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A Review on Audit Quality Factors

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Abstract *"Audit Quality" is not easy to define because of many diverse factors affecting quality. According to the consultation paper of the International Auditing and Assurance Standards Board (IAASB), audit quality is the significant issue that requires more considerable attention. Understanding how audit quality is important requires investigating audit quality factors more precisely. So, the present article aims to review and summarize the different audit quality factors, comparing the results achieved by the related recent studies. In this regard, as well as the well known audit quality factors such as size, industry expertise, auditor tenure, audit fees, non-audit services and auditor reputation, auditor specifications, were found to be able to affect audit quality significantly. Moreover, such factors can affect each other while affecting the audit quality directly.*

Key words Audit quality, Audit quality measures, Auditor specifications

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1. Introduction

Audit quality may be affected by several factors which can be simply divided into the auditor specifications and auditing process attributes. Hence, such factors can directly affect the "audit opinion" which is issued to state the reasonable assurance on financial statement reliability thereby enhancing the confidence of the market. Despite the unclear definition, importance of the audit quality and its influence on market confidence has been highlighted by regulators, investors and corporate governance. As stated in "agency theory", auditor's opinion certifies the assurance for third parties, who are using the financial statement (Lindberg, 2001). Audit quality has been defined as auditor's ability on discovering the material misstatement and reports them (DeAngelo, 1981). So, it has implicit the necessary competence and professional behavior along the auditing process, as well as auditor's independence and objectivity to assure that the outcome (audit report) reflects the adequate opinion.

Despite the wide range of the adopted measures, "size" can be considered as the most effective indicator of audit quality determination (Lennox, 1999). Consequently, higher audit quality can be easier achieved by the larger audit firm (Francis, 2004), because of their ability to discover and detect the misstatements (DeAngelo, 1981). But, reaching high audit quality in small size audit firms is also attainable, since because they conform to audit standards (Bauwhede & Willekens, 2004; Larn & Chang, 1994). However, because of the existence of the auditor-related specifications such as professional competence, technical ability, auditor's liability as well as auditor independence, it is more expected to reach higher audit quality in large audit firms (Hussein & Hanefah, 2013). More technical abilities and industry knowledge can be raised from the audit expertise. So, demanding for audit expertise leads to higher audit quality (Craswell, Francis, & Talylor, 1995), and thereby, enhances auditor's reputation. In addition, audit tenure may affect audit quality positively or negatively. Negative effects may result from a close connection between the auditor and the

client which can lead to fraud by ignoring the material misstatements included in financial statements (Firth, Rui, & Wu, 2012), while the positive effects can be achieved through the utilization of the clients financial statement knowledge (Dye, 1991). On the other hand, both audit fee and non-audit services may affect audit quality, since higher audit quality requires additional procedures resulting in higher audit fees (DeFond, Raghunandan & Subramanyam, 2002).

It must be stated that audit quality is becoming more attractive among other related auditing subjects, due to its considerable impacts on the reliability of the financial statements. Moreover, enhancing the confidence of the financial statement users can be considered as the result of higher audit quality. Hence, through a brief review, we aimed to provide the reader with the principal concepts and recent findings regarding the audit quality criteria. For this, the next part of the paper has aimed to provide some definitions followed by the main theories of the audit quality. Then, the significance of the audit quality factors has been the subject for further discussion to magnify its effects on the audit quality by the last section of the present manuscript. It is hoped that the results arising from this study can be beneficial for the audit committee members, regulators, shareholders and academic users who are interested in the investigation of the significant role of the mentioned factors during the auditing process as well as preparation of the related statements.

2. Terms and definitions

Auditors intend to issue an opinion that providing a reasonable assurance on the fairness and credibility of financial statement, detecting the material misstatements. So, audit quality has been defined as the likelihood to discover and report material misstatements by auditor's technical capabilities, as stated by DeAngelo (1981). In these circumstances auditor's independence is also crucial when reporting the discovered errors. Discover and report material errors, dependents on different factors related to auditors competencies. Training and experience qualifies the auditor to discover material misstatements. Moreover, independence would be the condition to report what has been discovered (Colbert & Murray, 1995).

In addition to the auditor's independence, other individual specifications such as professional competence, specialized knowledge, liability and expertise of the auditor are important factors influencing the quality of auditor professional judgment, and hence, audit quality. As the audit process increases the informational value of the accounts, auditor's report can affect the use of accounts. In order to guarantee the auditor's independent opinion, it is needed for auditors to enhance their professional judgment independency (Craswell, Stokes, & Laughton, 2002). In other words, in order to maintain the auditor's independency, auditor's are obliged to improve their professional judgment, and thereby, to increase the ability of providing information value for users (Arrunada, 2000; Thornton, 2003).

Both actual quality and perceived quality have been argued as important issues in audit quality definition. Actual audit quality can be considered as the probability of reducing the risk of reporting a material misstatement in the financial statement (Palmrose, 1988). While perceived quality is the belief of financial statement users about auditor's ability to reduce the material misstatements. In this situation, greater perceived audit quality can result in investment process improvement in audited clients. It can be stated that audit quality represents how can the auditing process detect and report material misstatements of the financial statements in terms of reaching reasonable assurance (DeAngelo, 1981). The belief of users about audit quality results from auditor's named individual specifications as important factors. Such high audit quality should be associated with high information quality of the financial statements (Balsam, Krishnan, & Yang, 2003). The main reason for this is that financial statements audited by high quality auditors should be less likely to contain material misstatements. In this case, audit quality is achieved not only by discovering misstatements but also through the client who make the adequate adjustments.

Considering client's perspective, reaching higher quality in auditing process and report can be stated as one important purpose. Due to the wealth function of the firm, shareholders are more interested in getting high quality audit reports, whereby preferred higher quality audit. Stakeholders are also concerned about audit quality. Accordingly, the lack of the audit quality may decrease the probability of discovering an audit failure (Bauwhede & Willekens, 2004). In addition, the factors that have been studied in the present manuscript influence audit quality directly or indirectly. Such factors make audit quality more important to be studied.

3. Influencing factors

The importance of factors which influence audit quality has been argued in many studies. As stated before, such factors can affect audit quality directly or indirectly which are individually consistent with some audit quality proxies. Meanwhile, this manuscript aims to present a clearer attitude on the classification of the audit quality factors that may influence audit quality.

3.1. Size

The link between the request for audit services and audits to large-firms is based on the "agency theory" as well as the links between audit quality and the auditor size (Lindberg, 2001). Therefore, clients intend to choose a high quality auditor to reach the best auditing results. So, they are more interested in demanding for large audit firms with higher reputation compared with small audit firms. The higher reputation, the higher incentive to issue clean and accurate audit report, because inaccurate audit reports can lead to decline the reputation. The decline of reputation could result in attracting fewer clients and in the decrease of audit fees. Large auditors with higher credible clients can suffer noticeable losses compared with small auditors if they issue inaccurate reports. Therefore, the large audit firms have more incentive to issue a reliable audit report with the purpose of maintaining their reputation (DeAngelo, 1981).

Some factors such as professional competence, auditor's qualification and supporting technical information undoubtedly can be found in large audit firm's system. Such factors can be taken into consideration when assessing the influence of audit firm's size on audit quality to facilitate the detection of the possible errors (Hussein & Hanefah, 2013). Because of the higher degree of specialization of large audit firm's employees, the technological knowledge of audit groups in large firms would be higher than in small auditors. In other words, continuing professional education is more considerable in large audit firms than in small ones (O'Keefe & Westort, 1992). Larger audit firms support higher quality audits (Francis, 2004). Also, the utilization of high quality auditors reveals that large entities (client) prefer to choose a high level of audit quality with higher technical knowledge. So, when the firm becomes larger, a higher audit quality will be demanded with the purpose of enhancing the monitoring and bonding activities. Also, adopting such strategies will be beneficial to the client, despite some inevitable operating costs (Hay & Davis, 2004).

Several studies have investigated the relationship between audit quality and auditor size (e.g., Francis & Yu, 2009; Hay & Davis, 2004). Most of them confirmed that the large size auditors are positively correlated with audit quality (e.g., Colbert & Murray, 1995; DeAngelo, 1981; O'Keefe & Westort, 1992). On the other hand, some other surveys have mentioned that there is no difference between large audit firms and smalls one in terms of their impact on audit quality, both of them have the potential to reach an acceptable level audit quality (e.g., Bauwhede & Willekens, 2004; Jackson, Moldrich, & Roebuck, 2008; Larn & Chang, 1994). However, it seems that larger audit firms are more qualified and committed to reach a higher audit quality. It can be attributed to their high technical information and professional competencies as well as their attempt to continue higher education of employees and to maintain firm's reputation on issuing an appropriate audit report. Such activities are necessary in order to keep their clients. In Fig.1 the relationship between audit quality factors and audit size is illustrated.

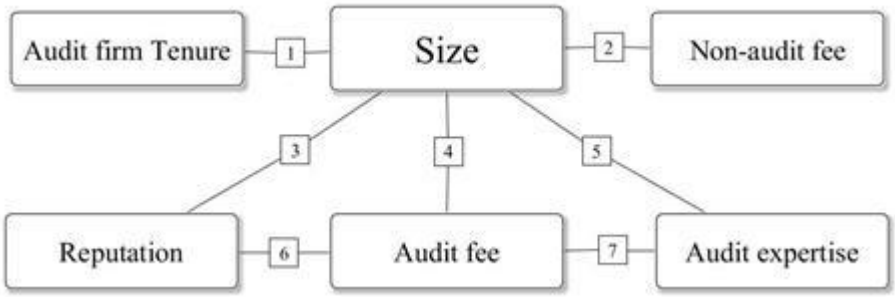

Figure 1. The observed relationships between audit quality factors and size

Figure 1. The observed relationships between audit quality factors and size. 1,2: Not relationship has been observed between size and both audit tenure and non-audit fee. 3: (a) The larger audit firm size may reach the higher reputation in order to issuing more reliable and accurate audit report. (b) The larger audit firm with the higher reputation may demand for more audit fee (6). 4: (a) The large audit firm may earn more audit fee due to operate with higher quality of monitoring and bonding. (b) The large audit firm may demand higher audit fee in order to higher level of audit expertise (7). (c) In terms of brand name, the larger audit firm may capture more audit fee. 5: The larger audit firm may operate with higher level of auditor specialization.

3.2. Industry expertise

According to literature, it is clear that the expertise of the auditor plays an important role in improving audit quality. Demanding auditor specialization in an industry leads to a higher level of technical competence and technical information. It is mainly due to auditor's potential ability to detect financial statement errors (Arrunada, 2000). In this case, industry expertise knowledge enhances the likelihood that auditors discover errors, and thereby, affect the probability of reporting the discovered errors (Hammersley, 2006). Requesting industry expertise can represent an incentive for audit firm to invest in expertise and to desire industry-based costumers. Besides, the industries which normally use the expertise contract, accounting related technologies, are more powerful to reach a higher level of audit quality by utilizing industry expert auditors than non-expert auditors (Craswell *et al*., 1995). So, audit quality is positively related to specialization and industry expertise (Lowensohn, Johnson, Elder, & Davies, 2007). In addition, audit tenure is directly related to the industry expertise, because of a new industrial audit client can desire to benefit from audit expertise, technical ability and knowledge. So, auditors will be able to fulfill the lack of client-specific knowledge during the first years of audit tenure (Stanley & Todd DeZoort, 2007). In this regard, higher audit fee increases as audit expertise enhances. This is mainly due to the fact that higher audit expertise can lead to higher audit quality (Francis, 2004). In other words, additional investment on expertise can cause a positive effect on the audit fee premium (Craswell *et al*., 1995). Hence, industry expertise is positively associated with audit fee and audit quality (Cahan, Godfrey, Hamilton, & Jeter, 2008). In this situation, industry expertise might reach more premiums compared to non-industry expertise (Wang & Iqbal, 2009). In addition, industry expertise, reinforced by auditors during the engagements, will lead to higher audit quality (Hussein & Hanefah, 2013). Such experiences can also enhance the audit reputation through market credibility. In summary, industry expertise advantages together with general audit knowledge can enhance the audit technical ability and audit reputation and so increase audit quality as well as leading to a higher level of audit fees.

3.3. Auditor tenure

Audit tenure has been investigated as short and large audit tenures. In this regard, studies have mentioned that the shorter the auditor's tenure, the less auditor client knowledge. As a result, lower audit quality is expected. In contrast, longer audit tenure can lead to decrease auditor's professional care, and therefore reducing audit quality. On the other hand, with larger audit tenure it is more likely to discover misstatements using technical abilities and higher levels of knowledge. But the relationship between auditor and client may reduce independence and can reduce the probability of report misstatements. So, short audit tenure may involve the auditors with the risk of less technical knowledge and abilities. Therefore, the audit report quality can also be affected by audit tenure. Generally, auditors have more incentive to issue a clean or acceptable audit report in the first years of their engagements. In terms of client's perspective, maintaining auditor for next period can depend on the issuing of a clean audit report. Therefore, if auditors know that clients are considering switching them, it can influence the type of audit report (Vanstraelen, 2000).

Then, such reactions can adversely affect auditor's independence, and thereby, reduce audit quality. In fact, in the first years of the connection between auditor and client, audit failures are generally higher and rise the audit costs due to the need of additional procedures by the new auditor (Barbara, Richard & Kurt, 2006). The auditor's mandatory rotation may cause some additional actions due to the loss of industry expertise and necessary information about financial report in the first years, which may enhance the likelihood of the audit failure (Gavious, 2007), as well as the additional costs to support the new auditor with the information about

client's normal and special functions (Chi, Huang, Liao & Xie, 2009). Such additional costs, negatively affect the relationships between the mandatory audit-firm rotation and audit quality (Chi *et al*., 2009). So, if there is no mandatory rotation, auditors are more likely to preserve longer tenures by satisfying clients. The idea that long term audit tenure may lead to lower audit quality has been confirmed by previous studies (Adenuyi & Mieseigha, 2013; C.-Y. Chen, Lin, & Lin, 2008; F. A. Gul, Fung, & Jaggi, 2009; F. A. Gul, Jaggi, & Krishnan, 2007; Johnson, Khurana, & Reynolds, 2002). Also, long term relationships between auditors and clients may cause the familiarity between auditors and management. This can lead to reduce auditor's independence and audit quality as well (Carey & Simnett, 2006). Therefore, as stated by legislators and business press, mandatory auditor rotation has been recommended, in order to increase the auditor's independence and to prevent fraud on issuing report (Barbara *et al*., 2006). Such negative relationships between auditor tenure and audit quality have been widely investigated, for instance by Carey & Simnett (2006); Choi & Doogar (2005).

In order to influence audit opinions, managers may switch auditors if they issue a qualified opinion. This represents an incentive for the auditor to issue an inadequate report. However, managers may not tend to switch auditors after receiving a qualified report. In fact, managers are willing, in several circumstances to receive a high quality audit report. In a situation of quasi-rent audit fees, managers will receive more satisfying reports from incumbent auditors compared to their switching by a new auditor (Jackson et al., 2008). In other words, long term relationships between auditors and clients may increase the incentive for the auditor to issue an unqualified report (Vanstraelen, 2000). Rotation initially can lead to lower audit quality due to the need to compensate the lack of client auditor knowledge (Francis, 2004). However, incumbent auditors may not report discovered misstatements. In this case, they are cheating by issuing a clean report which results from lower auditor independence and audit quality (DeAngelo, 1981).

Furthermore, some relationships can be observed between audit tenure and financial reports quality, when restating or modifying the financial statements and then the audit report. Restating financial statement after rotation means that the initial financial report was consistent with the misstatement(s) and fraud(s). Accordingly, the new audit report (after restatement of financial statements) makes visible the low quality of the previous audit. (Stanley & Todd DeZoort, 2007). Thus, mandatory auditor rotation will increase the likelihood of financial statement restatement compared to non-rotation firms (Firth *et al*., 2012). Therefore, there is an inverse relationship between the audit long tenure and the restatement financial report (Stanley & Todd DeZoort, 2007).

In conclusion, long term relationships between auditors and client may reduce auditor's independence, and thereby, decrease the audit quality. On the other hand, mandatory auditor rotations can lead to additional costs due to the need for additional procedures by new auditors. So, this gives the incentive for restating financial reports to capture unqualified audit opinion. In this situation, auditor's impairment of independence and lower audit quality of the initial audits is notorious.

3.4. Audit fee

Audit fee as an important factor of audit quality has been used in several studies, specifically in examining the link between audit quality and the size (e.g., DeAngelo, 1981; Francis, 2004; Hay & Davis, 2004). Greater audit fees are also associated with the choice of qualified auditors (Hay & Davis, 2004). In spite of higher audit fee, some clients are more interested in using large audit firms. Clients are confident that large audit firms have greater monitoring and bonding in order to capture higher audit quality (Hay & Davis, 2004). In terms of the auditor competence and specialization, including technical information and continuing education, large audit firms hire better professionals in comparison to small size firms. So, the larger the audit firm the higher auditor's specialization (and audit quality) is expected and therefore higher audit fees is achieved (DeAngelo, 1981). For instance, as the demand for higher audit quality as well as additional activities is increased, higher audit fee is expected for company (Houghton & Jubb, 1999). On the other hand, the reputation of audit firms can be negatively influenced by high-risk clients, and so, because of such influences, undoubtedly higher audit fee is charged by larger audit firms (Hogan, 1997).

However, no relationship may be identified in cases of doubts regarding going concern between audit fees and "going concern opinion" (DeFond *et al*., 2002), and the "demanding for audit quality" (Lindberg, 2001). Maintaining the reputation, auditors wish to perform an acceptable audit work. In summary, higher audit fee may result in greater audit quality (Eshleman & Guo, 2014) through increasing audit efforts as well

as the utilization of higher qualified auditors. In terms of brand name, larger audit firms may demand higher audit fees (Basioudis & Fifi, 2004). In contrary, since large audit firms are willing to preserve their reputation they do not have incentive to receive higher fees or fee premium as a condition to conduct high audit quality work.

3.5. Non-audit service

Non-audit services as well as the audit service can affect the audit quality (Jeong, Jung & Lee, 2005). To be more precise, auditing cost fluctuations can result from the changes in both audit fee and non-audit services (Ding & Jia, 2012). It has been argued by Houghton & Jubb (1999) that non-audit services fee is less price-sensitive compared to the audit fee and can play an important role to enhance the audit firm partners's wealth. However, it is expected a positive relationship between qualified audit reports and both audit quality and non-audit fee (Houghton & Jubb, 1999). The regulators and AICPA have strongly highlighted the independence of the auditor. In addition to the economic theory about the auditor's independence, SEC rules express that contrary to the actual audit, perceived auditor independence is a function of non-audit fee ratio (Schmidt, 2012). The temptation to earn more non-audit fee could impair the auditor's independence (Frankel, Johnson, & Nelson, 2002).

In terms of quasi-rent, a higher probability of maintaining quality in both auditing and non-audit services substantially results from continuous contracts. In this case, compliance with obligations is not logic. However, it is highly related to the internal incentives of the involving parties, especially those which are the cause of the reputation acquisition. The implicit contracts mechanism is thus beneficial to the parts (Arrunada, 2000). It can be considered as one of the quasi-rent benefits, resulting from costs reduction. This is explained by the difference between the wages paid for the current use of productive resource and their maximum best alternative applications (Chow, 1982). To enhance the effectiveness of the implicit contracting, the auditor must ensure to obtain a stream of quasi-rents, which maintains his incentive to present an acceptable performance (Arrunada, 2000).

In general, investors are not concerned about loss of auditor's independence who is auditing large clients in comparison to auditing small clients (Ghosh, Kallapur & Moon, 2009). This is mainly due to the fact that auditors receive incentives to be specifically considered about the loss of reputation which results from independence impairment in their audits for large clients. Moreover, the auditors are less economically dependent on small clients. Thus, since non-audit services result usually from large clients, high levels of non-audit services can decrease the auditor independence and may also affect the audit quality (Francis, 2004).

3.6. Auditor reputation

In common, large audit firms have more reputation than smaller ones. So, the reputation cost in the smaller firms is considerably less than in the large audit firms (Hogan, 1997). Hence, larger firms not only have incentives to maintain their existing level of reputation, but they also wish to enhance it by presenting accurate audit report. This is mainly due to the potential effect of audit quality on auditor reputation. Reputation can serve as a proxy in examining the relationship between audit quality and both audit size and audit fees. Based on "capital theory", due to more credibility of larger auditors, audit firms with great reputation are considered to be more accurate (Teoh & Wong, 1993). It means that the large auditors, having more reputation, are more likely to issue accurate audit report (Lennox, 1999). This theory also reveals that more credible audit firms can demand higher audit fees, because of the market value of their audit reports (Lindberg, 2001). However, such higher audit fees, may lead to decrease auditor's independence (DeFond *et al.,* 2002), because higher audit fees can represent clients intention to get a clear audit report. Thereby, auditors may lose their independence and so their reputation. So, a negative effect between auditor reputation and audit fees can occur (Tomczyk, 1996). As a result, the auditor reputation as well as the audit fee can be influenced. Table 1 summarizes the results arising from theoretical and empirical studies about the audit quality factors.

Table 1. Summary of the audit quality factors based on the results of previous theoretical and empirical studies

Factor	Observed Relationship		
	Positive	**Negative**	**No-effect**
Size	(Colbert & Murray, 1995; DeAngelo, 1981; Francis, 2004; O'Keefe & Westort, 1992)	Not Observed	(Bauwhede & Willekens, 2004; Jackson *et al*., 2008; Jeong & Rho, 2004; Larn & Chang, 1994)
Industry Expertise	(Francis, 2004; Lowensohn *et al*., 2007)	Not Observed	Not Observed
Auditor Tenure	(Chi *et al*., 2009)z	(Carey & Simnett, 2006; C.-Y. Chen *et al*., 2008; Choi & Doogar, 2005; F. a. Gul et al., 2009; F. A. Gul *et al*., 2007; Johnson *et al*., 2002)	Not Observed
Audit Fee	(Eshleman & Guo, 2014)	Not Observed	(Lindberg, 2001)
Non-Audit Service	(Houghton & Jubb, 1999)	Not Observed	(Francis, 2004)
Auditor Reputation	(Teoh & Wong, 1993)	Not Observed	Not Observed

4. Auditors specifications

4.1. Independence

Auditor's independence is the capacity of auditor to act, in mind and in appearance, objectively without influences. Non-audit service as an audit quality factor can have a considerable impact on auditor's independence, and regulators have been deeply concerned about that. So, independent auditing can be considered as a fundamental specification in any active capital markets. In this regard, most of regulators have stated that non-audit services can lead auditors to lose their independence in order to capture larger non-audit service (Chen, Elder, & Liu, 2005; Gul *et al*., 2007; Thornton & Shaub, 2014). As stated by Simunic (1984), auditor engagements as management consultants can compromise auditor's independence. However, being worried about reputation loss as well as litigation costs can maintain auditors independent (DeFond *et al.*, 2002). Concerning non-audit services, SEC 2000 has mentioned two situations about auditor's independence: first, the probability that auditors become financially dependent of clients as a result of non-audit services. Such dependence can ensure the auditors to keep their engagement. Secondly, the consulting nature of many non-audit services may lead auditors to act against the audit process, as a result of the managerial roles. As a conclusion, auditor's independence can be considered as a specification which is strongly associated with audit quality factors. Thereby, auditor's independence may strongly influence audit quality.

4.2. Liability

The impact of liability on audit quality has been investigated by various studies (e.g., Acemoglu & Gietzmann, 1997; Dye, 1993; Fargher, Taylor, & Simon, 2001; Free, 1999; Mlumad & Thoman, 1990; Narayanan, 1994). In common, audit firms have liability for their actions considering their accountability to the regulators (Chung, Farrar, Puri, & Thorne, 2010). For some reasons, the auditors may be pressured by such conditions to be serious and accurate in their functions. Risk of litigation and litigation costs resulting from perceived audit failures (real or not real) are usually associated with auditor's liability. In this regard, litigation costs may arise from sources such as clients, investors and other financial statement users. Such costs may cause liability payments and loss of reputation. Moreover, litigation risk can put auditors under pressure to accept a client. In addition, litigation risks can create an incentive for auditors to be more diligent on their

duties. So, the auditors are responsible to give satisfying answers to the economic players and stakeholders (Free, 1999). Because of the financial statement importance for market, logically higher degree of auditor liability is expected by the investors. Thereby, such expectations may lead to take more considerations into account, when auditors are at risk of liability payment. Then, considerable liability payment can be insurance for investor to prevent possible audit failures (Schwartz, 1997). Therefore, litigation risk can cause high audit quality. In this regard, audit costs will be increased due to the necessity of more skills and higher efficiency to achieve high levels of audit quality, which may result in significant drop of litigation costs. Thus, litigation costs can affect both higher audit quality and higher audit cost, directly or indirectly (Narayanan, 1994).

Concerning size, more liability is expected from the large audit firms, by clients and investors. Such liabilities normally lead large audit firms to reduce litigation risks, which may be resulted from the audit failure (Ding & Jia, 2012). In other words, larger audit firms with higher liability potentially have more litigation risks and costs that may lead to higher considerations on audit services, and thereby increase audit quality (DeFond, 2012; Lennox & Li, 2012). Regarding auditor's new engagement and client acceptance, some reasons may cause auditors to reject high risk clients in order to prevent litigation risks and costs. First of all there is the risk that auditors can be litigated from investors after an audit failure. Secondly, legal liability payments from auditors to investors, which arise from investor's complaint, can be considered in this regard. Eventually, extra litigation costs such as attorney fees and, more important, loss of reputation can force the auditor to reject a high risk client (Laux & Newman, 2010). Such client acceptances may also impair the perceived auditor independence, causing the demanding of higher audit fees (Schneider, 2011). Therefore, the decision of accepting a high risk client can affect audit quality. This is mainly because of high litigation risks and costs, particularly when audit firm is becoming larger. So, it may lead larger audit firms to be more precise in selecting and accepting clients, in order to reduce litigation risk (Kaplan & Williams, 2012).

However, both less and more liability may put audit firm partners at risk. Less liability may lead to auditor's negative mind about their independence credibility. Moreover, higher liability may lead to higher audit costs for partners. Therefore, partners shouldn't be involved in increasing the liability (Acemoglu & Gietzmann, 1997). In conclusion, auditor's liability to investors, clients and market can reduce the litigation risks and costs by reducing audit failures, and thereby, increasing audit quality.

4.3. Professional competence

Professional competence, as stated at the first section of audit general standards, plays an important role in the audit process. Particularly, it may contain a considerable impact on the auditor's professional judgment as well as on quality. The concept of the professional competence covers two substantial aspects of auditor's competencies. The first aspect is the professional competence attainment which is required to benefit from higher education. Such merits are improved based on the principles of public accountants, acquired by education, training, exams and professional experience. Maintenance professional competence can be considered as the second aspect that requires:

a) Continuous improvement of the knowledge and skills regarding career changes and developments, in particular, the utilization of the programs which execution must be ensured. Such career changes and developments include new ideas and principles on accounting and auditing standards as well as the related rules and regulations.

b) Audit services subject to appropriate control systems in conformity with the principles and professional standards. In terms of maintaining professional competence in addition to such auditor's abilities, auditor's behavior (such as professional ethics, being open-minded, keeping aware perspective, acting as self-reliant and being decisive in their professional judgment) should be considered in evaluating auditor's competence. Such aspects need to be taken into consideration in audit plan, in order to attain the audit program and objectives, and thereby, achieving high audit quality (IAESB, 2006; ISO 19011:2011).

Table 2 summarizes the observed relationships between specifications and factors and their impacts on audit quality.

Table 2. A summary of the observed relationship between specification and factor and its impact on the audit quality

Auditors Specifications	Relationships with Other Factors	Observed Effect on the Audit Quality	
		Positive	Negative
Independence	(Longe) Audit tenuer	Not Observed	(Carey & Simnett, 2006)
	(Higher) Non-audit fee	Not Observed	(DeFond *et al*., 2002; Frankel *et al.,* 2002; Thornton & Shaub, 2014)
	(Higher) Reputation	(Tomczyk, 1996)	Not Observed
Liability	(Loss of) Reputation	Not Observed	(DeFond *et al*., 2002)
	(The larger audit firm the higher liability) Size	(DeFond, 2012; Ding & Jia, 2012; Kaplan & Williams, 2012; Lennox & Li, 2012)	Not Observed
Competence	Size	(Hussein & Hanefah, 2013)	Not Observed
	Industry Expertise	(Arrunada, 2000)	Not Observed

5. Conclusion and future research directions

Considering the main purpose of this study, a literature review has been conducted. The main purpose was to identify the different factors with potential influence on audit quality. The auditor specifications have also been taken into account. The size of audit firm can be considered as one of the most important factors which can affect the other factors as well as the overall audit quality. Furthermore, the reviewed factors, including size, industry expertise, auditor tenure, audit fees, non-audit service, auditor reputation and auditor specifications, were found to be correlated with each other when studying the effect of each individual factor on audit quality. Also, auditor specifications such as professional competence, technical ability, independence and auditor's liability have been identified to have significant effects on audit quality. Assuming that audit quality has reached a social desirable level, some important future research directions should be considered. In this regard, the relationships between audit quality factors, corporate governance and decision makers must be taken into account. Moreover, considering the importance of audit quality, more specific studies on audit quality influencing factors are necessary in order to classify such factors, which can have great consequences in both practical and theoretical applications.

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