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Corporate Values, Codes of Ethics, and Firm Performance: A Look at the Canadian Context

ABSTRACT. In this empirical study, we present two new models that are corporate ethics based. The first model numerically quantifies the corporate value index (CV-Index) based on a set of predefined parameters and the second model estimates the market-to-book values of equity in relation to the CV-Index as well as other parameters. These models were applied to Canadian companies listed on the Toronto Stock Exchange (TSX). Through our analysis, we found statistically significant evidence that corporate values (CV-Index) positively correlated with firm performance. The results are even more significant for firms with low market-to-book values. Our empirical findings suggest that corporate ethics is vital for management, employees, shareholders, stakeholders, and the community at large. In addition, we have tested and confirmed five hypotheses that are used to illustrate corporate ethics behavior and performance.

KEY WORDS: codes of ethics, corporate values, ethical values, firm performance

Introduction

The classical theory of a market economy assumes the naive belief that the pursuit of economic efficiency and entrepreneurial dynamism are automatically linked with the *common good*. Due to this assumption, it is also assumed that the market merely follows a logic of means (maximizing the use of resources measured by profit) and not a logic of ends, purpose, or raison d'être. As Milton Friedman (1970) articulated this perspective, the sole responsibility of business is to maximize profit for the shareholder and obey the law. Many articles in the business ethics literature have examined what impact codes of ethics have on an organization. Do codes have an impact on organizational behavior? Do they influence leadership or employee decision making? Do they have an influence on consumer behavior? Do they provide prescriptive normative language that sets a moral standard independent of economic considerations?

In this article we draw upon the literature that is particularly germane to our current study, namely, those articles which look at the business case for the inclusion of ethical values in codes of ethics and the impact that the inclusion of those values has on firm performance. As well, we discuss some related and relevant articles on corporate social responsibility and financial performance.

Langlois and Schlegelmilch (1990) defined a code of ethics as a corporate statement that registers corporate principles, ethics, rules of conduct, codes of practice, or company philosophy concerning responsibility to stakeholders, the environment, or any other aspects of society external to the company. Kaptein (2004) states that a code of ethics clarifies the objectives the company pursues, the norms and values it upholds and what it can be held accountable for. A code of ethics contains the company's responsibilities, principles, values and/or norms. A code of ethics thus demonstrates a company's awareness of ethical issues and indicates how it will deal with such topics.

Despite the fact that many teachers of business ethics teach that business ethics is good for business, to the extent that codes of ethics are indicators of business ethics, much of the general literature on the impact of having codes of ethics on decision making within organizations has been disappointing. In reviewing a number of empirical studies, Lere and Gaumnitz (2003, p. 365) note '[t]he evidence from those studies that have been conducted suggests that

Han Donker Deborah Poff Saif Zahir codes of ethics apparently do not have a major observable impact on decision making.' The conclusion of Lere and Gaumnitz is to suggest that most codes do not have an impact if the individual is already going to act in a manner consistent with the code, that is, the code directs an ethical choice that the individual would already make. Lere and Gaumnitz provide a model to identify the cases where codes could have an impact and further provide helpful insights into other roles which codes may serve.

While not directly on codes, there are complementary articles on the relationship between corporate social responsibility and firm performance. Pava and Krausz (1996, p. 321) evaluated the financial performance of "53 firms which have been identified by the Council on Economic Priorities (CEP) as being socially responsible" compared with a control sample comparable in size and industry. 'Socially responsible' here was understood as defined by a number of either negative or positive screens on which the companies were assessed. Negative screens included items like violation of pollution standards while positive screens included items like corporate citizenship and environmental awareness. The authors concluded their study with the remarks,

This study has emphasized the recurrent and paradoxical finding that firms which have been perceived as having met social responsibility criteria have generally been shown to have a financial performance at least on a par, if not better, than other firms, (Pava and Krausz, 1996, 348).

In a similar study, Cummings (2000) concluded that ethical screens neither harmed nor helped the profitability of corporations in Australia.

Finally, Dentchev (2004) in an article on corporate social responsibility as a business strategy showed it to have mixed results, improving stakeholder relations on the positive side, for example, while negatively affecting corporate relations.¹

The business of business

In his classic article on the social responsibility of business, Friedman (1970), argued that the responsibility of business is solely to increase profits for stockholders and obey the laws and the ethical norms of the society. In the 21st century, what might have seemed straightforward, if contentious to some in 1970, is far less so today. It is not entirely clear what the necessary and sufficient conditions are for increasing profits and further how much increase is necessary. In addition, in our pluralistic and morally relativist world, it is not clear what 'the ethical norms of the society' are or cross-culturally how these might vary. What is clear from the recent history of corporate scandals is that overwhelmingly, leaders of the Enron, Worldcom, Tyco International, Arthur Andersen companies and their corporate relatives were seen as exemplars of egregious moral as well as legal wrong doing. Further, that wrongdoing brought down those companies with significant negative and tragic economic consequences for many stockholders. The question arises would moral 'right doing' have been profitable or more profitable? In the case of Enron, we know that;

Enron's board of directors voted three times to suspend the conflict of interest provisions in Enron's codes of ethics to permit CFO Andrew Fastow to establish and operate entities that transacted business with Enron and profited at Enron's expense. (Schwartz, 2005, p. 85)

We further know that all of these highly publicized moral and economic failures have made both consumers and corporations far more cognizant of the role of values and of the importance of ethical and effective leadership in today's businesses.

In the current study, we look at empirical evidence of the relationship between the values embodied in codes of ethics and profitability in companies.

Integrated decision making

Organizational codes of ethics are intended to capture the key values of a firm and to convey those values to both internal and external stakeholders. An important but underemphasized function of codes involves the fact that, by making a firm's values explicit, an effective code equips members of an organization with ethical justifications that can be used in resolving individual and organizational dilemmas. In many instances, a decision maker will consider these ethical justifications alongside economic and legal justifications before arriving at a choice (Boatright, 2000; Coughlan, 2005, p. 45).

Clearly we can agree with Friedman that a key function – if not the only function – of business is to be profitable. While there are many good reasons for a corporation to articulate a code of ethics and for a corporate culture to operationalize that code through manifest ethical behavior, the relationship between ethics and profitability for companies is not disinterested or coincidental. Evidence-based models of business ethics are critically important to business. As Loe et al. (2000, p. 185) note,

Criticisms of normative models of business ethics, which often assume absolute truths about appropriate decision-making, led to the development of positive perspectives and models. Positive models describe what actually occurs in the organization, versus normative models that address what *should* occur.

In this study we take such criticisms seriously. We hope that the data here provide part of the evidence to support business people who wish to incorporate ethical values into codes of ethics for their companies.

Code of conducts

Caracsco and Singh (2003) examined the content of the codes of conduct of the world's 50 largest transnational non-financial firms (ranked by foreign assets) in 2000. They analyzed three main areas: (a) behavior and actions covered by the code, (b) enforcement procedures, and, (c) penalties for noncompliance. They found that firms were concerned about conduct that promoted positive values and relationships (e.g., relations with customers/suppliers, employees, and the environment) and conduct that was negative either in a legal or ethical sense (e.g., conflict of interest and insider trading) but it should be noted that concerns relating to the latter were more emphasized in the codes the authors examined.

Kaptein (2004) investigated the codes of ethics of the 200 largest companies in the world in 2001. He found that 58% of the 200 largest companies in the world have a code of conduct. Specifically, the content of these codes contained information about: company responsibilities regarding quality of products and services (67%), adherence to local laws and regulations (57%), protection of the natural environment (56%), honesty (50%), fairness (45%), teamwork (43%), discrimination (44%), intimidation (43%), conflict of interests (52%), corruption (46%), and fraud (45%).

Langlois and Schlegelmilch (1990) reported the 'ethics gap' between Europe and the U.S. They found that while only 41% of the 189 firms from the U.K., France, and Germany had introduced codes of ethics in 1988, 75% of respondents to a survey of Fortune 500 companies in the United States stated that they had a code of ethics. They concluded that there were significant differences between Europe and the U.S., in particular with respect to employee conduct, supplier and contractor relations. In Europe, firms emphasized the importance of their employees to the organizations. Further, European codes promoted a sense of belonging (employees are the most important assets of a company), while American codes were more focused on fairness and equity.

Singh (2006) analyzed the content of the codes of ethics of 80 listed companies on the Toronto Stock Exchange (TSX) in 2003. He found that more of the codes were concerned with conduct that is contrary to the self-interest of the firm (e.g., conflict of interest and insider trading) than with conduct that is consistent with the self-interest of the firm (e.g., relations with customers/suppliers and competitors, product quality, and environmental affairs). The results are consistent with a previous study of Lefebvre and Singh (1992) where they concluded that the focus of codes of ethics was on the protection of the firms. The proportion of codes of ethics that mentioned enforcement or compliance procedures increased significantly from 1992 to 2003. Singh (2006) concluded that this result implied a determined effort to make the code of ethics more effective. Wood (2000) examined the codes of ethics of 83 of the top 500 companies in Australia, with findings similar to Lefebvre and Singh (1992).

Weaver et al. (1999) argued that the vast majority of firms have adopted a code of ethics for symbolic reasons (low cost approach). However, many firms went further and installed organizational procedures and policies to put these in action.

Schwartz (2005) identified a set of universal moral values for corporate codes of ethics: trustworthiness, respect, responsibility, fairness, caring, and citizenship. In the current study, we adopted these core universal moral values to construct a corporate value index (CV-Index) for companies.

Most studies we reviewed in looking at the relevant literature are focused on the content of corporate codes of conduct and are descriptive or exploratory in nature. Our study goes one step further and examines the effect of corporate values on shareholder value (market-to-book value).

Development of hypotheses

Corporate codes of ethics contain valuable information about corporate commitments regarding desired behavior of management and employees. Such commitments have an impact on the individual behavior of members as well as on the organization as a whole in order to propagate its moral norms and values. Corporate codes of ethics are the normative claimed and desired practices that an organization develops with respect to moral behavior. Codes articulate norms for the regulation of the actions and moral responsibilities of management and employees toward its stakeholders. Codes of ethics express the corporate mission and the normative responsibilities to which the organization aspires. In this fashion, Kaptein and Wempe (2002) suggest that corporate codes can be instruments for achieving cohesion in daily operations. A code of ethics that articulates corporate values and norms offers employees guidance and support in order to fulfill corporate goals. Corporate reputation regarding ethical behavior of management and employees can have an important impact on economic corporate performance.

In Europe, for example, pressure groups, such as Green Peace, forced Shell to change its environmental policy. Pressure groups launched global campaigns to boycott gas stations of Shell Companies and in this manner tried to influence consumer behavior. This resulted in a multi-year campaign on the part of the company to improve its corporate reputation and the investment of significant amounts of money on commercials that showed Shell's corporate responsibility with respect to the environment. To cite another example, the negative exposure that Wal-mart experienced with the labor and consumer campaign against its use of foreign child labor in clothing production resulted in the company's adoption of child-friendly campaigns for



Figure 1. Theoretical model.

customers, such as donations for charities. Walmart's business policy is now more clearly focused on improving its image and reputation in order to win consumer sympathy.

Improving the well-being of consumers, suppliers, as well as employees can have a positive effect on corporate goals, such as firm performance. Demonstrating appropriate services regarding after-sales, will influence consumers positively. Suppliers will deliver goods and services with lower risk (Figure 1).

- **Hypothesis 1** There is a positive association between corporate values disclosed in the corporate code of ethics and firm performance.
- **Hypothesis 2a** Agency costs that arise due to the presence of leverage will decrease firm value (under-investment theory).

Myers (1977) argues that firms with risky outstanding debt will pass up valuable investment opportunities (under-investment) that could lead to an increase in the market valuation of a firm. In highly leveraged firms, shareholders have no incentive to invest in new capital, because the overhang of debt will reduce the wealth to current shareholders and will benefit bondholders who have a prior senior claim on the corporate investments. Myers (1977) demonstrates that this sub-optimal corporate investment policy is an agency cost induced by risky debt (*under-investment theory*). Hypothesis 2a predicts a negative relationship between corporate debt and the market value of a firm.

Hypothesis 2b The presence of leverage (LEV) will reduce agency problems and increase firm value (monitoring theory).

Jensen (1986) argues that managers have incentives to cause their firms to grow beyond the optimal size in order to increase their compensation. Debt increases efficiency because it prevents managers from financing unprofitable investment opportunities, such as negative net present value projects. The overinvestment problem can be reduced by issuing debt. As a result, issuing debt motivates managers to overcome organizational resistance to retrenchment. We expect that increasing debt will reduce agency costs and increase firm value.

Hypothesis 3 The relation between small block ownership and company shareholder value is positive.

Small block shareholders will monitor incumbent management and discipline inefficient managers. As a result of monitoring by small block shareholders, market valuation of the firm will increase. Grossman and Hart (1980) and Shleifer and Vishny (1986) argued that atomistic shareholders can act as free-riders and benefit from the monitoring activities initiated by large shareholders. Large shareholders can discipline and replace incumbent management teams and influence incumbent managers to act in the interest of all shareholders, including minority shareholders as well as atomistic shareholders. Monitoring activities initiated by large shareholders will reduce agency costs and increase market valuation of the firm.

Stulz (1988) developed a model in which the firm value first increases, then decreases, as shareholdings are concentrated in the hands of insiders. McConnell and Servaes (1990) found empirical evidence for such a curvilinear relation between firm value (Tobin's Q) and insider ownership. Morck et al. (1988) investigated the relationship between managerial ownership and market valuation. They found empirical evidence that the market valuation first increases with managerial ownership, then decreases and finally increases as ownership by the board of directors rises.

Hypothesis 4 The relation between large block ownership and company value is negative.

When firm ownership is highly concentrated, the market for corporate control is ineffective. Management can hardly be replaced. Incumbent management teams that operate sub-optimally can be fired if large block holders are opposing proposals of management. They can force management to resign and replace incumbent management with new board members. When shareholders are inactive, incumbent management teams can be entrenched and are hard to replace.

For empirical testing, we use SIZE (company size) and ROA (return on assets) as control variables. We expect a negative relationship between SIZE and the market-to-book (MTB) value, because of the small firm size effect (Banz, 1981).

Sample description and methodology

The sample used in this study consists of firms that appeared in 2004 in *The Globe and Mail* 1000 list of the largest publicly traded Canadian companies based on assets and after-tax profits in the most recent fiscal year, excluding extraordinary gains or losses. For each firm, we collected financial data and ownership data from *Datastream* (database) and from *The Globe and Mail* 1000 list. Next, we extracted the largest firms (1–50), medium-sized firms (500–600) and small-sized firms (900–1,000) from *The Globe and Mail* 1000 list. The final sample includes 240 firms (10 observations were excluded, because of a lack of available information) listed on the TSX in 2004.

We developed a new CV-Index model. This model is based on a collection of values that is believed to represent recognizable and uncontroversial positive, normative corporate values. We chose 10 commonly accepted and positive value terms which would be recognized as such by business, shareholder, stakeholders, and the community at large. These terms do not designate of all possible values (e.g., we did not include values about equality or environmental sustainability). However, those values that we did include are broadly accepted as positive values for individuals and corporations to uphold (Schwartz, 2005). The key values identified in our index are: accountability, courage, excellence, fairness, honesty, honor, respect, trust, integrity, and responsibility. The following is the model we used, to estimate the CV-Index of a company:

CV-Index

CV-Index_i = $\sum_{j=1}^{10} E_{ij}$, where E_{ij} is an indicator variable which equals 1 if the corporate Code of Ethics of firm *i* states a corporate value $j \in [0, 10]$ regardless the number of times E_{ij} is mentioned in

the Code of Ethics. The corporate values $j \in [0,10]$, include the following terms: [1] accountability, [2] courage, [3] excellence, [4] fairness, [5] honesty, [6] honor, [7] respect, [8] trust, [9] integrity, and [10] responsibility.

Impact on market-to-book values

Further, we investigated the effect of corporate values on MTB values of equity, and, we regressed the following model:

$$MTB_{i} = \alpha_{0i} + \beta_{1}SIZE_{i} + \beta_{2}LEV_{i} + \beta_{3}ROA_{i}$$
$$+ \beta_{4}CV - Index_{i} + \beta_{5}H1small_{i} + \beta_{6}H1large_{i}$$

MTB = the market value of the firm's equity divided by the book value of the firm's assets.

 $SIZE = \log \text{ total assets.}$

LEV = the percentage of total book debt over total assets

ROA = the percentage of net earnings over market capitalization.

CV = the log of the sum of indicator variables, which equals one if the Code of Ethics of a firm

states a corporate value, such as: accountability, courage, excellence, fairness, honesty, honor, respect, trust, integrity and responsibility.

H1small = the percentage of shares owned by the largest shareholder who held less than 25% H1large = the percentage of shares owned by

the largest shareholder (=controlling shareholder) who held 25% or more.

Descriptive statistics for key variables for 240 companies are presented in Panel A of Table I. On average, the ROA is negative (-5.03%), because we ranked the largest 1,000 firms based on their aftertax profits in their most recent fiscal year, excluding extraordinary gains or losses and selected the largest firms (1-50), medium-sized firms (500-600) and small-sized firms (900-1,000). The median ROA is still positive (2.65%). We categorized firms with a large shareholder (i.e., shareholder who owns more than 25%), firms with a small shareholder (i.e., shareholder who owns less than 25%), and firms with dispersed ownership. Firms with a large shareholder (n = 67) control 53.83% of the votes. The controlling power of these large shareholders is substantial and can impose entrenchment and cause dilution of

Summary statistics and correlation matrix										
Panel A	Summary statistics			Panel B		Correlation matrix				
	Mean	Median	Min	Max	Size	LEV	ROA	CV	H1 <i>small</i>	H1large
SIZE (millions)	12,562	199	37	429,196	1.000					
LEV (%)	20.39	16.19	0.00	80.27	0.191	1.000				
ROA (%)	-5.03	2.65	-136.04	29.31	0.306	-0.071	1.000			
CV [0,10]	2.24	0.00	0.00	9.00	0.464	-0.011	0.144	1.000		
H1small (%)	16.20	16.30	10.10	24.30	-0.212	-0.016	-0.021	-0.131	1.000	
H1large (%)	53.83	57.00	25.00	90.80	0.215	0.045	0.051	0.110	-0.314	1.000

TABLE I Summary statistics and correlation matrix

The table reports descriptive statistics and the correlation matrix for the sample of 240 firms that appeared in the 2004 *The Globe and Mail* 1000 list of the largest publicly traded Canadian companies. SIZE is the total assets in millions. LEV is the percentage of total book debt over total assets. ROA is the percentage of net earnings over market capitalization. H1*small* is the percentage of shares owned by the largest shareholder who held less than 25%. H1*large* is defined as the percentage of shares owned by the largest shareholder) who held more than 25%.

Corporate values are measured by an CV-Index_i = $\sum_{j=1}^{10} E_{ij}$, where E_{ij} is an indicator variable which equals 1 if the corporate Code of Ethics of firm *i* states a corporate value $j \in [0,10]$ regardless the number of times E_{ij} is mentioned in the Code of Ethics. The corporate values $j \in [0,10]$ contain the following terms: accountability [1], courage [2], excellence [3], fairness [4], honesty [5], honor [6], respect [7], trust [8], integrity [9], and responsibility [10].

shareholder's minority interests (Grossman and Hart, 1980). Firms with a small shareholder (n = 55) control on average 16.2%. Panel B of Table I shows the correlation among the independent variables. The highest correlation coefficient is 0.464 (between SIZE and CV). The correlations between other explanatory variables are quite low. Hence, it indicates that the extent of multi-collinearity problem is minor.

Empirical results

To identify whether or not firms publish a code of ethics, we searched the websites of the respective companies. The results on the use of a code of ethics appear in Table II. To analyze the use of a code of ethics across different sizes of firms, we used total assets as a measure for firm size. Panel A illustrates that 84% of the large-sized firms and 54% of the small-sized firms have a published code of ethics while 25% of the medium-sized firms have a published code. Hence, a substantially lower portion of medium-sized firms have a published code of ethics. Panel B shows that in all sectors but finance, the use of a code of ethics is almost 50%. A majority of the finance sector does not report having a code of ethics. We found this pattern across firm size and industries to be surprising.

In Panel C of Table II, we demonstrate that companies with a code of ethics are statistically and significantly larger in size than companies without a code of ethics (p = 0.02). The difference in means with respect to the MTB ratio between companies

	Code of ethics	No code of ethics	Total number
Panel A			
Large-sized firms (1–50)	n = 38 (84%)	n = 7 (16%)	$n = 45^{\mathrm{a}}$
Medium-sized firms (500-600)	n = 24 (25%)	n = 72 (75%)	$n = 96^{a}$
Small-sized firms (900–1,000)	n = 53 (54%)	n = 46 (46%)	$n = 99^{\mathrm{a}}$
Total	$\Sigma = 115$ (48%)	$\Sigma = 125 (52\%)$	$\Sigma = 240^{a}$
Panel B			
Oil, gas, and mining	n = 23	n = 21	n = 44
Industry	n = 39	n = 36	n = 75
Finance	n = 14	n = 23	n = 37
Others	n = 39	n = 45	n = 84
Total	$\Sigma = 115 (48\%)$	$\Sigma = 125$ (52%)	$\Sigma = 240^{a}$
Panel C	Code of ethics	No code of ethics	Δ in means
	(standard deviation)	(standard deviation)	(p-values)
MTB	1.24	1.34	-0.10
	(1.02)	(1.40)	(p = 0.52)
SIZE (in millions)	20,598	5,168	15,430**
	(66,218)	(31,341)	(p = 0.02)

TABLE II

Code	of	ethics

The sample contains statistics of the code of ethics of 250 publicly traded Canadian companies on December 31, 2004. The sample is selected from *The Globe and Mail* 1000 list of the largest publicly traded Canadian companies, measured by assets and ranked according to their after-tax profits in their most recent fiscal year, excluding extraordinary gains or losses. The largest firms (1–50), medium-sized firms (500–600) and small-sized firms (900–1,000) were extracted from the sample. MTB is the market capitalization divided by total assets. ROA is the percentage of net earnings over market capitalization. SIZE is the total assets in millions.

***, **, * Indicates statistical significance at the 1% and 5% and 10% levels, respectively (two-sided tested).

^a Sample misses in total 10 observations, because financial data were not available.

Panel A: corporate values	Mean	Number	Min	Max
Accountability	0.271	$\Sigma n = 65$	0	3
Courage	0.171	$\Sigma n = 41$	0	12
Excellence	0.117	$\Sigma n = 28$	0	4
Fairness	0.342	$\Sigma n = 82$	0	6
Honesty	0.550	$\Sigma n = 132$	0	6
Honor	0.042	$\Sigma n = 10$	0	1
Respect	2.325	$\Sigma n = 558$	0	29
Trust	0.954	$\Sigma n = 229$	0	46
Integrity	1.700	$\Sigma n = 408$	0	25
Responsibility	1.783	$\Sigma n = 428$	0	25
Total	0.825	$\Sigma N = 1,981$	_	-
Panel B: corporate value index	Mean	SD	Min	Max
CV-Index	2.238	2.726	0	9.00

TABLE III Corporate values

The sample contains descriptive statistics of corporate values of 250 publicly traded Canadian companies on December 31, 2004. Corporate values are measured by the following CV-Index: $\text{CV-Index}_i = \sum_{j=1}^{10} E_{ij}$, where E_{ij} is an indicator variable which equals 1 if the corporate Code of Ethics of firm *i* states a corporate value $j \in [0,10]$ regardless the number of times E_{ij} is mentioned in the Code of Ethics. The corporate values *j* contain the following terms: accountability [1], courage [2], excellence [3], fairness [4], honesty [5], honor [6], respect [7], trust [8], integrity [9], and responsibility [10].

with a code of ethics and companies with no code of ethics is not statistically significant (p = 0.52).

We also investigated the use of corporate values in codes of ethics. Panel A of Table III illustrates the statistics of terms related to corporate values mentioned in the code of ethics. We focused on the following terms: accountability, courage, excellence, fairness, honesty, honor, respect, trust, integrity and responsibility. These terms are mentioned 1,981 times in the codes of ethics. The most often named corporate values are (82%): respect (n = 558), responsibility (n = 428), integrity (n = 408), and trust (n = 229), whereas honor (n = 10) is the least named corporate value.

Panel B of Table III shows the average of the CV-Index (mean = 2.238). On average, two or more corporate values are reported in the respective

code of ethics (one or more times) with an emphasis on terms such as: respect, responsibility, integrity and trust. These terms seem to be the most relevant corporate values for most codes of ethics evaluated in this study.

In this section, we explore the influence of corporate values, ownership structure, and financial variables on firm performance. The OLS regression analysis was conducted in order to estimate how corporate values affect firm performance. Table IV displays the results of a cross-sectional regression analysis on firm performance where firm performance is measured by the MTB ratio. The MTB ratio is often used as a measure for growth opportunities. Therefore, we restructured the sample into two sub-samples based on high and low MTB ratios with a cut-off when MTB = 1. Companies with a high MTB ratio are typical high-performance companies with high growth potentials.

Ordinary least squares performance regressions for each sample (total, high MTB, low MTB) reveal the following: The coefficient on SIZE has a negative sign and is significant at the 1% level for regression OLS1 and OLS 3 (MTB < 1) and is significant at the 10% level for regression OLS 2 (MTB > 1). The empirical evidence that risk-adjusted returns are larger for small firms than for large firms is known as the firm size effect. Banz (1981) showed that the size of a firm and the return on its common stock are inversely related. Although we do not estimate riskadjusted returns, our results are not in contrast with the small firm size effect. The coefficient of the variable LEV is negative and significant in all regressions. This negative relationship is in accordance with the under-investment theory (Myers, 1977). The higher the LEV ratio, the more selective managers will operate regarding new investment projects and thus reduce new investment opportunities and hence reduce firm value.

The estimated coefficients on ROA are consistently positive and statistically significant for regression OLS 1 (5% level) and OLS 3 (1% level).

The coefficient related to corporate values (CV) has the predicted sign (positive) and is statistically significant for regression model OLS 1 (10% level) and OLS 3 (1% level) and is negative and insignificant for model 2. The empirical results indicate that corporate values are positively related to firm performance. In addition, the results show that

TABLE	[V
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The effects of corporate values, ownership structure, and financial characteristics on firm performance

	Dependent variable						
Independent variables	Predicted sign	OLS 1 All MTB	OLS 2 High MTB (>1)	OLS 3 Low MTB (<1)			
Intercept	_	4.513*** (0.557)	4.866*** (1.360)	1.443*** (0.159)			
Size (SIZE)	_	-0.219*** (0.044)	-0.181* (0.118)	-0.061*** (0.012)			
Leverage (LEV)	±	-1.563 *** ^a (0.422)	$-1.592 \star^{a} (0.903)$	-0.246 ★★ ^a (0.112)			
Return on assets (ROA)	+	0.745** (0.356)	1.034 (0.971)	0.197*** (0.082)			
Corporate values (CV)	+	0.388* (0.263)	-0.237 (0.490)	0.215*** (0.077)			
Small shareholder (H1 <i>small</i>)	+	0.007 (0.012)	-0.002 (0.020)	-0.004 (0.004)			
Large shareholder (H1large)	_	-0.004* (0.003)	0.001 (0.007)	-0.001* (0.001)			
Adj. R^2		0.24	0.13	0.27			
<i>F</i> -statistic		10.17***	2.16*	6.04***			
Number of observations		198	92	106			

This table reports estimates from a regression of the form: $MTB_i = \alpha_{0i} + \beta_1 SIZE_i + \beta_2 LEV_i + \beta_3 ROA_i + \beta_4 CV_i + \beta_5 H1small_i + \beta_6 H1large_i$, where MTB is defined as the market capitalization divided by total assets. SIZE is the log of total assets. LEV is the ratio of total book debt over total assets. ROA is the ratio of net earnings over market capitalization. H1small is the percentage of shares owned by the largest shareholder who held less than 25%.

H1*large* is defined as the percentage of shares owned by the largest shareholder (=controlling shareholder) who held more than 25%.

Corporate values are measured by an CV-Index: $CV_i = \sum_{j=1}^{10} E_{ij}$, where CV_i is the log of the sum of the indicator variables E_j . E_j is an indicator variable which equals 1 if the corporate Code of Ethics of firm *i* states a corporate value $j \in [0,10]$. The corporate values *j* contain the following terms: accountability [1], courage [2], excellence [3], fairness [4], honesty [5], honor [6], respect [7], trust [8], integrity [9], and responsibility [10].

The standard errors are in parentheses.

***, **, * Indicates statistical significance at the 1% and 5% and 10% levels, respectively (one-sided tested). ^a Two-sided tested.

corporate values are among the three most significant out of the six variables listed for companies with low MTB ratios.

The variables related to ownership structure differ significantly between small and large shareholders. We expected some form of entrenchment when there is a large shareholder (H1*large*). The coefficients for H1*large* are negative and significant for OLS 1 and OLS 3 (10%). This result is consistent with the entrenchment theory. Our findings are related to Morck et al. (1988) and McConnell and Servaes (1990), although they focused their studies on managerial entrenchment. We argue that the market for corporate control is ineffective when the ownership structure of a firm is highly concentrated. In such cases, the entrenchment theory suggests that the market value of a firm will decrease for high levels of ownership concentration.

Our regression results indicate that the MTB value decreases for high levels of ownership (H1*large*). The estimated regression models have adjusted R^2 values ranging between 0.13 and 0.27, with corresponding *F*-statistics statistically significant. Diagnostic checks for the OLS estimation (not reported here) revealed no significant concern with heteroskedasticity (White test).

In sum, taking all firms together, the findings of the multivariate analysis show that firm performance: (a) increases with increases in the appearance of ethical value terms, (b) decreases with firm size, (c) decreases with debt ratio, (d) increases with ROA, and (f) decreases with shareholdings of large shareholders (holdings more than 25%).

Separating firms into high and low MTB, results show that increases in the appearance of ethical value terms in annual reports has no significant impact on the former and a significant impact on the latter. In fact, it is only the latter association that seems to drive the result in the first regression. As well, 4 of the 6 predictors of firm performance in the high MTB case have no significant impact.

Implications

Boatright (2000, p. 9) argued that when faced with an ethical problem, "the ideal resolution is not a trade-off between ethics and other considerations...but a decision that is ethically defensible while at the same time satisfying the legitimate demands of economic performance and a company's legal obligation."

We strongly agree. It is critically important to business ethics that minimally there are no disincentives to acting ethically for business people. Other things being equal, the world is a better place if when businesses are given the choice between choosing actions that are consistent with the values that we identified in our study versus making choices that are not consistent with integrity, fairness, courage, honesty, and so forth that they make choices consistent with good ethical values. Since a primary focus of business is to increase firm performance, empirical evidence that reinforces consistency between espousing ethical values and positive firm performance can only help encourage the espousal of ethical values. This is still a long way from proving correlations between, as Aristotle would have put it, generally "living well and doing well" while at the same time making a profitable return. But given the complexities of decision making in business, the encouragement of reasons to include positive ethical values and values statements (as well as ethical actions) moves rational decision making in business one step further in encouraging the promotion and adoption of positive stances toward ethics in business. The model that best serves business and community does not, as in the Enron example, wed itself to profit over all other values, including ethical values but rather in an integrated fashion incorporates ethics and firm performance as part of a rational decision making model of operation.

Conclusions

In this empirical study, we introduced two new models, identified a set of parameters (values) that represents a CV-Index and generated a set of hypotheses to test the impact of the CV-Index on corporate performance. The purpose of our first model (CV-Index) is to numerically quantify CV using 10 values that represent an integrated set of corporate values; and the second is a model that calculates the influence of corporate values on MTB-value. Our findings suggest a positive and statistically significant relationship between corporate values and firm performance. This article emphasizes the significance of business ethics and corporate social responsibility for business strategies and practices. Since corporate ethics arise out of social associations in the context of corporate culture and management interaction processes, the practical application of such ethics in the day-to-day business operations requires more strategic clarification for executives and managers in organizational terms.

Note

¹ It should be noted that Dentchev used 'expert' data rather than financial performance data in this study.

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