

# The Effect of Audit Firm Size on Independent Auditor's Opinion: Conceptual Framework

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## Abstract

Independent auditor's opinion enhances the confidence of investors in the reporting system and leads to an increased in capital markets efficiency. Thus, the effectiveness and quality of opinion developed by the auditor about the financial statements is significantly important, because financial statements should be reliable, useful and relevant for investors and creditors. A significant issue frequently raised in the accounting literature is whether judgments of auditors from large firms vary substantially from those of auditors employed by other firms. Then past researchers attempted to find the relationship between the size of company and auditor's opinion and its quality. Review on the literature revealed that the size of firm can not affect auditor's opinion but this survey found that some factors such as experience, education, skills and employee competence may have influence on quality of auditors and their opinion. This paper has categorized these views under special category of capital known as human capital. Thus, the study anticipates improvement in the relationship between audit firm's size and independent auditor's opinion by introducing human capital as a mediator variable.

**Keywords:** audit firm's size, human capital, independent auditor's opinion

## 1. Introduction

Small firms and regulators have argued that the quality of audit should not only be judged on the basis of the size of large public accounting firms as dictated in the disclosure of audit standard on independence of audit quality from auditor firm size (DeAngelo, 1981). DeAngelo (1981) rejected this allegation of small firms and revealed that big audit firms have more independence and higher quality in their audit work. Furthermore, Francis and Yu (2009) noted that large audit firms have more intention to detect material problems in financial statements.

Big audit firms will have the potential to lose their clients if they become notorious, have lower audit quality and show a lack of independence in their judgment. Hence, these issues lead to high motivation for improving audit quality. Scholars indicated the positive relationship between firm size and auditor quality (Cheng *et al.*, 2009). In conformity with Francis and Wilson (1998) and DeFond (1992), the reputation of audit firms is very important for audit partners.

In the international scenario, scholars have explored the judgment of auditors in CPA international firms as large firms in comparison with the auditor's judgment in regional and local firms as medium and small companies (AICPA, 1978; Frishkoff, 1970). The Derieux Committee Report stresses the 'concern that smaller firms may be replaced simply because they are less well known, even though the smaller firms may well be providing as high or higher quality services. In this condition, users cannot rely on accounting information and auditing reports (DeAngelo, 1981). DeAngelo also noted that large audit firms are more independent in terms of audit revenue, therefore, the qualified opinion is more probable.

## 2. Background

A prominent researcher in auditing and accounting area, DeAgelo (1981) examined the impact of size of auditor firms on the quality of audits. The research took AICPA international firms, medium and small firms as sample. The author found that auditor quality is associated with audit firm size.

Wright (1983) investigated the influence of size of CPA firms on auditor's judgments in preferences of disclosure. In this experimental study, size of CPA firms was important for reliability of auditor's report. Two types of audit firms were studied, national or regional and local CPA firms. The author collected information about client power of association, firm's size and growth from financial statements. The result of the study showed significant differences in preferences of disclosure, for example auditors who work in national firms like to put some comments for adjustment while auditor who work in local firms preferred footnote for disclosure. They also found that the environmental factor has an important role on CPA firms and can affect auditor judgment.

In a section of their study, Sweeney and Roberts (1997) inspected the impact of auditor firm size on auditor's independence. They divided firms on the basis of their size; Big Six international (now it is Big 4) firms were taken as large ones, national firms middle and local firms as small ones. They employed DeAngelo's (1981) "collateral bond" as a measuring instrument. Subjects were selected among 339 auditors of different levels of eight audit firms. The result of study showed that, although the relationship between audit firm size and independence is unclear and insignificant, audit firm's size can moderate the relationship of moral reasoning and independence.

In a multipurpose study, Caramanis and Spathis (2006) investigated the role of auditee and audit firm characteristics on audit qualifications. They explored the combination of audit fees as financial variable and audit size as a non-financial variable to determine the prediction of qualified and unqualified opinions. A sample of 185 companies was selected from Athens Stock exchange. The total assets, net sales and net profits of these companies were collected. They extended Dopouch *et al.* (1987) model and used it to determine which factor would affect the likelihood of unqualified opinion. The result of the study showed that audit fees and the audit firm size have no effect on the auditors' opinion. The research also revealed that audit qualification is related with financial ratio such as operating margin to total assets and the current ratio.

Furthermore, Francis and Yu (2009) tested the impact of Big 4 firms on audit quality. The study was a compression test among large firms and other small audit SEC registered. The period of observation was 2003-2005. They found that big firms provide higher quality in auditing. However; the findings also showed that there is a systemic difference between the results of small audit performance versus large firms.

Similarly, Sundgren and Svanström (2011) examined whether and possibly how, audit quality and audit pricing vary between audit firms (big) and audit offices (small). The authors investigated the dependent of audit quality and audit fee on audit firm size. They employed disciplinary sanctions as a measure of audit quality. The sample of study was Big 4 auditors and non Big 4 auditors. The result of the study showed a negative association between likelihood of sanction and audit office size. The result showed that audit fees follow this pattern indicating that large audit firms attempt to have greater quality.

Besides, the effect of client firm size on audit quality was traced to the independence of auditors (Reynolds & Francis, 2001), the appropriate instrument for measuring independence of auditors is the amount of audit fee in relation with audit firms AICPA (1997). Reynolds and Franci (2001) through "Jones (1991) model discretionary accruals" revealed that large audit firms like big 5 firms allow less "accounting discretion" to their significant client because they should protect their reputation; therefore, the client influence is negative. Similarly, other two studies by Chung & Kallapur (2003) and Ahmed *et al.* (2006) worked on the relation between same model of Jones and client influence. In contrast with Chung & Kallapur (2003) that found insignificant impact of big client on large audit firms, Ahmed *et al.* (2006), result found a positive coefficient client on audit firms.

Likewise, Craswell *et al.* (2002) tested the influence of audit fees on the auditor's independence. They investigated the fees in both national audit firms and local audit firms, the disclosure of audit fees were mandatory in the study place. They carry out multivariate test on two main levels of clients that get qualified and unqualified opinions. They also examined non-audit service fees. They found that fee dependence cannot affect an auditor's judgment. Their analysis showed that in non-audit service fees case, clients could have an influence on auditor's independence.

Chen *et al.* (2008) examined the relationship between CPE and fiscal performance in public accountancy firms. They categorized public accounting firms as large, medium and small size. The participants were selected from partners and assistants and training location was internal and external auditors. The empirical evidence obtained from 1992-1995, indicted that the association amid training hours in public and medium firms is positive while it is negative for small one. They also observed the correlation between the location of training and firm performance and they found that training hours for external auditor have positive association with firm performance but its relation with medium and small size firms is weak.

Cheng *et al.* (2009) also investigated the relationship among HC and "auditor's quality" in public accounting firms. They examined 4865 public firms from 1989 to 2004. Findings showed that investment on HC leads to higher

quality and firms have maintained their auditor's quality through quality education, CPE, professional training and experience. In other words, there was a positive relationship between HC and "auditor's quality" in public accounting companies.

Molina and Ortega (2003) analyzed the effect of training on firm's performance. They studied North-American firms and participants of the study were senior executive managers. They adopted Tobin's Q and Total Returns to Shareholders (TRS) for measuring IC and firm's value. In the context of human capital theory, the results of the study indicated that trainings about customer loyalty and employee satisfaction have direct impact on firm performance.

In contrast with other studies, Moeckel (1990) examined the effect of higher experience on auditor's memory errors. Memory errors, which include failure to integrate and reconstruct, tested among four levels of experience (35 assistants, 19 staff, 15 seniors, 16 managers or partners). They employed Cognitive Work Space (CWS) as supported theory. The result of the study showed that staff at all levels of experience committed memory errors and were unable to detect the contradiction in working papers. They also revealed that although inexperienced auditors often have mistakes in their work paper, experience auditors have lost their ability to recognize errors because of the inability to integrate the reconstructions. Therefore, the result of the study has challenged scholars who believe that more experienced auditors can better perform their tasks.

Based on the past studies, the items mentioned such as experience, skills, training can improve the auditor quality. This paper elaborated that these are part of human capital structure and also it found that the human capital theory is suitable as a supporting theory to develop hypotheses.

### 3. Human Capital Theory

Human and physical capital stock has an important role on economic welfare and performance of a nation (Olaniyan & Okemakinde, 2008). Although the focus of former studies was on economic researches, there is an increasing study on human factors. Generally, human capital theory argues that economic productivity will be enhanced by the investment on human (Olaniyan & Okemakinde, 2008). Human capital theory indicates that how education and experience can affect the economic productivity. Babalola (2003) argued that investment in human capital is based on three view points:

- 1) The new generation ought to earn accumulated knowledge from old generation;
- 2) The new generation need to find how exciting knowledge can increase the quality of services and new productions; and
- 3) For getting new idea to improve methods, productions and process, individual need to encourage.

Based on Fagerlind and Saha (1997) idea, the basic reason for big public expenditure on education is provided by human capital theory.

Human capital is the stack of skills, understanding and individualistic abilities exemplified in the capability to execute work to generate financial value. It is the feature obtained by personnel through knowledge and experience (Sullivan & Steven, 2003). Many early economic theories refer to it simply as workforce, one of the three factors of production, and consider it to be a tangible resource and easily interchangeable. Other conceptions of this labor dispense with these assumptions.

### 4. Proposed Conceptual Framework and Hypotheses

Critical review of literature shows no empirical study of the relationship between auditor firm size and independent auditor's opinion. For example, Sweeney and Roberts (1997) believed that the relationship between audit firm size and auditor's independence is unclear and insignificant. Caramanis and Spathis (2006) found that audit firm's size does not have significant effect on auditor's opinion and thus supported by Sweeney and Roberts (1997) belief.

Besides, the concern of the public about auditor's report been transferred from auditee companies to audit firms, the quality of auditors to perform their duties is a part of their characteristics (Cheng et al., 2009). In conformity with DeAngelo (1981), Francis and Wilson (1988) and DeFond (1992), who believed that the quality of auditors will be improved by education, work experience and training within the audit firms. However, the training facilities are considered to depend on the audit firm's size. In the past studies, scholars have attempted to explore the relationship between the size of audit firm and the quality of auditing. Since large audit firms have more clients and quasi-rent than others, they are apprehensive of losing their clients because of low quality audit services (Cheng et al., 2009). DeAngelo (1981) also believed that, managers of big audit firms attempt to keep the quality of their auditors through some activities such as auditor's education, training and experience. Furthermore, in their

findings, Cheng *et al.* (2009), revealed that the power of human capital on auditor quality in public accounting firms is significant as well as different from other non-public accounting firms. Therefore, this study has recommended the following conceptual model to find a relationship between the audit firm size and auditor's opinion by introducing human capital as a mediator variable in Figure 1.

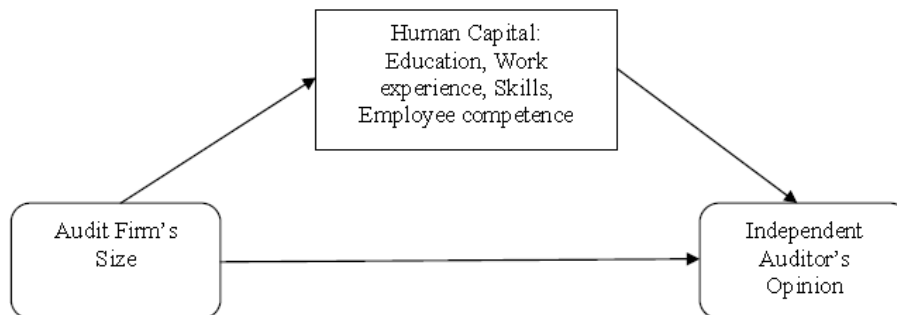


Figure 1. Proposed conceptual framework

Some components of human capital may improve the quality of auditors and there is a significant relationship between audit firm's size and auditor's quality (Francis and Wilson 1988, and DeFond 1992, Cheng *et al.*, 2009). However, prior studies failed to indicate any relationship between audit firm size and independent auditor's opinion. This study intends to examine the mediating effect of human capital on the relationship between audit firm's size and independent auditor's opinion. According to Baron and Kenny (1986, p.1173), "the mediator variable is the function of the third variable, which represents the generating mechanism through which the focal independent variable is able to influence the dependent variable of interest". In line with this view the size of audit firms can be determined by the number of their staff, the number of clients (Yuniarti, 2011) and the amount of the quasi-rent (DeAngelo, 1981; Watts and Zimmerman, 1981). Therefore, this study suggests the following hypotheses:

**H<sub>1</sub>**: There is a mediating effect of human capital on the relationship between audit firm's size and independent auditor's opinion.

Hypothesis **H<sub>1</sub>** can be further broken down into:

**H<sub>1a</sub>**: There is a significant effect of audit firm's size on human capital.

**H<sub>1b</sub>**: There is a significant effect of human capital on independent auditor's opinion

**H<sub>1c</sub>**: There is a significant effect of audit firm's size on independent auditor's opinion.

## 5. Methodology

The hypotheses of this paper are developed with the help of supporting theory. Questionnaire will be use as an instrument for data collection. The content of the questionnaire comprises of human capital and eight short ethical scenarios on auditor's opinion. Two models formula will be applied to test hypotheses in this study. Since this study is an examination of some factors which have impact on managers of Iranian audit firms, private audit firms would be the unit of analysis. Multiple regressions will be employed for measuring the relationship between independent and dependent variables, while stepwise mediation multiple regressions will be applied for measuring the relationship among the mediator variable, independent variable and dependent variable.

## 6. Summary

Since there are a few studies on size and independent auditor's opinion, the study has a new suggestion for improving the relationship between audit firm size and independent auditor's opinion. The paper applied human capital as a mediator variable because of its effect on auditor quality. It also examines the effect of size on human capital and the effect of human capital on independent auditor's opinion. Researchers in this paper anticipated that human capital can connect the relationship between audit firm size and independent auditor's opinion. For this purpose some factors such as experience, skills, education and employee competence are included as human capital components. HC mediator role may suggest that small and medium audit firms should create a pool to minimize audit and providing expenditure turning classes for auditor and finally promoting high quality responsible work in front of stockholders. Resultantly, the results of this study are expected to contribute the knowledge of audit firm's partners about the effects of human capital on their employees.

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