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Accounting Horizons
Vol. 32, No. 1
March 2018

The Alumni Effect & Professional Skepticism: An Experimental Investigation

American Accounting Association | Publications
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The Alumni Effect & Professional Skepticism:  
An Experimental Investigation

Michael Favere-Marchesi and Craig E. N. Emby*

SUMMARY:

Regulators consider lack of professional skepticism to be a major cause of audit deficiencies and are concerned that auditors are more willing to accommodate less conservative accounting policies in clients employing a former partner of their firm because of diminished skepticism. This study examines the impact of audit firm alumni serving as senior members of client’s management on auditors’ skeptical judgment. In a controlled experiment with three different conditions, audit managers assessed the potential impairment of goodwill. The results indicate that auditors are more likely to make a judgment that agrees with the client’s position when the CFO is a former engagement partner from their firm, and are more confident in the CFO’s position when the CFO is a former Big 4 partner, whether from their own firm or another firm, than when the CFO is not identified as having any affiliation with any audit firm. Together, these results suggest that there is an alumni effect and that the effect is also partially influenced by the differing levels of auditor’s confidence in the CFO’s position, as a consequence of the CFO’s known or unknown affiliation with Big 4 firms.

Keywords: alumni threat, independence, skepticism, source credibility

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The valuable suggestions of Brian Mayhew and two anonymous reviewers are greatly appreciated. The paper also benefited from the comments of reviewers, discussants and participants at the 6th Workshop on Audit Quality in Florence, Italy; the 27th Asian-Pacific Conference on International Accounting Issues in Brisbane, Australia; and the 2015 American Accounting Association Annual Meeting. The authors wish to thank all the participants and their respective firms for their support.
The Alumni Effect & Professional Skepticism: An Experimental Investigation

INTRODUCTION

Professional skepticism is considered to be one of the most important characteristics of an independent auditor. Regulators argue that lack of professional skepticism is a major cause of audit deficiencies (Franzel 2013). This study explores a potential threat to professional skepticism, namely the influence on current auditors’ judgments of a former audit engagement partner subsequently accepting employment with the client in a senior financial executive capacity, which we call the alumni effect. While finding no evidence of loss of professional skepticism in auditors’ judgments due to prior affiliation, Martinov-Bennie, Cohen, and Simnett (2011) note that Australian regulations have a number of requirements on employment relationship between an auditor and the audit client that are far more stringent than in North America. It is incumbent to test whether the less stringent regulations in North America are sufficient to address the potential reduced skepticism that could be associated with the employment of former auditors by audit clients. This study extends prior research by specifically examining the influence on auditors’ judgements of social bonds that exist between auditors and auditees, who are alumni of the audit firm and now in a client management position, and is the first study to assess whether the regulations in North America are sufficient to safeguard against the threat of reduced skepticism due to such relationships.

An experiment with 140 managers from Big 4 firms was conducted to examine the influence of the CFO’s position that goodwill is not impaired on the current auditor’s judgment about goodwill impairment, in three scenarios: (1) where the CFO was the engagement partner.
until two years ago, with whom the current auditor worked on this engagement and others, (2) where the CFO is a former partner of another Big 4 firm, and (3) where the CFO’s affiliation is not specified. Participants were also asked to express the level of confidence in their decision, a construct that measured their confidence in the CFO’s position, which includes both the CFO’s perceived expertise and trustworthiness.

The results indicate that auditors are more likely to make a judgment that agrees with the client’s position when the CFO is a former engagement partner from their firm, and are more confident in their judgment when the CFO is a former Big 4 partner, whether from their own firm or another firm, than when the CFO is not identified as having any affiliation with any audit firm. Conversely, auditors who disagree with the client’s position are less confident in their decision when the CFO is a former partner of their firm or of another Big 4 firm than they are when the CFO’s affiliation is not specified. Together, these results suggest that there is an alumni effect but that the effect could be partially influenced by the differing levels of auditor’s confidence in the CFO’s position, as a consequence of the CFO’s known or unknown affiliation with Big 4 firms.

BACKGROUND AND HYPOTHESES

A skeptical mindset encourages auditors to adopt a questioning approach when considering information and forming conclusions. In this regard, professional skepticism is inseparably linked to the fundamental ethical principles of objectivity and auditor independence (IAASB 2012). Both academic research (Hurtt, Brown-Liburd, Earley, and Krishnamoorthy 2013; Nelson 2009) and auditing standards (CPA Canada 2010; PCAOB 2003) stress the fundamental importance of professional skepticism on auditors’ performance. In fact, recently,
the International Auditing and Assurance Standards Board (IAASB) has embarked on a major project aimed at enhancing audit quality. One of the significant elements of this project is focused on professional skepticism (IAASB 2015).

Audit failures in the early 2000’s caused regulators to be troubled by the practice of companies hiring individuals who previously worked on their audits or worked for their auditors. There appeared to be ample cause for this concern. For example, Enron had hired from its auditor both Richard Causey, the former engagement partner on the Enron account, as its executive vice president and chief accounting officer, and Jeffrey McMahon, as the company’s chief financial officer (Herrick and Barrionuevo 2002). Global Crossings, which filed for bankruptcy amidst allegations of improper accounting, had hired Joseph Perrone, the partner in charge of overseeing Global Crossing's audit, as its executive vice president for finance (Berman 2002). In the Waste Management accounting scandal, in which the SEC charged the auditor with repeatedly signing off on financial statements it knew to be misleading, all of the company’s Chief Financial Officers and Chief Accounting Officers from 1971 to 1997 were hired from its audit firm (SEC 2001). The practice of hiring outside auditors in key financial management positions has not abated. For example, in June 2015, an embattled flooring retailer selected, as interim CFO and senior vice president of finance, a senior manager at Ernst & Young LLP (EY) who, as recently as September 2013, had worked directly on the company’s audits, while EY continues to be the company’s auditors (Chasan and Kester 2015). This study examines the practice of a client’s former audit engagement partner subsequently accepting employment with the client in a senior financial executive capacity, as it pertains to regulators’ concerns of a potential threat to professional skepticism.
Concerned that auditors are more willing to accommodate less conservative accounting policies from clients employing a former partner of their firm because of diminished skepticism, regulators started to impose restrictions on the employment by audit clients of former employees of their accounting firm. In the U.S., Section 206 of the Sarbanes-Oxley Act (2002) specifies that an accounting firm cannot perform an audit for a registrant if a chief executive officer, controller, chief financial officer, chief accounting officer, or any person serving in an equivalent position for the issuer, was employed by that registered independent public accounting firm and participated in any capacity in the audit of that issuer during the 1-year period (termed “cooling-off period”) preceding the date of the initiation of the current audit.

Soon after the Sarbanes-Oxley Act (SOX), regulators in other countries imposed similar “cooling-off” periods. In Canada, auditing standards (CICA 2003, CPA Canada 2013) state that a firm shall not perform an audit engagement for a listed entity if a person who participated in the audit of the entity’s financial statements performed by the firm is an officer of the entity or is in a financial reporting oversight role unless a period of one year has elapsed from the date that the financial statements were filed with the relevant securities regulator. In Europe, article 22A of directive 2014/56 (EC 2014) require member states to ensure that a period of at least two years has elapsed before an audit engagement partner leaving the audit firm can take up any position at the audit client which involves the responsibility for fundamental management decisions and provides influence on the accounting policies and the preparation of the financial statements (e.g., CEO or CFO).

There is academic support for regulators’ concerns. For example, Beasley, Carcello, and Hermanson (2000) argue that the remaining members of the audit team may be reluctant to question former audit firm colleagues who are now part of the client management team,
particularly when the former auditor previously supervised the current audit team now responsible for the audit engagement. In this situation, the current audit team could over-rely on their trust in the former audit firm colleague and fail to exercise the appropriate level of professional skepticism towards the judgments and decisions being made by that individual, who is now a member of the client management team. Moore, Tetlock, Tanlu, and Bazerman (2006, 16) suggest that there can hardly be a more effective means of establishing a common identity between auditor and client than rotating personnel between the two, and that, once auditors learn and encode information from a partisan perspective, they are no longer able to objectively assess the data and view ambiguous data to be consistent with the preference of their clients (see also Babcock, Loewenstein, Issacharoff, and Camerer 1995; Thompson and Loewenstein 1992). Furthermore, Abbott, Brown, and Higgs (2016) provide evidence indicating that audit committee members recognize the potentially harmful effects of a manager-auditor relationship on auditor independence and that auditors with management affiliations receive less favorable hiring recommendation. This is an important issue for audit practice and as a matter of policy for regulators who are constantly striving for greater audit quality and to reduce biases in auditors’ judgment and decision-making. To our knowledge, this is the first experimental study using auditors in North America to examine the alumni effect in a post-SOX environment after sufficient time has elapsed since the cooling-off periods were introduced by regulators.

A number of prior studies have used accounting data to examine the effect of the employment of former audit partners as executive officers on financial reporting quality and thereby infer impact on judgment. Parlin and Bartlett (1994) report that, although not significant at the traditional level of $p \leq .05$ using the entire sample, auditors who knew that the controller was a former manager with their CPA firm, had a larger preliminary estimate of materiality than
auditors who had no such knowledge. Menon and Williams (2004) observe an increase in abnormal accruals in firms with former audit partners as senior officers, as did Dowdell and Krishnan (2004). Lennox (2005) finds that such ties are negatively associated with the issuance of going concern opinions and suggested that this could be interpreted as indicating that such ties are a possible source of influence on auditors’ ability to use professional skepticism in making judgments. Yet, Geiger, North, and O’Connell (2005) find no evidence of greater abnormal accruals surrounding the period immediately prior to or following the hiring of senior financial executive officers (CFOs, VP-finance, controller) from their previous audit firm.

The expectation that auditors will be more likely to accept the position of the CFO when that person is a former audit engagement partner is generally consistent with the results of prior research on advice giving and taking, beginning about three decades ago (Brehmer and Hagafors 1986).¹ Some recent research in organizational decision-making and in auditing supports regulators’ claims that auditors’ skeptical judgment is compromised when a former audit engagement partner is employed as the audit client’ CFO. Social psychology suggests that knowing an advisor from previous interactions is an important factor in accepting the position of that advisor (Van Swol and Sniezek 2005; and Feng and MacGeorge 2006). A pre-SOX survey by Bamber and Iyer (2007) finds that auditors who identify more with their client are more likely to acquiesce to the client’s position. Stefaniak, Houston, and Cornell (2012) report that higher levels of external auditor client identification are associated with more lenient control evaluations. The latter two studies use general statements to capture auditor’s identification with their clients but do not examine social bonds that could exist between auditors and alumni of the audit firm in a managerial role with their clients. Finally, Kadous, Leiby, and Peecher (2013) find

¹ A comprehensive review of the organizational research can be found in Bonaccio and Dalal (2006).
evidence that auditors rely on a trust heuristic in assessing and weighting advice from advisors with whom they have a strong social bond. The results of their experiment suggest that advisees substitute trust in a stronger social bond advisor (i.e., a respected and trusted peer associate) for an objective assessment of the advice received. Our study examines social bonds that exist between auditors and auditees. It specifically investigates the influence on auditors’ judgement of social bonds between auditors and auditees, who are alumni of the audit firm and now in a client management position, and whether the provisions of cooling-off periods in North America are sufficient to eliminate the threat of reduced skepticism due to such bonds.

The first hypothesis in this study is a direct test of whether the relationship between the CFO and the current auditor influences the current auditor’s willingness to accept the CFO’s position. The experiment varies the relationship between the current auditor and the CFO by having three experimental conditions intended to capture “descending” levels of the degree of relationship between the CFO and the current auditor. We expect that the current auditor would both identify with the CFO (following Bamber and Iyer 2007) and perceive a strong social bond with the CFO (following Kadous et al. 2013), if that individual was a former audit partner of the same firm. The first condition, where the CFO was the audit engagement partner until two years ago, and with whom the participants worked on this engagement and others, could reasonably be expected to generate the strongest social identity and bond. The second condition, where the CFO is a former partner of another Big 4 firm, would not result in the same level of social identity and bond, but, as an audit manager would naturally look up to an audit partner, it would represent an intermediate level. The third condition, where the CFO’s affiliation is not specified, would result in the least amount of social identity and bond.
Considering the CFO’s position that goodwill is not impaired, our first hypothesis, stated in alternate form, is as follows:

**H1:** Auditors of a client where the CFO is the former engagement partner will more likely conclude that goodwill is not impaired than auditors of a client where the CFO is a former Big 4 partner without affiliation to the auditors. In turn, auditors of a client where the CFO is a former big 4 partner without affiliation to the auditors will more likely conclude that goodwill is not impaired than auditors of a client where the CFO’s affiliation is not specified.

The appropriateness of the current auditor being influenced by the position of a former audit partner is not unambiguous. There is a substantial body of work in the psychological literature, dating back to the 1950s (e.g., Hovland and Weiss, 1951; Hovland and Mandell, 1952) regarding the issue of source credibility and how source credibility influences judgment.² The general conclusion is that the higher the source credibility, the more persuasive the communication. We expect that an auditor would consider a former audit partner, with his or her skills and client experience, to be more credible than an individual who does not have that background or experience. Kerler and Killough (2009) use the model of Nooteboom (1996) and view trust as being comprised of two dimensions: goodwill trust or trustworthiness, which is similar to the trust heuristic proposed by Kadous et al. (2013), and competence trust, which is allied with perceived expertise.

If the current auditor is more likely to accept the CFO’s position in the scenario where the CFO is a former audit engagement partner on that client, it may not be solely an indication of reduced professional skepticism. The current auditor’s judgment could also be influenced by his/her confidence in the CFO’s position which includes both trustworthiness and perceived expertise. Willemsen, Neijens, and Bronner (2011) indeed argue that source credibility is a

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function of both trustworthiness and perceived expertise of the source. Hence, the current auditor would likely have the highest confidence in the CFO’s position when the CFO is a former audit partner of his/her firm because source credibility would be at the highest-level due to the presence of a social bond in addition to perceived expertise. The auditor would have a lower confidence in the CFO’s position when the CFO was the partner of another big 4 firm because of the reduced level of source credibility in the absence of the trustworthiness created by a social bond. Finally, the auditor would have the lowest level of confidence in the CFO’s position when the CFO’s affiliation was not specified because source credibility would be further diminished by the lack of information on which to base perceived expertise.

As stated earlier, we measured the current auditor’s confidence in the CFO’s position by asking participants their level of confidence in the judgment they had made regarding goodwill impairment, across the three experimental conditions. This confidence measure is a function of how confident auditors are in the CFO’s position as well as in their own judgment skills. Assuming that the auditors’ own skills and confidence in those skills are randomly distributed across the three conditions, differences in levels of confidence will reflect the auditors’ confidence in the CFO’s expertise and credibility. While our hypothesis is focused on managers who agreed with the CFO’s position, we also conducted an additional analysis using all subjects. Hence, our second hypothesis, stated in alternate form:

H2: When agreeing with the CFO’s position, auditors of a client where the CFO is the former engagement partner will be more confident in their judgment than auditors of a client where the CFO is a former Big 4 partner without affiliation to the auditors. In turn, when agreeing with the CFO’s position, auditors of a client where the CFO is a former big 4 partner without affiliation to the auditors will be more confident in their judgment than auditors of a client where the CFO’s affiliation is not specified.
RESEARCH METHOD

Research Design

The experiment is a 3x1 factorial between-subjects design. The independent variable is the affiliation of the CFO, which is manipulated at three levels (former partner of the current audit firm, former partner of another Big 4 firm, and no identified affiliation with any audit firm).

The dependent variables consist of (1) the auditor’s belief that goodwill may be impaired (i.e., the inverse of the likelihood of the current auditor’s accepting the CFO’s position that goodwill is not impaired) and (2) the auditor’s level of confidence in that belief. The “regulator view” would equate a greater likelihood of accepting the former audit partner’s position with diminished professional skepticism.

The belief in goodwill impairment was obtained by soliciting a response to the following question, on a dichotomous scale (yes or no):

*Based on the background information, the audit summary memo and the concurring partner review questionnaire for the 2012 audit, and the information you gathered, do you believe that purchased goodwill may be impaired?*

The level of confidence in subject’s decision was measured by asking subjects to answer the following question, on a scale of 0% to 100%:

*Please express (in percentage where 100% means absolute certainty) your level of confidence in the decision you just made regarding goodwill impairment.*

Our manipulation addresses two theoretical constructs. The first construct is the CFO’s prior affiliation with the auditor, where the first scenario would be considered by regulators to compromise the auditor’s independence. The second construct reflects the auditor’s confidence in
the CFO’s explanation which includes both perceived expertise and trustworthiness. In so doing, the current study extends the results of existing research (e.g., Martinov-Bennie et al. 2011) by looking at various levels of source credibility, a factor that could also influence auditors decisions – which is consistent with the arguments of Kinney (2005), Humphrey, Moizer, and Turley (2006), Young (2006), and Jamal and Sunder (2011) that regulators essentially have a one-dimensional view of audit quality, equating audit quality with professional skepticism and ignoring other potential determining factors.

Participants

A total of 140 managers from Big 4 firms in offices throughout Canada and the United States participated in this study.³ Potential participants were identified by a senior partner in each office, who personally contacted managers to secure their participation.⁴,⁵ Managers’ audit experience ranged from 4 to 15 years, with an average 7.2 years (standard deviation 2.4 years). Furthermore, in terms of other experience factors, the percentage of time that participants devoted to clients in the biotech industry averaged 4.3% (standard deviation 8.5%), while the percentage of audit engagements in which participants had experienced impaired goodwill averaged 11% (standard deviation 14.1%).

³ 57% and 43% of participants were US auditors and Canadian auditors, respectively. As anticipated, because auditors were from Big 4 firms, there were no statistical differences in the results for participants from Canada compared to the US.
⁴ Because participants were individually recruited within each firm, the rate of participation was 100%.
⁵ The firms and the participants involved in the study were assured of the confidentiality of the individual results and guaranteed that no identification of offices or participants would be disclosed.
Materials and Administration

The materials were based on the case used by Favere-Marchesi and Emby (2005), the audit of company in the biotech industry where there was some concern that purchased goodwill might be impaired, modified appropriately to test this study’s hypotheses. The web-based research instrument was accessible to managers over the Internet. Participants were randomly assigned to one of the three treatment combinations and provided a unique ID to access their version of the instrument. The first section of the case materials consisted of background information about the engagement, the client and the client’s industry, as well as a draft of the current year’s audited financial statements. The background information was common to all participants, except for the information about the engagement that reflected the three experimental conditions. In the first version, managers were told that the CFO, a former partner of their firm, used to be the engagement partner until two years ago, and that they worked with the partner on this and other audit engagements. In the second version, managers were told that the CFO was a former audit partner from another Big 4 firm. In the third version, there was no indication that the CFO had been a partner of their firm or another Big 4 firm.

Participants were asked to assume the role of continuing audit managers who were in complete agreement with financial statements in the prior year, including the valuation of goodwill. At issue in this year’s audit was the valuation of goodwill. The case presented to the participants contained mixed evidence as to whether or not goodwill is impaired. The participants received a number of pieces of information, some suggesting a possible write-down of goodwill, and some supporting the current goodwill valuation. This information was sufficiently negative to suggest that goodwill impairment might be a definite possibility, but not so overwhelmingly

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6 The biotech industry was selected because it is often associated with issues of purchased goodwill.
negative that subjects would automatically conclude impairment. Hence, the case offers a sufficiently rich context to provide some tension and the need for judgment in evaluating goodwill impairment. Subjects also received the engagement partner’s summary memo discussing the purchased goodwill and the completed concurring partner questionnaire, both from the prior year’s audit. The participants were then asked whether they believed that purchased goodwill may be impaired, based on the background information and the additional information provided to them. Both participants who responded that goodwill was not impaired (i.e., accepted the position put forward by the CFO) and those who believed that goodwill was impaired were asked for their level of confidence in the decision they had just made.

It was necessary to determine the normal level of professional skepticism of participants to rule out the possibility that different potential assessments of goodwill impairment between the three groups might be due to significant differences in the base level of skepticism of these groups. Following a distracter task, participants answered questions related to their level of professional skepticism. These questions, drawn from a scale developed by Hurtt (2010), were designed to measure an individual’s level of professional skepticism, based on characteristics derived from audit standards, psychology, philosophy, and consumer behavior research. This measurement was purposefully set after the experimental task so that it did not act as a trigger to artificially elevate the normal level of professional skepticism exhibited by the participants. Finally, participants answered a debriefing questionnaire that included demographic data and manipulation checks.

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7 Most audit firms require concurring partners to fill out a checklist questionnaire following their review to ensure that all important aspects of the audit have been performed and/or documented in accordance with generally accepted auditing standards (e.g., whether financial statements were prepared in accordance with GAAP, whether review of subsequent events have been documented).
RESULTS

Manipulation Checks

The debriefing questionnaire asked questions to ensure that participants internalized their role as audit manager on the current year’s audit and on last year’s audit, and about the CFO to determine whether participants correctly identified their experimental condition. Specifically, participants were asked whether the case mentioned that they were the manager on the current’s year audit and the manager of last year’s audit. They were also asked whether the case mentioned that the CFO was a former audit partner of their firm, a former audit partner from another Big 4 firm, or made no mention of the CFO’s professional background. All participants correctly identified their role in the audit and their experimental condition.\(^8\)

Base level of skepticism

Results (not tabled) from the skepticism questionnaire developed by Hurtt (2010) were analyzed using a one-way ANOVA on the participants’ skepticism scores. There were no significant differences in the base level of professional skepticism between the three experimental groups (F = .163, p = .850). With no significant difference in the base level of skepticism, different assessments of the impairment of goodwill between the three groups could be interpreted as indicating that the experimental conditions did affect the judgments exhibited by subjects in the specific task.

\(^8\) No statistical test of differences was needed, since all participants correctly identified their role and experimental condition.
Experience Measures

Prior to testing the hypotheses, we examined whether there were any significant differences in experience between the three experimental groups. The results (not tabled) of one-way ANOVAs show that there was no difference between the three experimental groups in terms of audit experience ($F = 0.014, p = .986$), industry experience ($F = 0.157, p = .855$), and experience with clients whose goodwill was impaired ($F = 0.141, p = .868$).

Self-reported Ability Measure

Subjects were asked to self-assess (on a scale of 1 to 5) their ability to assess goodwill impairment. The results (not tabled) of a one-way ANOVA show that there was no difference in the participants’ self-reported ability between the three experimental groups ($F = 0.011, p = .989$).

Hypothesis 1: Impairment of Goodwill

Hypothesis 1 states that auditors of a client where the CFO is a former engagement partner will be more likely to believe that purchased goodwill is not impaired than auditors of a client where the CFO is a former partner of another Big 4 firm. In turn, auditors of a client where the CFO is a former partner of a Big 4 firm will be more likely to believe that purchased goodwill is not impaired than auditors of a client where the CFO has no affiliation with the auditors or with any Big 4 firm.

Data relevant to this hypothesis are presented in Table 1. When the CFO is a former engagement partner, 76% of the managers believed that goodwill was not impaired; when the CFO is a former partner of another Big 4 firm, 48% of the managers believed that goodwill was
not impaired; and when the CFO has no affiliation with the auditors or another Big 4 firm, 39% of the managers believed that goodwill was not impaired.

A test of proportions, using Pearson Chi-square, indicates that that the experimental conditions are different with respect to the proportions of subjects who felt that goodwill was not impaired ($\chi^2 = 13.852, p = .001$). To determine which of the proportions differ, the Marascuilo procedure is used to make comparisons between all pairs of groups (Marascuilo 1966).

The results of the Marascuilo procedure show that the auditors of a client where the CFO is the former engagement partner are more likely to conclude that goodwill was not impaired than (1) auditors of a client where the CFO is a former partner of another Big 4 firm and (2) auditors of a client where the CFO has no affiliation with the auditors or with any Big 4 firm. In addition, auditors of a client where the CFO is a former partner of another Big 4 firm are as likely to conclude that goodwill was not impaired than auditors of a client where the CFO’s affiliation is not specified. These results support the social identity and social bond explanations of the “alumni effect”.

**Hypothesis 2: Confidence in judgment**

By looking at the decision confidence of the participants, hypothesis 2 tests the influence of source credibility reflected by the auditors’ confidence in the CFO’s position. Hypothesis 2 states that, when concluding that goodwill is not impaired, auditors of a client where the CFO is a former audit partner with their firm will be more confident in their judgment than auditors of a client where the CFO is a former partner from another Big 4 firm. In turn, when concluding that
goodwill is not impaired, auditors of a client where the CFO is a former partner from another Big 4 firm will be more confident in their judgment than auditors of a client where the CFO’s affiliation is not specified.

Data pertinent to this hypothesis are presented in Table 2. To test the hypothesis, the confidence levels of auditors who concluded that goodwill was not impaired were examined using an analysis of variance.\(^9\)

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Insert Table 2 about here

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The results of the analysis indicate there are significant differences in the mean confidence levels between groups (F = 23.762, p = .000), thereby rejecting the null hypothesis. The post hoc tests show that, when concluding that goodwill was not impaired, both auditors of a client where the CFO is the former engagement partner and auditors of a client where the CFO is a former partner of another Big 4 firm are *more confident in their judgment than* auditors of a client where the CFO has no affiliation with the auditors or with any Big 4 firm. Furthermore, when concluding that goodwill was not be impaired, auditors of a client where the CFO is the former engagement partner are *as confident in their judgment as* auditors of a client where the CFO is a former partner of another Big 4 firm. These results suggest that source credibility influences the judgments of the participants.

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\(^9\) The Levene statistic (1.367, p = .261) revealed that the variances are homogeneous among the three experimental conditions.
Additional analysis

The confidence in judgment from all participants were examined by transforming the confidence levels into a new scale that basically reflected the levels of confidence level in the CFO/client goodwill assessment. The confidence levels of auditors disagreeing with the CFO’s position were multiplied by -1, giving us scale that ranged from -100 (not very confident in the CFO’s position) to +100 (very confident in the CFO’s position). Data relating to the rescaled confidence levels of all participants are presented in Table 3.

The results of the analysis of variance indicate significant differences in the mean confidence levels between groups (F = 21.132, p = .000). The post hoc tests revealed that auditors of a client where the CFO is the former engagement partner were more confident in the CFO’s position than both auditors of a client where the CFO is a former partner of another Big 4 firm (p = .002) and auditors of a client where the CFO’s affiliation is not specified (p = .000). In addition, auditors of a client where the CFO is a former partner of another Big 4 firm were more confident in the CFO’s position than auditors of a client where the CFO’s affiliation is not specified (p = .007). These results suggest that as the source credibility increases so does the confidence level in the CFO’s position.
DISCUSSION

Regulators are concerned that a lack of professional skepticism is a major cause of audit deficiencies, despite auditing standards that stress the fundamental importance of skepticism on audit quality and the integrity of the audit process.

Very few studies have examined the link between independence and professional skepticism. The review by Hurtt et al. (2013) identified mixed results in studies that indirectly looked at the effects of audit clients employing a former partner of their present auditor as a chief financial officer. This study examined whether such situations impact auditor’s decisions and judgments.

The results of this study can be interpreted as speaking to the tension between independence and source credibility. The fact that the current auditors are more likely to concur with the client’s position when the client is a former audit partner of their firm can be interpreted as indicating reduced professional skepticism, but the results of the test of the second hypothesis suggest that source credibility also influences the auditors’ confidence in a CFO’s position. The fact that the participants were more confident in their decision to concur with the client’s position when the CFO was a former engagement partner than when the CFO was an audit partner from another Big 4 firm and even more when the CFO did not have affiliation with the auditors or with any Big 4 firm suggests that the current auditors were influenced by the source credibility of the CFO. We believe that this consideration is something the regulators should take into account to push for a more robust cooling off period covering a wider range of management positions and impose a longer cooling off period, as mentioned by the PCAOB Investor Advisory Group.
(2012) or even an outright prohibition as suggested by Bazerman, Moore, Tetlock, and Tanlu (2006).

LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

A limitation of the present study is a limitation common to almost all experimental research. It captures some, but certainly not all, of the factors that would be involved in a manager making such a decision. Also, because the case was fictitious, it is impossible to measure whether the participants’ judgments were influenced “in the wrong direction” by the CFO’s position. There is no objective truth as to whether goodwill may or may not be impaired. Future research could construct an experiment around an actual case where the SEC required financial statements to be restated as a consequence of a mandated write-down of goodwill.

Future research could also examine other audit judgment tasks to determine whether the alumni effect is a pervasive threat to other parts of the audit process. Further studies could determine whether the alumni threat is also present when the CFO is a former employee of the audit firm, but not necessarily a former engagement partner (e.g., former engagement manager, other partners of the same firm). Additionally, the length of the cooling-off period could be extended (e.g., 5 years) to see whether it reduces the differences in judgment observed in this study.
REFERENCES


<table>
<thead>
<tr>
<th>CFO is a former engagement partner (n = 46)</th>
<th>CFO is a former partner of another Big 4 firm (n = 48)</th>
<th>CFO has no affiliation with auditors or a Big 4 firm (n = 46)</th>
</tr>
</thead>
<tbody>
<tr>
<td>35/46 (76%)*</td>
<td>23/48 (48%)*</td>
<td>18/46 (39%)*</td>
</tr>
</tbody>
</table>

* A Chi-square test for proportions indicates that the difference in proportions is significant at p = .001.
TABLE 2

Effects of CFO Affiliation on Auditor’s Judgment Confidence Levels
(for Managers Who Believed that Purchased Goodwill Was Not Impaired)

Panel A: Mean confidence levels (and standard deviation)

<table>
<thead>
<tr>
<th>Experimental conditions</th>
<th>n</th>
<th>Mean confidence level (and standard deviation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFO is a former engagement partner</td>
<td>35</td>
<td>73.03 (13.734)</td>
</tr>
<tr>
<td>CFO is a former partner of another Big 4 firm</td>
<td>23</td>
<td>65.96 (18.351)</td>
</tr>
<tr>
<td>CFO has no affiliation with auditors or a Big 4 firm</td>
<td>18</td>
<td>41.83 (15.816)</td>
</tr>
</tbody>
</table>

Panel B: ANOVA for mean confidence levels

<table>
<thead>
<tr>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F-value</th>
<th>P*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>5883.286</td>
<td>23.762</td>
<td>0.000</td>
</tr>
<tr>
<td>Within groups</td>
<td>73</td>
<td>247.595</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>75</td>
<td>29841.000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Panel C: Post Hoc tests - Bonferroni

<table>
<thead>
<tr>
<th>Version</th>
<th>Version</th>
<th>Mean Difference</th>
<th>Std. Error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFO is a former engagement partner</td>
<td>CFO is a former partner of another Big 4 firm</td>
<td>7.072</td>
<td>4.224</td>
<td>.295</td>
</tr>
<tr>
<td>CFO is a former engagement partner</td>
<td>CFO has no affiliation with auditors or a Big 4 firm</td>
<td>31.195</td>
<td>4.564</td>
<td>.000†</td>
</tr>
<tr>
<td>CFO is a former partner of another Big 4 firm</td>
<td>CFO has no affiliation with auditors or a Big 4 firm</td>
<td>24.123</td>
<td>4.952</td>
<td>.000†</td>
</tr>
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</table>

Note:
This table contains descriptive statistics, ANOVA, and post hoc tests for 76 audit managers’ confidence levels in their judgment about impaired goodwill, made on a scale from 0 to 100 (where 100% means very confident).

* p-values are two-tailed.
† The mean difference is significant at the 0.05 level.
TABLE 3

Effects of CFO Affiliation on Auditor’s Judgment Confidence Levels
(for all Managers)

Panel A: Mean confidence levels (and standard deviation)

<table>
<thead>
<tr>
<th>Experimental conditions</th>
<th>n</th>
<th>Mean confidence levels (and standard deviation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFO is a former engagement partner</td>
<td>46</td>
<td>48.98 (45.719)</td>
</tr>
<tr>
<td>CFO is a former partner of another Big 4 firm</td>
<td>48</td>
<td>11.65 (55.583)</td>
</tr>
<tr>
<td>CFO has no affiliation with auditors or a Big 4 firm</td>
<td>46</td>
<td>-21.37 (53.786)</td>
</tr>
</tbody>
</table>

Panel B: ANOVA for mean confidence levels

<table>
<thead>
<tr>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F-value</th>
<th>P*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>113969.747</td>
<td>2</td>
<td>56984.873</td>
<td>21.132</td>
</tr>
<tr>
<td>Within groups</td>
<td>369444.675</td>
<td>137</td>
<td>2696.676</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>483414.421</td>
<td>139</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Panel C: Post Hoc tests - Bonferroni

<table>
<thead>
<tr>
<th>Version</th>
<th>Version</th>
<th>Mean Difference</th>
<th>Std. Error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFO is a former engagement partner</td>
<td>CFO is a former partner of another Big 4 firm</td>
<td>37.332</td>
<td>10.715</td>
<td>.002†</td>
</tr>
<tr>
<td>CFO is a former engagement partner</td>
<td>CFO has no affiliation with auditors or a Big 4 firm</td>
<td>70.348</td>
<td>10.828</td>
<td>.000†</td>
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<tr>
<td>CFO is a former partner of another Big 4 firm</td>
<td>CFO has no affiliation with auditors or a Big 4 firm</td>
<td>33.015</td>
<td>10.715</td>
<td>.007†</td>
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</table>

Note:
This table contains descriptive statistics, ANOVA, and post hoc tests for 140 audit managers’ confidence levels in their judgment about impaired goodwill, made on a scale from -100 (where -100% mean not very confident) to 100 (where 100% means very confident).
* p-values are two-tailed.
† The mean difference is significant at the 0.05 level.