# Characteristics and financial performance of no-ethics-code firms

Obeua S. Persons Rider University

#### **ABSTRACT**

This study investigates two research questions: (1) what are characteristics of companies that have not adopted a written code of ethics for their principal officers such as the chief executive officer (CEO), and (2) what is an effect of not having such a code on these firms' financial performance? These questions are addressed by examining 94 no-ethics code firms and 94 ethics-code firms matched on the basis of country and industry.

Logit regression analysis for the first question indicates that a firm with no ethics code had poorer financial performance, a smaller firm size, a less independent audit committee, no separation between the CEO and the BOD chair, and a smaller board size. The regression analysis for the second question suggests that not having a code of ethics for principal officers could potentially increase a likelihood of poorer financial performance because stakeholders likely perceive having no ethics code as a negative reflection of the CEO ethical values.

This study contributes significantly to the literature on business ethics because it documents a linkage between firm's financial performance and the CEO ethical values as reflected by whether a firm has an ethics code. Such linkage has important implications not only for companies, investors and top executives worldwide but also for business students who will become future corporate leaders.

Keywords: Code of ethics, CEO ethical values, financial performance, corporate governance, audit committee, Sarbanes-Oxley Act.

Copyright statement: Authors retain the copyright to the manuscripts published in AABRI journals. Please see the AABRI Copyright Policy at <a href="http://www.aabri.com/copyright.html">http://www.aabri.com/copyright.html</a>.

#### INTRODUCTION

Business ethics has become highly important for corporations around the world after major accounting scandals at multinational companies such as Enron, Worldcom, and Parmalat. The recent financial crisis that started with subprime-mortgage problems, the Madoff scandal, and BP's shoddy maintenance programs that led to disastrous offshore oil spill provide further highlights of the decay in business morality which support Friedman's (2008) statement that "we don't just need a financial bailout, we need an ethical bailout". Unethical conduct is definitely costly to a firm and its shareholders because it could bankrupt the firm as in the cases of Enron and Worldcom, or for less serious ethical lapses, jeopardize the firm's profitability and market value as a result of litigation-related expenses/penalty, tarnished reputation/brand image and mistrust from the public (Leone, 2010). In July 2002, President Bush signed into law the Sarbanes-Oxley Act (SOX) which, under Section 406, requires all public companies (including non-U.S. companies) to disclose whether the company has adopted a written code of ethics for its principal officers. Although the SOX does not require a public company to adopt a code of ethics if it has not already done so, all U.S. public companies and the main majority of non-U.S. companies that registered their securities with the U.S. Securities Exchange Commission (SEC) have adopted a code of ethics for their principal officers.

This study identified a total of 94 non-U.S. companies that have not adopted a code of ethics for their principal officers, and examine their financial and corporate governance characteristics as wells as the effect of having no ethics code on their financial performance. It is puzzling why these companies have not adopted such a code given that it is relatively easy for the board of directors (BOD) and the chief executive officer (CEO) of these firms to adopt a code that follows "best practices" exemplified by prominent companies such as Johnson & Johnson. Marnburg (2000) posits that a corporate code of ethics serves to challenge individuals to ethical behavior and maintain an environment that fosters ethical conduct. Gilley et al. (2010) assert that the development and the implementation of a code of ethics require strong support and commitment from the CEO and the BOD. Consequently, not adopting such a code could be perceived by investors as a lack of ethical commitment of the CEO and the BOD. Such investor perception could potentially have negative effects on the firm's value. This leads to the following two questions.

- 1. What are significant characteristics of these companies that have no code of ethics?
- 2. What is the effect of having no code of ethics on the firm's financial performance? An investigation of the first question should help us gain a better understanding about financial and corporate governance characteristics that affect a company's decision to adopt a code of ethics, therefore, contributing to the literature on business ethics. An examination of the second question should contribute significantly to a very scant literature on the relationship between ethical values of the CEO and the company's financial performance. A decision to adopt or not adopt a code of ethics likely reflects ethical values of the CEO whose decisions and conduct profoundly affect the firm's financial performance (Hambrick, 2007). CEOs who highly value ethics in conducting business likely adopt a code of ethics so as to signal to stakeholders his/her commitment to lawful and ethical behaviors. Such positive signal could help enhance corporate reputation and brand image crucial to the company's financial success. A finding of a positive relation between CEO ethical values and financial performance would provide an incentive for CEOs to behave ethically and for BODs to emphasize high ethics when evaluating CEOs. Such a positive relation will also send a clear message to our business students who will

become future corporate leaders that "you can do well by doing good." Additionally, investors such as "social-choice" mutual or pension funds could use this publicly available information regarding whether a firm has an ethics code for its principal officers to select appropriate stocks.

# HYPOTHESIS DEVELOPMENT FOR THE FIRST QUESTION

This study hypothesizes that a firm's financial performance, size and certain corporate governance characteristics in the prior year affect its decision to adopt a code of ethics for principal officers. Campbell (2007) offers a theory on corporate social responsibility (CSR) specifying the conditions under which companies are more (or less) likely to behave in socially responsible ways. He proposes that firms that are less profitable have fewer resources to spare for socially responsible activities and will be less likely to behave in a socially responsible ways than those that are more profitable. Given the close linkage between CSR and ethics, this study relies on Campbell's proposition to hypothesize that companies which have no code of ethics for their principal officers have weaker financial performance than those with such a code.

For the firm's size, since a larger firm is more visible, i.e., more likely to become an investment choice than a smaller firm due to it well-known brand name and greater information disclosures, a larger firm is subject to a greater scrutiny by investors and financial analysts than a smaller firm. As a result, a larger firm is more likely to adopt a code of ethics. Robertson and Crittenden (2003) also assert that adopting and implementing a viable code of ethics become increasingly important as an organization grows. This leads to a hypothesis that companies which have no code of ethics for their principal officers are smaller companies.

For corporate governance characteristics, this study hypothesizes that companies which have no code of ethics for principal officers have: (1) a less independent audit committee, (2) no separation between a board chairman and the CEO, (3) a higher CEO stock ownership, (4) a lower stock ownership of independent institutional investors, and (5) a smaller board of directors. Below is an explanation for each corporate-governance characteristic.

# 1. Less Independent Audit Committee

An audit committee is a board committee with the main responsibility of monitoring the integrity of financial reporting. Most companies also assign oversight responsibility over ethics to this committee. Blue Ribbon Committee (1999) state that audit committee independence is positively related to the number of its outside directors who have no personal or financial relations with the firm or its executives. Klein (2002) finds a lower incidence of earnings management when a firm has a higher percentage of outside independent directors on the audit committee. Abbott et al. (2004) and Persons (2005) find a negative association between the audit committee independence and the likelihood of financial reporting restatement and financial reporting fraud. Persons (2009) also reports that firms which made earlier voluntary ethics disclosure were likely to have a more independent audit committee. These studies support the view that a more independent audit committee contributes positively to ethical reporting, and imply a negative relation between audit committee independence and a likelihood of not adopting an ethics code.

### 2. No Separation between the BOD Chair and the CEO

Jensen (1993) and Dechow et al. (1996) argue that when the CEO is also the BOD chair, this top executive could exert undue influence on the board, which is supposed to supervise top management on behalf of the firm's stockholders. These CEOs can also handpick directors who would not seriously challenge them. Dechow et al. (1996) find that firms manipulating earnings are more likely to have a CEO who simultaneously serves as the board chairman. Persons (2005) also reports that the likelihood of financial statement fraud increases when the CEO also serves as the board chairman. These studies' findings suggest that firms with no separation between the BOD chair and the CEO are less committed to ethical conduct, and may be less interested in an adoption of an ethics-code for their principal officers.

# 3. Higher CEO Stock Ownership

Stulz (1988) proposes the managerial entrenchment hypothesis which suggests that becoming the firm's large shareholder provides the manager with an effective control of the firm, thereby enabling the manager to indulge in nonvalue-added behavior. Du et al. (2007) argue that stock ownership may provide incentive for unethical conduct such as misstating financial information so as to artificially increase stock price. This managerial entrenchment hypothesis is more likely for our sample that is comprised mainly of small foreign firms with a CEO who is also a large shareholder. Hamadi (2010) posits that one problem with large shareholders is that their motivation could be their own private benefits, favoring themselves at the expense of other small shareholders, employees, creditors, etc. This problem about unethical conduct of large shareholders is likely escalated when the CEO is a large shareholder of the firm. It is likely that adopting a code of ethics would not be of interest to such an entrenched CEO/large shareholder.

# 4. A Lower Stock Ownership of Independent Institutional Investors

This corporate governance variable is the cumulative percentage of stockholdings of independent institutional investors such as mutual funds and large pension funds. Jensen (1993) and Shleifer & Vishny (1997) note that these institutional investors have incentives to monitor management because they have larger cash flow stake in the firm. Institutional investors also have higher ability to monitor management due to their greater control (voting) rights, which enable them to affect corporate governance changes including an adoption of a code of ethics (Burns, 2003). These studies suggest that a lower stock ownership of institutional investors could lower the likelihood of an adoption of an ethics-code for principal officers.

#### 5. A Smaller Board Size

This study argues that a smaller board of directors is less conducive to an ethics-code adoption because there is a lower probability that a smaller (as opposed to a larger) board will include some highly ethical member(s) who could persuade the BOD and the CEO to adopt such a code. Chaganti et al. (1985) find that chapter 11-bankrupt firms have smaller boards than matched healthy firms, suggesting that a smaller board is less effective in preventing corporate failure. Likewise, Beasley and Salterio (2001) finds that firms that voluntarily exceed minimum

mandated level of audit committee composition/expertise have larger boards. These studies support the view that firms with no code of ethics likely have a smaller board of directors.

# HYPOTHESIS DEVELOPMENT FOR THE SECOND QUESTION

This study hypothesizes that not having a code of ethics for principal officers could contribute to relatively weaker future financial performance of the company. Having a code of ethics shines positive light on the CEO's ethical values. Gilley et al. (2010) assert that commitment to ethical business conduct enhances stockholder interest and contributes to value creation. A prerequisite to such commitment is to adopt and implement a written code of ethics that governs top executives' decisions and conduct. On the other hand, some might argue that there were several unethical companies such as Enron and WorldCom that had such a code. However, not having such a code could be an indicator that the CEO does not value business ethics as an important factor for the firm's financial success. This CEO may manage the company for his/her own private benefits instead of the benefits of stakeholders including shareholders, employees, customers, suppliers and local communities. Falck and Heblich (2007) suggest that managing companies for stakeholder benefits can lead to enhanced competitiveness crucial for firm value creation. Likewise, Allouche and Laroche (2006) argue that the ways in which a firm satisfies its stakeholders and communicates its corporate social responsibilities (CSR) to stakeholders can positively affect its financial performance. Margolis and Walsh's (2001) meta-analysis find that the majority of 160 studies examined support a positive relationship between CSR and financial performance. Agle et al. (1999) find a significant and positive relationship between CSR and CEO ethical values. Pae and Choi (2011) find that cost of capital is higher for companies with weaker commitment to business ethics. This positive association between CSR/ethical commitment and financial performance as well as the strong linkage between CSR and CEO ethical values support the hypothesis that not having a code of ethics, which is a negative reflection of CEO ethical values, could potentially increase a likelihood of weaker future financial performance

This study also controls for other performance-related variables: size, risk, and investment opportunity of a company. Small start-up firms common in this study's sample typically have large net losses, and tend to experience worse future financial performance than larger well-established firms because they are in the process of developing their products or their products are not well-known in the market. Risk is measured by how much debt a firm has relative to its total assets. Riskier firms that are burdened by large debt and interest payments tend to have worse financial performance, and are more likely to have major ethics problems related to a potential violation of debt covenants. A firm with a smaller investment opportunity, i.e., smaller total market value relative to its total book value, is likely to have lower future financial performance. These three control variables are commonly used in prior CSR-financial performance studies such as Makni et al. (2009) and Garcia-Castro et al. (2010).

#### DATA COLLECTION AND RESEARCH DESIGN

An examination of the last annual report of all non-U.S. companies that registered with the SEC indicated 94 companies that have no code of ethics for their principal officers. The fiscal year of these firms' last annual reports spans 2004 through 2010. These 94 firms are from the following 11 jurisdictions: Canada-71 firms, British Virgin Island-5 firms, China-4 firms,

United Kingdom-4 firms, Bermuda-2 firms, Ireal-2 firms, Sweden-2 firms, Australia-1 firm, Belize-1 firm, Brazil-1 firm, and Japan-1 firm. They are from 44 different industries based on four-digit SIC codes. Out of these 94 firms, 51 firms are from mining industries with SIC codes ranging from 1000 to 1400. All of these 51 firms are Canadian firms. Relevant financial and corporate governance data were collected from their annual reports in the EDGAR database on the SEC web site. All financial data including stock price are translated into U.S. dollar using the exchange rate at the fiscal year end. Data from financial statements are based on or equivalent to U.S. generally accepted accounting principle (GAAP) for 81 out of 94 firms, Canadian GAAP for eight firms, and international financial reporting standards (IFRS) for five firms.

These no-code firms are matched with 94 control firms that have a code of ethics, and are from the same country and industry as the no-code firms. If a control firm from the same industry based on a four-digit SIC code is not available, a control firm is chosen from a two-digit SIC code or the SIC code closest to that of the no-code firm. This study also tries to match firms on the basis of GAAP if there is such a control firm in the same industry and country. Consequently, most control firms' financial-statement data are also based on or equivalent to U.S. GAAP with the exception of five firms that use Canadian GAAP and two firms that use IFRS. Financial-statement data of each control firm came from the same year as that of its matched no-code firm, and were translated using the same exchange rate as that for its matched no-code firm for a better comparability. Corporate-governance data are also from the same year as that of its matched no-code firm

This study uses t-test, Wilcoxon rank-sum test, and the following two regression models to address the two questions, and test related hypotheses. Both models are based on the maximum-likelihood logit estimation. The dependent variable of each model pertains to the year right after the year of explanatory variables in order to infer the causal relationship.

# **Model for Question #1 About Characteristics of No-Ethics-Code Firms**

 $\begin{aligned} NOCODE_t &= a + b_1LOSSFIRM_{t-1} + b_2SIZE_{t-1} + b_3AUDIND_{t-1} + b_4CEOCHR_{t-1} \\ &+ b_5CEOOWN_{t-1} + b_6INSTOWN_{t-1} + b_7BODSIZE_{t-1} \end{aligned}$ 

NOCODE = 1 if a firm has no code of ethics for principal officers in year t, and 0 otherwise.

LOSSFIRM = 1 if a firm had net loss in year t-1 and 0 if a firm had net income. This is an

appropriate measure of financial performance among the sample firms because the main majority of them had net loss. The use of LOSSFIRM also avoids a problem

of exceptionally high standard deviation that other financial measures have.

SIZE = Natural logarithm of a firm's total market value at the end of year t-1.

AUDIND = Ratio of independent directors to total audit-committee members for year t-1.

CEOCHR = 1 if the CEO also chaired the BOD in year t-1 and 0 otherwise. CEOOWN = Percentage of common shares owned by the CEO in year t-1.

INSTOWN = Cumulative stock ownership of independent institutional investors in year t-1.

BODSIZE = Total number of directors on the board.

SIZE, AUDIND, INSTOWN and BODSIZE are expected to have a negative coefficient, whereas LOSSFIRM, CEOCHR and CEOOWN are expected to have a positive coefficient per the earlier discussion.

# Model for Question #2 About the Effect of No Ethics-Code on Financial Performance

 $LOSSFIRM_{t} = a + b_1NOCODE_{t-1} + b_2SIZE_{t-1} + b_3RISK_{t-1} + b_4INVOPP_{t-1}$ 

LOSSFIRM = 1 if a firm had net loss in year t and 0 if a firm had net income.

NOCODE = 1 if a firm has no code of ethics for principal officers in year t-1 and 0 otherwise.

SIZE = Natural logarithm of a firm's total market value at the end of year t-1.

RISK = Total debt divided by total assets at the end of year t-1.

INVOPP = Investment opportunities at the end of year t-1 computed as total market value

divided by total book value (stockholders' equity).

NOCODE and RISK are expected to have a positive coefficient, whereas SIZE and INVOPP are expected to have a negative coefficient per the earlier discussion.

#### **RESULTS**

Table 1 reports descriptive statistics along with t-test and Wilcoxon rank-sum test of the seven regression variables regarding characteristics of the two groups of firms. LOSSFIRM results indicate that there is a significantly higher percentage (88%) of no-code firms with net loss than that (68%) of matched code firms. This higher percentage of LOSSFIRM among no-code firms could be explained by a significantly higher percentage (49%) of no-code firms that had no revenue compared to only 34% of matched code firms. Additionally, no-code firm also had significantly smaller SIZE (natural logarithm of ending total market value) than code firms. No-code firms also had a significantly lower mean ratio of independent directors on their audit committee (52.7%) than that (79.5%) of code firms. There is also significantly higher percentage of no-code firms (74.5%) that have the same person as its CEO and board chairman than code firms (52.1%). No-code firms also had significantly smaller board size with the mean value of 5.223 versus 6.5 for code firms. The two groups do not differ with respect to CEO stock ownership and stock ownership of institutional investors.

Table 2 shows logit regression results concerning the characteristics of no-code firms. The results indicate five significant variables listed here in an order of their significance level: AUDIND, LOSSFIRM, BODSIZE, SIZE and CEOCHR. In sum, no-code firms had a less independent audit committee, are more likely to have net loss which is an indicator of poorer financial performance, had a smaller board size, are smaller firms, and had its CEO chaired BOD. These regression results are in line with the results in Table 1.

Table 3 presents descriptive statistics along with t-test and Wilcoxon rank-sum test of the four variables in the regression model for testing the effect of having no ethics code on firm financial performance measured by whether a firm had net loss in a subsequent year. These results are based on a total of 185 firms: 41 net-income firms and 144 net-loss firms. Three out of 188 firms were excluded because their RISK cannot be computed due to their zero total assets. Results indicate that firms with net loss are more likely to have no ethics code in the prior year as indicated by the NOCODE mean value of 0.565 for net-loss firms versus 0.268 for net-income firms. Loss firms are also smaller with the SIZE mean value of 0.962 that is significantly smaller than 5.872, the SIZE mean value of net-income firms. Poorly performing firms with net loss also had significantly lower investment opportunities in the prior year (INVOPP) with the mean value of 3.092 versus 12.829 of net-income firms. Both net-income and net loss firms do not differ in terms of RISK measured as total debt to total assets in the prior year.

Table 4 reports logit regression results of the effect of having no ethics-code on firm performance measured by whether a firm had net loss in a subsequent year. The results indicate that three out of four explanatory variables, NOCODE, SIZE and INVOPP, have statistically significant effect on financial performance in the expected direction. That is smaller size, lower investment opportunities and having no code of ethics in the prior year, t-1, are significantly associated with poorer financial performance in year t. These results, which are consistent with those in Table 3, support the hypothesis that having no ethics code for principal officers could increase a likelihood of weaker future financial performance.

This study also conducts two diagnostic tests for both regression models. The first test is using an alternative measure of firm size, i.e., natural logarithm of ending total assets. Regression results of both models using this size variable yield the same inferences as those reported earlier. The second test involves an alternative measure of firm performance. For the first model about characteristics of no-code firms, an alternative measure of firm performance is return on assets (ROA). The use of ROA produces the same inferences as earlier results. For the second regression model about the effect of having no ethics code on financial performance, an alternative measure is whether ROA for the prior year is below the sample median value of -0.4863. The dummy variable of ROA is used instead of the ROA itself because of an exceptionally high and negative correlation of -0.996 between ROA and RISK. The inferences based on this alternative measure are virtually the same as those reported earlier.

#### **CONCLUSIONS**

This study examines the characteristics of firms that have no code of ethics for their principal officers and the effect of having no ethics code on financial performance. The statistical analysis based upon 94 no-ethics code firms and 94 control ethics-code firms indicate the following two significant findings. First, no-code firms had a less independent audit committee, weaker financial performance, a smaller firm size, no separation between the CEO and the BOD chair, and a smaller board size. Second, having no code of ethics for principal officers could increase a likelihood of weaker future financial performance. This is because having no ethics code for principal officers likely reflects a lack of ethical commitment of the CEO in conducting businesses, and many prior studies indicate that ethical business conduct involving corporate social responsibilities (CSR) can positively affect the company's financial performance. An implication for investors is that they may want to avoid firms that have not adopted a code of ethics for their principal officers.

This study makes a significant contribution to the literature on business ethics because it documents an association between poorer future financial performance and a failure to adopt an ethics code for principal officers. Such an association has important implications not only for companies, investors and top executives worldwide but also for business students who will become future corporate leaders. Future studies may want to extend this study by investigating a long-term relationship between financial performance and code of ethics/CEO ethical values.

#### REFERENCES

Abbott, L.J., S. Parker, and G.F. Peters. (2004). Audit committee characteristics and restatements. *Auditing: A Journal of Practice and Theory*, 23 (March), 69-87.

- Agle B.R., Mitchell R.K., and Sonnenfeld J.A. (1999). Who matters to CEOs? An investigation of stakeholders attributes and salience, corporate performance, and CEO value. *Academy of Management Journal*, 42 (5), 507-525.
- Allouche, J. and Laroche, P. (2006). The relationship between corporate social responsibility and corporate financial performance: A survey. in J. Allouche (ed.), *Corporate Social Responsibility: Performance and Stakeholders* (Palgrave MacMillan, Basingstoke), 3-40.
- Beasley, M.S. and Salterio, S.E. (2001). The relationship between board characteristics and voluntary improvements in audit committee composition and experience. *Contemporary Accounting Research*, 18(4), 539-570.
- Blue Ribbon Committee. (1999). Report and Recommendations of Blue Ribbon Committee on Improving the Effectiveness of Corporate Audit Committees. New York, NY: New York Stock Exchange and National Association of Securities Dealers. Available at http://www.nyse.com.
- Burns J. (2003). Everything you wanted to know about corporate governance. *Wall Street Journal Online*, October 27.
- Campbell J.L. (2007). Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. *Academy of Management Review* 32 (3), 946-967.
- Chaganti, R.S., Mahajan, V. and Sharma, S. (1985). Corporate board size, composition, and corporate failures in retailing industry. *Journal of Management Studies*, 22(3), 400-417.
- Dechow P.M., Sloan R.G. and Sweeney A.P. (1996). Causes and consequences of earnings manipulation: An analysis of firms subject to enforcement actions by the SEC. *Contemporary Accounting Research*, 13 (Spring), 1-36.
- Du, H., Cullinan, C.P. and Wright, G.B. (2007). Is there a relationship between management compensation and revenue misstatements? *Journal of Forensic Accounting*, 8(1&2), 119-140.
- Falck O. and Heblich S. (2007). Corporate social responsibility: Doing well by doing good. *Business Horizon*, 50 (3), 247-254.
- Friedman, T.L. (2008). The great unraveling. New York Times OP-ED Columnist, December 16.
- Garcia-Castro R., Arino M.A., and Canela M.A. (2010). Does social performance really lead to financial performance? Accounting for endogeneity. *Journal of Business Ethics*, 92, 107-126.
- Gilley K.M., Robertson C.J. and Mazur T.C. (2010). The bottom-line benefits of ethics code commitment. *Business Horizon*, 53 (1), 31-37.
- Hamadi M. (2010). Ownership concentration, family control and performance of firms. *European Management Review*, 7, 116-131.
- Hambrick, D.C. (2007). Upper echelons: the organization as a reflection of its top managers. *Academy of Management Review*, 32 (2), 334-433.
- Holderness, C.G. (2003). A survey of blockholders and corporate control. *FRBNY Economic Policy Review*, 9 (1), 51-64.
- Jensen M. (1993). The modern industrial revolution, exit, and failure of internal control systems. *Journal of Finance*, 48 (July), 831-880.
- Klein A. (2002). Audit committee, board of director characteristics, and earnings management. *Journal of Accounting & Economics*, 33, 375-400.
- Leone M. (2010). Ethics and the bottom line. Accessed December 11, 2010 from www.cfo.com/article.cfm/14504175.

- Makni R., Franceour C., and Bellavance F. (2009). Causality between corporate social performance and financial performance: Evidence from Canadian firms. *Journal of Business Ethics*, 89, 409-422.
- Margolis, J. and Walsh J. (2001). *People and Profits? The Search for a Link between Company's Social and Financial Performance* (Mahwah, New Jersey).
- Marnburg, E. (2000). The behavioral effects of corporate ethical codes: Empirical finding and discussion. *Business Ethics: A European Review*, 9 (3), 200-210.
- Pae J, and Choi T.H. (2011). Corporate governance, commitment to business ethics and firm valuation: Evidence from the Korean stock market. *Journal of Business Ethics*, 100, 323-348.
- Persons O. (2005). Relation between the new corporate governance rules and the likelihood of financial statement fraud. *Review of Accounting and Finance*, 4 (2), 125-148.
- -----. (2009). Audit committee characteristics and earlier voluntary ethics disclosure among fraud and no-fraud firms. *International Journal of Disclosure and Governance*, 6 (4), 284-297.
- Robertson C.J. and Crittenden W.F. (2003). Mapping moral philosophies: Strategic implications for multinational firms. *Strategic Managerial Journal*, 24 (4), 385-392.
- Shleifer A. and Vishny R.W. (1997). A survey of corporate governance. *Journal of Finance*, 52 (June), 737-783.
- Stulz, R. (1988). Managerial control of voting rights. Journal of Financial Economics, 20, 25-59.

**APPENDIX**Table 1. Seven Regression Variables Regarding Characteristics of Code Firms vs. No-Code Firms

Variables	Minimum.	Mean	Median	Maximum	T-Test <sup>a</sup>	Wilcoxon <sup>a</sup>
LOSSFIRM						
Code	0.000	0.681	1.000	1.000	-3.443***	-3.347***
No-Code	0.000	0.883	1.000	1.000		
SIZE						
Code	-9.062	3.251	3.110	13.488	3.788***	4.424***
No-Code	-8.213	1.074	1.294	13.243		
AUDIND						
Code	0.000	0.795	1.000	1.000	5.306***	5.555***
No-Code	0.000	0.527	0.667	1.000		
				//\\		
CEOCHR		(	J) /	<u> </u>	***	***
Code	0.000	0.521	1.000	1.000	-3.249***	-3.169***
No-Code	0.000	0.745	1.000	1.000		
CEOOWN				5		
Code	0.000	9.054	3.070	100.000	-1.136	-1.011
No-Code	0.000	11.775	4.674	83.000		
INDINSTOW	'NI					
Code	0.000	10.752	5.105	79.770	0.071	0.887
No-Code	0.000	10.732	0.000	85.100	0.071	0.007
1,0 2040	0.000	10.070	0.000	32.100		
BODSIZE						
Code	1.000	6.500	6.000	14.000	3.195***	3.897***
No-Code	1.000	5.223	5.000	15.000		

There are 94 code firms and 94 no-code firms. LOSSFIRM = 1 if a firm had net loss in year t-1 and 0 if a firm had net income. SIZE = Natural logarithm of total market value at the end of year t-1. AUDIND = Ratio of independent directors to total number of audit-committee members in year t-1. CEOCHR = 1 if the CEO was also the BOD chairman in year t-1 and 0 otherwise. CEOOWN = Percentage of common shares owned by the CEO in year t-1. INDINSTOWN = Percentage of common shares owned by independent institutional investors in year t-1. BODSIZE = Total number of directors in year t-1.

<sup>\*\*, \*\*\*</sup> Statistically significant at p < 0.05 and p < 0.01, respectively.

Table 2. Logit Regression Analysis of Characteristics of No-Ethics-Code Firms

Variables	Expected Sign	Est. Coeff.	Std. Error	Z-Statistic	Prob. $>$ Z
Intercept	n/a	-0.0395	0.9934	-0.04	0.968
LOSSFIRM	+	0.8474	0.5161	1.67	0.049**
SIZE	-	-0.1352	0.1029	-1.31	$0.094^{*}$
AUDIND	-	-2.3351	0.7422	-3.15	0.001***
CEOCHR	+	0.5387	0.3234	1.29	$0.096^{*}$
CEOOWN	+	0.0063	0.0154	0.41	0.341
INDINSTOW	N -	-0.0028	0.0089	-0.31	0.753
BODSIZE	-	-0.1694	0.1069	-1.58	$0.056^*$
Wald Chi-Squ Probability Le		20.11 0.0053***	\ <u></u>		
-					

There are 94 code firms and 94 no-code firms. The dependent variable is NOCODE that is 1 if a firm had no ethics code in year t and 0 otherwise. LOSSFIRM = 1 if a firm had net loss in year t-1 and 0 if a firm had net income. SIZE = Natural logarithm of total market value at the end of year t-1. AUDIND = Ratio of independent directors to total number of audit-committee members in year t-1. CEOCHR = 1 if the CEO was also the BOD chairman in year t-1 and 0 otherwise. CEOOWN = Percentage of common shares owned by the CEO in year t-1. INDINSTOWN = Percentage of common shares owned by independent institutional investors in year t-1. BODSIZE = Total number of directors in year t-1.

<sup>\*, \*\*, \*\*\*,</sup> Statistically significant at p < 0.10, p < 0.05 and p < 0.01, respectively.

Table 3. Four Regression Variables for testing the Effect of Having No Ethics Code on Firm Performance.

Variables	Minimum.	Mean	Median	Maximum	T-Test <sup>a</sup>	Wilcoxon <sup>a</sup>
NOCODE						
NI Firms	0.000	0.268	0.000	1.000	-3.650***	-3.347***
Loss Firms	0.000	0.565	1.000	1.000		
SIZE NI Firms	-4.290	5.875	7.173	13.057	7.764***	6.965***
Loss Firms	-7.851	0.962	1.016	13.199		
RISK						
NI Firms	0.010	2.062	0.610	62.118	-1.155	-0.304
Loss Firms	0.000	183.540	0.403	3,340.67		
INVOPP NI Firms Loss Firms	-8.953 -103.46	12.829 3.092	2.591 1.450	53.284 23.744	1.898**	1.854**

There are 41 net-income (NI) firms and 144 net-loss firms. NOCODE = 1 if a firm had no ethics code in year t-1 and 0 otherwise. SIZE = Natural logarithm of total market value at the end of year t-1. RISK = Total liabilities divided by total assets at the end of year t-1. INVOPP = Investment opportunities computed as total market value divided by total book value (stockholders' equity) at the end of year t-1.

<sup>\*, \*\*, \*\*\*</sup> Statistically significant at p < 0.05 and p < 0.01, respectively.

Table 4. Logit Regression Analysis of the Effect of Having No Ethics Code on Firm Performance

Variables	Expected Sign	Est. Coeff.	Std. Error	Z-Statistic	Prob. > Z
Intercept	n/a	2.3935	0.5221	4.58	0.000***
NOCODE	+	0.8351	0.4740	1.76	0.039**
SIZE	-	-0.4684	0.1104	-4.24	0.000***
RISK	+	0.4364	0.6454	0.68	0.250
INVOPP	-	-0.0183	0.0095	-1.93	0.027**
Wald Chi-Squ Probability Le		33.41 0.0000***			

There are 41 net-income firms and 144 net-loss firms. The dependent variable is LOSSFIRM that is 1 if a firm had net loss in year t and 0 if a firm had net income. NOCODE = 1 if a firm had no ethics code in year t-1 and 0 otherwise. SIZE = Firm size measured by the natural logarithm of total market value at the end of year t-1. RISK = Total liabilities divided by total assets at the end of year t-1. INVOPP = Investment opportunities computed as total market value divided by total book value (stockholders' equity) at the end of year t-1.

<sup>\*, \*\*, \*\*\*</sup> Statistically significant at p < 0.10, p < 0.05 and p < 0.01, respectively.