

Ethical Climate, Social Responsibility, and Earnings Management

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Abstract This study proposes and tests a model of the relations among corporate accountants' perceptions of the ethical climate in their organization, the perceived importance of corporate ethics and social responsibility, and earnings management decisions. Based on a field survey of professional accountants employed by private industry in Hong Kong, we found that perceptions of the organizational ethical climate were significantly associated with belief in the importance of corporate ethics and responsibility. Belief in the importance of ethics and social responsibility was also significantly associated with accountants' ethical judgments and behavioral intentions regarding accounting and operating earnings manipulation. These findings suggest that perceptions of ethical climate, usually presumed to reflect the "tone at the top" in the organization, lead accounting professionals to rationalize earnings management decisions by adjusting their attitudes toward the importance of corporate ethics and social responsibility. This is the first study to document a relationship between organizational ethical climate and professional accountants' support for corporate ethics and social responsibility, and also the first study to document that industry accountants' views toward corporate ethics and social responsibility are associated with their willingness to manipulate earnings. The findings have important implications, suggesting that organizational efforts to enhance the ethical climate and emphasize the importance of corporate ethics and social responsibility could reduce the prevalence of earnings manipulation.

Keywords Ethical climate · Perceived importance of ethics and social responsibility · Earnings management · Hong Kong

Introduction

This paper examines the relations among industry accountants' perceptions of the ethical climate in their organization, their views toward the importance of corporate ethics and social responsibility, and earnings management decisions. Prior studies have documented the effects of a variety of influences on earnings management, but have largely ignored the potential influence of both organizational ethical climate and views toward corporate ethics and social responsibility.

We adopt the classic Victor and Cullen (1987, 1988) conceptualization of organizational ethical climate, which views the perceived climate as a reflection of management's attitudes and behaviors toward ethics. We argue that, when employees perceive an unethical climate or tone at the top in the organization, they are likely to minimize the importance of corporate ethics and social responsibility in order to justify or rationalize aggressive earnings management decisions. In contrast, if employees perceive that the ethical climate in their organization is relatively positive or supportive of ethical/socially responsible behavior this should increase their perceptions of the importance of ethics and social responsibility and accordingly lead to more ethical reporting decisions.

In addition to enhancing our theoretical understanding of the relationships examined, the current research has practical implications for improving ethical behavior. For instance, organizational characteristics such as the ethical climate are at least somewhat malleable and may be

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improved through ongoing efforts that place greater emphasis on the importance of ethical behavior. The importance of ethical reporting decisions that serve the best interests of external stakeholders may also be emphasized through internal training programs for professional accountants. Consequently, the quality of professional accountants' ethical decisions may be improved by efforts to align the values and ethical standards of the organization more closely with the espoused values of the accounting profession.

The next section will provide an overview of relevant literature on earnings management, organizational ethical climate, and the perceived importance of corporate ethics and social responsibility. This is followed by the development of the research hypotheses. The paper then summarizes the research method and findings, and provides the discussion and conclusions.

Literature Review

Earnings Management

Earnings management has long been recognized as a critical ethical issue for the accounting profession, and has been investigated by accounting researchers for many years. The current section provides a general discussion of earnings management and reviews selected behavioral/attitudinal studies of earnings management in accounting.

In a widely cited study, Merchant (1989) reported results from a survey using a questionnaire to measure attitudes toward earnings management. This questionnaire, which became influential in the accounting literature, contained thirteen earnings management scenarios. The scenarios can be categorized into two basic types of earnings manipulation, namely accounting manipulations and operating manipulations. Accounting manipulations involve situations that violate Generally Accepted Accounting Principles (GAAP) in order to achieve desired results. Operating manipulations involve modifying earnings through operating decisions, such as intentionally delaying expenditures for repairs and maintenance to reduce current year expenses, or running sales promotions near year end to boost reported sales and income. In contrast to accounting manipulations, operating manipulations do not involve violations of accounting rules or regulations.

Bruns and Merchant (1990) conducted a follow-up survey of 649 U.S. managers to assess their attitudes toward earnings management using the Merchant (1989) instrument. Participants' ethical judgments lacked a high degree of consensus regarding the acceptability of earnings management practices. The researchers also found that participants judged operating manipulations more

favorably than accounting manipulations. Managers explained to the researchers that they considered accounting manipulations to be purposeful distortions of "truth." On the other hand, the managers thought that even though operating manipulations involve modifying business decisions, the facts will still be reported accurately.

Merchant and Rockness (1994) administered the Merchant (1989) questionnaire to general managers, staff managers, operating unit controllers, and internal auditors in the U.S. Based on data from 308 respondents, the researchers found significant relationships between ethical judgments and manipulation characteristics, such as the type, size, timing, and objective of the actions. More specifically, they empirically identified the following relationships: (1) consistent with Bruns and Merchant (1990), participants judged accounting manipulations more harshly than operating manipulations; (2) no significant differences in judgments were found between manipulations that increased earnings and those that decreased earnings; (3) earnings management of material amounts were judged to be less acceptable than manipulations of immaterial amounts; (4) year-end manipulations were judged to be significantly less acceptable than quarter-end manipulations; and (5) actions with primarily selfish purposes such as achieving profit targets (as opposed to continuing product development projects) were judged more harshly.

In a survey of 265 members of a regional organization of accountants in the U.S., Rosenzweig and Fischer (1994) found that accountants with more experience and at higher position levels were more tolerant of earnings management. In another study, Fischer and Rosenzweig (1995) surveyed undergraduate accounting students, MBA students, and practicing accountants. Consistent with Bruns and Merchant (1990), the study found that all three groups adopted more lenient attitudes toward operating manipulations than accounting manipulations. Indeed, they reported that most respondents did not consider operating manipulations to be of significant ethical concern.

Greenfield et al. (2008) surveyed 375 senior-level undergraduate business students to investigate the impact of ethical orientation (idealism and relativism) and professional commitment on earnings management behavior. They found that individuals with higher professional commitment were less likely to express an intention to engage in earnings management, though the size of this effect was quite small. The results also indicated that participants who scored higher (lower) on idealism (relativism) expressed a lower (higher) likelihood of engaging in earnings management behavior.

As illustrated by the foregoing discussion, most prior behavioral studies of earnings management have focused primarily on assessing attitudes toward various types of manipulations and the effects of personal characteristics on

such attitudes. Elias (2004) appears to be the first behavioral study to address the effects of the organizational ethical environment on decisions regarding earnings management.¹ Elias (2004) conducted a survey of 583 CPAs in public accounting, industry, and academia that examined the effects of perceived corporate ethical values [using the Hunt et al. (1989) scale] on ethical judgments of earnings manipulations. The results indicated that respondents who perceived the ethical standards of their organization to be relatively high (low) regarded earnings management as less (more) ethical. However, this study adopted an one-dimensional measure of corporate ethical values, focused on ethical judgments to the exclusion of other key decisions such as behavioral intentions, and did not recognize potential mediating variables or mechanisms through which ethical culture may influence ethical decisions.

The current paper proposes an integrated model in which professional accountants' perceptions of the ethical climate in their organization influence their beliefs regarding the importance of corporate ethics and social responsibility, and such beliefs in turn influence their ethical decisions regarding operating and accounting earnings management. The model incorporates the Victor and Cullen (1987, 1988) multi-dimensional conceptualization of organizational ethical climate, and includes multiple measures of ethical decisions and behavioral intentions to provide a more refined assessment of accountants' ethical decision-making processes. We now turn our attention to detailed discussions of organizational ethical climate and the perceived importance of corporate ethics and social responsibility.

Ethical Climate

Victor and Cullen (1988) defined organizational ethical climate as the prevailing *perceptions* among employees of organizational practices and procedures that have ethical

content.² They proposed that the ethical climate in an organization would reflect the attitudes and behaviors of management; thus, employee perceptions of ethical climate in their organization or organizational subunit will be influenced by the tone at the top.

The ethical climate construct developed by Victor and Cullen (1987, 1988) may be depicted by a widely recognized two-dimensional matrix, which captures both the ethical criteria and locus of analysis involved in decision making. The ethical criteria, derived from theories of moral philosophy, include egoism, benevolence, and principle. The locus of analysis specifies the focal point or scope of consideration when making ethical decisions, which may be at the individual, local, or cosmopolitan levels. The cross section of the ethical criteria and locus of analysis forms a 3×3 matrix consisting of nine ethical climate dimensions, depicted in Fig. 1.

In the ethical criteria component, egoistic climates focus on self-interest and self-interest maximizing behavior, benevolent climates on what is best for the parties under consideration, and principled climates on following rules, laws, and professional codes of conduct. An individual locus of analysis is focused on the self; accordingly, an egoistic/individual climate emphasizes the pursuit of self-interest, a benevolent/individual climate places priority on friendship or personal relationships, and a principled/individual climate focuses on following one's personal moral principles or beliefs (also referred to as an "independence climate"). The "local" level of analysis is usually interpreted as an emphasis on the company or organizational subunits. Thus, in an egoistic/local climate the primary concern may be on what is considered best for the company, such as profitability. In a benevolent/local climate the focus may be on what is best for an organizational subunit, such as caring for the interests of all team members. In a principled/local climate the primary emphasis will be on following internal company rules and regulations. A

¹ Archival studies have addressed the relationships between certain aspects of organizational governance and earnings management. For instance, Klein (2002) found that abnormal accounting accruals (a measure of earnings management) were significantly higher when either the audit committee or the board of directors lacked independence. Xie et al. (2003) found that when members of corporate boards of directors and audit committees had more extensive corporate or financial backgrounds (a measure of financial sophistication), companies were less likely to engage in earnings management. Earnings management was also less likely to occur when boards or audit committees met more frequently. García-Meca and Sánchez-Ballesta (2009) concluded based on a meta-analysis of 35 studies that when audit committees and boards of directors are more independent, earnings management is less likely to occur. Such studies provide support for the general contention that the tone at the top in an organization may influence earnings management.

² Victor and Cullen (1987, 1988) assumed that, although individual differences in climate perceptions will exist, in a given organization there will be one or more dominant ethical climate dimensions. Most studies of organizational ethical culture/climate fall into one of two categories: (1) studies that focus on one or a few organizations and attempt to identify dominant or influential climate dimensions within these organizations (e.g., Victor and Cullen 1988); and (2) studies that survey employees from many organizations in an attempt to identify relationships between ethical climate perceptions and other variables of interest (e.g., Treviño et al. 1998). Studies of the first type allow for comparisons of the dominant climate dimensions across different types of organizations or organizational subunits. Studies that are based on surveys of employees from a relatively large number of organizations (including the current study) do not allow for the categorization of organizations or organizational subunits according to their climate dimensions, but provide a basis for identifying relationships between climate perceptions and other variables that are generalizable across multiple organizations.

		LOCUS OF ANALYSIS		
		Individual	Local	Cosmopolitan
ETHICAL CRITERION	Egoism	Self-Interest	Company Profit	Efficiency
	Benevolence	Friendship	Team Interest	Social Responsibility
	Principle	Personal Morality	Company Rules and Procedures	Laws and Professional Codes

Fig. 1 Theoretical climate types. *Source* Victor and Cullen (1988, p. 104)

cosmopolitan focus extends the scope of concern to the societal level. For example, a benevolent/cosmopolitan climate will place significant emphasis on social responsibility or acting in the public interest to maximize the wellbeing of society. In a principled/cosmopolitan climate, the emphasis will be on following the rules and regulations of collectives such as society as a whole (laws) or professional associations (codes of conduct).

It is important to recognize that Victor and Cullen (1987, 1988) did not anticipate that all nine climate dimensions would be present in all organizations. They developed this conceptual framework to identify a range of potential ethical climate dimensions, and expected that different dimensions would emerge in different organizations. Thus, as would be expected, there has been significant variation in the ethical climate dimensions identified in various organizational contexts. However, according to Martin and Cullen (2006), a reasonably consistent pattern of five dimensions has emerged over the years from the large number of studies using the Ethical Climate Questionnaire: an *instrumental climate* that combines elements of the egoistic/individual and egoistic/local types; a *caring climate* that comprises elements of the benevolent/individual and benevolent/local dimensions; and three separate principled climates corresponding with the initial theoretical conceptualization (personal morality, company rules and procedures, and law and code climates).³

³ Note that these five climate dimensions were also the ones identified in Victor and Cullen (1988).

The majority of ethical climate studies conforming to this pattern have been conducted in commercial corporations and have involved employees who are not members of highly regulated professions such as accountancy (see the studies reviewed in Martin and Cullen 2006). Consequently, we would not necessarily expect this typical pattern to emerge in professional organizations such as public accounting firms, or in professional departments within corporations (such as legal and accounting departments). Indeed, due to the heavy emphasis in the accounting profession on following codes of professional conduct and protecting the public interest, one would hope to find that benevolent/cosmopolitan (public interest or social responsibility) and principled/cosmopolitan (law and code) climates would be present in accounting firms/departments. Due to the inevitable pressures for profitability and desires for personal advancement that also exist in the accounting profession, one would also anticipate that the widely documented “instrumental” climate (combining elements of the egoistic/individual and egoistic/local climates) would be present. The coexistence of public interest, law and code, and instrumental climates in accounting contexts reflects the conflicting pressures that virtually all professionals face. Thus, we anticipate that these three climates will emerge in studies of professional accountants.⁴

These arguments are supported by the studies of ethical climate in CPA firms conducted to date, as illustrated in Fig. 2. Based on our review of six such studies, they have

⁴ We also feel that these three climate types are the most relevant to the ethical decisions of professional accountants, including the types of earnings management decisions tested in our study. Such decisions involve the fundamental tension that accountants often face between upholding laws and professional standards (principled/cosmopolitan) and serving the public interest (benevolent/cosmopolitan), or succumbing to temptations to acquiesce in earnings manipulations to enhance company profits and/or promote one’s personal career (instrumental). The other commonly identified ethical climate types appear somewhat less relevant to such decisions. For example, the caring climate discussed by Martin and Cullen (2006) combines elements of the benevolent/individual (friendship) and benevolent/local (team interests) climate types, which are clearly less relevant to ethical decisions in accounting than the benevolent/cosmopolitan (public interest) climate. Each of the three principled climates (individual, local, and cosmopolitan) has also commonly emerged in prior studies (Martin and Cullen 2006). But again, among these three we feel that the principled/cosmopolitan climate focused on in our study is the most relevant to earnings management decisions. The principled/cosmopolitan climate emphasizes following laws (e.g., securities laws relating to financial reporting) and professional codes of conduct, both highly relevant to professional accountants’ decisions. We acknowledge that principled/local climates (e.g., following organizational codes of ethics) are also relevant to such decisions, but for professionals laws and professional codes of conduct take precedence over organizational rules. The principled/individual climate (following one’s own personal principles of morality) may obviously influence ethical decisions, but in professional work environments such personal principles should be subordinated to laws and professional codes.

		LOCUS OF ANALYSIS		
		Individual	Local	Cosmopolitan
ETHICAL CRITERION	Egoism	Instrumental (1,2,3,4,5,6)		Efficiency (6)
	Benevolence	Friendship (6)	Team Interest (5,6)	Social Responsibility (1,2,3,4,5,6)
	Principle	Personal Morality (4,6)	Company Rules and Procedures (6)	Laws and Professional Codes (1,2,3,4,5,6)

Notes:

- a. The parenthetical references in the above figure correspond with the following studies: (1) Shafer, Poon and Tjosvold (2013a); (2) Shafer, Poon and Tjosvold (2013b); (3) Shafer (2009); (4) Shafer (2008); (5) Parboteeah et al. (2005); (6) Cullen et al. (2003).
- b. According to Martin and Cullen (2006), most studies have found “instrumental” climates that combine elements of the egoistic/individual and egoistic/local types. Some accounting studies have concluded that separate egoistic/individual or egoistic/local climates existed, but even in some of these cases the climate factors that emerged combined some items from both sub-scales. Thus, we have combined these two climate types, and the parenthetical references in the Instrumental cell above should be interpreted to indicate that the studies found either an egoistic/individual climate, an egoistic/local climate, or some combination of both.

Fig. 2 Climate types emerging in studies of public accounting firms

all documented elements of the three climate dimensions proposed, and other climate dimensions have not been documented frequently. The six studies have also included public accounting firms from the U.S., Japan, Singapore, and China, which lends credibility to the robustness of the findings.

These findings raise an important issue regarding the extent to which these climate dimensions will also be present in accounting departments within corporations. We argue that, from a conceptual standpoint, they should be present in this context. All licensed or certified accountants, regardless of where they are employed, are bound by codes of professional conduct, and such codes emphasize the importance of acting in the public interest. Thus, given that the more senior employees in most corporate accounting departments are likely to be certified, one could easily argue that the ethical climate in such departments should ideally reflect concerns for following codes of

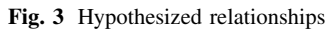
conduct (and laws), as well as acting in the public interest. Indeed, in a recent study of management accountants employed by private corporations in mainland China, Shafer and Wang (2011) documented the presence of both benevolent/cosmopolitan and principled/cosmopolitan climates. We also anticipate that instrumental climates will be present in corporate accounting departments, as they have been found in virtually all prior studies of ethical climate. Due to the apparent significance of benevolent/cosmopolitan, principled/cosmopolitan, and instrumental climates to professional accountants’ ethical views, as well as the fact that these three climates have emerged in most prior studies of ethical climate perceptions among accountants, they are the focus of our study.

Perceived Importance of Ethics and Social Responsibility

Singhapakdi et al. (1996) developed a scale to measure the perceived role of ethics and social responsibility (PRES-OR) in organizational success. The PRESOR instrument has been used widely in studies of business ethics, and several studies have concluded that the scale has two separate dimensions: the stockholder view and the stakeholder view (see Appendix 2) (Shafer and Simmons 2008).

The stockholder and stakeholder views are alternative perspectives or attitudes toward the importance of ethics and social responsibility to organizational success. People who score highly on the stockholder view dimension tend to regard organizational profitability (serving the best interests of the stockholders to the exclusion of others) as the overriding responsibility of business, in line with Friedman’s (1962) classic argument. Those who score highly on the stakeholder view dimension, in contrast, recognize that the organization has a responsibility to a variety of stakeholder groups and accordingly should act in an ethical and socially responsible fashion. They also consider ethical and socially responsible behavior to be not only compatible with but also critical to the long-term success of business enterprises.

Individuals who minimize the importance of corporate ethics and social responsibility should primarily view issues from the perspective of the effects on the company’s “bottom line” profitability, with ethical issues being given a lower priority (note in Appendix 2 that the stockholder view items *prioritize* issues such as profitability and competitiveness over considerations of ethics and social responsibility). In contrast, for individuals who believe more strongly in the importance of ethical and socially responsible behavior, the moral aspects of business decisions should be more salient. Thus, attitudes toward the importance of corporate ethics and social responsibility provide a lens through which business decisions are viewed (Singhapakdi et al. 1996).



If the organizational culture emphasizes protection of the public interest (benevolent/cosmopolitan climate) and compliance with laws and professional codes of conduct (principled/cosmopolitan climate), this should reinforce commitment to professional values, increasing support for the stakeholder view and reducing support for the stockholder view of corporate ethics and social responsibility. Serving the public interest, or doing what is best for the collective welfare of society, is consistent with the stakeholder view, which explicitly acknowledges that corporations have obligations to external stakeholders—organizations or groups other than the company's shareholders. In contrast, according to the stockholder view the interests of external stakeholders should be subordinated to those of shareholders. Similarly, a focus on following professional codes of conduct, which emphasize serving the public interest and behaving in an ethical fashion, is

In light of the foregoing discussion, we clearly anticipate that attitudes toward the importance of corporate ethics and social responsibility will impact ethical decisions. Although the evidence is mixed, some empirical support also exists for this proposition. For instance, Shafer and Simmons (2008) found highly significant correlations between both the stockholder and stakeholder views and all their measures of ethical decision making among tax professionals employed by CPA firms. Elias (2002) examined the direct relationships between PRESOR attitudes and ethical judgments for the thirteen Merchant (1989) earnings management scenarios. The sample consisted of over 700 participants including public accountants, industry accountants, accounting faculty, and accounting students. For the sample of industry accountants, none of the relationships between PRESOR attitudes and ethical judgments were significant at conventional levels. However, for the public accounting sample, both the stockholder view and stakeholder view dimensions in general exhibited

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significant associations with ethical judgments for operating and accounting manipulations.⁸ In the current study we refine Elias' (2002) approach using a multi-item measure of ethical judgments and also eliciting participants' behavioral intentions in an effort to document significant relationships between PRESOR attitudes and ethical decisions among management accountants.

Indeed, most prior studies adopting the Merchant (1989) earnings management scenarios have examined only ethical judgments. In the current paper we argue that the perceived importance of corporate ethics and social responsibility will have significant effects on behavioral intentions as well as ethical judgments regarding earnings management.

In this respect, it is important to recognize that the practical focus of attitudes toward corporate ethics and social responsibility, as reflected in the PRESOR instrument (see Appendix 2), suggests that their greatest impact may be on behavioral intentions. If one considers the attitudes that comprise the stockholder view, this practical focus is particularly evident. The statements give *priority* to corporate profitability, efficiency, competitiveness, and survival over considerations of ethics and social responsibility. Essentially, this view holds that questionable or aggressive actions may be necessary to serve the best interests of the stockholders. It does not explicitly deny that the actions are unethical from a deontological point of view; it simply maintains that they may be required for success or survival in a competitive business environment. The practical focus of this view suggests that its primary impact should be on teleological evaluations of ethical issues; consequently, its greatest effect is likely to be on behavioral intentions.⁹

A practical focus is also evident in the stakeholder view. These items describe ethical and socially responsible

behavior as "important," "essential to long-term profitability," central to organizational "effectiveness," critical to "the survival of a business enterprise," "compatible" with profitability, and "good business." Thus, it appears that attitudes toward the stakeholder view may also have a relatively strong impact on behavioral intentions.

In light of the above discussion, one can surmise that support for the stockholder view of corporate ethics and social responsibility will result in more lenient ethical judgments of aggressive actions and a higher estimated likelihood of engaging in such actions. Individuals who feel that unethical and socially irresponsible behaviors are sometimes necessary and in the best interests of a company should make relatively favorable teleological evaluations of such issues, resulting in such actions being viewed as more ethical or moral. As argued previously, such individuals should also be more likely to establish intentions to engage in similar actions. On the other hand, individuals who support the stakeholder view feel that unethical/socially irresponsible actions are antithetical to the long-term success of business enterprises; consequently, their teleological evaluations of such issues should be relatively harsh, leading them to judge such actions as unethical or immoral. This should result in a lower likelihood of developing intentions to engage in such actions. More generally, stronger belief in the importance of corporate ethics and social responsibility (rejection of the stockholder view and acceptance of the stakeholder view) should lead professional accountants to make more ethical decisions, as reflected in the following hypothesis.¹⁰

Hypothesis 3 Stronger support for the importance of corporate ethics and social responsibility will lead professional accountants to judge aggressive actions as more unethical and decrease the likelihood that they will express an intention to engage in similar actions.

In accordance with well-established theoretical models of ethical decision making in organizations (e.g., Hunt and Vitell 1986, 1991) and the results of recent accounting studies (e.g., Henderson and Kaplan 2005; Shafer 2008),

⁸ Following the early results of Singhapakdi et al. (1996), Elias (2002) grouped the PRESOR items into three factors: (1) social responsibility; (2) long-term gains; and (3) short-term gains. The social responsibility and long-term gains factors roughly correspond with our measure of the stakeholder view, while the short-term gains factor corresponds with our stockholder view. Elias' (2002) results for the sample of public accountants indicated that five of six possible relationships between the three PRESOR factors and earnings manipulations (operating and accounting) were significant at conventional levels. The only relationship that was not significant was that between long-term gains and operating manipulations.

⁹ As recognized in the influential Hunt–Vitell theory of ethical decision making in organizations (Hunt and Vitell 1986, 1991), decision makers make both deontological (based on moral principles) and teleological (based on practical consequences) ethical evaluations of issues, both of which should directly affect overall ethical judgments of an issue, which in turn affect behavioral intentions. However, the Hunt–Vitell model also posits that practical or teleological evaluations of ethical issues (in contrast to deontological evaluations) have additional direct effects on behavioral intentions. Thus, ethical evaluations that are highly dependent on practical or teleological considerations should have relatively large impacts on behavioral intentions.

¹⁰ Note that we are not proposing separate hypotheses for the associations between PRESOR attitudes and operating versus accounting manipulations, because we do not expect these relationships to differ across manipulation types. Accountants' attitudes toward the importance of corporate ethics and social responsibility should exhibit the same basic relationships with ethical decision making, regardless of the specific types of ethical transgressions involved. This argument is supported by the findings of Elias (2002), who documented that PRESOR attitudes were associated with ethical judgments for both operating and accounting manipulations. Indeed, because PRESOR attitudes are not specific to any particular business discipline, they have the potential to influence ethical decision making across a wide variety of business situations (Singhapakdi et al. 1996).

we also anticipated that ethical judgments would directly influence expressed behavioral intentions. This proposition is reflected in the following hypothesis.¹¹

Hypothesis 4 Accountants' ethical judgments regarding earnings management will influence their expressed intentions of engaging in similar behavior.

Research Method

Instrument

Participants responded to (1) four earnings management scenarios adapted from Merchant (1989); (2) sixteen items from the Ethical Climate Questionnaire (ECQ) (Cullen et al. 1993) designed to measure egoistic/individual, egoistic/local, benevolent/cosmopolitan, and principled/cosmopolitan climates; (3) the Perceived Importance of Ethics and Social Responsibility (PRESOR) scale (Singhapakdi et al. 1996); and (4) a demographic questionnaire. All these scales have been used in prior studies.

The four scenarios taken from the Merchant instrument (illustrated in Appendix 1) included two cases dealing with operating manipulations and two cases dealing with accounting manipulations. The cases were selected because they seemed representative of the types of manipulations in question. For each scenario, participants provided (1) overall ethical judgments; (2) judgments on five items from the Multidimensional Ethics Scale (MES) (Henderson and Kaplan 2005) designed to measure moral equity ("just," "fair," and "morally right") and relativism ("culturally acceptable" and "traditionally acceptable"); (3) judgments of the likelihood that their peers would engage in similar actions; and (4)

judgments of the likelihood that they would personally engage in similar actions.¹² The instrument was administered in English, which was considered appropriate given the common use of English in the Hong Kong business community.

Responses to the ethical judgment measures were provided on seven-point scales, with higher numbers indicating that the action was considered less moral or ethical. Behavioral intentions were also elicited on seven-point scales anchored on "unlikely" (1) and "very likely" (7). Responses to the Ethical Climate Questionnaire were provided on the original six-point scale, anchored on "completely false" (1) and "completely true" (6). PRESOR responses were provided on a seven-point scale anchored on "disagree strongly" (1) and "agree strongly" (7). For the PRESOR scale, higher numbers are indicative of stronger support for the stakeholder view dimension and weaker support for the stockholder view dimension (as previously discussed, this is due to the fact that the stockholder view items are all reverse-scored). More generally, higher scores on both dimensions of the PRESOR scale indicate stronger belief in the importance of corporate ethics and social responsibility.

Participants

Access to participants was obtained through personal contacts at companies in Hong Kong. A cover letter that explained the nature of the study and assured the confidentiality of the information collected was attached to every instrument distributed. The letter also reminded respondents to complete the instrument without assistance and return it to a contact person in the company in a sealed envelope for collection by the researchers.

Approximately 700 instruments were distributed to accountants working in over 20 companies engaged in a wide variety of private industries. A total of 211 respondents returned their instrument, giving a response rate of approximately 30 percent. Five instruments were discarded because of incomplete information given, resulting in a usable sample of 206 responses.¹³

¹¹ As indicated by our research hypotheses and Fig. 3, we are proposing that the two PRESOR dimensions will fully mediate the relationship between ethical climate and ethical decisions (we have not hypothesized any direct paths from ethical climate to ethical judgments or behavioral intentions). This is because (1) relatively little evidence exists on the direct relationships between ethical climate/culture and ethical decision making in accounting; and (2) the existing evidence does not provide robust or consistent support for the existence of such relationships. For example, Shafer (2008) found that only one of twelve possible direct relationships between ethical climate and ethical judgments was significant. Three of four relationships between ethical climate and behavioral intentions were significant ($p < .05$), but these results only held true for high relativists. In addition, Shafer and Wang (2011) found that only one of ten potential direct associations between their ethical climate/culture measures and ethical judgments was significant. Also note that we are proposing that the relationships among the PRESOR dimensions and behavioral intentions will be partially mediated by ethical judgments (we have proposed both direct links from the PRESOR dimensions to behavioral intentions and indirect links through ethical judgments). The validity of these assumptions is later addressed by testing alternative model specifications.

¹² It is relatively common in the accounting ethics literature to measure behavioral intentions by asking participants to estimate the likelihood that (1) they themselves, and (2) their peers or professional colleagues would engage in similar actions (e.g., Shafer 2008).

¹³ Though it would have been desirable to have a larger sample size, we feel that the sample size is reasonable based on common recommendations for SEM modeling and prior practice in accounting. Smith and Langfield-Smith (2004, p. 66) note that there is variation in recommended minimum sample sizes in the SEM literature, with some authors suggesting a minimum of 100 participants and others a minimum of 200. Thus, our sample size exceeds the larger of these recommendations. Smith and Langfield-Smith (2004) also noted that among the 20 studies they reviewed that used SEM in management accounting contexts, 11 had sample sizes below 200, and three had samples smaller than 100 participants.

As indicated in Table 1, the mean age of participants was approximately 35 (range of 22 to 56 years). They had an average of 10 years of professional accounting experience (range of 1 to 36 years), and 4.4 years of accounting experience with their current organization (range of .5 to 26 years).¹⁴ Fifty-one percent of respondents were male. Ninety percent had bachelor's degrees or above. About 30 percent of the respondents were general staff, 20 percent senior staff, 20 percent supervisors, and 23 percent managers.¹⁵ Approximately 56 percent worked in local non-listed companies, 10 percent in local listed companies, and 34 percent in multinational companies. All participants were ethnic Chinese. Finally, approximately half the sample held CPA or Chartered Accountant certifications, and 24 participants held management accounting certifications.¹⁶

Scale Construction

Exploratory principal components factor analyses were initially performed for the ethical judgment, behavioral

¹⁴ We asked participants to indicate their total number of years of "professional accounting experience," based on the expectation that this term is commonly understood to include both public accounting experience and experience in accounting positions in other types of organizations such as government and industry.

¹⁵ We were informed by accounting personnel in private industry in Hong Kong that the term "general staff" would be commonly understood as relatively low-level positions in an accounting department, while the terms "senior staff", "supervisor," and "manager" would be understood to be progressively higher position levels. This information is supported by our data. The mean total professional experience reported by general staff, senior staff, supervisors, and managers was 5, 9, 11, and 15 years, respectively. The mean level of experience with their current employer reported by these respective groups was 2, 4, 5, and 6 years.

¹⁶ We also conducted tests of the relations between the continuous variables in our conceptual model and the demographic measures. These tests revealed relatively few significant relationships. Age, total professional experience, and experience with the current employer had little influence on the continuous measures. The only exceptions were that age was correlated ($p < .05$) with ethical judgments and intentions for operating manipulations, and total professional experience was also correlated ($p < .05$) with ethical judgments for operating manipulations. Older participants tended to judge operating manipulations more leniently, and older participants and those with more total professional experience indicated a higher likelihood of engaging in such manipulations. Gender was significantly correlated with behavioral intentions for operating manipulations ($p = .01$) and with the stakeholder view ($p = .003$). Relative to males, females were less likely to express an intention to engage in operating manipulations, and more likely to support the stakeholder view. Position had a highly significant effect ($p < .0001$) on behavioral intentions for operating manipulations, with employees in higher positions estimating higher likelihoods of committing such actions. Supervisors and managers also believed less strongly in the stakeholder view ($p = .046$).

Table 1 Summary of demographic data

Sample size by position	
General staff	66
Senior staff	42
Supervisor	45
Manager	49
Type of current employment	
Local company (non-listed)	113
Local listed company	20
Multinational company	68
Mean age	35.1 (8.0)
Mean total experience	10.0 (7.2)
Mean years of experience with company years	4.4 (4.2)
Gender	
Male	101
Female	99
Degrees held	
None/associate	12
Bachelors	120
Masters	61
Other	5
Certification	
Bookkeeping/technical	12
CPA/chartered accountant	94
Management accountant	24
Others	25

Notes (1) Numbers do not total 206 due to missing values. (2) Numbers in parentheses are standard deviations

intention, ethical climate, and PRESOR measures.¹⁷ A minimum cutoff for factor loadings was set at .4, a commonly used cutoff for exploratory factor analysis (Churchill 1979; Singhapakdi et al. 1996). Before conducting the factor analyses for ethical judgments and behavioral intentions, we averaged responses to the scale items for the two operating scenarios and also for the two accounting scenarios to develop combined measures of ethical judgments and behavioral intentions for both operating and accounting manipulations.¹⁸

The factor analyses for ethical judgments indicated that, for both operating and accounting manipulations, overall ethical judgments and the five MES items all loaded on a

¹⁷ We initially analyzed the data using exploratory (rather than confirmatory) factor analysis because (1) significant variations in factor loadings for some of the instruments, in particular the ethical climate and PRESOR scales, have been found in previous studies; and (2) the instruments have had only very limited prior usage among Chinese management accountants; thus, it should not be assumed that their factor structure will be the same as that previously documented in other professional and national contexts.

¹⁸ Responses to both the operating and accounting scenarios factor analyzed the same regardless of whether the items for the two related cases were analyzed individually or were averaged together.

single dimension, which will be referred to simply as “ethical judgments.”¹⁹ The coefficient alpha for the ethical judgment items for both the operating and accounting manipulations exceeded .90, indicating a very strong internal reliability of the measures. Operating and accounting ethical judgment scales were constructed by computing the mean responses for the six items comprising each scale (overall ethical judgments plus the five MES items).

The factor analysis results for the two behavioral intention measures [estimated likelihoods that (1) the respondent and (2) their professional colleagues would commit similar actions] also indicated that these items loaded strongly on a single dimension. As in the case of the ethical judgment measures, the internal reliability of the two-item behavioral intention measures (whether calculated separately for each of the four cases or combined for the operating scenarios and the accounting scenarios) was quite high, exceeding .85. Consequently, scales for behavioral intentions for accounting and operating manipulations were calculated as the mean response to the two related measures (self-reported and peer intentions).

Three interpretable factors with Eigenvalues in excess of one were identified for the ethical climate instrument: a benevolent/cosmopolitan factor that included all four of the *a priori* items (see Appendix 2) and had a coefficient alpha of .834; a principled/cosmopolitan factor that included all four *a priori* items and had a strong coefficient alpha of .875; and an instrumental factor that included seven of the eight egoistic/individual and egoistic/local climate items and had a coefficient alpha of .728. The factor loadings for the ethical climate dimensions were reasonably strong, as indicated in Appendix 2.

The factor analysis for the PRESOR items revealed two factors with Eigenvalues in excess of one representing the stockholder view and stakeholder view dimensions (see Appendix 2). The stockholder view factor included all five of the *a priori* items and had a coefficient alpha of .800. The stakeholder view factor included all eight of the *a priori* items and had a coefficient alpha of .857. Thus, the PRESOR scale dimensions were found to possess high internal reliability in the current study. The factor loadings for the PRESOR items, as indicated in Appendix 2, were also reasonably strong. Scales for the ethical climate and

PRESOR dimensions were also computed as the numerical average of the individual items comprising each factor.²⁰

We conducted confirmatory factor analyses to validate the scales.²¹ A confirmatory factor analysis for the three ethical climate constructs (see Appendix 2) provided a reasonably strong fit to the data. The root mean square error of approximation (RMSEA) was .084, which is below the recommended .10 cutoff (Hu and Bentler 1998). The Comparative Fit Index (CFI) and Incremental Fit Index (IFI) for the model were both .94, which indicates a strong model fit.²² A similar analysis for the two PRESOR constructs (stock and stake) also provided a strong fit to the data, with an RMSEA of .053 and CFI and IFI values both equal to .98. Since the confirmatory factor analyses provided acceptable model fits, respecification of the models was not necessary (Anderson and Gerbing 1988; Houghton and Jinkerson 2007).

To further validate the scales and model specification, we conducted a series of confirmatory factor analyses for the model as a whole (Furr 2011). The first analysis included all the nine latent constructs (three ethical climate measures, two PRESOR measures, and measures of both ethical judgments and behavioral intentions for accounting manipulation and operating manipulations). This model provided a reasonably good fit to the data, with an RMSEA of .086 and comparative and incremental fit indices both equal to .91. We then compared this nine-factor model with alternative model specifications. Specifically, we estimated two eight-factor models, one of which combined ethical judgments across the operating and accounting scenarios,

²⁰ As described in this section, we constructed scales for our continuous measures by averaging the responses to individual items. These scales were used for purposes of testing the potential effects of demographic measures on responses and to provide a basis for correlation analysis. In the structural equation models, the individual items comprising each scale were used as the indicators for each latent construct in accordance with standard practice. The individual indicators for the ethical climate and PRESOR constructs are illustrated in Appendix 2. The individual indicators for the ethical judgment constructs include the overall ethical judgments and responses to the five MES items for each of the individual earnings management scenarios, while the individual indicators for behavioral intentions include the two behavioral intention measures for each of the scenarios.

²¹ The initial use of exploratory factor analysis followed by confirmatory factor analysis for scale validation is consistent with the recommendations of Anderson and Gerbing (1988) in their influential article. These authors suggest (p. 412) that, rather than viewing exploratory versus confirmatory analysis as a strict dichotomy, these approaches may be viewed as a part of an ordered progression. This progression may begin with a strictly exploratory approach (in which there is no prespecification of the number of factors) as adopted in the current study, and proceed through a variety of approaches that culminate with a confirmatory analysis of the measurement model that achieves adequate model fit.

²² Generally, goodness-of-fit indices in excess of .90 indicate a good model fit (Byrne 2001; Hu and Bentler 1999).

¹⁹ Note that this result contrasts with other recent empirical studies in accounting that have used the MES (e.g., Henderson and Kaplan 2005; Shafer 2008). Those studies found that the MES items loaded on multiple factors generally corresponding with the *a priori* dimensions of the scale such as moral equity and relativism. Apparently, our Hong Kong participants did not make a clear distinction among these aspects of ethical judgments. The failure of the MES items to load on distinct dimensions is later recognized as a limitation of our study.

Table 2 Correlation analysis

	Judge OM	Intent OM	Judge AM	Intent AM	INST	BCC	PCC	Stock
Intent OM	-.645 .000							
Judge AM	.433 .000	-.267 .000						
Intent AM	-.272 .000	.601 .000	-.456 .000					
INST	-.403 .000	.362 .000	-.270 .000	.253 .000				
BCC	.265 .000	-.239 .001	.225 .001	-.181 .009	-.147 .036			
PCC	.244 .000	-.251 .000	.123 .079	-.201 .004	-.103 .142	.551 .000		
Stock	.242 .001	-.274 .000	.287 .000	-.282 .000	-.321 .000	.170 .015	.267 .000	
Stake	.488 .000	-.406 .000	.298 .000	-.251 .000	-.311 .000	.428 .000	.365 .000	.477 .000

Notes (1) Top numbers in each cell are Pearson correlation coefficients. Bottom numbers are significance levels based on two-tailed tests. (2) For ethical judgments, higher numbers indicated that the actions were deemed more unethical; for behavioral intentions, higher numbers indicated a higher likelihood of committing the actions. (3) For all ethical climate measures, higher numbers indicated a stronger perceived emphasis on the related climate dimension. (4) For the Stock and Stake measures, higher numbers indicated a greater belief in the importance of ethics and social responsibility

Judge OM Ethical judgments for operating manipulations, *BCC* Benevolent/cosmopolitan climate, *Intent OM* Behavioral intentions for operating manipulations, *PCC* Principled/cosmopolitan climate, *Judge AM* Ethical judgments for accounting manipulations, *Stock* Stockholder view, *Intent AM* behavioral intentions for accounting manipulations, *Stake* stakeholder view, *INST* instrumental climate

and another that combined behavioral intentions across both operating and accounting manipulations. Each of these models provided a significantly poorer fit than the nine-factor model, indicating that responses to the operating and accounting manipulations should be treated as separate constructs.

To test the convergent and discriminant validity of the measures of ethical climate and the perceived importance of corporate ethics and social responsibility, we adopted the procedures recommended by Fornell and Larcker (1981). These authors recommend that, to establish adequate convergent validity, the average variance extracted (AVE) for each construct (defined as the amount of variance captured by a latent construct in relation to the variance attributable to measurement error) should exceed .5. This criterion was met for each of the latent constructs. To establish discriminant validity between two latent constructs, Fornell and Larcker (1981) suggest that the squared correlation between the constructs should be less than each of the constructs' AVEs. This criterion was met for each of the six pairwise comparisons between the ethical climate and PRESOR measures, providing evidence for discriminant validity.

Findings

Correlation Analysis

Correlation results for the continuous measures are presented in Table 2. The correlations are generally consistent with the research hypotheses. The strong negative correlations between the instrumental climate dimension and both the stockholder and stakeholder view dimensions of the PRESOR scale support Hypothesis 1. Consistent with Hypothesis 2, we found that the benevolent/cosmopolitan and principled/cosmopolitan climate dimensions were positively and significantly correlated with both the stockholder view and stakeholder view dimensions, indicating that organizational concerns with serving the public interest and following laws and professional codes of conduct are associated with stronger belief in the importance of corporate ethics and social responsibility. The relationships between the stakeholder view and stockholder view dimensions of the PRESOR scale and both ethical judgments and behavioral intentions are also consistent with Hypothesis 3. As proposed in Hypothesis 3, stronger belief in the importance of corporate ethics and social responsibility was associated with more harsh ethical

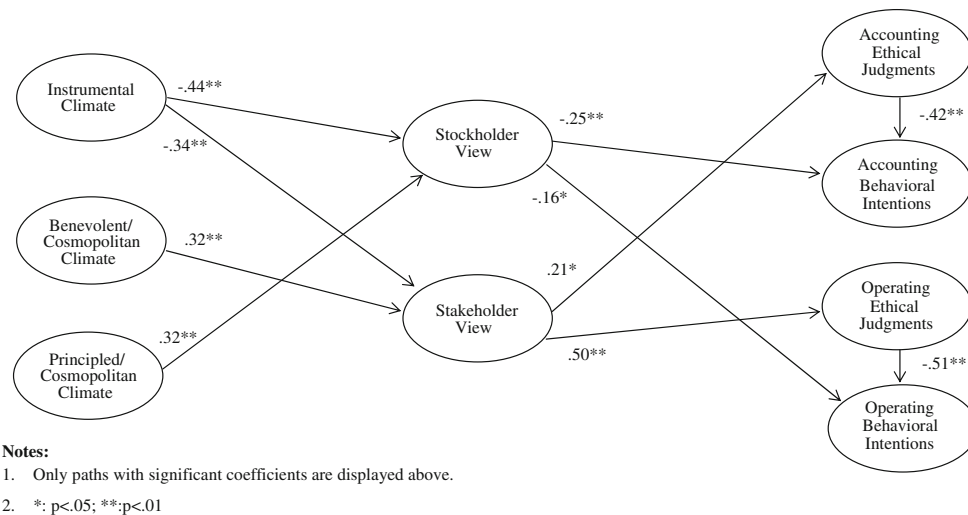


Fig. 4 Structural equation results

judgments and lower estimated likelihoods of engaging in similar actions. Finally, the strong correlations between ethical judgments and behavioral intentions for both accounting and operating manipulations provide support for Hypothesis 4.

Structural Equation Analysis

A structural equation model (SEM), presented in Fig. 4, was used to simultaneously analyze the relationships among the variables of interest.²³ Overall model fit tests were first conducted by reference to several key indices. The root mean square error of approximation (RMSEA) was .061, a value well below the desired .10 cutoff. The Comparative Fit Index (CFI) and Incremental Fit Index for the model, both at .95, indicate a strong model fit. Collectively, these results indicate that the model provided a good fit to the data.

After verifying the overall fit of the model, we examined the parameter estimates to test the research hypotheses. The instrumental climate dimension was associated with the stockholder view and stakeholder view at the .01 significance level or smaller. These results, consistent with Hypothesis 1, indicate that perceived instrumental ethical climates are associated with diminished concern for corporate ethics and social responsibility.

The benevolent/cosmopolitan climate dimension was significantly associated with the stakeholder view, though it was not significantly associated with the stockholder view. In contrast, the principled/cosmopolitan dimension

was significantly associated with the stockholder view but not the stakeholder view. Taken together, these results provide partial support for Hypothesis 2.

The stockholder view was significantly associated with behavioral intentions for both the accounting and operating manipulations, but was not associated with ethical judgments. The negative path coefficients from the stockholder view to accounting and operating behavioral intentions indicate that participants who believed more strongly in the importance of ethics and social responsibility were less likely to express intentions to manipulate earnings, as hypothesized. In contrast, the stakeholder view was significantly associated with both accounting and operating ethical judgments, but was not directly associated with behavioral intentions. This finding indicates that stronger support for the stakeholder view is associated with more harsh ethical judgments of both operating and accounting manipulations, but not directly associated with behavioral intentions regarding such manipulations. Taken together, the findings for the associations between PRESOR attitudes and ethical decisions provide partial support for Hypothesis 3. Hypothesis 4 was strongly supported, with highly significant path coefficients from ethical judgments to behavioral intentions for both accounting and operating manipulations.

To summarize, our hypothesized model provided at least partial support for each of the hypotheses. Strong associations were found between the instrumental climate and both the stockholder and stakeholder views, which fully support Hypothesis 1. Hypothesis 2 was partially supported by the significant associations between the public interest (law and code) climate and the stakeholder (stockholder) view. Hypothesis 3 was also partially supported, with the stakeholder (stockholder) view exhibiting significant relationships with ethical judgments (behavioral intentions).

²³ To simplify the presentation, the model in Fig. 4 does not include the correlations among the variables. The latent constructs at each step in the model (i.e., ethical climates and stockholder/stakeholder views) were all significantly correlated with each other, and these correlations were controlled for in the model.

Nevertheless, there is a possibility that prior experience in other organizations (such as public accounting firms) could influence participants' perceptions of the climate in their current organization. We did not collect detailed information regarding the extent of our participants' prior experience in other types of work organizations; consequently, we were unable to address this issue in the current study. The inability to address this issue should also be recognized as a limitation of the current study.

Appendix 1: Earnings Management Scenarios

Case 1: In September 2011, Mr. Chan, the General Manager of a large division of a multinational company, realized the division would need strong performance in the fourth quarter to reach its budget targets. He decided to implement a sales program offering liberal payment terms to pull some sales that would normally occur next year into the current year; customers accepting delivery in the fourth quarter would not have to pay the invoice for 120 days.

Action: Mr. Chan implemented the sales program, and as a result the division was able to meet its budget targets.

Case 2: Mr. Zhou is the head of a division of a multinational company that was straining to meet its earnings forecasts during late 2011. Mr. Zhou decided to call the engagement partner of a consulting firm that was doing some work for the division and ask the consulting firm to not send an invoice until next year, although the consulting fees had already been incurred in 2011. The consulting partner agreed.

Action: Mr. Zhou did not record the consulting expenses until the following year; as a result, the division met its earnings forecasts for 2011.

Case 3: Mr. Zhu serves as the manager of a small manufacturing company that has recently been experiencing financial difficulties. In order to help the company meet its annual budget targets, he ordered the employees to defer all discretionary expenditures (e.g., maintenance, advertising, and hiring) into the next accounting period.

Action: Mr. Zhu's plan was implemented, and as a result the company was able to meet its budget goals.

Case 4: Mr. Tsang, the manager of a large division of a retailing firm, realized near the end of 2011 that his division would significantly exceed its budgeted profit targets for the year. As a result, he ordered his controller to develop a rationale for increasing the reserve for inventory obsolescence. By taking an overly pessimistic view of future market prospects, the controller was able to identify a significant amount of finished goods to be fully reserved or written off; even though Mr. Tsang was fairly confident the inventory in question would still be sold at a later date at close to full price.

Action: Mr. Tsang implemented his strategy of recording excess inventory reserves. The division still met its 2011 profit targets, and had some excess inventory reserves that could be used to increase reported profits in the future.

Appendix 2: Scale Items and Reliabilities

	Factor loadings
Instrumental climate: ($\alpha = .728$)	
1. In this organization, people are mostly out for themselves	.553
2. In this organization, people protect their own interest above other considerations	.693
3. People in this organization are very concerned about what is best for them	.746
4. People are expected to do anything to further the organization's interests	.600
5. Work is considered sub-standard only when it hurts the organization's interests	.531
6. People are concerned with the organization's interests—to the exclusion of all else	.458
7. Decisions here are primarily viewed in terms of contribution to profit	.680
Benevolent/cosmopolitan climate: ($\alpha = .834$)	
1. It is expected that you will always do what is right for the public	.695
2. People in this organization have a strong sense of responsibility to the outside community	.778
3. People in this organization are actively concerned about the public interest	.752
4. The effects of decisions on the public are a primary concern in this organization	.771
Principled/cosmopolitan climate: ($\alpha = .875$)	
1. The first consideration is whether a decision violates any law or professional standard	.827
2. People are expected to comply with legal and professional standards over and above other considerations	.797
3. In this organization, people are expected to strictly follow legal or professional standards	.819
4. In this organization, the law or ethical code of one's profession is the major consideration	.821
PRESOR Scale:	
Stockholder view: ($\alpha = .800$)	
1. The most important concern for a firm is making a profit, even if it means bending or breaking the rules ^a	.707
2. To remain competitive in a global environment, business firms will have to disregard ethics and social responsibility ^a	.673
3. If survival of a business enterprise is at stake, then you must forget about ethics and social responsibility ^a	.802

	Factor loadings
4. Efficiency is much more important to a firm than whether or not the firm is seen as ethical or socially responsible ^a	.782
5. If the stockholders are unhappy, nothing else matters ^a	.628
Stakeholder view: ($\alpha = .857$)	
5. Being ethical and socially responsible is the most important thing a firm can do	.763
6. The ethics and social responsibility of a firm are essential to its long-term profitability	.551
7. The overall effectiveness of a business can be determined to a great extent by the degree to which it is ethical and socially responsible	.534
8. Business ethics and social responsibility are critical to the survival of a business enterprise	.599
10. A firm's first priority should be employee morale	.823
11. Business has a social responsibility beyond making a profit	.775
12. Social responsibility and profitability can be compatible	.725
13. Good ethics is often good business	.690

^a Reverse scored

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