Pressure on Internal Auditors to Alter Findings

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For her own part, Cynthia Cooper doesn’t regret what she did. As she told a group of students at Mississippi State: “Strive to be persons of honor and integrity. Do not allow yourself to be pressured. Do what you know is right even if there may be a price to be paid.” If your company tells employees to do whatever it takes, push the envelope, look the other way, and “be sure that we make our numbers,” you have three choices: go along with the policy, try to change things, or leave. If your personal integrity is part of the equation, you’re probably down to the last two choices.”

Cynthia Cooper’s conviction to “do the right thing” despite feeling threatened provides an excellent example for internal auditors, external auditors, and forensic accountants. As Vice President of Internal Audit at WorldCom, why did Cooper continue to pursue a case against her employer after being told to “drop it?” Likely, she felt a strong allegiance to her profession and its standards. The Institute of Internal Auditors (IIA) requires that “the internal audit activity be independent, and internal auditors must be objective in performing their work” (IIA Standard 1100). While Ms. Cooper’s case is an extreme example, internal auditors can face pressure to change a rating or assessment, or withdraw findings in internal audit reports. As evidence of such pressure, the IIA’s CBOK (Common Body of Knowledge) study (IIA 2010) reports that seventeen percent of U.S. Chief Audit Executives (CAEs) faced some form of coercion to change or withdraw a finding. The purpose of this article is to understand factors that are positively or negatively associated with the presence of pressure being applied to U.S. CAEs. Understanding factors associated with pressure ultimately may help to design systems to minimize pressure on CAEs and strengthen internal audit functions (IAFs).

Using data from The IIA’s survey of U.S. CAEs (n = 221), we find that factors associated with good corporate governance are associated with a lower likelihood of pressure on the CAE to alter or withdraw audit findings. Specifically, we find that pressure is less likely when: (a) the CAE is more experienced and holds either a CPA or CIA certification; (b) the CAE is appointed by the audit committee/board of directors (with no CEO or CFO involvement); (c) the IAF’s status in the organization is rated as sufficient to be effective, and (d) the IAF has provided training to audit committee (AC) members. Conversely, pressure is more likely when the IAF is evaluated based on (a) the total number of significant findings or (b) recommendations being accepted/implemented. Based on the results of this study, we suggest some avenues for future research. Future studies may fully examine the source and type of pressure being applied. Also, future studies may further explore the relationship of board and AC characteristics to CAE pressure.

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2 Globally, 22 percent of CAEs faced some form of pressure. However, only seventeen percent of U.S. CAEs reported experiencing pressure. Future research may examine what factors lead to a higher likelihood of pressure in non-U.S. settings.
The next section provides background information, followed by previous research and the hypotheses. The remaining sections discuss the method, results, and summary and conclusions.

**Background**

Research suggests that the IAF has a positive influence on corporate governance, including the deterrence of accounting irregularities and employee theft (see Gramling et al., 2004 for a synthesis of the role of the IAF in corporate governance). In order to strengthen corporate governance, the IAF must be able to do its job free from pressure to change or withdraw its findings. While accounting research has examined a number of pressure effects within external audit, tax, and managerial accounting, the factors associated with pressure in the internal audit setting are not well known (DeZoort and Lord 1997).

The pressure literature describes many different forms of pressure. Two forms of pressure that may apply to the IAF include social influence pressures (compliance and obedience) and environmental pressures (client). Social influence pressures relate to the influence that individuals have over one another within a firm (DeZoort and Lord 1997). Within social influence, both compliance and obedience pressure involve pressure to submit to requests/directives from: 1) any individual in the firm (compliance); or 2) from hierarchical superiors (obedience). Compliance pressure results from a request by a superior or peer, whereas obedience results from a demand by a superior. Thus, within the social influence context, the IAF can experience pressure to comply with requests/directives to alter findings from management, corporate accounting, or other internal auditors.

In addition, the literature identifies environmental pressure, specifically client pressure, as “pressure to yield, or the perceived pressure to yield, to a client’s wishes or influence, whether appropriate or not” (DeZoort and Lord 1997, 47). The IAF may feel environmental (client) pressure where the “client” (the auditee) is the company’s management team. Most of the research in this area is in public accounting, focusing on the auditor-client relationship and its impact on independence. Prior studies suggest that auditors are more exposed to pressure where technical guidance is minimal (Lindsay 1990; Knapp 1985, 1987). Many studies examine various characteristics of the audit firm (e.g., firm-size, audit and non-audit fees) and auditor (e.g., ethical reasoning, locus of control, decision-making style).

A recent study documents that pressure on CAEs may be more prevalent than previously thought. Rittenberg and Miller (2015) find that greater than fifty percent of CAEs indicated they were asked to omit or alter a finding at least once. Thus, rather than focus on the CAE’s response to pressure, it may be fruitful to focus on the presence/absence of pressure and examine characteristics associated with CAEs reporting pressure. By exploring characteristics associated with pressure, we may begin to develop systems to minimize pressure and strengthen IAFs.

**Previous Research and Hypotheses**

The IAF is a key element of the corporate governance structure, contributing to the overall quality of the control environment and internal controls. The passage of the Sarbanes-Oxley Act of 2002 (SOX) heightened the role of the IAF as an organizational support function for meeting the SOX regulatory requirements (COSO 2004; Gramling et al., 2004). Numerous studies explore the IAF’s contribution to quality financial reporting or improved governance (Read and Rama 2003; Cohen et al., 2004; Cohen et al., 2007). In addition to the IAF, a strong audit committee (AC) is integral to the overall governance structure (Sharma et al., 2011, Carcello et al., 2011). The combination of a strong IAF working with a strong AC should signal a commitment to quality financial reporting, thus moderating management’s belief that coercion of the CAE would be effective. Essentially, strong governance should serve to reduce social influence and client pressure because of the higher level of structure and discipline imposed by the overall governance framework.

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3 In addition, the CBOK data set does not include information on the CAE’s response to the pressure.
We expect that strong governance will better insulate the CAE from pressure to change or withdraw a rating/assessment/finding in a report. This insulation is because there can be consequences when someone attempts to exert pressure, in case the person being pressured refuses to buckle and instead makes an issue out of the attempt to coerce. Hence, before someone can be pressured, the person who seeks to change something through pressure must believe that there is a plausible chance of achieving the objective through pressure.

A strong governance structure should signal a commitment to a disciplined, systematic approach to the work. As a result, we expect that management will perceive that achieving its objectives through pressure will not be effective. Conversely, the weaker the governance structure, the greater the likelihood that management may believe it can coerce the CAE to alter findings, resulting in a greater likelihood that the CAE will face pressure to change or withdraw a rating/assessment/finding in a report.

Figure 1, Governance Framework, highlights the key elements of the governance structure examined in this study. In particular, we examine characteristics of the overall corporate governance, internal audit function, and audit committee. Our hypotheses flow from this framework and are discussed below. [see Figure 1, pg 439]

**Corporate Governance—Governance Code**

The IIA CBOK study measures one overall governance characteristic: whether the organization complies with a corporate governance code. Compliance with a governance code may signal that the organization is serious about governance. The overall quality of the IAF and AC and the strength of the ethical environment may be bolstered by compliance with a code.

**H1:** CAEs of organizations that comply with a corporate governance code will be less likely to report coercion (extreme pressure) to change a rating or assessment or to withdraw a finding in an internal audit report.

**Internal Audit—Competence**

Competence relates to qualifications, training, and professional experience. As CAEs become more competent, we would expect that social influence pressures would decrease due to the CAEs’ personal and professional growth and level of organizational influence.

Two studies suggest that IAs with more experience are better attuned to unethical behavior. Larkin (2000) finds more experienced IAs (those with greater than five years of experience) identify unethical behavior more clearly than do less experienced auditors. O’Leary and Stuart (2007) find that more experienced IAs consider inaction (in responding to an ethical dilemma) to be more unethical than less experienced IAs.

Given prior research, we would expect that greater tenure as a CAE should yield greater understanding of technical issues and guidance, more experience/knowledge about the company, potential for more developed ethical reasoning, and hence, more influence in the organization. As a result, we predict that greater experience as a CAE should result in less pressure to change audit findings.

**H2:** CAEs with more experience will be less likely to report coercion (extreme pressure) to change a rating or assessment or to withdraw a finding in an internal audit report.

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4 Ng and Tan (2003) find that a stronger (effective) AC enhances the bargaining power of auditors in negotiating audit adjustments, because a strong AC is a signal that the appropriate accounting will be considered carefully.

5 The characteristics explored in this study are based on the answers to questions posed in the CBOK Study. As a result, this article is not an exhaustive analysis of all governance characteristics, but rather we focus on those relevant to the proposed governance framework in Figure 1.
Both CPA and CIA certification require passage of a rigorous professional exam, continuing professional
education, and adherence to a strict code of conduct. As a result, both CPA and CIA certification should
act as proxies for higher levels of training and competence.

Numerous studies have used the CPA designation as a proxy for expertise (DeZoort et al., 2003; DeZoort
et al., 2008). CPAs are licensed by each state, and CPAs must continue training in order to maintain their
licenses. Also, Myers and Gramling (1997) surveyed CFOs, board members, and internal audit directors
of Fortune 500 companies and the Top 300 U.S. Commercial Banks, and find that the CIA designation
conveys the message that the designation holder has a higher level of competence. Similarly, Anderson et
al., (2012) use the CIA certification as a measure of internal audit quality. Hence, we expect that CAEs
with CPA or CIA certification will be perceived as having greater competence; thus, they should be less
likely to be pressured.

**H3:** CAEs with CPA or CIA certification will be less likely to report coercion (extreme
pressure) to change a rating or assessment or to withdraw a finding in an internal audit
report.

Following the professional standards enhances overall IAF competence. Thus, one of the IIA’s ten core
competencies for IA personnel (in its Competency Framework) is applying the professional standards
(International Professional Practices Framework). The CBOK Study asked CAEs whether their IAF
complies with the IIA’s Standards for the Professional Practice of Internal Auditing. Technical guidance
may help to shield CAEs from pressure by providing a structured and disciplined approach to performing
and evaluating the work.

Previous research (Lindsay 1990; Knapp 1985, 1987) suggests that pressure is increased when technical
guidance is minimal. In examining the reliance of external auditors on internal audit work, Mihret and
Admassu (2011) find that IA work performance (quality) is critical to determining the extent of reliance
on the IAF. Mihret and Admassu include perceived compliance with IIA standards as part of their work
performance measure. Thus, we would expect CAEs to experience less pressure when the IAF complies
with IIA standards.

**H4:** CAEs of IAFs that comply with The IIA’s Standards for the Professional Practice of
Internal Auditing will be less likely to report coercion (extreme pressure) to change a
rating or assessment or to withdraw a finding in an internal audit report.

**Internal Audit—Resources and Performance Incentives**

Regardless of the reporting structure and relationship with the BOD/AC, CAEs’ beliefs about their
organizational status may be more important than their actual status within the organization. If CAEs
believe that they have sufficient status to be effective, then they may project an unwillingness to be
c oerced, resulting in a lower likelihood of the CAE being pressured. That is, CAEs may exhibit strong
convictions about their role in the organization, similar to the Cynthia Cooper story described in the
introduction.

**H5:** CAEs who believe that their IAF has sufficient status in the organization to be effective
will be less likely to report coercion (extreme pressure) to change a rating or assessment
or to withdraw a finding in an internal audit report.

Companies may create incentives (through performance evaluations) for IAFs in order to promote
vigorous IAF evaluation of the organization. However, these incentives may actually hinder the reporting
process by setting the CAE up to face increased pressure. Specifically, two types of performance
evaluation may expose the CAE to greater possibility of coercion. First, if the IAF is evaluated based on
the number of recommendations accepted/implemented, then CAEs may face coercion to drop some
findings in order to improve the auditee’s “acceptance rate” and make the IAF appear more effective.
H6: CAEs of IAFs that are evaluated based on the number of recommendations accepted/implemented will be more likely to report coercion (extreme pressure) to change a rating or assessment or to withdraw a finding in an internal audit report.

Similarly, if the IAF is evaluated using the total number of significant findings, CAEs have an incentive to report even the most remote “findings,” recognizing that management might pressure them to drop some from the list. Such an approach would be likely to open CAEs up to greater likelihood of reporting coercion.

H7: CAEs of IAFs that are evaluated using the total number of significant findings will be more likely to report coercion (extreme pressure) to change a rating or assessment or to withdraw a finding in an internal audit report.

Finally, IAF incentives may be skewed when the IAF performs consulting services for management. Brody and Lowe (2000) examine the dual role of the IAF. They suggest that if the IAF performs in both an assurance role and a consulting role, the IAF may not be able to maintain objectivity. A consulting role requires the IAF to serve management and the company, whereas an assurance role requires the IAF to maintain greater objectivity. The conflicting roles may cause pressure on CAEs as management recognizes that it has influence over the IAF’s consulting engagements and may be able to influence assurance engagements as well. In contrast, IAFs with a strong assurance role may mitigate this pressure.6

H8: CAEs of IAFs that place more emphasis on assurance than consulting services will be less likely to report coercion (extreme pressure) to change a rating or assessment or to withdraw a finding in an internal audit report.

IA/AC Interactions—Independence

The IIA’s best practices (IIA 2012) recommend that CAEs be appointed by, and report to, the AC. In addition, the CAE should have direct communication with the AC. This relationship with the AC is observable by management and signals the independence of the IAF. Accordingly, CAEs should experience less pressure to change findings when they are appointed by the board of directors (BOD) or AC and meet privately with the AC.

H9: CAEs appointed by the AC or BOD (without CEO or CFO involvement) will be less likely to report coercion (extreme pressure) to change a rating or assessment or to withdraw a finding in an internal audit report.

H10: CAEs who meet privately with the AC will be less likely to report coercion (extreme pressure) to change a rating or assessment or to withdraw a finding in an internal audit report.

Audit Committee—Diligence

Effective ACs should strengthen IAFs “by providing an independent and supportive environment where the CAE can raise matters affecting management” (O’Leary and Stewart 2007, 792). Accordingly, effective ACs may insulate CAEs from pressure by giving them a higher degree of influence within the organization. The IIA’s CBOK study measures two AC characteristics: number of AC meetings during the fiscal year and whether the AC is trained by the IAF.

Numerous governance studies use the frequency of AC meetings as a proxy for AC diligence and monitoring. More frequent AC meetings may improve communication between external and internal

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6 Abbott et al., (2010) examine the range of IAF activities (including internal control and consulting). They find that IAFs with greater AC oversight allocate a greater percentage of hours to internal control activities. Thus, an internal control focus may be the result of increased AC oversight (which also could explain H8).
auditors, leading the AC to be more effective. A number of studies find a positive relationship between the frequency of meetings and positive financial reporting outcomes (e.g., reduced financial reporting problems, fraud, and restatements—see Raghunandan and Rama 2007), although evidence is mixed (see Bédard and Gendron 2010).

**H11:** CAEs of companies where ACs meet more frequently will be less likely to report coercion (extreme pressure) to change a rating or assessment or to withdraw a finding in an internal audit report.

**Audit Committee—Training**

Similar to meeting frequently, ACs may be more effective if they receive training, as research has documented that various forms of AC expertise are associated with positive accounting and internal control outcomes (Carcello et al., 2011). Presumably, IAF training of ACs should elevate the effectiveness of the ACs’ oversight and monitoring. At the very least, the training should improve communication between the IAF and the AC.

**H12:** CAEs of IAFs that have provided training to the AC will be less likely to report coercion (extreme pressure) to change a rating or assessment or to withdraw a finding in an internal audit report.

**Method**

**Data**

Data for our study come from The IIA’s Global Internal Audit Survey of 2010, referred to as the CBOK Study (IIA 2010). The IIA surveyed practicing internal auditors, internal audit service providers, and academics in 2010 to continue developing and documenting a Common Body of Knowledge in internal auditing. The IIA CBOK Study started in 1972, and the 2010 iteration is its most comprehensive, with 13,582 responses from internal auditors at different levels in various types of organizations in 107 countries; 1,102 of the responses were from Chief Audit Executives (CAEs) of public companies, including 288 from CAEs of U.S. public companies. The questions relate to respondents’ current (and possible future) internal audit activity in their current organizations, including staffing, planning, standards, competencies, tools, and emerging issues. Academic and practitioner teams from around the globe developed and compiled the survey and results. The purpose of the CBOK Study is to examine current trends in IA in order to make recommendations for changes and to identify long run strategies.

The IIA granted us access to its 2010 survey data; however, survey respondents remain anonymous. As a result, additional data collection on firm characteristics is not possible. Given the exploratory nature of the study, we focus on preliminary findings and how these findings suggest avenues for future research.

For the current study, we restricted the data to responses from CAEs of U.S. public companies. This restriction removes the effects of cultural differences across countries, as well as differences in the level or type of coercion across internal auditors of different titles. There are 252 CAEs of U.S. public companies who responded yes/no to the pressure question in the CBOK survey. After eliminating observations with missing data for other variables in our model (see below), 221 CAEs remain in the analysis.

Table I provides descriptive data. Roughly ninety percent of organizations comply with a corporate governance code. The majority of the CAEs have less than ten years of experience in a CAE position (seventy-nine percent). The majority of the CAEs have CPA certification (sixty-two percent), while forty-six percent have CIA certification. About half (fifty-one percent) of the CAEs report that their IAF

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7 The IIA granted us access to this data after we submitted a research proposal and signed a confidentiality agreement.
is in full compliance with The IIA’s Standards for the Professional Practice of Internal Auditing. Forty-two percent of CAEs strongly agreed that their IAF has sufficient status within the organization to be effective, while another forty-one percent agreed with the statement.

In terms of performance measurement, thirty-seven percent of IAFs are evaluated based on the number of recommendations accepted/implemented, while twenty-one percent of IAFs are evaluated using the number of significant audit findings. Approximately eighty-six percent of the IAFs emphasize assurance over consulting services. [see Table I, pg 440]

Only twelve percent of CAEs are appointed by the Board or the Audit Committee (without any CEO or CFO involvement). The majority of IAFs meet privately with the AC (ninety-one percent). About sixty percent of ACs formally meet eight times or less during the fiscal year. Less than half of the IAFs provide training to AC members (forty-six percent).

The CAEs typically are employed by large firms with total assets greater than one billion dollars (seventy-one percent). Approximately seventy percent of the respondents are male. About thirty percent of the firms are utilities or financial institutions (e.g., regulated industries).

**Model**

We employ a logistic regression to test our hypotheses. The dependent variable is the response to the question: “Have you ever been subject to coercion (extreme pressure) to change a rating or assessment or to withdraw a finding in an internal audit report?” To clarify, this question is posed in the section related to audit activities at the CAEs’ current organization (i.e., What activities are you currently performing? Do you form an opinion or a rating on these activities? Have you ever been coerced to change a rating or withdraw a report? After release of a report in the organization, who is responsible for reporting the findings to management?). In responding to the pressure question, CAEs could answer yes, no, or not applicable—we do not give ratings or assessments.

The independent variables are those discussed in H1–H12 above. In addition, we add some firm level controls for operational complexity (size in total assets) and regulatory environment (regulated industries). Also, we control for CAE gender.

The logistic regression model is as follows:

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\text{Pressure} = \beta_0 + \beta_1 \text{GovCode} + \beta_2 \text{CAE10Exp} + \beta_3 \text{CERT} + \beta_4 \text{IIASTDS} + \beta_5 \text{IAStatus} + \beta_6 \text{IAEvalRecAcc} + \beta_7 \text{IAEvalNumFind} + \beta_8 \text{ASSUR} + \beta_9 \text{ApptAC/BOD} + \beta_{10} \text{IA/ACPvt} + \beta_{11} \text{ACMeet} + \beta_{12} \text{ACTrain} + \beta_{13} \text{SizeTA} + \beta_{14} \text{FEM} + \beta_{15} \text{UTIL} + \beta_{16} \text{FIN} + \text{error}
\]

Where:

- \( \text{Pressure} = 1 \) if subject to coercion (extreme pressure), else 0.
- \( \text{GovCode} = 1 \) if organization complies with a corporate governance code, else 0.
- \( \text{CAE10Exp} = 1 \) if 10 years or more of experience, else 0.
- \( \text{CERT} = 1 \) if CPA or CIA certification, else 0.
- \( \text{IIASTDS} = 1 \) if complied with The IIA’s Standards for the Professional Practice of Internal Auditing, else 0.
- \( \text{IAStatus} = \) Coded using 3 point scale, based on CAE response to following statement: Your internal audit activity has sufficient status in the organization to be effective (3 = strongly agree; 2 = agree; 1 = neutral, disagree, or strongly disagree).
- \( \text{IAEvalRecAcc} = 1 \) if IAF is evaluated using recommendations accepted/implemented, else 0.
**Results**

Of the 221 CAE respondents with complete data, 37 (17 percent) indicated yes (the CAE reported facing pressure) and 184 (83 percent) answered no. Table II reports the logistic regression results. Overall, the model is significant ($\chi^2 = 41.39, p < 0.001$). [see Table II, pg 441]

**Corporate Governance—Governance Code Hypothesis**

GovCode has a significant negative coefficient ($p = 0.0275$, one-tailed), consistent with H1. CAEs of organizations that comply with a corporate governance code are less likely to experience pressure. Thus, the overall ethical environment may be strengthened by compliance with the code.

**Internal Audit—Competence Hypotheses**

We tested three measures of competence: experience, certification, and compliance with standards. The results indicate a significant negative coefficient for CAE10Exp ($p = 0.0125$, one-tailed). This supports H2, suggesting that CAEs with at least 10 years of experience encounter less pressure to change a finding than less experienced CAEs.\(^9\) Also, we find a significant negative coefficient for CERT ($p = 0.0355$, one-tailed), indicating support for H3. CAEs experience less pressure when they hold a CPA or CIA certification. We also run the model with CPA and CIA as separate independent variables (rather than a certification dummy variable). The results indicate there is a significant negative coefficient for the CPA variable, but not for the CIA variable. Given the large number of CIAs who are also CPAs, the effect of CIA is likely diminished in the model.

The coefficient on IIASTDS is not significant ($p = 0.1780$, one-tailed). Thus, H4 is not supported. We do not find that compliance with The IIA’s Standards for the Professional Practice of Internal Auditing is associated with a reduced likelihood of pressure. It is possible that lack of a more precise measure of compliance (e.g., perhaps separate measures pointing to specific standards) may account for the lack of significance.\(^10\) While only fifty-one percent of CAEs report that their IAF is in full compliance with the

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\(^8\) The IIA survey included the six categories for total assets. Our inferences remain substantively similar if we use total revenue (measured using the same six categories) instead of total assets.

\(^9\) Our results are substantively similar if we use seven years as the cutoff for experience as CAE.

\(^10\) We attempted to measure compliance with standards using an alternative measure based on responses to the following question: *Does your internal audit activity have a quality assessment and improvement program in place in accordance with Standard 1300: Quality Assurance and Improvement Program?* (1 if the respondent noted that there was such a Program currently in place, else 0). We used this measure in lieu of the IIASTDS variable. This
IIA’s Standards for the Professional Practice of Internal Auditing, over seventy percent of respondents to the CBOK study agreed or strongly agreed that compliance is a key factor in adding value to the governance process. The CBOK Study suggests that while full compliance with standards is down from 2006, it may be due to compliance with a particular standard, Standard 1300: Quality Assurance and Improvement Program. If IAFs are largely in compliance with the standards, then differences between the compliance and non-compliance groups may not be very distinct. Given the support for H2 and H3, it appears that competence factors may help to mitigate CAEs’ exposure to pressure to alter findings.

**Internal Audit—Resources and Incentives Hypotheses**

We tested four hypotheses associated with resources/incentives: whether the CAE believes the IAF has sufficient status, whether IAF is evaluated based on the number of recommendations accepted/implemented, whether IAF is evaluating using the total number of findings, and whether IAF places more emphasis on assurance than consulting services.

IAStatus has a significant negative coefficient (p = 0.0015, one-tailed). This result supports H5, indicating that CAEs who rated the IAF as having sufficient status in the organization to be effective are less likely to experience pressure. It may be that CAE beliefs about their organizational status are more important than traditional independence measures (addressed in H9 and H10) when it comes to experiencing pressure. For example, CAEs “with status” may act more authoritative, and as a result, not be as subject to pressure.

The coefficient for IAEvalRecAcc is significant and positive (p = 0.0265, one-tailed). This result supports H6, indicating that IAFs evaluated based on the number of recommendations accepted/implemented are more likely to report pressure. Similarly, the coefficient for IAEvalNumFind is significant and positive (p = 0.0250, one-tailed). This supports H7, indicating that IAFs evaluated using the number of significant findings are more likely to report pressure. Finally, the coefficient for ASSUR is not significant (p = 0.5500, two-tailed). This result does not support H8, which predicted that IAFs that place more emphasis on assurance than consulting services would experience less pressure. On the whole, the resource and performance incentive results suggest that IAF resources and performance incentives may play a role in whether CAEs experience pressure to alter findings.

**IA/AC Interactions—Independence**

We tested two measures of overall independence: whether the CAE is appointed by the AC or BOD (without CEO/CFO involvement) and whether the CAE meets in private with the AC. ApptAC/BOD is marginally significant with a negative coefficient (p = 0.0765, one-tailed). This is consistent H9, suggesting that CAEs appointed by ACs or BODs (without CEO or CFO involvement) are less likely to experience pressure to change a finding. The coefficient on IA/ACPvt is not significant (p = 0.4420, one-tailed). Accordingly, H10 is not supported. Private meetings between the CAE and AC do not appear to reduce the likelihood that CAEs experience pressure. Given H9 and H10 are based on The IIA’s best practices for independence, it is interesting that the results suggest only weak support for the notion that IAF independence may insulate CAEs from pressure.

**Audit Committee—Diligence Hypothesis**

The coefficient on ACMee is marginally significant and positive, opposite of the predicted sign (p = 0.094, two-tailed). Thus, H11 is not supported. We posited that a greater number of meetings may proxy for better monitoring and diligence. Better ACs should help to insulate CAEs from pressure. However, alternative measure was not significant, and those variables that are (in)significant in Table II continue to remain (in)significant.
prior research shows that the AC meeting variable can be a noisy measure because ineffective ACs may need to meet more often to solve problems.  

**Audit Committee—Training Hypothesis**

The ACTrain variable is marginally significant, with a negative coefficient (p = 0.0785, one-tailed). This provides some support for H12, suggesting that CAEs of IAFs that have provided training to ACs will be less likely to report pressure. Perhaps the training improves AC oversight and monitoring (and consequently is a better measure of diligence than meeting frequency). Alternatively, training may allow for more IAF and AC interaction, strengthening the IAF.

**Summary and Conclusions**

The internal audit function (IAF) is considered by many to be a key pillar of corporate governance. In order to strengthen corporate governance, the IAF must be able to do its job free from pressure to change or withdraw its findings. The purpose of this study is to explore factors associated with internal auditors (CAEs) who reported being subject to coercion (extreme pressure) to change a rating or assessment or to withdraw a finding in an internal audit report.

We focus on governance codes, IA competence, IAF resources/incentives, IAF independence, AC diligence, and AC training. The twelve hypotheses and results are summarized in Table III. We find that measures associated with strong governance (e.g., experience, certification, independence, etc.) are associated with CAEs experiencing less pressure. Conversely, we find that two IAF performance incentive measures are associated with CAEs experiencing more pressure (where IAF is evaluated based either on the number of recommendations accepted/implemented or number of significant findings). [see Table III, pg 442]

Overall, the results suggest that factors associated with stronger corporate governance may help to reduce the likelihood of CAEs experiencing pressure. We recognize some limitations and recommend some avenues for future research. Because The IIA collected this data prior to our study (and the respondents remain anonymous), our analysis is limited to the variables included in The IIA survey—we cannot gather additional archival data. However, we have access to a unique, rich data set that allows us to begin to examine characteristics associated with pressure in an IAF setting. As a result, we view this analysis as an exploratory first step toward understanding the factors associated with pressure.

Our findings suggest many avenues for future research. First, the CAEs in this study do not disclose who imposed pressure on them or how such pressure was applied. In order to better understand the type of social influence or environmental pressure, we need a better idea of the source and type of pressure being applied. Future studies may more fully examine the “who” and the “how” of the pressure being applied. Second, due to the anonymity of the respondents and a lack of specific questions about governance characteristics in The IIA survey, we have only limited insight about the quality of the AC or BOD. Future research may incorporate more AC and BOD characteristics, as well as other IAF information. Finally, future studies may directly examine IAF work performance (e.g., preparation and effective use of audit programs, documentation of working papers, review of work and quality of reports, etc.). Incorporating these features will allow us to build a more robust model of factors related to pressure on internal auditors.

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11 In an analysis of AC effectiveness research from 1994 to 2008, Bédard and Gendron (2010) find that the relationship between the number of meetings and AC effectiveness is weak. Specifically, in sixty-eight percent of the forty-four studies they review, no significant association between AC meetings and effectiveness is documented. The authors posit that number of meetings is a crude measure of diligence. For example, ACs may meet more frequently as a result of ineffectiveness, requiring more meetings to resolve problems.
Figure 1: Governance Framework

Corporate Governance

Governance Code

Internal Audit

Competence

H2 – H4

Resources/Incentives

H5 – H8

Audit Committee

Diligence

H11

Training

H12

IA Independence

H9 – H10

Interaction
Table I: Demographics

<table>
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<tr>
<th>Chief Audit Executives (CAE) of U.S. public company with complete data to conduct analysis: sample size</th>
<th>Frequency (% of Respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Org. Complies with a Corporate Governance Code</td>
<td>221 (100%)</td>
</tr>
<tr>
<td>Yes</td>
<td>199 (90%)</td>
</tr>
<tr>
<td>H2: Years of Experience as a CAE</td>
<td></td>
</tr>
<tr>
<td>Less than 3 years</td>
<td>64 (29%)</td>
</tr>
<tr>
<td>3 to 6 years</td>
<td>77 (35%)</td>
</tr>
<tr>
<td>7 to 9 years</td>
<td>34 (15%)</td>
</tr>
<tr>
<td>10 years or more</td>
<td>46 (21%)</td>
</tr>
<tr>
<td>H3: Certification</td>
<td></td>
</tr>
<tr>
<td>CIA</td>
<td>101 (46%)</td>
</tr>
<tr>
<td>CPA</td>
<td>137 (62%)</td>
</tr>
<tr>
<td>CPA or CIA</td>
<td>189 (86%)</td>
</tr>
<tr>
<td>H4: Compliance with IIA Standards</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>112 (51%)</td>
</tr>
<tr>
<td>H5: Your internal audit activity has sufficient status in the organization to be effective</td>
<td></td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>92 (42%)</td>
</tr>
<tr>
<td>Agree</td>
<td>91 (41%)</td>
</tr>
<tr>
<td>Neutral, Disagree or Strongly Disagree</td>
<td>38 (17%)</td>
</tr>
<tr>
<td>H6: IAF Evaluated on # of Recommendations Accepted</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>82 (37%)</td>
</tr>
<tr>
<td>H7: IAF Evaluated Using Total # of Significant Findings</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>47 (21%)</td>
</tr>
<tr>
<td>H8: IAF Emphasizes Assurance over Consulting</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>191 (86%)</td>
</tr>
<tr>
<td>H9: CAE Appointed by</td>
<td></td>
</tr>
<tr>
<td>Audit Committee or Board of Directors (no CEO or CFO involvement)</td>
<td>27 (12%)</td>
</tr>
<tr>
<td>H10: CAE Meets Privately with AC</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>201 (91%)</td>
</tr>
<tr>
<td>H11: Number of Formal AC Meetings During Fiscal Year</td>
<td></td>
</tr>
<tr>
<td>3-5</td>
<td>65 (29%)</td>
</tr>
<tr>
<td>6-8</td>
<td>67 (30%)</td>
</tr>
<tr>
<td>9 or more</td>
<td>89 (40%)</td>
</tr>
<tr>
<td>H12: IAF Provides Training to AC</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>101 (46%)</td>
</tr>
<tr>
<td>Control: Firm Size in Total Assets</td>
<td></td>
</tr>
<tr>
<td>$500M or less</td>
<td>29 (13%)</td>
</tr>
<tr>
<td>$501M - $1B</td>
<td>35 (15%)</td>
</tr>
<tr>
<td>$1B - $5B</td>
<td>74 (33%)</td>
</tr>
<tr>
<td>$5B - $15B</td>
<td>43 (19%)</td>
</tr>
<tr>
<td>$15B - $25B</td>
<td>8 (4%)</td>
</tr>
<tr>
<td>Greater than $5 Billion</td>
<td>32 (15%)</td>
</tr>
<tr>
<td>Control: Gender</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>66 (30%)</td>
</tr>
<tr>
<td>Male</td>
<td>155 (70%)</td>
</tr>
<tr>
<td>Control: Industry</td>
<td></td>
</tr>
<tr>
<td>Utilities</td>
<td>28 (13%)</td>
</tr>
<tr>
<td>Financial</td>
<td>38 (17%)</td>
</tr>
<tr>
<td>Unregulated</td>
<td>155 (70%)</td>
</tr>
</tbody>
</table>
Table II: Logistic Regression Results ($n = 221$)

$$Pressure = \beta_0 + \beta_1GovCode + \beta_2CAE10Exp + \beta_3CERT + \beta_4IIASTDS + \beta_5IAStatus + \beta_6IAEvalRecAcc + \beta_7IAEvalNumFind + \beta_8ASSUR + \beta_9ApptAC/BOD + \beta_{10}IA/ACPvt + \beta_{11}ACMeet + \beta_{12}ACTrain + \beta_{13}SizeTA + \beta_{14}FEM + \beta_{15}UTIL + \beta_{16}FIN + \text{error}$$

<table>
<thead>
<tr>
<th>Variable</th>
<th>Hypothesis/ Prediction</th>
<th>Coefficient</th>
<th>Wald Chi-sq.</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td></td>
<td>0.565</td>
<td>0.185</td>
<td>0.6670</td>
</tr>
<tr>
<td>GovCode</td>
<td>H1: -</td>
<td>-1.213</td>
<td>3.685</td>
<td>0.0275</td>
</tr>
<tr>
<td>CAE10Exp</td>
<td>H2: -</td>
<td>-1.785</td>
<td>5.010</td>
<td>0.0125</td>
</tr>
<tr>
<td>CERT</td>
<td>H3: -</td>
<td>-1.068</td>
<td>3.271</td>
<td>0.0355</td>
</tr>
<tr>
<td>IIASTDS</td>
<td>H4: -</td>
<td>-0.428</td>
<td>0.853</td>
<td>0.1780</td>
</tr>
<tr>
<td>IAStatus</td>
<td>H5: -</td>
<td>-0.965</td>
<td>8.842</td>
<td>0.0015</td>
</tr>
<tr>
<td>IAEvalRecAcc</td>
<td>H6: +</td>
<td>0.852</td>
<td>3.746</td>
<td>0.0265</td>
</tr>
<tr>
<td>IAEvalNumFind</td>
<td>H7: +</td>
<td>0.935</td>
<td>3.838</td>
<td>0.0250</td>
</tr>
<tr>
<td>ASSUR</td>
<td>H8: -</td>
<td>0.398</td>
<td>0.357</td>
<td>0.5500</td>
</tr>
<tr>
<td>ApptAC/BOD</td>
<td>H9: -</td>
<td>-1.251</td>
<td>2.038</td>
<td>0.0765</td>
</tr>
<tr>
<td>IA/ACPvt</td>
<td>H10: -</td>
<td>-0.099</td>
<td>0.021</td>
<td>0.4420</td>
</tr>
<tr>
<td>ACMeet</td>
<td>H11: -</td>
<td>0.182</td>
<td>2.813</td>
<td>0.0940</td>
</tr>
<tr>
<td>ACTrain</td>
<td>H12: -</td>
<td>-0.614</td>
<td>2.005</td>
<td>0.0785</td>
</tr>
<tr>
<td>SizeTA</td>
<td></td>
<td>0.207</td>
<td>1.936</td>
<td>0.1640</td>
</tr>
<tr>
<td>FEM</td>
<td></td>
<td>-0.730</td>
<td>2.318</td>
<td>0.1280</td>
</tr>
<tr>
<td>UTIL</td>
<td></td>
<td>-1.422</td>
<td>2.690</td>
<td>0.1010</td>
</tr>
<tr>
<td>FIN</td>
<td></td>
<td>0.171</td>
<td>0.098</td>
<td>0.7540</td>
</tr>
</tbody>
</table>

Model Chi-sq. = 41.4, $p < 0.001$; Nagelkerke R-sq. = 0.29

Overall Classification Accuracy = 84.2%, No Pressure = 97.3%, Pressure = 18.9%

Note: p-values are based on one-tailed tests for hypotheses, except for $ACMeet$ and $ASSUR$ given that the coefficient is in the opposite direction of the predicted sign. Two-tailed p-values are shown for control variables. The variables are defined as follows: $Pressure = 1$ if subject to coercion (extreme pressure), else 0; $GovCode = 1$ if organization complies with a corporate governance code, else 0; $CAE10Exp = 1$ if 10 years or more of experience, else 0; $CERT = 1$ if CPA or CIA certification, else 0; $IIASTDS = 1$ if complied with The IIA’s Standards for the Professional Practice of Internal Auditing, else 0; $IAStatus =$Code using three point scale, based on CAE response to following statement: Your internal audit activity has sufficient status in the organization to be effective (3 = strongly agree; 2 = agree; 1 = neutral, disagree, or strongly disagree); $IAEvalRecAcc = 1$ if IAF is evaluated using recommendations accepted/implemented, else 0; $IAEvalNumFind = 1$ if IAF is evaluated using the number of significant audit findings, else 0; $ASSUR = 1$ if IAF places more emphasis on assurance than consulting services, else 0; $ApptAC/BOD = 1$ if only AC or BOD is involved in appointing CAE (without CEO or CFO involvement), else 0; $IA/ACPvt = 1$ if CAE meets in private with AC, else 0; $ACMeet = Number of audit committee meetings; $ACTrain = 1$ if IAF provided training to AC members, else 0; $SizeTA = size in total assets using six categories as in Table I (1= smallest, 6 = largest); $FEM = 1$ if female, 0 if male; $UTIL = 1$ if industry is utilities, else 0; $FIN = 1$ if industry is financial, else 0.
Table III: Summary of Results

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Finding</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 CAEs of organizations that comply with a corporate governance code will be less likely to report coercion (extreme pressure) to change a rating or assessment or to withdraw a finding in an internal audit report.</td>
<td>Supported</td>
</tr>
<tr>
<td>H2 CAEs with more experience will be less likely to report coercion (extreme pressure) to change a rating or assessment or to withdraw a finding in an internal audit report.</td>
<td>Supported</td>
</tr>
<tr>
<td>H3 CAEs with CPA or CIA certification will be less likely to report coercion (extreme pressure) to change a rating or assessment or to withdraw a finding in an internal audit report.</td>
<td>Supported</td>
</tr>
<tr>
<td>H4 CAEs of IAFs that comply with The IIA’s Standards for the Professional Practice of Internal Auditing will be less likely to report coercion (extreme pressure) to change a rating or assessment or to withdraw a finding in an internal audit report.</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H5 CAEs who believe that their IAF has sufficient status in the organization to be effective will be less likely to report coercion (extreme pressure) to change a rating or assessment or to withdraw a finding in an internal audit report.</td>
<td>Supported</td>
</tr>
<tr>
<td>H6 CAEs of IAFs that are evaluated based on the number of recommendations accepted/implemented will be more likely to report coercion (extreme pressure) to change a rating or assessment or to withdraw a finding in an internal audit report.</td>
<td>Supported</td>
</tr>
<tr>
<td>H7 CAEs of IAFs that are evaluated using the total number of significant findings will be more likely to report coercion (extreme pressure) to change a rating or assessment or to withdraw a finding in an internal audit report.</td>
<td>Supported</td>
</tr>
<tr>
<td>H8 CAEs of IAFs that place more emphasis on assurance than consulting services will be less likely to report coercion (extreme pressure) to change a rating or assessment or to withdraw a finding in an internal audit report.</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H9 CAEs appointed by the AC or BOD (without CEO or CFO involvement) will be less likely to report coercion (extreme pressure) to change a rating or assessment or to withdraw a finding in an internal audit report.</td>
<td>Marginal Support</td>
</tr>
<tr>
<td>H10 CAEs who meet privately with the AC will be less likely to report coercion (extreme pressure) to change a rating or assessment or to withdraw a finding in an internal audit report.</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H11 CAEs of companies where ACs meet more frequently will be less likely to report coercion (extreme pressure) to change a rating or assessment or to withdraw a finding in an internal audit report.</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H12 CAEs of IAFs that have provided training to the AC will be less likely to report coercion (extreme pressure) to change a rating or assessment or to withdraw a finding in an internal audit report.</td>
<td>Marginal Support</td>
</tr>
</tbody>
</table>
References


Lindsay, D. 1990. An investigation of the impact of contextual factors on Canadian bankers’ perceptions of auditors’ ability to resist management pressure. *Advances in International Accounting* 3: 71-85.


