

A Wolf in Sheep's Clothing: The Use of Ethics-Related Terms in 10-K Reports

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January 7, 2008

Abstract: We examine the occurrence of ethics-related terms in 10-K annual reports over 1994-2006 and offer empirical observations on the conceptual framework of Erhard, Jensen, and Zaffron (2007). We use a pre-Sarbanes-Oxley sample subset to compare the occurrence of ethics-related terms in our 10-K data with samples from other studies that consider virtue-related phenomena. We find that firms using ethics-related terms are more likely to be “sin” stocks, are more likely to be the object of class action lawsuits, and are more likely to score poorly on measures of corporate governance. The consistency of our results across these alternative measures of ethical behavior suggests that managers who portray their firm as “ethical” in 10-K reports are more likely to be systematically misleading the public. These results are consistent with the integrity-performance paradox.

Key words: Code of Ethics; Sarbanes-Oxley; Corporate Governance

We thank Robert Battalio, Harrison Hong, Paul Schultz, a referee, Ann Tenbrunsel (editor), and participants at the 2007 University of Notre Dame Ethical Dimensions in Business Conference for helpful comments.

One-sentence bio: University of Notre Dame Finance Professor Tim Loughran received a Bachelor of Arts and a Bachelor of Science from the University of Illinois (Urbana), an MBA from Indiana University, and a Ph.D. from the University of Illinois (Urbana). University of Notre Dame Finance Professor Bill McDonald received a Bachelor of Science from the Central Missouri State University, and an MBA and Ph.D. from Arizona State University. University of Notre Dame Finance Professor Hayong Yun received a Bachelor of Science from the Seoul National University, MS and Ph.D. from Massachusetts Institute of Technology, and M.Phil. and Ph.D. from Columbia University.

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1. Introduction

The literature on business ethics ranges from Friedman's (1970) simple declaration that "the social responsibility of business is to increase profits," to the realm of religious guidelines for action, with concepts and introspection contributed by the philosophy of ethics. Philosophy provides us with a variety of rigorous conceptual frameworks for considering ethical issues, such as Kantian ethics, Mill's utilitarianism, or Rawl's theory of justice, but the topic of business ethics has struggled to identify a well-structured theoretical foundation that lends itself to generating empirically testable hypotheses.

Recently, Erhard, Jensen, and Zaffron (2007), hereafter EJZ, put forth a descriptive model of integrity that they argue provides such a framework. Honoring one's word is one of the primary observable artifacts of their model. They cite company annual reports as a means for managers to give their word (p. 39) and cite as failed integrity the case where managers do not enforce their stated ethical codes (p. 49).

EJZ carefully divide the terms *ethical*, *moral*, and *legal* into distinct domains. In this paper we use the term "ethics" in its more generic sense because this is the context that our sample evolved within and it is the framework that has influenced regulation requiring ethics codes. This distinction, between EJZ's lexicon and the traditional use of the term ethics, is important for us to highlight in order to avoid confusing EJZ's formal domain of "ethics" versus our use of the word (and words related to it) as a signal of commitment to higher standards of conduct.

A firm cannot “give its word” on the topic of ethical behavior within an annual report in a strictly contractual sense. For our tests, however, we assume that any use of ethics-related terms in SEC-mandated 10-K reports creates an implicit assurance and expectation that a firm maintains high standards of business conduct. Many of the ethics-related terms in our sample appear when firms declare a responsibility for maintaining a “high” ethical standard or “strong” ethical climate.

We examine the occurrence of ethics-related terms in all 10-K reports filed electronically with the SEC over 1994-2006. In the 1994-2002 pre-regulatory period, we observe relatively infrequent voluntary use of the terms, with ethics-related terms occurring in about 8% of the 10-Ks. Post regulation, when most firms are required to discuss their codes of ethics in the annual report, the vast majority of 10-Ks include an ethics-related term, as would be expected, thus diluting any information content in its usage.

We then focus exclusively on the pre-regulation period, when the use of ethics-related terms was voluntary. We compare the occurrence of ethics-related terms in the 10-K data to samples in other studies that could be considered to represent virtue-related phenomena. If firms, in the language of EJZ, “keep their word,” we would expect companies using ethics-related terms to be better than average in samples measuring virtue-related phenomena.

We first examine Hong and Kacperczyk’s (2007) sample of “sin” stocks and find that these stocks are more likely to use ethics-related terms in their 10-Ks. This result, by itself, is subject to varied interpretations. We next consider class action lawsuits and find that firms that are the object of class action lawsuits also are more likely to use ethics-

related terms in their 10-K filings of the same year. Finally, we look at the occurrence of ethics-related terms for companies ranked on the corporate governance index of Gompers, Ishii, and Metrick (2003) and find that firms with poor governance scores (i.e., not shareholder friendly) are more likely to use ethics-related terms in their 10-Ks.

Our research relates to the use of codes of conducts to serve as window dressing to hide unethical practices. It has been suggested that some formal systems are used to generate the appearance of ethical conduct to outsiders (Paine, 1994) when in reality these systems are virtually ignored, or decoupled (Meyer and Rowan, 1977) from the internal workings of the organization (Weaver, Trevino, and Cochran, 1999). In this way, formal systems are seen as “window dressing” systems that have little impact on the actual performance of employees within organizations (Trevino, 1990).

Our work is also related to earlier work on the disclosure of conflicts of interest. Cain, Loewenstein, and Moore (2005) hint at the pervasive effects of disclosure such that the reporting of ethical activity may be used as a disguise to hide unethical behavior and such reporting may actually increase unethical activity.

Taken collectively, our results provide evidence consistent with EJZ’s integrity-performance puzzle, which argues that the “veil of invisibility” causes firms to behave without integrity because managers underestimate the importance of honoring one’s word. Firms apparently believe that the benefit of sending misleading signals concerning standards of business conduct outweighs the cost of losing their long term credibility.

2. The integrity model

EJZ's model of integrity is built on a taxonomy defining the virtue-related terms of integrity, morality, ethics, and legality. They define integrity as the "state or condition of being whole or complete," which they argue produces a term that can be considered in a descriptive realm. Morality is assigned to the domain of social virtue phenomenon; ethics, group virtue phenomenon; and legality, governmental virtue phenomenon, thus keeping all three of these terms in the prescriptive realm but being careful to distinguish between their meanings.

They operationalize their model by linking integrity to performance, or, in their terminology, the opportunity for performance provided by the state of workability. Finally, they define the integrity of a person or entity in terms of honoring one's word.¹

Despite the descriptive implications of the EJZ model, we do not necessarily expect to see individuals or entities behave with integrity. An "immature grasp" of the relation between integrity and performance, or what EJZ call the *integrity-performance paradox*, keeps firms from realizing the impact of their behavior on performance. In EJZ's terms, a "veil of invisibility," attributable to a handful of factors, causes this systematic oversight.

We use EJZ's conceptual framework to compare the "word" of a firm, represented by the inclusion of ethics-related terms in the 10-K annual report, with virtue-related measures and attributes of the firm.

¹ EJZ's focus on honoring one's word resonates with early work in bargaining by Schelling (1956), who considers the "cross my heart" case as a canonical example of binding commitment.

3. The impact of regulation on our sample

Our 10-K sample covers the period 1994-2006. The Sarbanes-Oxley Act (commonly referred to as SOX) was signed into law on July 30, 2002. Section 406 of SOX directs the SEC to issue rules requiring public companies to disclose in their annual report whether they have implemented a code of ethics for their senior financial officers, and if not, why not. The final rules for implementing this provision of SOX, issued in January 2003, required compliance by reporting firms for fiscal years on or after July 15, 2003. In addition to SOX, the SEC approved in early 2003 new listing rules for the NYSE, Nasdaq, and Amex, all including a requirement that companies adopt a code of ethics (or code of conduct and ethics). The exchange rules are much broader in that they require the code to be applicable to all directors, officers, and employees.²

Clearly the implementation of these new regulations impacts the likelihood that firms will use ethics-related terms in their 10-K annual reports. Thus we partition our sample into pre-SOX (1994-2002), implementation (2003), and post-SOX (2004-2006) periods. Although we consider all of these periods in our descriptive results, our multivariate analysis focuses on the pre-SOX period when the use of ethics-related terms was discretionary.

4. Data and variables

Our analysis focuses on ethics-related words occurring in firms' 10-K annual reports. We also match our 10-K sample with samples from other studies to examine the

² Interestingly, section 406 of Sarbanes-Oxley requires that a code of ethics be disclosed, but technically does not require adoption. The listing requirements of the exchanges require adoption of an ethics code.

relations between the occurrence of ethics-related terms and firms identified as sin stocks, the filing of class action lawsuits, and a measure of corporate governance.

A. The 10-K sample

The initial 10-K sample is based on all forms available on the SEC's Electronic Data Gathering, Analysis, and Retrieval (EDGAR) system over the period of 1994 to 2006. As of May 1996, all public companies, except in cases of hardship exemption, are required to file electronic 10-K documents. This requirement was phased in over a three-year period prior to May 1996, which is why our 10-K sample grows substantially through 1997. There are only four 10-Ks available on EDGAR in 1993, which we do not include in our analysis.

Our sample consists of all Form 10-K and Form 10-K405 filings, excluding amended filings. Prior to 2003, firms could checkmark a qualifier on the 10-K concerning information disclosure, which would then require the 10-K to be filed as a 10-K405. The option was eliminated in 2003 because the SEC found the designation was inconsistently applied. The distinction between the 10-K and 10-K405 is not relevant for our analysis, so both are included in our use of the term "10-K." Over 1994-2006, a total of 104,621 10-K documents are available on EDGAR. After we eliminate duplicates using a character match algorithm, the 10-K sample includes 100,404 unique filings.

Each 10-K document is analyzed as follows. First, all ASCII-encoded graphics, carriage-returns/line feeds, HTML, and punctuation are removed from the document using regular expression search patterns. We later use the number of characters in the document as a control variable, which is equal to the sum of alpha plus numeric

characters in the remaining text. We then eliminate 24 phrases from the document (detailed in Panel A of the appendix), which contain an ethics-related word that is used in a context different from ours (e.g., “ethical drugs,” “ethic clay liners,” or “ethical pharma”).

Because SOX requires firms to cite or include a code of ethics, we divide ethics-related terms into two groups. Panel A of Table 1 lists the seven words or phrases that we define as an ethics-related term—ethic, ethics, ethical, ethically, corporate responsibility, social responsibility, and socially responsible. Before counting these terms, we first separately count and remove any of the “code of ethics” references listed in Panel B of Table 1. Unless otherwise noted, any count of ethics-related terms means the sum of these two counts.

In all cases, only terms bounded by spaces are counted in order to avoid certain words—typically proper nouns—that include one of the target terms. We also tabulate the frequency of occurrence for any five words occurring before and after a target term. Before performing this tabulation for a given document, we remove a list of 20 stop words reported in the appendix (e.g., “and”, “or”, “that”, or “this”) and all words with fewer than three characters.

B. Comparative samples

After providing descriptive statistics for our full sample, we consider subsets of our data matched to samples from research on topics potentially related to the use of ethics terms. Because of the SOX requirement that firms adopt and document a code of

ethics, and the potential biases associated with using samples after the governance index was first publicized in 2003, these tests focus on pre-SOX data.

We first consider the list of “sin” stocks examined in Hong and Kacperczyk (2007). They define sin stocks as “publicly traded companies involved in producing alcohol, tobacco, and gaming” (p. 1). Firms defined as sin stocks include well-known names like Altria (Philip Morris), Anheuser Busch, Bally, Caesars, and Trump Hotels. Hong and Kacperczyk find that because social norms prevent some investors from purchasing sin stocks, these stocks tend to: be held by fewer institutions, be followed by fewer analysts, and experience higher rates of return, results consistent with Merton’s (1987) theory on neglected stocks.

From their list of 184 stocks over 1962-2003, we are able to match 143 in our sample period (<http://finance.sauder.ubc.ca/~mkacpe/Index/sinstocks.pdf>, downloaded June 2007). We create a dummy variable, Sin Stock, which we set equal to one for any of these stocks in our 10-K sample. The “sin” firms are matched to the 10-K sample using a name lookup on EDGAR to identify the Central Index Key (CIK) assigned by the SEC, which appears in all the 10-K reports.

We then examine all securities in the Stanford Securities Class Action (SSCA) Clearinghouse dataset, which provides an index of filings for firms named in federal class action securities fraud lawsuits based on the Private Securities Litigation Reform Act of 1995 (<http://securities.stanford.edu/>, downloaded June 2007). The data set begins in 1996 and includes the company’s ticker symbol and year of filing. The Compustat data we use includes a ticker symbol, so the SSCA data are matched along with the Compustat

data to the 10-K sample. A dummy variable, labeled Class Action, is set equal to one if a class action suit was filed in the same year as the 10-K filing.

The final comparative sample is based on the Governance Index measure derived by Gompers, Ishii, and Metrick (2003). They use 24 governance rules to assign scores to about 1,500 firms, where a high score indicates the weakest shareholder rights.

A firm with good governance policies imposes no barriers to takeovers while a company with poor governance policies erects many barriers that simply protect managers from outside market forces. Items counted in the Governance Index include state-level anti-takeover laws of the state of incorporation, anti-takeover provisions in a firm's charter, and anti-greenmail measures. All such items make it less likely that poorly performing managers will be replaced by shareholders.

For example, if a company has poison pills that would discourage an outsider from taking over the firm at a premium to the current price, the Governance Index increases by one. If the company has a staggered board, which serves to protect incumbent managers from hostile takeovers, the Governance Index increases by an additional one. The Governance Index can range from zero to 24, where zero means no takeover protection ("democracy"), and 24 means maximum takeover protection ("dictatorship").³

Figure 1 plots the distribution of the Gompers, Ishii, and Metrick (2003) Governance Index for all firms in the 1994-2002 pre-SOX sample. The index ranges from 1 to 19, with a median of 9 and a mean of 9.04. Clearly, most firms have

³ Gompers, Ishii, and Metrick (2003) compare firms to republics, where the balance of power between shareholders and managers and directors is determined by the corporate governance structure. Thus they label firms with strong shareholder rights as "democracies" and firms with provisions that empower and entrench managers as "dictatorships."

governance policies that place some limits on takeovers. Few firms are at the extreme tails of the Governance Index.

Gompers, Ishii, and Metrick (2003) report that firms with stronger shareholder rights (lower Governance Index scores) have “higher firm value, higher profits, higher sales growth, lower capital expenditures, and made fewer corporate acquisitions.” We use an updated version of their sample, which for the pre-SOX data includes the years 1995, 1998, 2000, and 2002 (downloaded from <http://finance.wharton.upenn.edu/~metrick/data>). The Governance Index score is matched to the 10-K sample using both company name and ticker symbol.

C. Other variables

Clearly the likelihood of any term occurring in a 10-K is related to the length of the document. We use the character count of the 10-K document to capture this issue of magnitude. One might also expect the size of a firm to impact the likelihood it would use ethics-related terms. To measure firm size, we use total assets according to Compustat. We use the CIK/GVKey file available from Wharton’s WRDS data service to match the Compustat data to the 10-K sample.

Both size measures are taken as natural logs; $\text{Log}(\text{CHARS})$ represents the natural log of the 10-K character count, and $\text{Log}(\text{TA})$ represents the natural log of total assets in the year of the 10-K filing date. We control for SIC codes using the SEC’s ten non-governmental aggregate categories.

D. Sample sizes

Concentrating on the pre-SOX period of 1994-2002 reduces the full sample of 10-Ks from 100,404 to 67,044. We use the largest sample possible for each variable considered. Note, however, that whenever we examine the Governance Index variable, the original sample includes only four years that overlap our pre-SOX 10-K sample (and about 1,500 firms). This, along with the requirement of total asset data from Compustat substantially reduces the sample in cases where these variables are considered.

5. Results

Figure 2 graphs the number of 10-K filings by year. The electronic filing phase-in is apparent in the first three years, and the peak levels in the late 1990s presumably are attributable to the internet IPO phenomenon. In Figure 3 we separate the ethics-related term count into those cases where the targeted term is contained within code-related phrases (Table 1, Panel B) and those with only the targeted terms (Table 1, Panel A). This partitioning of the term count allows us to observe the explicit impact of the SOX requirement to discuss a code of ethics (or similarly labeled code).

The results in Figure 3 clearly reflect the impact of requiring firms to discuss a code of ethics; code-related occurrences increase substantially post-SOX. Before the passage of SOX, ethics-related terms in total appeared, on average, in about 8% of 10-K reports while the subset of code-related terms appears less than 1% of the time.

Not surprisingly, after the passage of Sarbanes-Oxley, we see many more ethics-related terms. From the pre- to post-SOX period, code-related usage goes from less than 1% to almost 60%.

Are all industries equally likely to use ethics-related terms in their 10-K reports? Table 2 reports our sample of firms by ten SIC categories. About 32% of our sample is in Finance and Insurance, while 29% is in Manufacturing. The lowest percentages of the sample are in Agriculture (0.29%) and Construction (0.88%).

The second column in Table 2 reports that firms in Agriculture (28.87%), Manufacturing (26.98%), and Retail Trade (25.20%) most often use ethics terms. The three industries with the lowest use of ethical phrases are Nonclassifiable (13.05%), Finance and Insurance (17.53%), and Mining (19.40%).

A. Univariate comparisons

If my company sells cigarettes to consumers, is it more likely to use ethics-related terms in the 10-K report than if it sold only soap? Does being the object of a class action lawsuit seem to influence managers' word choices in their reports to shareholders? If a firm has many restrictions that reduce the probability of replacing poorly performing managers, does its managers beguile investors by highlighting their commitment to "high" ethical standards?

Table 3 provides a univariate comparison in 10-K word choice categorized by sin stocks, class action lawsuits, and the Governance Index. The analysis is also divided by pre- and post-SOX time periods. The transition year after the signing of SOX into law, 2003, is not included in the results.

From the results of Table 3, we can see that sin stocks, firms named in a class action lawsuit, and companies with poorer corporate governance all are much more likely to use ethics-related terms in their 10-K reports than other firms. This is true in both the pre- and post-SOX time periods for the available data, but the proportional differences are much greater pre-SOX.

In the pre-SOX period (1994-2002), over 17% of sin stock 10-Ks use ethics-related terms compared to less than 8% of non-sin stock 10-Ks. After the enactment of SOX, 72% of sin stocks use ethics terms compared to 62% of the other firms. Almost 13% of firms named in a class action suit use ethics terms compared to 7% for other firms during 1994-2002.

As in the Gompers, Ishii, and Metrick (2003) paper, we divide the sample of firms into extreme categories (democracy versus dictatorship) based on the Governance Index. Firms with a Governance Index measure are divided into those with good governance policies (i.e., index values ≤ 8) and those with poor policies (i.e., index values ≥ 12). In both periods, firms with good corporate governance policies are much less likely to use ethics terms than firms with poor governance. For example, in the pre-SOX period, 12% of good governance firms use ethics-related terms, compared to 19% of firms with entrenched managers.

B. Multivariate results

One obvious flaw in our analysis is that we do not control for other variables in our univariate comparison, although we know from Table 2 that the likelihood of using an ethics-related term varies across industries. We also would expect longer 10-K reports

(more characters) to be more likely to use ethics-related terms, if simply by chance. Larger firms are also presumably more likely to use ethics-related terms than smaller firms.

Table 4 reports results of six logit regressions whose dependent variable is equal to one if an ethics-related term appears at least once in the firm's 10-K report, and otherwise zero. The explanatory variables are: a sin stock dummy; a class action lawsuit dummy; the Gompers, Ishii, and Metrick (2003) Governance Index; the natural log of the total characters in the 10-K report [Log(Chars)]; the natural log of total assets from the Compustat database [Log(TA)]; and SIC industry dummy variables based on the categories in Table 2. To control for industry, the first five regressions include SIC category dummy variables for the ten industry classifications in Table 2. For each logit regression p-values for the estimated coefficients are reported in parentheses.

In all the regressions, the number of characters in the 10-K report is highly significant in explaining the use of ethics-related terms. The positive sign of the coefficient is what should be expected. The more words in a report, the more likely it is to use an ethics-related term at least once.

Highly significant coefficients are also reported when the natural log of total assets is included in the last two regressions. Thus, larger firms are more likely to discuss ethics at least once in a given year's 10-K than smaller firms.

The first regression in Table 4 indicates that a sin stock is significantly more likely than other stocks to use ethics terms in the 10-K (controlling for industry and characters in the report). The second regression finds that class action lawsuit targets increase ethics word usage at the 4% significance level.

The sample size drops in the last four regressions largely because there are a limited number of firms and years in the Governance Index sample and, in the last two columns, Compustat data is required.

The third column reports that the Governance Index is positively related to the occurrence of ethics-related terms (after controlling for character count and industry). The positive value for the Governance Index indicates that firms with poor governance policies (i.e., companies with high index values) are more likely to use ethics-related terms, all else equal.

In column 4, when all the explanatory variables are included, all the variables are statistically significant at conventional levels. Thus, after controlling for industry and length of report, sin stocks, firms that are the targets of lawsuits, and companies with poor corporate governance policies are much more likely to use ethics-related terms during the pre-SOX time period.

There is little change in the coefficients or significance levels when we include the natural log of total assets in the column 5 regression. For a robustness check, the last column does not control for industry. Here we see no real changes in the coefficient values of the five explanatory variables or their significance levels when we do not include industry dummies. As an example, the Governance Index coefficient is 0.06 in column 5 and 0.07 when the industry dummies are dropped.

As a final test of robustness we reconsider the logit regressions in Table 4 by collapsing the time series of observations into a single cross-sectional analysis by firm. In Table 4 we treat each choice of using an ethics-related term as independent across all observations. Clearly this is not strictly true in that a given firm using ethics in one year

is more likely to use the term in a subsequent year. To mitigate this problem, we re-estimate the logit regressions in Table 4 for the cross-section of firms.

For a given firm, the dummy variables (the dependent variable, sin stock dummy and legal action dummy) are set equal to one if they are one in any period. The continuous variables (the governance index, Log(Chars), Log(TA)) are set equal to the average for the firm across all periods. The logit results from this approach are essentially identical to those reported for each model in Table 4, both in terms of signs and inference. The magnitude of the coefficients is also unaffected by this alternative estimation approach.

Interestingly, our paper finds that firms' corporate governance policies have a direct and significant relation with 10-K word usage. Firms with policies that entrench and protect poorly performing managers from their shareholders are more likely to discuss ethics in their 10-K reports. This might be an attempt to draw attention away from their poor governance policies. In one example, Mine Safety Appliances, a firm with a Governance Index score of 18, a score indicating a "dictatorship" with weak shareholder rights, states in its 2002 10-K: "Management recognizes its responsibility for fostering a strong ethical climate so that the company's affairs are conducted according to the highest standards of personal and corporate conduct."

In another example, Gompers, Ishii, and Metrick (2003) report that GTE was one of the largest firms in the extreme dictatorship portfolio (see their Table IV). Each year during 1996-2000, GTE had the same following sentence in their 10-K: "The Company also has instituted policies and guidelines that require employees to maintain the highest level of ethical standards." Lastly, in its 1998 10-K filing, Park Place Entertainment with

about 1.4 million square feet of gaming space makes note of a Board of Director's Compliance Committee. This committee "supervises Park Place's efforts to assure that its business and operations are conducted in compliance with the highest standards applicable to it as a matter of legal and regulatory requirements as well as ethical business practices."

In the case of sin stocks, the results considered in isolation could imply either disingenuous signaling by the firm or merely the firm's desire to address ethical issues because of its "sinful" industry. That is, sin stocks are under attack and might feel the need to defend themselves in the 10-K reports. We believe that the consistency of our results across alternative measures of ethical behavior suggests, however, that managers invoking ethical declarations in their 10-K annual reports are more likely to be systematically misleading the public.

6. Areas for Future Research

Examining the word choice/pattern of senior executives in public documents is a rich area for future research. Why do managers select the particular tone and word pattern when communicating with the general public? There is some evidence that the readability of the 10-K document encourages small investors to trade the firm's stock (see Loughran and McDonald (2007)).

It would be interesting to examine specific word choice patterns before and after passage of Sarbanes-Oxley. In untabulated results, we find that of the top 50 words occurring within five words of an ethics-related term pre-SOX, the following words experience a significant post-SOX decline: "maintain," "standards," "will," "highest,"

“responsibility,” “strong,” and “climate.” Interestingly, when managers are held liable for their statements, absolute words like “will,” and comparative or superlative words like “strong” and “highest” suddenly become less attractive. If the Sarbanes-Oxley legislation significantly affects the probability that ethics-related terms appear in 10-K reports, it may also affect the tone of the reports.

Sarbanes-Oxley also requires any change in the code or waiver granted to an officer to be immediately reported in a Form 8-K. Looking at stock returns around this event could measure whether the market considers these declarations relevant.

It would be interesting to track firms over time to see if the use of ethics-related terms diminishes as an event, such as a class action lawsuit, becomes “old news.” It would also be useful to look at classifications other than “sin stocks” such as those used for socially or environmentally responsible investing (i.e., nuclear power generators).

Another interesting question is the link between long-term stock performance and the use of ethics-related terms in a 10-K. Are firms with ethical integrity positively or negatively rewarded by the stock market? Tobacco companies do earn higher rates of returns on their assets than non-tobacco firms. This is evidence consistent with high proportions of ethical words corresponding to good financial performance. Yet, results in the studies whose samples we consider provide mixed clues—sin stocks perform relatively well, while poor-governance firms do not. These are interesting questions for future research.

7. Conclusions

Using a sample of 100,404 unique 10-K filings during the 1994-2006 time period, we find a strong usage pattern relating to ethical terms. We find that firms using “ethics” phrases in their 10-Ks are more likely to be “sin” stocks and a defendant in a class action lawsuit. Further, we report that companies with entrenched managers (i.e., poor corporate governance policies) are much more likely to discuss ethical topics than other firms. Our evidence holds even after controlling for industry, firm size, and the number of characters contained in the 10-K document.

Erhard, Jensen, and Zaffron (2007) define integrity simply as: Honoring one’s word. They argue that their model of integrity facilitates improved performance by organizations and individuals. Managers using ethical terms in their 10-K report publicly declare that their firm will behave ethically. Managers are essentially giving their word to act in an ethical manner by the words they choose.

We would not perceive sin stocks as virtuous firms. The same is true for the objects of class action lawsuits. Yet these two groups are the firms that are more likely to use ethics-related terms. Most notably, having poor corporate governance is not consistent with a company acting in an ethical manner to benefit its present and future shareholders. Poor governance serves only to entrench managers and enrich those who are not creating value for shareholders. Managers of firms with poor governance policies seem much more likely than other managers to make ethics-related declarations in an attempt to obscure their poor governance practices.

The statistical significance of all these three variables is robust to various specifications. Their economic significance is seen in the sign of the coefficients, where

consistently the effect of these measures is contrary to the simple notion of virtuous firms being more likely to use ethics-related declarations. False signaling is consistent with the integrity-performance paradox of EJZ in that firms are willing to sacrifice integrity by making these declarations because they have an “immature grasp” of the connection between integrity and performance.

Appendix

Panel A: List of phrases excluded from analysis

BC ETHIC
BIO ETHICS
CONTRACT ETHICAL CORPORATE
ETHIC CLAY LINERS
ETHICAL AND GENERIC PHARMACEUTICALS
ETHICAL APPROVAL
ETHICAL COMMITTEE
ETHICAL COMPOUNDS
ETHICAL DERMATOLOGY
ETHICAL DRUGS
ETHICAL GENERICS
ETHICAL HOLDINGS
ETHICAL PHARMA
ETHICAL PHARMACEUTICALS
ETHICAL SHARE PURCHASE
ETHICALS
ETHICS AND RELIGIOUS VALUES FUND
ETHICS FILING
ETHICS PRESCRIPTION
ETHICSPPOINT
HEALTH INTERNET ETHICS
HI ETHICS
PHYSICIANS FOR SOCIAL RESPONSIBILITY
PRESCRIPTION ETHICAL

Panel B: Stop words excluded from analysis

ALSO	EACH	HAVE	SUCH	THROUGH
AND	FOR	ITS	THAT	UNDER
ANY	FROM	OTHER	THE	WHICH
ARE	HAS	SHALL	THIS	WITH

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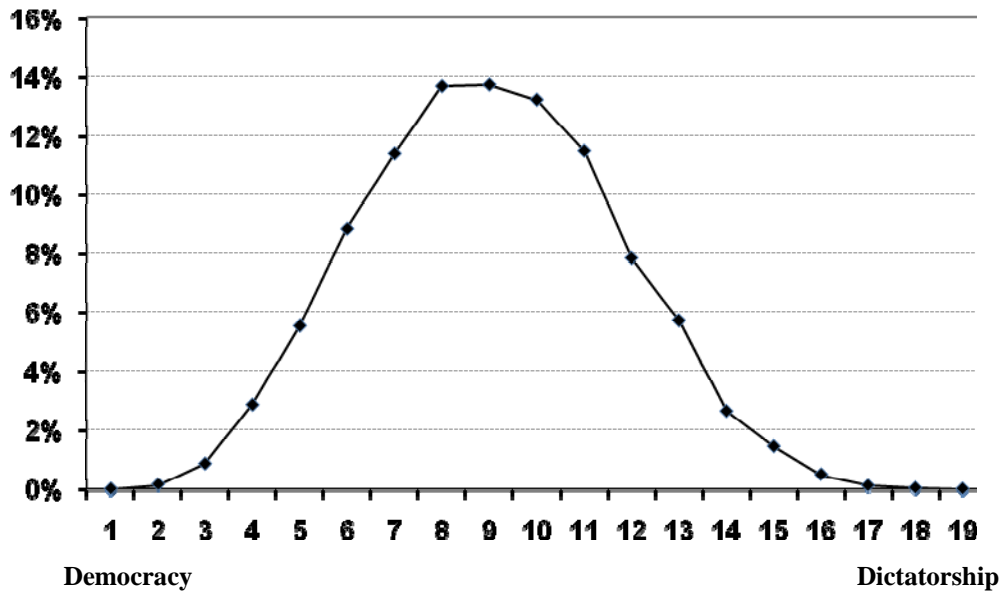


Fig. 1. Distribution of Gompers, Ishii, and Metrick (2003) Governance Index for firms in sample.

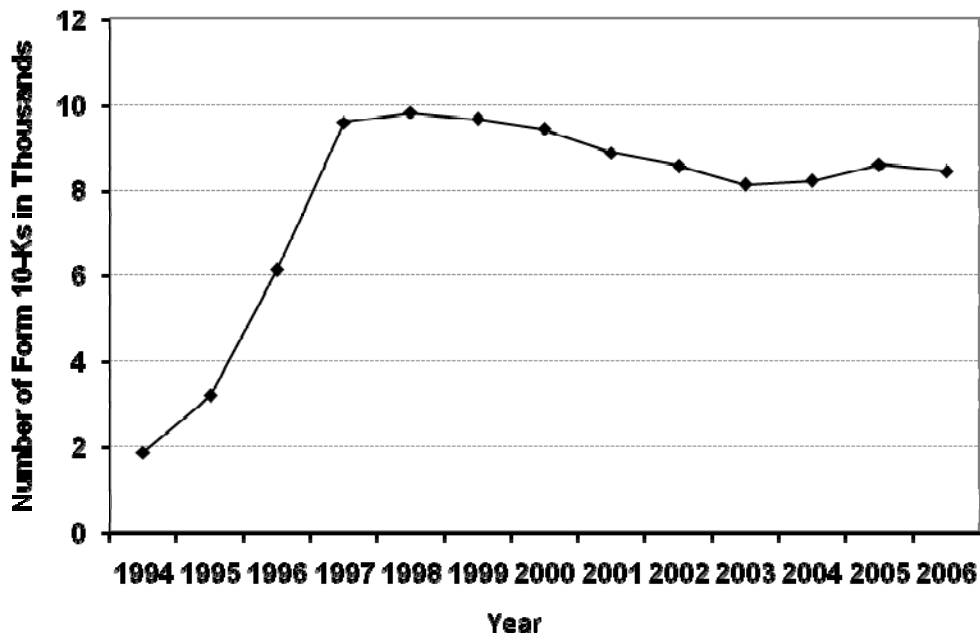


Fig. 2. Number of 10-K filings in thousands by calendar year.



Fig. 3. Percentage of times ethics-related terms appear in 10-Ks by period. “w/o code” is the count for terms in Table 1, Panel A. “w/ code” is the count for terms in Table 1, Panel B. Section 406 of the Sarbanes-Oxley Act was implemented by the SEC in 2003.

Table 1
Definitions of ethics-related terms

<i>Panel A: Ethics-related terms</i>	
ETHIC	CORPORATE RESPONSIBILITY
ETHICS	SOCIAL RESPONSIBILITY
ETHICAL	SOCIALLY RESPONSIBLE
ETHICALLY	
<i>Panel B: Ethics-related terms used in a “code” context</i>	
CODE OF BUSINESS CONDUCT AND ETHICS	
CODE OF BUSINESS CONDUCT ETHICS	
CODE OF BUSINESS ETHICS	
CODE OF CONDUCT AND ETHICS	
CODE OF ETHICAL BUSINESS CONDUCT	
CODE OF ETHICS	
CODE OF ETHICS AND BUSINESS CONDUCT	
CODE OF PERSONAL AND BUSINESS CONDUCT AND ETHICS	
CODE OF PROFESSIONAL ETHICS	
CODES OF CONDUCT AND ETHICS	
ETHICS CODE	
PRINCIPLES OF PROFESSIONAL ETHICS	

Table 2
 Percentage of 10-Ks by SIC category, 1994-2006

SIC Category	Proportion of Sample	Percent with Ethics Term Use
Agriculture	0.29%	28.87%
Mining	3.73%	19.40%
Construction	0.88%	22.54%
Manufacturing	29.10%	26.98%
Transportation and Communications	8.66%	23.26%
Wholesale Trade	2.98%	22.19%
Retail Trade	4.90%	25.20%
Finance and Insurance	32.30%	17.53%
Services	14.47%	25.05%
Nonclassifiable	2.69%	13.05%
Total	100.0%	

Table 3

Univariate comparison of percent of 10-Ks with at least one ethics-related term categorized by pre- and post-Sarbanes-Oxley (SOX) Act of 2002

	Pre-SOX (1994-2002)	Post-SOX (2004-2006)
Sin Stock = 0	7.64%	62.30%
Sin Stock = 1	17.32%	71.76%
Class Action Lawsuit = 0	7.40%	62.11%
Class Action Lawsuit = 1	12.77%	82.86%
Good Governance Index: ($1 \leq GI \leq 8$)	12.13%	83.25%
Poor Governance Index: ($12 \leq GI \leq 19$)	19.45%	86.90%

Data are available on the sin stocks for the entire 1994-2006 time period. The class action lawsuit data start in 1996 and are available through 2006. The Governance Index is available only in years 1995, 1998, 2000, 2002, 2004, and 2006.

Table 4

Logit regressions using dummy variables for the occurrence of ethics-related terms in 10-K reports for the pre-Sarbanes-Oxley (SOX) period, 1994-2002

The dependent variable is equal to one if an ethics-related term appearing in either panel of Table 1 occurs at least once in a firm's 10-K annual report, and zero otherwise. The sample is all unique 10-Ks available on EDGAR for 1994-2002. Sin Stock Dummy takes a value of one if the firm is included in the sample of Hong and Kacperczyk (2007), and zero otherwise. Class Action Dummy takes the value of one if at least one class action lawsuit is reported for the firm in the same year as the 10-K filing, and zero otherwise. The class action lawsuit data are available only for 1996-2002. The Governance Index is available only for the pre-SOX sample in years 1995, 1998, 2000, and 2002. A firm with a low Governance Index score is considered to be more shareholder friendly. Log(Chars) is the natural log of the total number of characters appearing in the firm's 10-K. Log(TA) is the natural log of total assets from Compustat. SIC category dummy variables are included in the first five regressions. p-values are in parentheses.

	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	-13.29 (0.000)	-13.47 (0.000)	-10.06 (0.000)	-9.51 (0.000)	-9.65 (0.000)	-9.11 (0.000)
Sin Stock Dummy	0.55 (0.000)			0.75 (0.008)	0.72 (0.029)	0.79 (0.016)
Class Action Dummy		0.23 (0.042)		0.68 (0.000)	0.50 (0.034)	0.48 (0.039)
Governance Index			0.06 (0.000)	0.07 (0.000)	0.06 (0.000)	0.07 (0.000)
Log(Chars)	0.91 (0.000)	0.92 (0.000)	0.64 (0.000)	0.58 (0.000)	0.53 (0.000)	0.47 (0.000)
Log(TA)					0.13 (0.000)	0.13 (0.000)
SIC Category Dummies Included	Yes	Yes	Yes	Yes	Yes	No
N	67,044	62,008	6,279	5,098	3,361	3,361