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## Institutional context and auditors' moral reasoning: A Canada-US comparison

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**INSTITUTIONAL CONTEXT AND AUDITORS' MORAL REASONING:  
A CANADA-U.S. COMPARISON**

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INSTITUTIONAL CONTEXT AND AUDITORS' MORAL REASONING:  
A CANADA-U.S.A COMPARISON

**ABSTRACT:** This paper compares the moral reasoning of 363 auditors from Canada and the United States. We investigate whether national institutional context is associated with differences in auditors' moral reasoning by examining three components of auditors' moral decision process: (1) moral development, which describes cognitive moral capability, (2) prescriptive reasoning of how a realistic accounting dilemma ought to be resolved and, (3) deliberative reasoning of how a realistic accounting dilemma will be resolved. Not surprisingly, it appears that institutional factors are more likely to be associated with auditors' deliberative reasoning than their prescriptive reasoning in both countries. Additionally, our findings suggest that the national institutional context found in the United States, which has a tougher regulatory and more litigious environment, appears to better encourage auditors to deliberate according to what they perceive is "the ideal" judgment as compared to the Canadian context. We then discuss the implications of these findings for regulators and for ethics research.

**Keywords:** National Institutional Context, Moral Reasoning

**Data Availability:** Contact the first or second author concerning data availability.

## BACKGROUND

In the U.S., the Senate, the Congress and the SEC are investigating the auditors of Enron, Andersen, and in particular Andersen's admission that it shredded key files documenting the audit procedures followed. Under substantial public pressure in light of Andersen's actions, Harvey Pitt, chairman of the SEC has recently announced plans to revise the requirements to which auditors in the U.S. must adhere (i.e., institutional context) (Byrnes, 2002; McFarland, 2002). Although the prospect of increased regulatory intervention suggests a need to understand whether institutional context may have an effect, there does not yet appear to be evidence that institutional context may influence auditors' moral reasoning.

To that end, this paper compares auditors from Canada and the United States to investigate whether national institutional context may be associated with their moral reasoning<sup>1</sup>. National institutional context is defined in this paper as the combination of nationally based requirements, such as legal, regulatory and professional factors, that must be adhered to in a particular jurisdiction (Thorne and Bartholomew-Saunders, 2002). In organizational settings, prior research investigating institutional factors that influence individuals' ethical conduct suggest the importance of situational variables arising from the immediate job context, organizational culture and characteristics of the work (Treviño, 1986). In particular, Ferrell and Gresham (1985) cite rewards and punishments as well as corporate policies as important determinants of ethical decision-making in organizations. As applied to the institutional context influencing auditors' ethical conduct, rewards and punishments are assessed through the legal, regulatory and professional requirements for the regulation and licensing of auditors.

While Canada and the United States have very similar cultures (Hofstede, 1981, 1990), auditors in each country face institutional contexts that are distinct along a number of several key dimensions. Several institutional variations between the U.S. and Canada suggest that the institutional environment influencing auditors from the two countries is quite diverse. These

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<sup>1</sup> Bay and Greenberg (2001), Jones (1991), Rest (1999), and Treviño (1986) identify the link between moral reasoning and moral behavior.

differences include: 1) distinct professional contexts with dissimilar emphases on principles versus rules between the two countries, as well as differences in the degree of self-regulation of the audit profession in the two countries (Brooks, 1997; Wingate, 1997); 2) diverse legal systems reflecting the judge-based nature of Canadian case law versus the jury-based nature of American statutory law, and 3) increased regulatory power in the U.S., with Canada not having a national regulatory body overseeing financial reporting as found in the Securities Exchange Commission (Needles, 1997).

We use a broad-based random survey of 363 Canadian and American auditors to examine whether auditors' moral reasoning varies with national institutional contexts. To develop a comprehensive understanding of the association between national institutional context and auditors' moral reasoning, we use three different measures of moral reasoning: moral development, prescriptive reasoning, and deliberative reasoning.<sup>2</sup> Moral development describes the most sophisticated moral reasoning of which an individual is capable. Prescriptive reasoning involves the consideration of what should ideally be done to resolve a realistic moral dilemma, while deliberative reasoning involves the formulation of an intention to act on a realistic moral dilemma (Thorne and Bartholomew-Saunders, 2002). The latter two are context-specific measures of auditors' moral reasoning, which are needed to develop an understanding of how auditors actually consider moral dilemmas in the workplace (Arnold, 1997; Shaub, 1997; Thorne, 2000). The use of a broad-based random survey mitigates potential firm-specific effects that may limit the generalization of findings of prior studies that rely on selective samples (Bernardi and Arnold, 1997; Jeffrey and Weatherholt, 1996).

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<sup>2</sup> Thorne and Bartholomew-Saunders (2002) suggest that various aspects of moral reasoning are differentially influenced by external factors; therefore, a comprehensive understanding of the association between institutional context and public accountants' moral reasoning requires an investigation relying on multiple measures of moral reasoning.

## COGNITIVE DEVELOPMENTAL THEORY

Cognitive-developmentalists, generally, concentrate on studying the development of cognitive reasoning structures that precipitate a moral decision or choice. They believe cognitive moral capability becomes more sophisticated and complex as additional cognitive moral structures are acquired. At increasingly mature levels of moral development, individuals evolve from being primarily influenced by externally prescribed rewards and punishments to being primarily influenced by internally defined concerns for principles and universal fairness (Kohlberg, 1979). Kohlberg (1958) identifies three levels of moral development: pre-conventional, conventional and post-conventional or principled. For pre-conventional individuals, the moral acceptability of alternative actions is defined by the rewards and punishments attached. For conventional individuals, moral acceptability of alternative actions is based upon an interpretation of the group norm. Post-conventional or principled individuals consider complex notions of universal fairness, despite legal, social, or material implications.

Accounting researchers employing cognitive-developmental approaches mostly investigate factors associated with the moral development of auditors (Louwers et al., 1997). However, the focus of our paper is on auditors' moral reasoning, which includes cognitive moral development as well as prescriptive and deliberative reasoning. Moral development is related to, but is distinct from prescriptive and deliberative reasoning (Rest, 1994). Moral development describes the most sophisticated cognitive moral structure an individual is capable of utilizing, and is not, theoretically, influenced by contextual factors (Rest, 1994). In contrast, prescriptive and deliberative reasoning describe the cognitive moral structure one individual applies to the resolution of a particular moral dilemma. According to Rest (1994), prescriptive reasoning involves considering what should ideally be done to resolve a particular moral dilemma, whereas deliberative reasoning involves formulating an intention to act on a particular moral dilemma.

## HYPOTHESIS DEVELOPMENT

National institutional context often is distinct from culture as a culture may span national boundaries (e.g., the gypsies of Eastern Europe) and there may be several cultures within one nation (e.g., in Canada there is a French-speaking and an English-speaking culture). While Arnold, Bernardi and Neidermeyer (1999) link inter-country differences in auditors' moral reasoning to differences in ethical culture (c.f., Hofstede, 1980, 1991), institutional differences such as legal and regulatory structures, and professional rules and requirements may also play a role (c.f., Geiger and Raghunandan, 2002; Holloway et al., 1999). However, most of the evidence regarding the ethics of auditors is drawn from a single national institutional context, the United States (Louwers, Ponemon and Radtke, 1997). Thus, it is yet to be determined whether auditors' moral reasoning is differentially associated with national institutional context.

While Canada and the United States have very similar cultures (Hofstede, 1981, 1990), auditors in each country face institutional contexts that are distinct along a number of several key dimensions.<sup>3</sup> First, through the Canadian Institute of Chartered Accountants (CICA), the Canadian accounting profession has the authority to enact and implement financial reporting and auditing standards. By contrast, in the United States, accounting standards are set by the Financial Accounting Standards Board (FASB), an autonomous body whose actions are closely supervised and complemented by the Securities and Exchange Commission, an agency which mandate emanates from the U.S. Congress. This suggests that the Canadian accounting profession has more discretion than its' U.S. counterparts in enacting and implementing accounting rules and standards.

The events following Enron's failure illustrate the difference in discretion between the Canadian and U.S. accounting professions and in their respective ability to control accounting

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<sup>3</sup> As reflecting differences in the culture of auditors, Arnold, Bernardi and Neidermeyer (1999) find that there are significant differences between auditors' responses to ethical dilemmas only on the two dimensions of individualism and power-distance. These dimensions are similar between Canada and Americans with Canadians scoring 80 as compared to Americans scoring 91 on individualism, and with Canadians scoring 39 as compared to Americans scoring 38 on power distance (Hofstede, 1991).

and auditing standards. On the one hand, through the CICA, the Canadian accounting profession was able to seize the initiative by creating an Auditing Oversight Board (AOB) that will review auditors' work on a national basis. By virtue of its being a committee of the CICA, the AOB is not independent of the Canadian accounting profession, its corporate governance structure and funding comes directly from the CICA. On the other hand, the U.S. accounting profession saw the enactment of a new law by Congress that proposed the creation of a new Regulatory Board to oversee and regulate public accounting and auditing in the U.S. The new Regulatory Board established by Sarbanes-Oxley is independent of Congress and of the American accounting profession, through the establishment of an autonomous corporate governance structure that requires independence in the appointment of those that sit on the Board (no more than 2 out of 5 members can have been public accountants) and self-sufficiency in terms of financing.

Second, Canadian accounting standards rely on a principles-based approach that is less detailed and emphasizes professional judgment and economic substance over legal form. In contrast, U.S. accounting standards tend to be more detailed and rule-oriented with extensive reliance on technical guidance and pronouncements serving as a substitute for professional judgment.

Third, auditors face a different legal environment in Canada than in the United States (Brooks, 1997). While both countries rely on a common law framework, each country relies upon different sources for their common law development. The United States primarily relies upon statute to determine auditor liability whereas in Canada there is heavy reliance on precedent (earlier cases) and the courts will use case law of Canada as well as that of the United Kingdom. Moreover, the United States relies on juries to determine auditor liability (Kadous, 2000). This contrasts with Canada where audit liability cases are tried by judges. Finally, while class-action suits and contingent legal fees are an integral part of the U.S. legal system, they are rarely used in Canada due to structural impediments. Wingate (1997) reports that, in combination, these factors result in a different level of litigation between the two countries for auditors, with the respective



litigation indices for auditors of the two countries to be 8 and 10, for Canada and the U.S. respectively<sup>4</sup>.

Fourth, securities laws' enforcement differs extensively between both countries in two key respects. For instance, while the regulation of U.S. securities markets is under federal jurisdiction, Canadian securities markets operate under 13 provincial securities regulators. Moreover, in contrast to the S.E.C., the Ontario Securities Commission (Canada's pre-eminent securities regulator) does not have the legal power to levy fines or to force the disgorgement of ill-gotten gains. Such legislation is yet to be introduced in Canada (Howlett, 2002). Hence, in Canada, professional accountants are likely less accountable for their actions to regulatory agencies.

Our study examines whether the differences in institutional context between Canada and the United States is associated with a difference in the moral reasoning of auditors from the two countries<sup>5</sup>. Previous research shows only one previous study that compared moral reasoning of Canadian and American auditors. Ponemon and Gabhart (1993) compare the moral development of 102 Canadian auditors to that of 133 American auditors employed in the same two "Big 6" audit firms. Figure 1 presents Ponemon and Gabhart's results graphically.

Figure 1 about here.

As shown in Table 1, results in Ponemon and Gabhart (1993) indicate that, unlike the inverse U-shaped association between moral development and tenure often found in the American samples, tenure and moral development are positively associated in the sample comprising auditors from two Canadian audit firms. Because of the specialized and limited

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<sup>4</sup> The level of litigiousness found in a country is suggested by the litigation index reported in Wingate (1997). This index is based upon a risk rating developed by an international insurance underwriter for one of the Big 6 audit firms. It takes on values based to reflect the legal risk faced by an auditor in a particular country.

<sup>5</sup> Because there are several factors that as a whole constitute institutional context, it is difficult during a preliminary investigation to postulate a directional impact that the respective institutional contexts may have on the moral reasoning of auditors from the respective countries.

nature of the sample used in Ponemon and Gabhart's (1993) study, it is unclear whether these findings capture organizational or national institutional differences in the moral reasoning of auditors (c.f., Bernardi and Arnold, 1997; Jeffrey and Weatherholt, 1996).

Table 1 about here.

Table 1 also shows that within a specific institutional context there is a difference between Canadian and American auditors with regard to how tenure and moral reasoning are related. However, it remains an open question whether institutional pressures (e.g., legal, regulatory, professional etc.) exerted in the two nations differentially influence the moral reasoning of members, once they enter the profession. This gives rise to the following hypothesis:

H1: The association between tenure and moral reasoning for auditors in Canada is different from that for auditors in the U.S.

Ponemon and Gabhart (1993, 59) also find that the median level of moral development for Canadian auditors is higher than that of American auditors. This is consistent with other research suggesting differences in moral cognition of Canadian and American accountants. For example, evidence in Salter and Sharp (2001) suggests that Canadian and American accountants act differently in the presence of information asymmetry and incentive to shirk. Similarly, Etherington and Schulting (1995) report that Canadian Certified Management Accountants (CMAs) exhibit higher levels of moral development than American CMAs. Accordingly, the next hypothesis posits that the moral reasoning of Canadian auditors is significantly different from that of their American counterparts:

H2: Canadian auditors' exhibit levels of moral reasoning that are different from American auditors.

## **Other Factors Impacting Auditors' Moral Reasoning**

Two other factors, previously shown to be associated with auditors' moral reasoning, are included in the statistical analysis in this paper: gender (e.g., Gilligan 1982) and political orientation (e.g., Elmer, et al. 1983). With respect to gender, there is weak prior evidence of an association between gender and auditors' moral reasoning. On the one hand, investigations of American auditors fail to find a significant difference in moral reasoning between genders (e.g., Armstrong, 1987; Ponemon, 1992; Ponemon and Gabhart, 1993). On the other hand, some studies find that female auditors have a higher level of moral reasoning than their male counterparts, both in Canada (Etherington and Schulting, 1995) and in the United States (e.g., Bernardi and Arnold, 1997; Lampe and Finn, 1992; Shaub, 1994; Sweeney, 1995). To ensure that our results may not be attributed to differences in gender in the respective samples, we control for gender in our analysis.

With respect to political orientation, some evidence suggests an association between moral reasoning and liberal political orientation (Elmer et al., 1983; Fisher and Sweeney, 1998; Markoulis, 1989; Rest et al., 1999; Sweeney and Fisher, 1998). This research considers whether moral reasoning may be associated or influenced by "an imbedded political ideological content in the instrument unrelated to the assessment of moral judgment" (Sweeney and Fisher, 1998, 139). Recent research in accounting finds that very little of the variance in accountants' moral reasoning can be attributed to political orientation (Bailey et al, 2002; Bernardi et al., 2002). As the respective socio-economic infrastructures of the two countries are different, with Canadians being more "liberal" than Americans (Brooks, 1997; Di Norcia, 1997), we control for political orientation to ensure that this alternate hypothesis does not account for the results' findings.

## METHODOLOGY

### Sample

Data was collected through a large-scale randomized survey of auditors in Canada and in the U.S.<sup>6</sup> Subjects' names and addresses were randomly selected from each country's membership directory (i.e., CICA and AICPA), according to the year they obtained their professional certification. All participants have at least one year of audit experience.<sup>7</sup> Participants received a survey that requested them to complete a three-item instrument to measure cognitive moral capability (i.e., moral development), a four-item instrument to measure audit-specific moral reasoning, and a questionnaire to gather demographic information. One-half of the subjects in the sample received the prescriptive form of the audit-specific instrument; the other half received the deliberative form. The questionnaire to gather demographic information included questions about age, gender, work experience, and political orientation. Several weeks later, a post card follow up was sent to all subjects. Participation was entirely voluntary and completely anonymous. Appendix 1 contains a sample of the survey.

### Measures of Moral Reasoning

This research provides a comprehensive picture of the moral reasoning of auditors by considering each hypothesis, using three different measures: 1) moral development, 2) prescriptive reasoning, and 3) deliberative reasoning. Although related, moral development and moral reasoning are distinct constructs (Rest 1986). Moral development, or cognitive moral capability, describes the most sophisticated moral reasoning of which an individual is capable. Prescriptive reasoning involves the consideration of what ideally should be done to resolve a

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<sup>6</sup> All survey questions were identical, however, the surveys differed in their reference to public accountants. In the survey distributed in Canada, we refer to public accountants as Chartered Accountants (CAs) whereas in the survey distributed in the United States, we refer to public accountants as Certified Public Accountants (CPAs).

<sup>7</sup> Due to the difficulty of translating the research instrument into French, the Canadian sample only included public accountants with English as a first language. Further research is required to determine the similarities and differences between the moral reasoning of English- and French-speaking Canadian public accountants.

particular moral dilemma, while deliberative reasoning, involves the formulation of an intention to act on a particular moral dilemma.

### **Cognitive Moral Capability or Moral Development**

We use the traditional three-item version of Rest's (1979) Defining Issues Test (DIT) to calculate auditors' P-score, a measure of moral development or cognitive moral capability, as applied to the resolution of hypothetical moral dilemmas. Researchers interested in measuring accountants' level of moral development often rely on the DIT, as do researchers in numerous studies outside the accounting domain (Rest et al., 1999). The P (for principled) score is the percentage of principled moral reasoning an individual uses to recommend how a hypothetical moral dilemma ought to be resolved. Davison and Robbins (1989) report that the P-score's reliability varies between 70% and 90% for test-retest situations (within one-to-three week intervals) and for internal consistency (as measured by Cronbach's (1951) alpha).

### **Measures of Moral Reasoning as Applied to Realistic Dilemmas**

How an individual makes a moral decision is influenced by situational factors and may change across domains and due to the intensity of the issue (Jones, 1991; Treviño, 1986). Because of their hypothetical nature, the dilemmas used in the DIT may not necessarily capture the moral reasoning used by auditors in the workplace (Massey, 1997). Thus, it is critical to use context-specific moral dilemmas to gain insights into a moral reasoning process that is representative of auditors (Shaub, 1997). As there are several facets of auditors' moral reasoning that are relevant to their moral decision making, context-specific measures of moral reasoning may take several forms, including prescriptive reasoning and deliberative reasoning. Accordingly, to assess accountants' prescriptive and deliberative moral reasoning in the workplace, this research relies on an audit-specific instrument that has been developed and tested by Thorne (2000).

There are two versions of the audit-specific instrument: prescriptive and deliberative. Each version of the instrument is identical to the other except that each elicits one mode of the accountants' moral reasoning. The prescriptive version of the audit-specific instrument requests subjects to consider how auditors should ideally resolve the described dilemmas. The deliberative version of the audit-specific instrument requests subjects to consider how auditors would realistically resolve the described dilemmas. Thorne (2000) validates each version of the instrument. According to Thorne, the reliability, and validity of the audit-specific instrument is comparable or better than that of the Defining Issues Test (DIT) of a similar length.

### **Statistical Approach**

Tests of our two hypotheses rely on ANCOVA (Analysis of Covariance) to examine whether there is a significant difference in moral reasoning between groups. The independent and control variables in the ANCOVA include: country (1 for Canada, 2 for the U.S.); sector of employment (1 for currently employed in public practice; 2 for currently employed outside public practice); gender (1 for male; 2 for female); political orientation (1 for liberal; 2 for moderate liberal; 3 for moderate; 4 for moderate conservative; 5 for conservative); and an interaction term of work years by country. The interaction term is included to test for differences in the association between tenure and moral reasoning of auditors in each of the two countries.<sup>8</sup> DIT P-score is also used as a control variable in testing prescriptive and deliberative reasoning.

## **DESCRIPTIVE STATISTICS**

434 auditors (215 CAs and 219 CPAs) responded to the survey. In Canada, we sent out 1000 surveys; our response rate was 21.5%. In the U.S., the initial mailing of 1000 surveys resulted in 84 responses (for a response rate of 8.4%). To increase our sample size, the survey was administered to

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<sup>8</sup> Additional statistical analysis included all other interaction terms. They are not reported as there was no significant difference in the results as presented.

a second random sample of 1000 American public accountants. One hundred thirty five responses were received from the second mailing (response rate of 13.5%) for a total of 219 responses from American public accountants (overall response rate of 11.0%). There were no significant differences in results from the two U.S. samples. Non-response bias was checked by statistical analysis and through telephone follow-up of a selected group. Power level computations also suggest that statistical inferences from t-tests and from correlations are relatively reliable (higher than 0.90) (Rosenthal and Rosnow, 1984: 356-365). Among Canadian responses, eight could not be used due to missing data and twenty-five failed internal validity checks; so 182 valid responses were received. Nineteen American responses could not be used due to missing data and another nineteen could not be used because they failed internal validity checks, resulting in a total of 181 valid American responses. A comparison between responses from early and late responders does not reveal any significant difference between them in terms of moral development and moral reasoning. The demographic profile of the sample, in total, according to country and assignment of prescriptive or deliberative forms of the instrument, is presented in Table 2. The mean age of the sample is 43.6 years old, mean years of work experience is 18.6 and 21% of the sample is female. There are no significant differences for any descriptive characteristic listed in Table 2 for respondents broken-down by version of the instrument that they received (prescriptive versus deliberative).

Table 2 about here.

## **RESULTS**

Before investigating whether national institutional context differentially associates with the moral reasoning of auditors in Canada and the U.S., we assess whether the associations between institutional context and moral reasoning reported in prior research extend to our sample. In particular, there is prior evidence of a significant association between tenure and

auditors' moral reasoning, both in Canada (e.g., Etherington and Schulting, 1995; Gaa, 1994; Lemon, 1998; Ponemon and Gabhart, 1993; Thorne and Magnan, 2000) and the United States (e.g., Armstrong, 1987; Bernardi and Arnold, 1997; Lampe and Finn, 1992; Ponemon, 1992; Ponemon and Gabhart, 1993; Shaub, 1994). Since previous research is generally based upon studies that generally rely on selective samples, typically based upon convenience, their findings may not be generalizable to the population of Canadian and American auditors and to the national institutional context of the respective countries (c.f., Bernardi and Arnold, 1997; Jeffrey and Weatherholt, 1996). Accordingly, we examine whether there is a significant association between tenure and moral reasoning, and in particular tenure and moral development as found in previous research. Figure 2 shows the relationship between tenure and moral development for Canadian and American auditors in our study.

Figure 2 about here.

A comparison of Figure 2 to Figure 1 suggests that significant differences exist between the moral development of auditors included in our random survey and those in Ponemon and Gabhart's (1993) study. Consequently, we statistically consider this association using three different measures of moral reasoning: moral development, prescriptive reasoning, and deliberative reasoning, as shown in Panels A, B, and C of Table 3, respectively.

Table 3 about here.

Consistent with prior findings (e.g., Armstrong, 1987; Lampe and Finn, 1992; Ponemon, 1992; Ponemon and Gabhart, 1993; Shaub, 1994), results in Panel A of Table 3 show a significant negative correlation between tenure and moral development for the combined sample ( $p \leq 0.00$ ), as well as for the Canadian ( $p \leq 0.02$ ) and American ( $p \leq 0.03$ ) sub-samples.



Interestingly, also shown on Table 3, we fail to find this association between tenure and prescriptive reasoning or between tenure and deliberative reasoning, respectively.<sup>9</sup>

### **Hypothesis 1**

Table 4 shows the results from ANCOVAs between auditors' moral reasoning and their tenure, country, and current sector of employment, while controlling for gender and political orientation.<sup>10</sup> There are three panels to Table 4, one for each measure of moral reasoning: Panel A shows the results of the ANCOVA for moral development, Panel B shows the results of the ANCOVA for prescriptive reasoning, and Panel C shows the results of the ANCOVA for deliberative reasoning. The results on Panel A of Table 4 show that moral development is significantly associated with work years ( $p \leq 0.03$ ) and political orientation ( $p \leq 0.02$ ). Panel B of Table 4 shows that prescriptive reasoning is significantly associated with gender ( $p \leq 0.04$ ). Panel C of Table 4 shows that deliberative reasoning is significantly associated with the DIT P-score ( $p \leq 0.01$ ), and with work years ( $p \leq 0.09$ ), country ( $p \leq 0.07$ ) and country\*workyear ( $p \leq 0.09$ ).

Hypothesis 1 considers whether there is a difference between Canada and the U.S. with regard to the association between tenure and moral reasoning. Because of a lack of significant findings in Panels A and B of Table 4 for the interaction term, country\*workyear, Hypothesis 1 is not supported for moral development or for prescriptive reasoning, respectively. However, as shown in Panel C of Table 4, the interaction term, country\*workyear, is significant for deliberative reasoning. This finding suggests that there is a different association between tenure and deliberative moral reasoning in Canada than in the United States.

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<sup>9</sup> Further, Table 3 also shows a marginally significant positive association between tenure and deliberative reasoning for the Canadian sub-sample ( $p \leq 0.07$ ). This result is in the opposite direction, and suggests Canadian public accountants' deliberative moral reasoning increases with tenure.

<sup>10</sup> Note that DIT P-score is included as an additional control variable in the ANCOVAs for Prescriptive Reasoning (as shown in Table 4, Panel B) and Deliberative Reasoning (as shown in Table 4, Panel C).

Table 4 about here.

## **Hypothesis 2**

Hypothesis 2 posits that the moral reasoning of Canadian auditors is different from their counterparts in the U.S. The lack of significance for the country variable in Panels A and B of Table 4 suggests that there is no difference between Canadian and American auditors' moral development or prescriptive reasoning, respectively, thus providing no support for Hypothesis 2. However, as shown in Panel C of Table 4, the country variable is significant ( $p \leq 0.07$ ) for deliberative reasoning. Thus, there is limited and marginal support for Hypothesis 2, which suggests that there may be differences in the deliberative reasoning of auditors from Canada and the United States.

## **DISCUSSION, CONCLUSION AND LIMITATIONS**

Given the ongoing investigations into Andersen concerning the Enron debacle and the increasing pressure to reform the institutional factors that affect auditors, it is becoming more important than ever to understand whether and to what extent national institutional context influences the moral reasoning of auditors. Toward that end, we analyze survey data that is drawn from a large random sample of 363 auditors from both Canada and the United States.

Several inferences can be made from the results of this study. The first is that national institutional context (e.g., legal environment, and professional regulation and licensing) appears to be associated with the moral reasoning of auditors. Consistent with broad-based studies conducted previously, auditors in our random sample exhibit a significant, and negative, correlation between moral development and tenure, in both Canada and the U.S. This suggests that changes in the national institutional context of both countries over the past decades has resulted in individuals with an increasing capacity for moral reasoning being attracted to the accounting profession (c.f., Thorne and Magnan, 2000). Thus, a key contribution of our study is

to identify the importance of institutional factors for affecting the moral development of individuals entering the profession.

Another contribution of our study is to identify to what extent national institutional context influences different components of auditors' moral reasoning. Similar to findings in the organizational literature that suggest the importance of penalties to ensure ethical compliance (e.g., Ferrell and Gresham, 1985), our results suggest that institutional factors are more likely to influence auditors' deliberative reasoning than their prescriptive reasoning. For example, our findings suggest that the national institutional context found in the United States, which has an emphasis on penalties resulting from the tough legal and regulatory environment, appears to better encourage auditors to deliberate according to what they perceive is "the ideal" judgment than the national institutional context found in Canada.

The random selection of subjects for this study facilitates the development of a representative portrait of the moral reasoning of North American auditors, in terms of both similarities as well as differences between auditors from Canada and the United States. The use of a broad-based random sampling technique mitigates the effects of firm-specific differences (Bernardi and Arnold, 1997) and allows U.S. to compare whether there is a difference in moral reasoning associated with institutional contexts in two nations that are culturally very similar. By conducting a cross-national comparison of the moral reasoning of Canadian auditors to that of American auditors, we gain insight into the extent to which U.S.-based research findings are generalizable to the Canadian context. In addition, studying moral development, prescriptive moral reasoning, and deliberative moral reasoning, provides insights into which aspects of auditors' moral reasoning may be most susceptible to national institutional context.

A few caveats are in order concerning our findings. The first concerns the use of self-reported measures, the limitations of which are well documented. The second caveat concerns the nature of the sample. The use of anonymous, random, samples resulted in a lower number of responses than desired, particularly for the initial American sample. However, subsequent

sampling, testing for non-response bias, following up with phone calls to the survey participants, and comparing our findings to those of previous studies of the moral reasoning of U.S. auditors suggest our findings are representative. Finally, the caveats concerning the limitations of the cognitive-developmental perspective are also widely documented (see Louwers et al. 1997).

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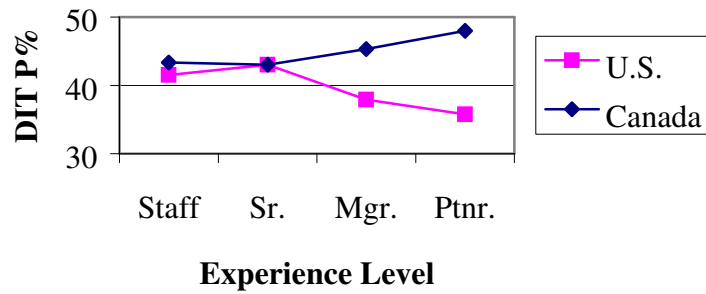
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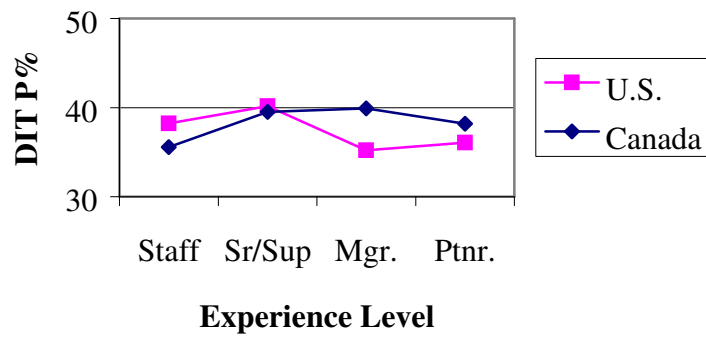
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**Figure 1. Moral Development (DIT P%) by Experience Level (from Ponemon and Gabhart 1993)**



**Figure 2. Moral Development (DIT P%) by Experience Level**



**Table 1: Practicing Public Accountants' DIP P Score by Rank across the U.S. and Compared with Canada**

Rank	U.S. DIT score	Canada DIT score
Partner (>6 years experience)	37.1 c 35.6 a ( <i>Big 6</i> )* 32.3 b (national firm)	46.7 a*
Manager (>5 years experience)	41.9 b (national firm)  41.9 d ( <i>Big 6</i> ) 41.4 e (manager) 41.1 3 (senior manager) 38.7 a ( <i>Big 6</i> )* 38.5 c (manager) 38.1 c (senior manager) 35.7 b (north-east)	45.9 a*
Senior (2-5 years of experience)	42.2 b 42.2 a 41.4 c 41.1 e	43.6 a
Staff-level (1-3 years of experience)	44.7 b 42.6 c 40.2 a 39.8 d	43.2 a
<b>FIRM AVERAGE</b>	40.0 a*	44.2 a*
Sources: a Ponemon and Gabhart (1993) b Ponemon (1992) c Shaub (1994) d Lampe and Finn (1992) e Bernardi and Arnold (1997)		

*\*Statistically significant difference between median DIT score of CPAs and CAs at the same hierarchical level at 0.05 (from Ponemon and Gabhart 1993).*

**Table 2: Descriptive Statistics**

	<b>Panel A Total Respondents</b>			<b>Panel B Prescriptive Respondents</b>			<b>Panel C Deliberative Respondents</b>		
	All	Canada	U.S.	All	Canada	U.S.	All	Canada	U.S.
Gender # female (%)	74 (21%)	34 (19%)	40 (22%)	40 (22%)	16 (18%)	24 (27%)	34 (19%)	18 (20%)	16(18%)
Work Experience In years									
-mean	18.6	17.9	19.2	17.9	17.5	18.3	19.2	18.3	20.1
-range	1-50	3-36	1-50	1-45	3-36	1-45	3-50	3-34	3-50
Age In years									
-mean	43.6	42.9	44.4	43.3	42.9	43.8	43.9	43.0	44.8
-range	22-72	26-63	22-72	22-72	26-59	22-72	26-65	26-63	24-65
Political Orientation (1=liberal, 5=conservative)									
-mean	3.5	3.4	3.5	3.4	3.3	3.5	3.5	3.5	3.6
-(standard error)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)
Moral reasoning measures: Moral development									
• Mean	38.3	38.6	38.0	40.1	41.4	38.8	36.5	35.8	37.1
• (Standard error)	(0.8)	(1.2)	(1.1)	(1.1)	(1.6)	(1.5)	(1.2)	(1.8)	(1.5)
Moral Reasoning									
• Mean	32.9	31.8	34.0	35.0	33.9	36.1	30.8	29.8	31.8
• (Standard error)	(0.7)	(0.9)	(1.0)	(0.9)	(1.3)	(1.3)	(1.0)	(1.3)	(1.5)
Sample size	363	182	181	180	90	90	183	92	91

**Table 3: Association Between Tenure and Moral Reasoning for Public Accountants**

<b>Panel A: Tenure and Moral Development</b>			
	All Subjects	Canadian Subjects	American Subjects
<b>Pearson correlation coefficient</b>	-0.15	-0.16	-0.15
<b>n*</b>	353	182	171
<b>p-value**</b>	0.00	0.02	0.03

<b>Panel B: Tenure and Prescriptive Moral Reasoning</b>			
	All Subjects	Canadian Subjects	American Subjects
<b>Pearson correlation coefficient</b>	0.02	0.06	-0.03
<b>n*</b>	173	90	83
<b>p-value**</b>	0.83	0.59	0.40

<b>Panel C: Tenure and Deliberative Moral Reasoning</b>			
	All Subjects	Canadian Subjects	American Subjects
<b>Pearson correlation coefficient</b>	0.06	0.19	-0.05
<b>n*</b>	180	92	88
<b>p-value**</b>	0.42	0.07	0.32

\*Note: Ten subjects failed to provide tenure information and were not included in this analysis.

\*\*Note: when results are in the predicted direction, p-values are one-tailed; otherwise, they are two-tailed.

**Table 4: ANCOVAs for Moral Reasoning**

Panel A: ANCOVA for Moral Development Moral Development = $f(\text{work years, country, gender, political orientation})$				
Source of Variation	Sum of Squares	Degrees of freedom	F-Value	Prob. > F
Within + Residual	72392	336		
Workyear	1054	1	4.89	0.03
Country	48	1	0.22	0.64
Gender	24	1	0.11	0.74
Political Orientation	2636	4	3.06	0.02
Country * Workyear	<u>25</u>	1	<u>0.11</u>	<u>0.74</u>
Model	4366	8	2.53	0.01
Total	76758	344		

Panel B: ANCOVA for Prescriptive Reasoning Prescriptive Reasoning = $f(\text{DIT P-score, work years, country, gender, political orientation})$				
Source of Variation	Sum of Squares	Degrees of freedom	F-Value	Prob. > F
Within + Residual	23564	160		
DIT P-score	247	1	1.68	0.20
Workyear	8	1	0.06	0.81
Country	276	1	1.87	0.17
Gender	618	1	4.20	0.04
Political Orientation	479	4	0.81	0.52
Country * Workyear	<u>78</u>	<u>1</u>	<u>0.53</u>	<u>0.47</u>
Model	1557	9	1.17	0.32
Total	25121	169		

Panel C: ANCOVA for Deliberative Reasoning Deliberative Reasoning = $f(\text{DIT P-score, work years, country, gender, political orientation})$				
Source of Variation	Sum of Squares	Degrees of freedom	F-Value	Prob. > F
Within + Residual	29350	165		
DIT P-score	1350	1	7.59	0.01
Workyear	517	1	2.90	0.09
Country	614	1	3.45	0.07
Gender	35	1	0.20	0.66
Political Orientation	133	4	0.19	0.95
Country * Workyear	<u>526</u>	<u>1</u>	<u>2.96</u>	<u>0.09</u>
Model	2528	9	1.58	0.13
Total	31878	174		

Appendix 1: Sample of The Survey Instrument

**Here are an illustration case and sample questionnaire.**

Simon Fellows is thinking about buying a house. He is married, in his early thirties, has two small children, and earns an average income. No additions to his family are planned. His family has two cars and his wife works. Simon comes to you for advice as to whether he should or should not buy a house.

Should Simon buy a house? (Check one)        X   Yes         Can't decide         No

In the process of advising Simon whether or not he should buy the house, you may consider many different issues to be important. Below is a list of some of these issues. On the left-hand side of each statement check the space which best corresponds to the importance you believe should be given to the particular consideration. (For instance, if you think that statement #1 should be of great importance in making a decision about buying a house, check the space on the left).

IMPORTANCE:

Great	Much	Some	Little	No	
X					1. Whether Simon can afford a suitable house. (Note in this example, the person taking the questionnaire thought that Simon should place great weight on this consideration in reaching his decision).
				X	2. Whether the furnace on the house was thermal dynamic (Note that if a statement sounds like gibberish, nonsense or is not relevant to the question at hand, mark it of "no importance").
		X			3. Whether Simon could still go on his annual golf vacation.
X					4. Whether Simon's wife wants to buy a house.

From the list of considerations above, select the most important to the decision choice. Put the number of the most important consideration on the blank beside "Most important." Do likewise for your 2nd, 3rd, and 4th most important choices.

For example, from the list above, the four most important could be ranked as follows:

  1   MOST IMPORTANT        4   SECOND MOST IMPORTANT        3   THIRD MOST IMPORTANT        2   FOURTH MOST IMPORTANT

Note in this example, the top choices will come from those statements that were checked on the left-hand side--statements #1 and #4 were thought to be very important. In deciding what is the most important, a person would reread #1 and #4 and then pick one of them as the most important, then put the other one as "second most important", and so on). Statement #3 was of the next highest importance (some importance); therefore, #3 would be put beside the "third most important" choice. Finally, statement #2 was of the fourth highest importance; therefore, #2 would be put beside the "fourth most important" choice.

ALICE AND THE ABC COMPANY

Alice is a senior auditor and a CA for a national CA firm that provides auditing, tax and consulting services. The firm has developed a package called the ACME ACCOUNTING SYSTEM that is sold to the general public as well as the firm's clients. Alice is the auditor in charge of the fieldwork on the ABC Company, Inc. audit. During the course of this audit assignment, Alice is asked to evaluate the quality control of the accounting system that happens to be the ACME package. Alice uncovers several severe control weaknesses in the ACME system. Before rendering the management letter to ABC management, Alice is told by her boss to modify the negative comments regarding the ACME package.

**Ideally, should Alice amend the management letter? (Check one)**

Should amend it    Can't decide    Should not amend it

In the process of advising Alice whether or not she should amend the management letter, many items need to be considered. Below is a list of some of these items. Please indicate the importance of each of the following considerations:

IMPORTANCE:

Great	Much	Some	Little	No	
					1.Whether the weaknesses in the ACME system may be easily remedied by compensating controls.
					2.Wouldn't a good employee defer to her superior's judgment.
					3.Whether Alice's job may be threatened by her refusal to revise the letter.
					4.Whether fair deliberation on the client's financial position can predilect professional reputation.
					5.What is best for Alice's firm?
					6.Whether or not Alice has a duty to ensure the management letter is accurate?
					7.What is the potential value of an independent audit in lieu of society's current perspective on an enterprise's net worth?
					8.How is society best served?
					9.Whether clients really care about internal control or if all they ever really want is a clean audit opinion.
					10.Would amending the management letter be consistent with what Alice thinks is right?
					11.What action would Alice's peers in the audit firm expect her to make?
					12.What factors are relevant in determining Alice's professional responsibility?

From the list above, rank the four items of greatest importance to an "ideal" response:

MOST IMPORTANT    SECOND MOST IMPORTANT    THIRD MOST IMPORTANT    FOURTH MOST IMPORTANT