among diverse audit industry stakeholders that an audit partner's close involvement in the audit process is a strong positive indicator of high AQ (Schroeder et al. 1986; Carcello et al. 1992; Kilgore et al. 2011).

Information about a partner's or manager's attention to the audit is only available to those able to observe the audit process directly, and hence is unavailable to directors. The very high RIS directors awarded this attribute is therefore not consistent with the expectation that because they operate in a context of strong information asymmetry, they will favour attributes about which information is available to them as relatively important indicators of AQ. This result does not support research hypothesis H2.

5.7. COMMUNICATION BETWEEN AUDIT TEAM AND CLIENT MANAGEMENT

The RIS received by this attribute (11.31) placed it third among the investigated attributes, showing that directors perceive it to be relatively important in their assessments of AQ. This result supports other studies that have found a perception among audit industry stakeholders that communication between an audit team and client firm managers is an important element in high AQ (Schroeder et al. 1986, Behn et al.1997; Murray 2013).

Information about this attribute is not readily available to directors, so the high relative importance they attached to this attribute is contrary to the expectation that they would rate such attributes as relatively unimportant as drivers of AQ. The RIS for this attribute does not support research hypothesis H2.

5.8. PARTNER KNOWLEDGEABLE ABOUT CLIENT INDUSTRY

This attribute also received a close-to-the-mean RIS (10.04). This is another attribute perceived by directors to be of moderate importance relative to other attributes. The significance directors attached to the engagement partner's industry experience as an indicator of AQ is consistent with earlier research. See, for example, Zerni (2012), whose findings are that client firms infer AQ at least to some extent from the individual knowledge and experience of the audit partner in charge.

Information about an audit partner's knowledge of the client's industry is available to directors, so the moderate relative importance directors attached to this attribute is consistent with the expectation that directors would favour such an attribute as an indicator of AQ and supports research hypothesis H1.

5.9. SENIOR MANAGER/MANAGER KNOWLEDGEABLE ABOUT CLIENT INDUSTRY

This attribute received an RIS of 10.27, placing it fourth among the investigated attributes for perceived impact upon AQ. This indicates that directors place considerable importance on managers' knowledge of their client's business or industry. Interestingly, this attribute is also placed first among the three 'knowledge' attributes investigated in this study (5.8, 5.9 and 5.10): attributes, that is, concerned with auditors' knowledge of the client's industry. The greater importance that directors attach to the audit manager's industry experience than to that of the engagement partner may indicate that they perceive the 'hands on' practical influence of the manager on the engagement to be more important to AQ than the more distant authority

exercised by the partner. There is limited research on the influence of audit managers' industry experience on AQ. Kilgore et al. (2011) report that users of audit services attach some significance to managers' industry experience as a driver of AQ, and the present study supports that finding.

Information about audit managers' knowledge of their clients' industry is available to directors, as they would generally attend board and/or audit committee meetings with the engagement partner. Consequently, the significant impact upon AQ that directors ascribe to this attribute is consistent with the expectations and supports research hypothesis H1.

5.10. VERY KNOWLEDGEABLE AUDIT TEAM

The RIS of 9.74 received for this attribute makes it yet another to which directors accorded a level of importance very close to the mean, as an indicator of AQ. Nonetheless, this RIS places it only seventh in importance as an indicator of AQ, showing that directors attach less importance to it than to most other attributes investigated. This result is not inconsistent with the findings of those researchers (eg Li and Chen 2011) who report a positive relation between an audit team's industry experience and AQ.

The extent of an engagement team's audit experience and knowledge of their client's industry is not readily available to directors, so the relative lack of importance that they attach to this attribute is consistent with the expectations and supports research hypothesis H2.

6. Conclusions and implications

As indicated earlier, the perception of directors that audit firm size is the most important attribute in their assessments of AQ is one they share with the majority of stakeholders across the audit industry. This is an unsurprising result given that directors operate in circumstances of strong information asymmetry. Information about audit firm size is publicly available, so asymmetry is not a problem here. It would be expected that directors would favour such attributes as more important indicators of AQ than attributes that are less easily assessed. Arguably, furthermore, as purchasers of a credence good, directors, like other consumers in this situation, have reason to resort to reliance on the seller's name or reputation, and in an audit context that means turning to those firms that are best known, have a high reputation and have ample resources available to them: in practice, large firms.

Nonetheless, as noted earlier, and contrary to expectations, the surveyed directors did not consistently prefer such readily assessed attributes in their assessments of AQ. Indeed, the attributes that emerged as those they regarded as the second and third most important for AQ were attributes about which information is not readily available to them (see Table 4.1). A likely explanation for this finding is that the directors, rather than indicating attributes they were able to judge for themselves as the best indicators of AQ, stated what they believed were in fact the best indicators of AQ. On this basis, of the five attributes that they regard as most important for AQ, two are ones that they cannot readily assess for themselves.

There is a plausible further explanation for the order in which directors ranked the relative importance of the attributes. As noted, the fact that audit firm size is ranked as the most important attribute has a ready explanation in the fact that directors, operating in circumstances of strong information asymmetry are likely to turn to the audit firm's brand and reputation – hence the size of the firm – for reassurance as to the quality of the audit service likely to be received. The remaining attributes ranked among the six most important indicators of AQ are all concerned either with the relationship between senior members of the audit team and the client (ie 'Communication between audit team and client management'; 'Provision of non-audit services (NAS)') and with the engagement team (ie 'Partner/manager attention to audit'), or with senior members' competence (ie 'Senior manager/manager knowledgeable about client industry'; 'Partner knowledgeable about client industry'). A ready explanation for this is that because directors operate in circumstances of information asymmetry, they have little option but to place their faith in their relationship with senior members of the audit firm, and to trust in those senior auditors' competence to safeguard their interests in keeping a close watch on the progress of the audit.

The survey results have important implications because they are likely to have significant economic consequences for all stakeholders. The audit industry is of critical importance to economic stability not only at a corporate but also at a national and

global level, and users of audit services are expending significant resources on these services. Despite this, two of the three criteria the directors regard as the most reliable and important indicators of high audit quality are attributes that they cannot directly assess themselves. This confirms that directors operate in circumstances of strong information asymmetry, and it raises the further concern that the kinds of market inefficiencies associated with information asymmetry that were pointed out in section 2.2 – namely, undertreatment, overtreatment or overcharging – are also likely to characterise the audit industry.

The attributes that directors ranked second and third in relative importance for AQ were 'Partner/manager attention to audit' and 'Communication between audit team and client management'. These results have significant implications for audit firms. As remarked earlier, it is commonly the directors in potential client firms who carry the responsibility for engaging and/or approving the auditors, hence, for marketing reasons, directors' perceptions of the attributes of greatest importance for AQ are of substantial interest to audit firms. Although directors cannot determine for themselves what degree of attention the partners or managers in an audit firm give to audit engagements, or the nature and degree of the communication between the firm's audit teams and their clients' management, directors regard these as highly significant indicators of AQ, so auditors have good reason to emphasise these attributes in publicity materials and other means of

communication likely to reach directors and other stakeholders in the audit industry.

Directors' perceptions of the attributes most important to AQ are also of interest to industry regulators in formulating policy and guidelines for improving audit quality. It should be of concern to regulators that information about two of the three attributes directors perceive as the most important indicators of AQ is not readily available to them, placing them in a situation of strong information asymmetry and making them vulnerable to market inefficiencies such as undertreatment, overtreatment or overcharging. The present findings suggest that it would be of benefit to the audit industry for regulators to seek ways of reducing the information asymmetry faced by directors and other external shareholders by introducing measures that make the desired information more readily available to users of audit services.

References

- Akerlof, G. A. (1970), 'The Market for "Lemons": Quality Uncertainty and the Market Mechanism', *The Quarterly Journal of Economics*, 84 (3): 488–500.
- ASIC (Australian Securities and Investments Commission) (2014), *Audit Quality: The Role of Directors and Audit Committees*, Information Sheet 196 <<https://dv8nx270cl59a.cloudfront.net/media/1338914/info196-Audit-quality-published-17-March-2014.pdf>>, accessed 10 November 2014.
- Australian Treasury (2010), *Audit Quality in Australia – A Strategic Review* (2010) <http://archive.treasury.gov.au/documents/1745/PDF/Audit_Quality_in_Australia.pdf>, accessed August 14 2014.
- Balsam, S., Krishnan, J. and Yang, J. (2003), 'Auditor Industry Specialization and Earnings Quality', *Auditing: A Journal of Practice & Theory*, 22 (2): 71–97.
- 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.
- Brown, C. D. and Raghunandan K. (1995), 'Audit Quality in Audits of Federal Programs by Non-Federal Auditors', *Accounting Horizons*, 9 (3): 1–10.
- 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: 1–15.
- Carey, P. and Simnett, R. (2006), 'Audit Partner Tenure and Audit Quality', *The Accounting Review*, 81 (3): 653–76.
- Causholli, M. and Knechel, W.R. (2012), 'An Examination of the Credence Attributes of an Audit', *Accounting Horizons*, 26 (4): 631–56.
- Chang, X., Dasgupta S. and Hillary G. (2009), 'The Effect of Auditor Quality on Financing Decisions', *The Accounting Review*, 84 (4): 1085–117.
- 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.
- Coffee, J. (2001), *The Acquiescent Gatekeeper: Reputational Intermediaries, Auditor Independence and the Governance of Accounting*, Columbia Law and Economics Working Paper No. 191 <<file:///C:/Users/Paul/Downloads/SSRN-id270944.pdf>>, accessed 5 July 2015.
- Colbert, G. and Murray, D. (1998), 'The Association Between Auditor Quality and Auditor Size: An Analysis of Small CPA Firms', *Journal of Accounting, Auditing and Finance*, 13 (2): 135–50.
- 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.
- De Fond, M. and Zhang, J. (2013), 'A Review of Archival Auditing Research' <<http://www.abstract.xlibx.com/a-economy/52136-1-mark-defond-jieying-zhang-university-southern-california-septe.php>>, accessed 14 September 2014.
- Deis, D. R. and Giroux, G. A. (1992), 'Determinants of Audit Quality in the Public Sector', *The Accounting Review*, 67 (3): 462–79.
- Dopuch, N. and Simunic, D. (1980), 'The Nature of Competition in the Auditing Profession: A Descriptive and Normative View' in Buckley, J. W. and Weston, J. F. (eds), *Regulation and the Accounting Profession* (Belmont, CA: Lifetime Learning Publications), 77–94.
- Dulleck, U. and Kerschbamer, R. (2006), 'On Doctors, Mechanics and Computer Specialists, the Economics of Credence Goods', *Journal of Economic Literature*, 54: 5–42.
- Epps, K.K. and Messier, W.F. (2007), 'Engagement Quality Reviews: A Comparison of Audit Firm Practices', *Auditing: A Journal of Practice and Theory*, 26: 167–81.
- Financial Reporting Council (2008), *The Audit Quality Framework* <<http://www.frc.org.uk>>, accessed 24 October 2014.
- 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*, 36 (4): 345–68.
- Francis, J., Maydew, L.E. and Sparks, H.C. (1999), 'The Role of Big 6 Auditors in the Credible Reporting of Accruals', *Auditing: A Journal of Practice & Theory*, 18 (2): 17–34.
- Francis, J., Michas, P. and Seavey, S. (2011), 'Big 4 Audit Market Concentration and Client Earnings Quality Around the World', Working paper (Kansas City: University of Missouri).
- Francis, J.R. and Wilson, E.R. (1988), 'Auditor Changes: A Joint Test of Theories Relating to Agency Costs and Auditor Differentiation', *The Accounting Review* 63 (4): 663–82.
- Hogan, C.E. and Jeter, D.C. (1999), 'Industry Specialisation by Auditors', *Auditing: A Journal of Practice and Theory*, 18: 1–17.
- International Auditing and Assurance Standards Board (IAASB) (2014), *A Framework for Audit Quality: Key Elements that Create an Environment for Audit Quality* <<http://www.ifac.org/publications-resources/framework-audit-quality>>, accessed 15 August 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. (2011), 'An Empirical Analysis of Auditor Independence in the Banking Industry', *The Accounting Review*, 85: 2011–46.
- Kilgore, A., Martinov-Bennie, N. and Wright, S. (2014), 'Audit Quality: What CFOs Perceive as Important', ACCA <[http://www.accaglobal.com/content/dam/acca/global/PDF-technical/audit-publications/pol-tp-daq1\(cfo\)-drivers-audit-quality.pdf](http://www.accaglobal.com/content/dam/acca/global/PDF-technical/audit-publications/pol-tp-daq1(cfo)-drivers-audit-quality.pdf)>, accessed 15 August 2014.
- Kilgore, A., Radich, R. and Harrison, G. (2011), 'The Relative Importance of Audit Quality Attributes', *Australian Accounting Review*, 21: 253–65.
- Knechel, W. R., Krishnan, G.V., Pevzner, M., Shefchik, L.B. and Velury, U.K. (2013), 'Audit Quality: Insights from the Academic Literature', *Auditing: A Journal of Practice and Theory*, 32 (Supplement 1): 385–421.
- 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: 19–46.
- Knechel, W. R., Rouse, P. and Schelleman, C. (2009), 'A Modified Audit Production Framework: Evaluating the Relative Efficiency of Audit Engagements', *The Accounting Review*, 84 (5): 1607–38.
- Knechel, W. R. and Sharma, D. (2011), '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.
- Leland, H. (1979), 'Quacks, Lemons and Licensing: A Theory of Minimal Quality Standards', *Journal of Political Economy*, 87: 1328–46.
- 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.
- Lin, J. and Hwang, M. (2010), 'Audit Quality, Corporate Governance, and Earnings Management: A Meta-analysis', *International Journal of Auditing*, 14 (1): 57–77.
- Lizzeri, A. (1999), 'Information Revelation and Certification Intermediaries', *Rand Journal of Economics*, 30 (2): 214–31.
- 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: 705–32.
- Murray, Z. (2013), 'Audit Quality: The Role of Management', *Chartered Accountants Journal*, 92 (5): 34–5.
- Nelson, P. (1970), 'Information and Consumer Behaviour', *Journal of Political Economy*, 78 (2): 311–29.
- Public Company Accounting Oversight Board (PCAOB) (2012), *Strategic Plan: Improving the Relevance and Quality of the Audit for the Protection and Benefit of Investors* <<http://pcaobus.org/About/Ops/Documents/Strategic%20Plans/2011-2015.pdf>>, accessed 15 May 2014.
- Sawtooth Software (2007), 'ACA System for Adaptive Conjoint Analysis', ACA 5.0 Technical Paper, Sawtooth Software Technical Paper Series <<http://www.sawtoothsoftware.com/download/techpap/acatech.pdf>>, 17 June 2014.

- 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: 191–208.
- Spiegler, R. (2006), 'Competition Over Agents with Boundedly Rational Expectations', *Theoretical Economics*, 1: 207–31.
- 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.
- van Buuren, J., Majoor, B., Paape, L. and Wright, A. (2014), 'The Impact of Economic Bonding on Audit Quality: Evidence from Audit Working Papers', presented at the American Accounting Association – Auditing Midyear session, San Antonio, Texas.
- Wallman, S. (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-DAQ3(DIRECTORS)