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By

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Are Corporate Codes of Ethics and Risk Assessment by Internal Auditors Associated with Sustainability Audits by Internal Auditors?

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Corporate Codes of Ethics, and Risk Assessment by Internal Auditors as Correlates of Sustainability Audits by Internal Auditors

SUMMARY

An increasing number of organizations engage in sustainability reporting to the public. However, assurance of this disclosure is relatively new. In this study we investigate corporate codes of ethics and risk assessment by internal auditors as correlates of organizations' engaging their internal audit functions (IAFs) in sustainability audits. Using data from a large sample of chief audit executives (CAEs) we find significant and positive associations between code of conduct and risk assessment and sustainability audits by IAFs. Also, we find positive and significant association between industry (environmentally sensitive vs. others), CAE experience, and CAE major (accounting vs. others) and sustainability audits by IAFs. Other control variables (organization size, CAE grad/undergrad degrees, and CAEcp do not indicate significance in their association with sustainability audits by IAFs. These results have implications for design of sustainability reporting by various organizations and assurance of such reporting by internal auditors.

Key Words: sustainability audits, internal auditing code of conduct, risk assessment

Data availability: Please contact The Institute of Internal Auditors Research Foundation which owns the CBOK (2015) database used in this study.

Corporate Codes of Ethics, and Risk Assessment by Internal Auditors as Correlates of Sustainability Audits by Internal Auditors

INTRODUCTION

The United Nations Global Compact (UNGC) states that “*Corporate sustainability starts with a company’s value system and a principled approach to doing business. This means operating in ways that, at a minimum, meet fundamental responsibilities in the areas of human rights, labour, environment and anti-corruption*” (UNGC, 2016). The literature indicates that organizations engage in sustainability reporting to increase transparency, enhance brand value, improve reputation and legitimacy, signal competitiveness, motivate employees, and support corporate information and control processes (Herzig and Schaltegger, 2006). Such reporting is increasingly recognized as an important contributing factor to corporate sustainability (Lozano and Huisingh, 2011). Data from The UN Global Compact (2012) indicate that sustainability reporting is gaining momentum as a key component of organizations’ reporting practices globally.¹ While sustainability reporting growth is documented in the literature (e.g., Hahn and Kühnen, 2013) and by NGOs (GRI, 2017), assurance of sustainability is in its infancy (GRI, 2013; KPMG, 2015).

Prior research indicates that sustainability audits are important because validation of the reported data and promotion of external transparency can be a result of sustainability reporting

¹ For example, the membership of the UN Global Compact (which requires annual reporting on progress toward the Compact’s Ten universally accepted principles on human rights, labor, the environment and anti-corruption) has grown to over 9,000 public companies since its inception in 2000 (<https://www.unglobalcompact.org/>). In addition, more than 5,000 organizations have a profile on the Global Reporting Initiative (GRI) Website. The GRI is a non-profit organization that works toward a sustainable global economy by providing sustainability reporting guidance (<https://www.globalreporting.org/Pages/default.aspx>).

(Gray *et al.*, 2014; Simnett *et al.*, 2009; Cohen and Simnet, 2014). The Institute of Internal Auditors (The IIA, 2010) states that IAFs can play multiple roles in sustainability reporting. For example, IAFs can provide value to their organization from improved risk management and better understanding of emerging issues (Zadek *et al.* (2004).

The primary objective of the current study is to investigate if the presence of corporate codes of conduct/ethics and IAF risk assessment programs are associated with IAF involvement with sustainability audits.² We also investigate several control variables. The study is important because prior research (e.g., Mijatovic and Stokic, 2010) acknowledges the importance of auditing sustainability reporting but focuses on external assurance and organization attributes (Cho *et al.*, 2014; Cohen and Simnet, 2014; Perego and Kolk, 2012). However, research is limited in its consideration of corporate internal contextual attributes that lead to voluntary assurance of sustainability reporting and whether IAFs are involved with the audit of their organizations' sustainability reports (O'Dwyer and Owen, 2005; Simnett *et al.*, 2009; Trotman and Trotman, 2015). This is despite Adams' (2002) call for additional research to empirically examine internal organization factors that are associated with sustainability reporting. This investigation includes corporate attributes (e.g., code of ethics, size and industry), general contextual factors (e.g., risk assesment by the IAF), and CAE attributes, such as experinece (Adams, 2002).

² We use the terms assurance and audit interchangeably. Also, our dependent variable is whether the IAF is involved in "environmental sustainability audits," which may include audits of activities and/or reporting therein. We use the term sustainability audits throughout the paper to describe this.

Prior research provides qualitative data on the role that the IAF can play in sustainability audits (Cohen *et al.*, 2004; Darnall, *et al.*, 2009; Gray *et al.*, 2014; Nieuwlands, 2006; O’Dwyer *et al.*, 2011).

We examine the IAFs’ involvement with audits of sustainability reporting within their respective organizations. Our study answers calls for research to examine factors that influence voluntary sustainability assurance by organizations’ IAFs (Carcello *et al.*, 2011; Cohen *et al.*, 2008; Cohen *et al.*, 2014). We focus on the presence of corporate codes of ethics and IAF risk assessment programs as our test variables. This is an important issue because research finds that sustainability assurance activity is driven by stakeholder demand (O’Dwyer *et al.*, 2011) and assurance costs can be high. Additionally, The IIA (2013) stresses that IAFs should perform value-added activities, such as sustainability audits, and as internal assurance may be a substitute for external assurance, creating an opportunity for IAFs to add value and reduce cost of sustainability assurance.³ Finally, prior research finds a positive association between presence of sustainability assurance and; investor stock valuations (Brown-Liburd *et al.*, 2012; Cheng *et al.*, 2014), lower cost of equity capital, and lower analyst forecast errors and dispersion (Casey and Grenier, 2014).

The source of data for our study is the Common Body of Knowledge in Internal Auditing (CBOK, 2015) database developed by the Institute of Internal Auditors Research Foundation

³ We acknowledge that there are multiple alternative parties that can perform CSR audits (Simnett *et al.*, 2009; Trotman and Trotman, 2015). Our focus in this paper is on IAFs as a source of sustainability audits in organizations.

(IIARF) in 2015. Specifically, we analyze responses from a sample of 524 chief audit executives (CAEs) of organizations of varying size and industry.

Our results indicate that the presence of a code of ethics and involvement of IAF in risk assessment program are positively and significantly associated with sustainability audits by IAFs. We also find positive and significant results for several control variables. Specifically, while industry, CAE experience, and CAE major have significant relationship with sustainability audits by IAFs, organization size, education level (graduate vs. undergraduate and continuing professional Education (CPE) do not have statistically significant associations with sustainability audits by internal auditors.

The research background leading to our hypotheses are presented in the next section, followed by our research method and statistical analysis. The study's discussion and conclusions are presented in the final section.

BACKGROUND AND HYPOTHESES

Widespread sustainability activity and reporting began in the 1990s (Cormier and Magnan, 1999; Holder-Webb *et al.*, 2009) with a dramatic increase in the 2000s (Dhaliwal *et al.*, 2011; Dhaliwal *et al.*, 2012; Tschopp, 2012). More than 13,750 companies produced sustainability reports in 2016, which is twenty-five times the number in 1998 (Corporateregister.com, 2016). Following prior research, we consider sustainability (also Corporate Social Responsibility or CSR) as an organization's performance related to the inclusion of social, economic, and environmental concerns in business operations and in

interactions with stakeholders (Cohen and Simnet, 2014; Dahlsrud, 2008; Hahn and Kühnen, 2013; Montiel, 2008; Van Marrewijk, 2003).⁴ Much of the reporting on sustainability is voluntary, where Non-Government Organizations (NGOs) have generally defined sustainability reporting and have provided sustainability reporting guidelines (Tschopp, 2012).⁵

Despite the growing demand for sustainability policies; sustainability activity, reporting practices, assurance, and regulation vary widely worldwide.⁶ Prior research finds that 60 percent of companies that issue environmental reports use some form of internal assurance (Darnall *et al.*, 2009) and that IAF assurance of sustainability activity is expected to increase in the future (Allegrini *et al.*, 2011). With the increased sustainability reporting since the 1990s, has come increased stakeholder interest for sustainability assurance. The rationale for audits is the notion that individuals must be held accountable for their actions and this accountability should be verified (Power, 1997). With an emphasis of an objective review, sustainability audits by the IAF are designed to assist organizations to achieve managerial commitment and control of their sustainability activities, to comply with environmental regulations, and to conform to organization policies around sustainability (Darnall *et al.*, 2009).

⁴ This definition is consistent with that of the Global Reporting Initiative (2017). CBOK (2015) defines sustainability as the ability of the organization and its environment (social, economic, and natural) to survive in the long-term.

⁵ Some of the more prevalent sustainability and sustainability reporting guidelines are: the UN's Global Reporting Initiative (United Nations Global Compact, 2011), Organization for Economic Co-operation and Development Guidelines for Multinational Enterprises (OECD, 2011), International Organization for Standardization (2014), AccountAbility AA1000 (2008), and SA8000 (Social Accountability International, 2014).

⁶ While there are some specific mandatory sustainability reporting instruments across the world, there are few regulations around sustainability reporting and virtually none regarding sustainability assurance (Cuadrado-Ballesteros *et al.*, 2017; Gürtürk *et al.*, 2016; Huggins *et al.*, 2011; Hummel *et al.*, 2017). For a more complete list, see <https://www.carrotsandsticks.net/>.

In a 2014 qualitative study, audit committee members, senior accountants, CAEs, and external audit partners from a Big-4 audit firm acknowledge that the IAF plays, or should play, a role in the auditing of sustainability reporting. Interviewees state that IAF involvement aids in risk management, as the costs of misreporting can be high (Trotman and Trotman, 2015). These costs include penalties against the CEO and the board as well as damage to reporting reputation. In addition, professional guidance stresses the importance of the assurance of sustainability reporting, and specifically the IAF's role (The IIA, 2010).

Prior research suggests that the current audit culture relies heavily on external auditors to measure performance against pre-selected corporate social performance indicators (Kemp *et al.*, 2012). Relying heavily on checklists and accounts that justify corporate actions, this process often makes operational personnel become subjects rather than participants in the discussion of sustainability (Kemp *et al.* 2012). Internal auditors are in a unique position in that they understand both the audit process (specifically what is necessary to achieve compliance with external benchmarks) and the operational knowledge to engage all levels of the organization to better improve sustainability efforts (Kemp *et al.*, 2012; Pickett, 2010). Thus, IAFs are less likely to rely on isomorphic processes that external auditors use (Gürtürk and Hahn, 2016), with a potential to add value to the process.

Internal audits of sustainability reporting are much like internal financial audits in that internal auditors evaluate controls over reporting and suggest corrective action through communication with management and the audit committee (Darnall *et al.*, 2009). But, they also

have a long-term focus by continually assessing sustainability progress toward achieving desired outcomes (Darnall *et al.*, 2009). By engaging the IAF in sustainability audits, organizations create processes and procedures aimed at improving sustainability activities, and also increase the probability of discovering sustainability issues before they become significant, reducing various risk.⁷ (Stanwick and Stanwick, 2001) As such, IAFs are in a unique position to add value to the sustainability process (Nieuwlands, 2006), and play a significant role in the corporate governance process (Cohen, *et al.* 2004).

Understanding the correlates of IAF involvement with sustainability assurance is important given the trend toward reliance by some internal and external stakeholders in the monitoring and measuring of sustainability reporting (Trotman and Trotman, 2015) and professional guidance therein (KPMG, 2008; The IIA, 2010). Trotman and Trotman (2015) find that audit committees, senior accountants, and internal auditors feel that IAFs should play a key role in sustainability assurance.

Research Hypotheses

Prior research finds that corporate codes of ethics promote sustainability (Svensson and Wood, 2008), and are a starting point for an integrated program (Wood, 2002). Ethics policies, ethical codes/guidelines are clearly visible signs that organizations are aware of the need for ethical behavior and require the workforce to be committed therein (Agatiello, 2008). Prior research also suggests a positive relationship between existence of a code of ethics

⁷ Risks included are legal, regulatory, lost business, environmental crises, increased costs, and reputational.

and sustainability within organizations (Mijatovic and Stokic, 2010; Schwartz, 2001; Somers, 2001). Other research suggests that codes of ethics may not be a significant factor influencing sustainability disclosure behavior (Cleek and Leonard, 1998) or sustainability activity (Bondy *et al.*, 2008). The mixed results in the literature suggests that corporate codes of ethics may primarily be “window-dressing” (Helin and Sandstrom, 2007; Stevens, 1994) and thus may not promote sustainability. ADD TEXT HERE The mixed results provide tension for our first hypotheses as follows.

H1: Existence of an organizational code of ethics is positively associated with sustainability audits by IAFs.

Trotman and Trotman (2015) find that the risk management approach promotes IAFs to provide assurance on greenhouse gas emissions. Their survey respondents indicated that the role of internal audit in sustainability audits will grow in years to come as the use of Enterprise Risk Management (ERM) grows. Because IAF activities involve recognizing risks associated with legal, financial, social, and environmental implications of an organization’s activities, it is likely that IAFs will identify sustainability as a key risk (Bebbington *et al.*, 2014). Ballou *et al.* (2012) find evidence that internal audit uses its risk management expertise (cf. Knechel *et al.* 2007) to promote integration of sustainability issues into overall business risks. They do so by identifying social impacts of the organization’s competitive context and value chain. In this regard IAFs are able to measure the impacts of these risks and help design controls to mitigate them. Research

finds that firms often use the internal audit as a substitute for external audit of sustainability reporting (Peters and Romi, 2015). Thus,

H2: IAFs that are involved in the risk management process are more likely to engage in sustainability audits.

RESEARCH METHOD

The IIARF regularly conducts surveys of the IIA membership. For example, in 2015, the IIARF conducted a survey of the common body of knowledge in internal auditing (CBOK, 2015). The survey has detailed questions about various issues ranging from characteristics of participating organizations and their IAFs, to the strategic and codes of ethics/conduct. It also includes questions regarding practice issues, such as use of The IIA's standards and attributes of practicing internal auditors (e.g., education, experience, and continuing professional education). We gained permission from the IIARF to use the CBOK (2015) database as the source of our data.

CBOK (2015) has 14,518 useable responses from IIA members in over 160 countries. We filtered the data base by profession rank (CAEs only) and sustainability report (i.e., whether the organization has a sustainability reporting program). The reason for this filtering is that arguably CAEs are the most knowledgeable about their IAFs involvement with sustainability audits by IAFs. Limiting data to only organizations that have a sustainability reporting program is important because if the organization does not have sustainability reporting then we can not

analyze the correlates of IAF's audit of sustainability reporting. Using these filters, our sample contains 524 observations from the entire database of 14,518.

Independent Variables

Code of Ethics. CBOOK (2015) asks "Which of the following internal audit policies or documents exist in your organization?" An item listed is Code of conduct/ethics. We code responses as 1 for those that checked this item and 0 otherwise.

CBOOK (2015) asks "What areas of responsibility does internal audit have related to risk at your organization? (Choose all that apply)" and lists "Provide assurance on risk management as a whole" and "Provide advice and consulting on risk management activities". We select this variable as our second test variable.

Control Variables

Prior studies find that organization size is positively associated with the presence of sustainability reporting (Adams *et al.*, 1998; Cowen *et al.*, 1987; Dhaliwal *et al.*, 2011; Holder-Webb *et al.*, 2009). This is generally seen as a result of the increased attention from the general public and increased pressure to act in a socially responsible manner (Cowen *et al.*, 1987). Larger firms interact with a greater number and variety of stakeholders, with likely increase in complexity of sustainability efforts (Hart & Sharma, 2004) and the need/demand for assurance. In addition, larger firms likely possess resources (financial and human) required for sustainability initiatives (Gallo and Christensen, 2011). Thus, larger firms can devote time and attention to

sustainability related items and assurance (Gallo and Christensen, 2011). Conversely, Peters and Romi (2015) find a negative relationship between organization size and sustainability due to lagging development and institutional expectations surrounding sustainability. So it is likely that only large companies that demonstrate willingness to expend resources for sustainability engage in sustainability assurance. We investigate organization size as a control variable.

Prior research documents an association between environmental and social risks of varying industries and the level of environmental and social disclosure (Adams, 1998; Patten, 2002) and assurance (Cho *et al.*, 2014; Kolk and Perego, 2010; KPMG, 2015; Simnett *et al.*, 2009). Organizations in industries with greater social and/or environmental impact are more exposed to risks therein, and are thus more likely to utilize resources for sustainability assurance to manage this risk (Simnett *et al.*, 2009). Simnett *et al.*, (2009) also find that organizations with higher social footprints (mining, utilities, and finance) are more likely to have sustainability reports assured. CBOK (2015) asked participants to denote the “primary industry classification(s) of the organization for which you work (or your primary client if you are a service provider).” Following prior research (e.g., Kolk, 2010; Simnett *et al.*, 2009), we control for industry by separating responses into environmentally sensitive industries (mining/quarrying, and oil and gas extraction agriculture, forestry, fisheries, and hunting) which we code as 1, and all other industries coded as 0.

CAE experience, education, and continuing professional education are control variables specific to the CAE attributes. We expect that a more experienced CAE is able to lead his/her

group to perform sustainability audits, as they will be competent to do so. Thus, we expect a positive relationship between these CAE attributes, and our dependent variable.

Each variable is selected as an indicator dummy variable (1/0) and is expected to be positively associated with sustainability audits by IAFs. Regarding education (*CAEducation*), CBOK (2015) asked participants about “Your highest level of formal education (not certification)” completed and listed the following to select from:

1. Secondary/high school education
2. Undergraduate diploma or associate degree (less than four years),
3. Bachelors/diploma
4. Masters/graduate degree/diploma,
5. Masters/graduate diploma in fields other than business
6. Doctoral degree (PhD or higher)

We created a binary variable (1/0) for graduate (numbers 4-6) versus other (numbers 1-3) degrees.

Regarding the CAE’s major (*CAEMajor*), CBOK (2015) listed numerous majors and asked CAEs to select their “academic major(s).” We use a binary variable (1/0) to indicate whether the CAE major was accounting or other majors. Finally, The IIA’s International Standards for the Professional Practice of Internal Auditing requires that practicing internal auditors receive a minimum of 40 hours of continuing professional education per year. CBOK (2015) asked; “How many hours of formal training related to the internal audit profession do you receive per year? Formal training meets The IIA criteria for continuing professional education (CPE), including, but not limited to, seminars, conferences, workshops, online, or web-based

training. Note that you do not need to be certified to receive formal training.” We use a binary variable (1/0) for 40 hours or more compared with less than 40 hours of CPE per year.

Model Specification

Table 1 provides variables used in the study and their definitions. The associations between the dependent and independent variables as identified above are used to specify our binary logistic regression as follows:

$$\text{SustainabilityAudit} = \alpha + \beta_1 \text{CodeofEthics} + \beta_2 \text{IAFInvolveRiskMgt} + \beta_3 \text{ORGsize} + \beta_4 \text{ORGindustry} + \beta_5 \text{CAEexperience} + \beta_6 \text{CAEgrad/undergrad} + \beta_7 \text{CAEmajor} + \beta_8 \text{CAEcpe} + e$$

RESULTS

Descriptive Statistics

Table 2 provides descriptive statistics on independent variables crossed by the dependent variable, sustainability (Does the IAF Perform sustainability audits?). Independent variables are listed in column 1, followed by their summary statistics by sustainability audits (yes/no) in the second and third columns. The last two columns provide statistical tests, where significant differences are highlighted. Given the direction of the variables as discussed earlier, we use the one-tailed significance for reporting the results. Also, given the binary nature of all but one variables, we use the Chi-Square (χ^2) test of differences. Only CAE experience is a continuous variable for which we use the t-statistic for test of difference by sustainability audits bt IAFs.

[Insert Table 2 Here]

For existence of code of ethics, 66% of the organizations reported to have a code while 34% that said yes did not have sustainability audits, but this difference was not statistically significant ($p=0.15$). Sixty five percent of CAEs indicated that their organizations currently perform sustainability audits. With $p=0.11$ *ORGsize* is not statistically significant as is CAEGrad/Undergrad ($p=0.26$). The remaining variables are all significant at conventional levels, indicating positive relationship with sustainability audits by IAFs.

Correlation Matrix

Table 3 presents bivariate Pearson correlations between the independent variables in Model 1, where all significant (at $p=0.05$ or less) correlation coefficients are highlighted. Coefficients of 0.50 or higher pose a serious threat for multicollinearity, but as Table 3 shows, none of the coefficients is near the 0.50 critical level. Thus we move to test Model 1 using binary Logit analysis.

[Insert Table 3 Here]

Multiple Regression Analysis

Table 4 presents the results of an estimated Logit regression, where the coefficient (β) is provided for each variable, along with its related Wald statistic and statistical significance. Also provided is the overall χ^2 statistic for the model, its related classification accuracy and the pseudo

R². As shown in the table, the overall χ^2 is highly significant ($p < 0.001$) for the model, with classification accuracy of 66.3 percent. The pseudo R² is 7.9 percent.

[Insert Table 4 Here]

These results provide evidence that H1 (existence of a code of ethics) and H2 (risk assessment by the IAF) are both positively and significantly associated with sustainability audits by IAFs. Of the six control variables, three are not statistically significant, indicating that the relationship between OrgSize, CAEGrad/Undergrad, and CAEcpe with sustainability is not significant. The remaining control variables are statistically significant, indicating that ORGIndustry, (sensitive industries vs. others), CAE experience, and CAEMajor (accounting vs. other majors) are positively and significantly associated with sustainability audits by IAFs.

DISCUSSION AND CONCLUSIONS

Our CBOK (2015) based sample of 524 chief audit executives (CAEs) of various organizations worldwide reveals that existence of a code of conduct and IAF involvement in risk assessment are significantly associated with the IAF conducting audits of sustainability. Of the control variables, three (industry, CAE experience and accounting major) are also significantly and positively associated with sustainability audits by IAFs.

This is an important finding, as the importance of sustainability and its assurance continue to increase. Organizations, stakeholders, and regulators may benefit from these associations because they indicate variables that, if adopted, can improve sustainability activity/reporting through promotion of assurance therein. Additionally, this study identifies a unique and largely unexamined set of factors that are associated with sustainability assurance.

Like other survey-based research, our study has a number of limitations, consideration of which provides avenues for additional research. For example, while CAE responses are highly valuable in the sense that these professionals are highly knowledgeable and insightful about internal audit issues in their organizations, the data they provide may represent their perceptions, not necessarily what is actually done in practice. Future qualitative study of a small sample of organizations may be helpful in finding the exact nature of sustainability audits by IAFs.

As large as the sample of CAEs is in the current study, it is still limited to conduct company-specific analysis for over 160 countries in the sample. Future studies may benefit from analysis of the sample into select other countries. Such an expansion will require analysis of cultural dimensions, legal/regulatory characteristics, and economic variables in various countries.

While our findings indicate an association between code of conduct and risk assessment and sustainability audits by IAFs, we acknowledge that such relationships are not necessarily causal in nature. However, we believe that our results are informative in highlighting some conditions under which organizations engage their IAFs in sustainability assurance. Future

qualitative interviews with CAEs, audit committees, and management may help disentangle the determinants of IAF engagement in sustainability auditing. Studies can examine organization-specific Variables.

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