

# CONTRAVENING THE POPULAR ETHICAL SENTIMENTS PERSONIFIED BY THE “OCCUPY WALL STREET” MOVEMENT

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## **ABSTRACT**

*The Occupy Wall Street movement has given voice, among other things, to the American public's frustration with and outrage about exploitive, predatory, and unscrupulous business practices. The OWS Movement helps bring to the forefront popular ethical sentiments that: (1) Businesses are becoming increasingly unethical. (2) Big businesses are more unethical than smaller businesses. (3) Certain businesses are more unethical than other businesses. This paper presents results from a 16-year longitudinal study that provides evidence challenging the validity of these popularly expressed ethical sentiments.*

## **POPULAR ETHICAL SENTIMENTS ABOUT BUSINESS**

Without a doubt, the public is increasingly concerned with the ethical practices of business; or as some (perhaps many) people would likely express it — the unethical practices of business. We need only reference the current *Occupy Wall Street* movement in its various incarnations throughout the nation (and around the world) to know that a growing proportion of the population questions the integrity and intent of the corporate world relative to those lower on the economic food chain. It is in the context of this movement — and the plethora of corporate scandals as well as the years of stagnant incomes and diminishing job opportunities for many people — that the ethical intentions of businesses are being questioned with increasing vehemence in the court of public opinion.

Among other opinions brought to center stage by the *Occupy Wall Street* movement, popular ethical sentiment seems to be that: (1) Businesses are becoming increasingly unethical. (2) Big businesses are more unethical than smaller businesses. (3) Certain businesses — such as those in the financial services industry — are more unethical than other businesses, if for no other reason than the role that some of their members played in the recent Great Recession.

Although it may be seductively tempting to embrace these popular ethical sentiments, a more reasoned approach is needed for understanding the evolving ethicality of businesses. To that end, this paper draws on a large database generated over a multi-year period to explore the ethical beliefs of a particular swath of the American public — namely, those people employed in the accounting profession.

## **RESEARCH QUESTIONS**

This paper addresses the following specific research questions:

- **RQ<sub>1</sub>:** Have business organizations become more or less ethical over time?
- **RQ<sub>2</sub>:** Does the ethical effectiveness of organizations vary in some systematic way relative to organization size?
- **RQ<sub>3</sub>:** Are some industries more ethical than other industries?

- **RQ<sub>4</sub>:** Does having a written ethics code actually facilitate the occurrence of ethical decisions and actions in organizations?
- **RQ<sub>5</sub>:** Does having an ethics code versus not having an ethics code affect changes in the ethical effectiveness of organizations over time?
- **RQ<sub>6</sub>:** Does having an ethics code versus not having an ethics code affect the impact of organization size on ethical effectiveness?
- **RQ<sub>7</sub>:** Does having an ethics code versus not having an ethics code affect the degree of ethical effectiveness in different industries?

### **METHODOLOGY FOR ADDRESSING THE RESEARCH QUESTIONS**

This study is based on data collected from 1994 through 2009 as part of the annual salary survey of members of the Institute of Management Accountants (IMA). In addition to the salary and compensation issues and demographic and organizational classification variables that constitute a significant portion of the annual IMA survey questions (with results being published annually in *Strategic Finance* and its predecessor, *Management Accounting*), the respondents were asked numerous other questions about their job satisfaction and their employing organization's success, profitability, ethical practices, and corporate reputation. The present study focuses exclusively on only five of the multitude of variables covered in the IMA database. These five variables are: the chronological data year, organization size, Standard Industrial Classification, existence of an organizational code of ethics, and a measure of ethical effectiveness.<sup>1</sup>

**Relevancy of Sample.** The population from which this study's samples are drawn can be considered to be relevant to exploring the research questions for a number of reasons. First, IMA members are familiar with ethics and ethical codes of conduct. In order to join and continue membership in the IMA, members must agree to comply with the Statement of Ethical Professional Practice (and its predecessor, Standards of Ethical Conduct for Management Accountants) — the IMA's own code of ethics that has been in place for the entire IMA membership since 1983 and that was revised and given a new title in 2005. In addition, many of the members who respond to this annual survey hold professional certifications, meaning that they have a code of ethics with which they must comply as a condition of their certification (*e.g.*, all CPAs must comply with the AICPA's Code of Ethics; all IMA members holding the CMA and/or CFM must comply with the aforementioned Statement of Ethical Professional Practice). Furthermore, many of the respondents to this study are employed by organizations that have codes of conduct or ethics codes with which they are expected to comply. In short, members of IMA are very much attuned to ethics in the workplace in terms of what is ethical and what is not, how organizations address ethical issues, and ways in which organizations can implement and strengthen their ethical practices.

**Sampling Procedure.** In November or December of each year, a questionnaire packet was mailed to a different random sample of IMA members. Each random sample was selected geographically to represent IMA members who were employed in the United States. The questionnaire packet included the survey, a postage-paid return envelope, and a separate postcard to indicate return of the survey. Respondents completed the questionnaire and returned it anonymously in the postage-paid return envelope. Simultaneously but separately, the respondents returned the reply postcard which had the person's name and address on it. Those IMA members who did not send in the reply postcard received a follow-up survey a few weeks after the initial mailing. This procedure maintained the anonymity of the respondents while enabling a follow-up mailing targeted only to non-respondents.

Table 1 identifies the number of usable questionnaires that were received from all IMA respondents in each year of the 1994-2009 timeframe. Since this study focused exclusively on

businesses, certain respondents were excluded and a reduced data set was created. In the initial reduction pass, respondents who were employed in an *academic position in a college/university* were excluded. In the second reduction pass, respondents who indicated that their employer’s Standard Industrial Classification (SIC) was *government (federal, state, local, or international)* or *non-classifiable* were excluded. In the third reduction pass, respondents who said they *did not know whether their employer had a written code of ethics* were excluded. Thus, the final reduced data set consisted only of respondents who were employed in businesses which either definitely had an ethics code or definitely did not have one. Also, the number of respondents in this reduced data set for each survey year is presented in Table 1.

**TABLE 1: Number of Usable Responses and Number of Respondents in Purified Data Set in Each Survey Year**

Survey Year	Number of Respondents Returning Usable Questionnaires	Number of Respondents in Purified Data Set
1994	2,119	1,772
1995	2,152	1,785
1996	2,114	1,739
1997	1,963	1,640
1998	2,114	1,751
1999	1,954	1,622
2000	1,777	1,444
2001	1,738	1,443
2002	1,675	1,412
2003	1,685	1,397
2004	1,404	1,193
2005	1,690	1,421
2006	1,583	1,307
2007	1,565	1,322
2008	1,614	1,339
2009	1,549	1,292
All Years Combined	28,696	23,879

**Measurement of the Independent Variables.** Four variables from the cumulative IMA database served as independent variables in this study. Each of this is described below. First, the *IMA data year* (*i.e.*, 1994 through 2009, sequentially) was used to capture chronological time. Second, the number of employees in the respondent’s employing organization was used to characterize the *size of the organization*. Response options for this independent variable were: (1) less than 10; (2) 10 to 24; (3) 25 to 99; (4) 100 to 499; (5) 500 to 999; (6) 1,000 to 2,499; (7) 2,500 to 4,999; and (8) 5,000 or more. Third, the *Standard Industrial Classification* (SIC) for the respondent’s employing organization was used to identify major categories of business operations. Response options for the SIC question were: (1) agriculture, forestry, and fisheries; (2) mining; (3) contract construction; (4) manufacturing; (5) transportation, communication, and utility services; (6) wholesale and retail trade; (7) finance, insurance, and real estate (including banking, credit agencies, and security/commodity brokers and services); (8) services (including medical/health services, educational services, public, and other services not specified in the preceding); (9) government (federal, state, local, or international); and (10) non-classifiable. (As indicated above, respondents who indicated options 9 or 10 were excluded from the present study because it focuses on businesses.) Fourth, the respondents were asked: “Does your employer provide a written code of ethics (*i.e.*, code of professional conduct, statement of business principles, statement of core values, etc.) to guide employees in its operations and in relations with vendors, customers, clients, and/or other employees?” Possible responses were “0 = don’t know,” “1 = no,” and “2 = yes.” As indicated previously, the “don’t know” respondents were excluded from

the present analysis. Therefore, this variable indicates whether or not an ethics code actually exists.

**Measurement of the Dependent Variable.** *Ethical effectiveness* was the sole dependent variable used in this study. The respondents were asked to rate the effectiveness of their employing organization with respect to performing seven different ethical decisions or actions, which were:

- Communicating the organization's ethical standards.
- Providing training in the organization's ethical standards.
- Conducting daily operations in a manner consistent with the organization's ethical standards.
- Gaining employee commitment to the organization's ethical standards.
- Considering the organization's ethical standards in making short-range decisions.
- Considering the organization's ethical standards in making long-range decisions.
- Supporting and rewarding ethical actions in the organization.

Responses were based on a six-point scale that was designed using the Bass *et al.* (1974) method for approximating an interval level of measurement. The scale labels were: 1 = ineffective; 2 = effective to some degree; 3 = fairly effective; 4 = very effective; 5 = almost completely effective; and 6 = entirely effective. A principal components factor analysis of these seven items was conducted, and the results revealed a single factor that explained 79.042% of the common variance. Additionally, Cronbach's coefficient alpha, which measures the internal consistency reliability of a measurement scale, was .954 for the ethical effectiveness index. This alpha coefficient is substantially above the recommended threshold level of .70 (Nunnally, 1978, p. 245); thus, the .954 figure indicates an exceptionally high level of reliability among the seven ethical effective scale items. Based on the above scale properties, an *ethical effectiveness index* was created for each respondent by computing the arithmetic mean of his/her responses across the seven items. Higher values on this index indicate greater ethical effectiveness, whereas lower values reflect poorer ethical effectiveness.

**Planned Method of Analysis.** The data were initially analyzed using the SPSS univariate analysis option in the General Linear Models (GLM) procedure. The Type III analytical model was used; this model includes the intercept as well as the factors of interest and interactions between/among those factors. Including the intercept in the model is appropriate because we cannot assume that the dependent variable data will go through the origin (GLM Univariate Analysis, 2005, pp. 393-395). In effect, this analytical model produces a factorial Analysis of Variance (ANOVA).

By initially performing a factorial ANOVA, it can be ascertained whether or not there is an interaction effect between the existence of an ethics code, on the one hand, and IMA data year, organization size, and standard industrial classification, respectively, on the other hand. The absence of a statistically significant and practically significant interaction effect would provide a NO answer to research questions 5, 6, and 7. In other words, whether or not organizations have a written ethics code does not modify the impact of IMA data year, organization size, or standard industrial classification on organizations' ethical effectiveness. Therefore, the existence of an ethics code operates independently from IMA data year, organization size, and/or standard industrial classification.

Should statistically significant and practically significant interaction effects not be found, the impact of the four independent variables on ethical effectiveness will be explored via the Oneway Analysis of Variance (ANOVA) procedure rather than through the main effects in the factorial model. There are two important reasons for this approach. First, because of missing data in some cases on each of the independent variables and the dependent variable, at least a few hundred cases out of the 16 year's worth of data are eliminated from analysis with the factorial model. By using the Oneway ANOVA procedure, however, cases can be included for which data are not missing on one independent variable but are missing on the other independent variable. Second, the existence of an ethics code occurs as an independent variable in each of the factorial analyses. If this independent variable does not interact with any of the other independent variables, there is no reason to essentially analyze the existence of an ethics codes effect three separate times — as a main effect in three separate factorial analyses.

## RESULTS

### **Initial Data Exploration with the Factorial ANOVA: Considering RQ<sub>5</sub>, RQ<sub>6</sub>, and RQ<sub>7</sub>.**

Using the two-factor factorial analytical design, three separate analyses are conducted. In each analysis, the existence of an ethics code is one of the factors. The other independent variable or factor differs from analysis to analysis. In analysis 1 it is IMA data year; in analysis 2 it is organization size; and in analysis 3 it is standard industrial classification. Then, of course, there is the possible interaction between existence of an ethics code and the other independent variable in each analysis. The results of the interaction effect analyses relate to research questions 5, 6, and 7; and will determine the direction of subsequent analyses.

Table 2, on the next page, reports the results of the factorial analytical design for the three analyses. In each analysis, both main effects and the interaction effect were highly significant ( $p < .001$ ). Based on the  $F$  statistics alone, the evidence indicates there are significant differences in the ethical effectiveness index across the various cell means that are relevant to each of the research questions. However, the  $\text{Eta}^2_{\text{partial}}$  figures, which document the effect size, paint a quite different picture.  $\text{Eta}^2_{\text{partial}}$  measures the percent of variance in the dependent variable — in this case, the Ethical Effectiveness Index — that a given main effect or interaction effect explains. In each analysis,  $\text{Eta}^2_{\text{partial}}$  is .006 or less for the interaction effect; in other words, the interactions explain six-tenths of one percent or less of the variance in ethical effectiveness. Thus, the interaction effects, while statistically significant due to the extraordinarily large sample size, are of no practical importance. They are trivial and should not be considered further. This also means that the existence of an ethics code does not alter the impact of IMA data year, organization size, or standard industrial classification upon the Ethical Effectiveness Index — which, of course, answers research questions 5, 6, and 7 with a resounding NO.

However, not only are both main effects in each of the analyses statistically significant, but they are also practically significant. For analyses 1, 2, and 3, respectively,  $\text{Eta}^2_{\text{partial}}$  figures are 14.2%, 10.5%, and 4.1% for the ethics code main effect. For the IMA data year main effect (analysis 1),  $\text{Eta}^2_{\text{partial}}$  is 2.2%; for the organization size main effect (analysis 2), it is 3.8%; and for the standard industrial classification main effect (analysis 3), it is 2.0%. Thus, none of the main effects are trivial, and they warrant further investigation. But further exploration will not proceed in the context of the factorial model. Rather, further analysis will proceed using the Oneway ANOVA procedure for the reasons articulated above in section 3.5.

TABLE 2: Results of the Factorial Analytical Design for the Ethical Effectiveness Index					
Factorial Analytical Design	F Statistic	df <sub>1</sub>	df <sub>2</sub>	Sig.	Eta <sup>2</sup> <sub>partial</sub>
<b>ANALYSIS 1:</b>					
Intercept	160,121.424	1	22,673	.000	.876
IMA Data Year (IMADY)	33.777	15	22,673	.000	.022
Existence of Ethical Code (EEC)	3,741.305	1	22,673	.000	.142
IMADY x EEC	2.984	15	22,673	.000	.002
<b>ANALYSIS 2:</b>					
Intercept	105,214.165	1	22,577	.000	.823
Organization Size (OS)	126.850	7	22,577	.000	.038
Existence of Ethical Code (EEC)	2,639.478	1	22,577	.000	.105
OS x EEC	20.964	7	22,577	.000	.006
<b>ANALYSIS 3:</b>					
Intercept	42,192.446	1	22,689	.000	.650
Standard Industrial Classification (SIC)	66.697	7	22,689	.000	.020
Existence of Ethical Code (EEC)	964.704	1	22,689	.000	.041
SIC x EEC	8.904	7	22,689	.000	.003

**Oneway ANOVAs: Preliminary Analysis Regarding Homogeneity of Cell Variances.** When there are three or more levels of an independent variable (or factor) and that factor is significant, multiple comparisons of cell means are appropriate through post hoc probing. This is the case for the IMA data year, organization size, and standard industrial classification variables (reference Table 2). (Multiple comparisons are not appropriate for the ethical codes factor because only two levels are being compared.) Therefore, before analyzing the data with respect to research questions 1, 2, and 3, the Levene Test should be used to assess the homogeneity of variance in the dependent variable (*i.e.*, the Ethical Effectiveness Index) relative to the cells created by the different levels of the specified independent variables. Determination of homogeneity of variance is essential for selecting the appropriate test for post hoc probing of cell means.

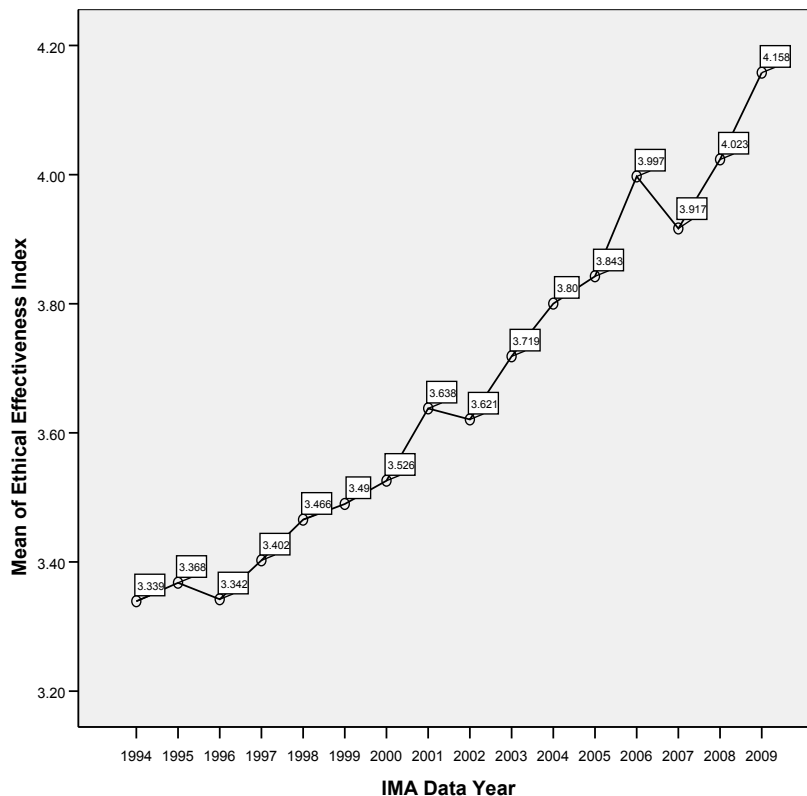
In the Levene Test, acceptance of the null hypothesis indicates that the cell variances are statistically equivalent, whereas rejection of the null hypothesis signifies the lack of equivalency among the cell variances. When the Levene test indicates that cell variances are equal, Tukey’s Honestly Significant Differences (Tukey’s HSD) test is an appropriate choice for post hoc probing. However, when the results of the Levene test indicate unequal cell variances, the Tamhane T2 test is appropriate for post hoc probing. The results of the Levene test, which are shown in Table 3, indicate acceptance of the null hypothesis for IMA Data year and rejection of the null hypothesis for organization size and standard industrial classification. Thus, Tukey’s HSD test will be used in post hoc probing of the IMA data year, and the Tamhane T2 test will be used for post hoc probing of the organization size and standard industrial classification variables.

TABLE 3: Results of Levene Test of Homogeneity of Cell Variances for the Dependent Variables Across the Levels of the Independent Variables				
Independent Variable	Levene Statistic	df <sub>1</sub>	df <sub>2</sub>	Sig.
IMA Data Year	1.452	15	22,689	.114
Organization Size	13.980	7	22,585	.000
Standard Industrial Classification	6.563	7	22,697	.000

**Oneway ANOVA: Answering RQ<sub>1</sub>.** Consistent with the findings reported in Table 2 and reflective of the missing data adjustment mentioned in section 3.5., the Oneway ANOVA indicates that the IMA data year independent variable is significant with respect to explaining variation in the Ethical Effectiveness Index ( $F = 66.141, df_1 = 15, df_2 = 22,689, p < .001$ ), and that the effect size is modest ( $\text{Eta}^2 = .0419$  or 4.19%). These results pertain to research question 1, which asks: “Have business organizations become more or less ethical over time?” The findings definitely indicate a change in ethical effectiveness over time, but the answer regarding direction will be found in the effect profile and in comparisons of all possible pairs of cell means. Figure 1 demonstrates that ethical effectiveness has increased, rather than decreased, over time — although there was slight, though not statistically significant, backsliding in 1996, 2002, and 2007.

Table 4, shown on the following page, reports on the multiple comparisons of cell means with Tukey’s HSD test. This table identifies all the possible paired comparisons of the Ethical Effectiveness Index cell means across the IMA data year levels, and whether the means associated with each paired comparison are or are not significantly different from one another. These results indicate a robust trend of increasing ethical effectiveness from 1994 to 2009. Differences in means for adjacent years are consistently non-significant; however, means are significantly different for the vast majority of the non-adjacent years. Moreover, these significant differences are always in the direction of ethical effectiveness being greater in the more recent years relative to the earlier years. In total, the results shown in Figure 1 and Table 4 demonstrate that business organizations have become more ethical over time — a clear and unequivocal answer to RQ<sub>1</sub>.

**FIGURE 1: Ethical Effectiveness Index Relative to IMA Data Year**



**TABLE 4: Results of Post Hoc Probing of Cell Means with the Tukey HSD Test for the Ethical Effectiveness Index Across IMA Data Years**

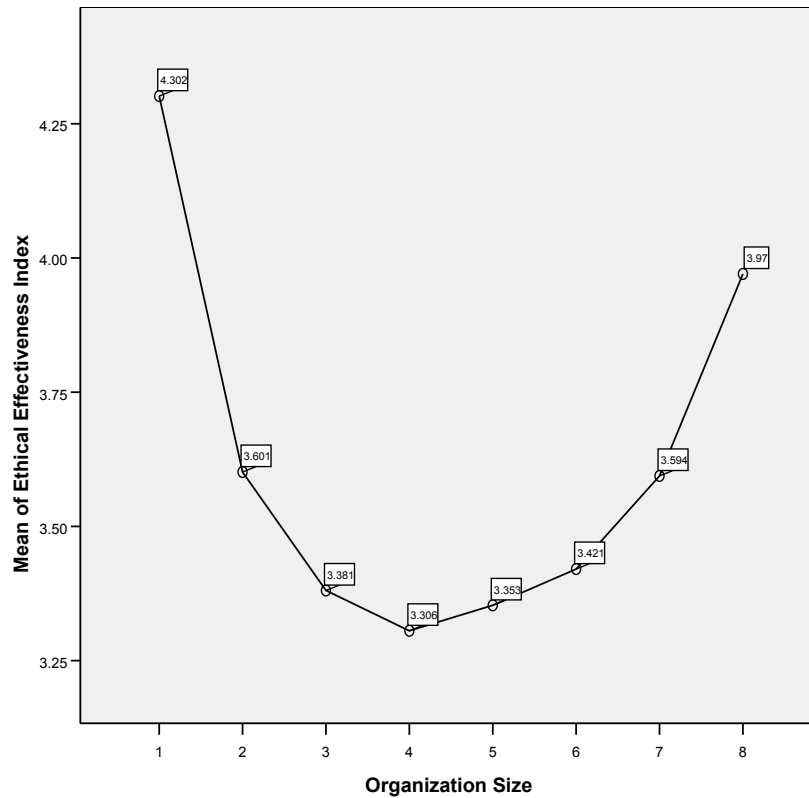
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
1994	—															
1995	NS	—														
1996	NS	NS	—													
1997	NS	NS	NS	—												
1998	NS	NS	NS	NS	—											
1999	*	NS	NS	NS	NS	—										
2000	**	*	**	NS	NS	NS	—									
2001	***	***	***	***	*	NS	NS	—								
2002	***	***	***	***	*	NS	NS	NS	—							
2003	***	***	***	***	***	***	**	NS	NS	—						
2004	***	***	***	***	***	***	***	NS	*	NS	—					
2005	***	***	***	***	***	***	***	**	***	NS	NS	—				
2006	***	***	***	***	***	***	***	***	***	***	**	NS	—			
2007	***	***	***	***	***	***	***	***	***	***	**	NS	NS	—		
2008	***	***	***	***	***	***	***	***	***	***	**	*	NS	NS	—	
2009	***	***	***	***	***	***	***	***	***	***	***	***	NS	***	NS	—

NS = Not Significant; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

**Oneway ANOVA: Answering RQ<sub>2</sub>.** Results of the Oneway ANOVA for RQ<sub>2</sub> document the existence of significant differences among the levels of organization size ( $F = 211.528$ ,  $df_1 = 7$ ,  $df_2 = 22,585$ ,  $p < .001$ ), and that the effect size is modest ( $\text{Eta}^2 = .0615$  or 6.15%). Figure 2, on the following page, shows the plot of the Ethical Effectiveness Index across the across the organization size levels, wherein an interesting U-shaped relationship is revealed. Figure 2 (shown on the next page), in conjunction with the comparisons of pairs of means presented in Table 5 (shown on the following page), provide some intriguing results. First, the highest level of ethical effectiveness (Mean = 4.302) occurs in the smallest organizations — those with less than 10 employees. Second, the next highest level of ethical effectiveness (Mean = 3.970) is at the opposite end of the organization size spectrum (*i.e.*, organizations with 5,000 or more employees). Third, ethical effectiveness is significantly higher in the smallest organizations (*i.e.*, less than 10 employees) than in the largest organizations (*i.e.*, 5,000 or more employees). Fourth, respondents in all of the other organization size categories report significantly less ethical effectiveness than exists in either the smallest or largest categories. Fifth, there is a sharp decline in ethical effectiveness between the “less than 10 employees” category (Mean = 4.302) and the “10 to 24 employees” category (Mean = 3.601); likewise there is a sharp increase in ethical effectiveness from the “2,500 to 4,999 employees” category (Mean = 3.594) and the “5,000 or more employees” category (Mean = 3.970). Sixth, with the exception of 100 to 499 employees versus 1,000 to 2, 4999 employees, the four middle organization size categories (*i.e.*, 25 to 99 employees, 100 to 499 employees, 500 to 999 employees, and 1,000 to 2,499 employees) are statistically equivalent and significantly lower than the two smallest categories and the two largest categories of organization size. Collectively, these results, which pertain to RQ<sub>2</sub>, demonstrate that ethical effectiveness in organizations does vary in a systematic way relative to organization size — and that systematic variation is captured in a U-shaped relationship.



**FIGURE 2: Ethical Effectiveness Index Relative to Organization Size**



1 = less than 10 employees; 2 = 10 to 24 employees; 3 = 25 to 99 employees; 4 = 100 to 499 employees; 5 = 500 to 999 employees; 6 = 1,000 to 2,499 employees; 7 = 2,500 to 4,999 employees; 8 = 5,000 or more employees

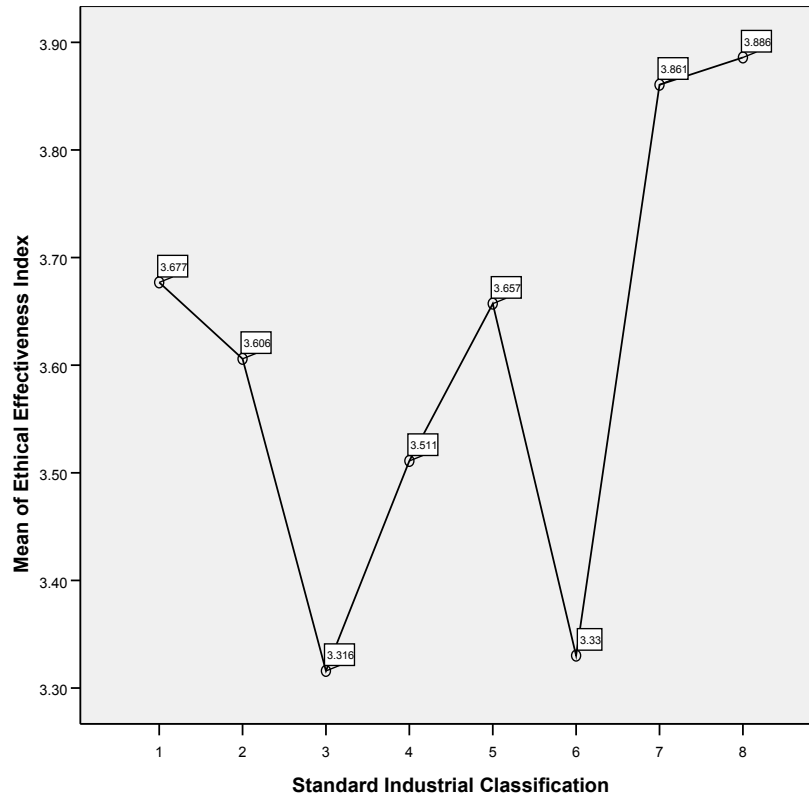
TABLE 5: Results of Post Hoc Probing of Cell Means with the Tamhane T2 Test for the Ethical Effectiveness Index Across Organizational Size								
	1	2	3	4	5	6	7	8
1	—							
2	***	—						
3	***	**	—					
4	***	***	NS	—				
5	***	***	NS	NS	—			
6	***	*	NS	**	NS	—		
7	***	NS	***	***	***	***	—	
8	***	***	***	***	***	***	***	—

NS = Not Significant; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

Code for Organization Size: 1 = less than 10 employees; 2 = 10 to 24 employees; 3 = 25 to 99 employees; 4 = 100 to 499 employees; 5 = 500 to 999 employees; 6 = 1,000 to 2,499 employees; 7 = 2,500 to 4,999 employees; 8 = 5,000 or more employees.

**Oneway ANOVA: Answering RQ<sub>3</sub>.** The Oneway ANOVA findings for RQ<sub>3</sub> reveal significant differences among the standard industrial classification ( $F = 83.128$ ,  $df_1 = 7$ ,  $df_2 = 22,697$ ,  $p < .001$ ); although the effect size is small, it nonetheless is of practical importance as indicated by  $\text{Eta}^2 = .0250$  or 2.50%. Figure 3 presents the profile of the ethical effectiveness means across the eight standard industrial classification categories. Table 6, shown on the next page, reports the results of the Tamhane T2 test of all pairs of means shown in Figure 3.

**FIGURE 3: Ethical Effectiveness Index Relative to Standard Industrial Classification**



1 = Agriculture, Forestry, and Fisheries; 2 = Mining; 3 = Contract Construction; 4 = Manufacturing; 5 = Transportation, Communication, and Utility Services; 6 = Wholesale and Retail Trade; 7 = Finance, Insurance, and Real Estate (including banking, credit agencies, and security/commodity brokers and services); 8 = Services (including medical/health services, educational services, public, and other services not specified in the preceding)

Perhaps the results reported in Figure 3 and Table 6 are best described in the context of three tiers of ethical effectiveness. The first tier includes the lowest levels of ethical effectiveness; two industries — “contract construction” (Mean = 3.316) and “wholesale and retail trade” (Mean = 3.330) — occupy this tier. Both industries in this tier have significantly lower ethical effectiveness than any of the following industries: “manufacturing”; “transportation, communication, and utility services”; “finance, insurance, and real estate”; and “services.” “Contract construction” also has a significantly lower Ethical Effectiveness Index than “agriculture, forestry, and fisheries.” Second, a middle tier of ethical effectiveness includes “agriculture, forestry, and fisheries” (Mean = 3.677), “mining” (Mean = 3.606), “manufacturing” (Mean = 3.511), and “transportation, communication, and utility services” (Mean = 3.557). Of the six pairs of means formed for these four industrial classifications, five of them are

statistically equivalent in terms of ethical effectiveness. The sole exception is “manufacturing” paired with “transportation, communication, and utility services.” The third tier contains the two highest levels of ethical effectiveness. The highest Ethical Effectiveness Index scores occur in “finance, insurance, and real estate” (Mean = 3.861) and “services” (Mean = 3.886). Although these two industries are not significantly different from each other in terms of ethical effectiveness, both are significantly more ethically effective than all of the other industries except “agriculture, forestry, and fisheries” (and “mining” in the case of “finance, insurance, and real estate” comparison).

**TABLE 6: Results of Post Hoc Probing of Cell Means with the Tamhane T2 Test for the Ethical Effectiveness Index Across Standard Industrial Classification**

	1	2	3	4	5	6	7	8
1	—							
2	NS	—						
3	**	NS	—					
4	NS	NS	**	—				
5	NS	NS	***	***	—			
6	***	NS	NS	***	***	—		
7	NS	NS	***	***	***	***	—	
8	NS	*	***	***	***	***	***	NS

NS = Not Significant; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

Codes for Standard Industrial Classification: 1 = Agriculture, Forestry, and Fisheries; 2 = Mining; 3 = Contract Construction; 4 = Manufacturing; 5 = Transportation, Communication, and Utility Services; 6 = Wholesale and Retail Trade; 7 = Finance, Insurance, and Real Estate (including banking, credit agencies, and security/commodity brokers and services); 8 = Services (including medical/health services, educational services, public, and other services not specified in the preceding).

**Oneway ANOVA: Answering RQ<sub>4</sub>.** Results from the Oneway ANOVA that pertain to RQ<sub>4</sub> powerfully document the significant difference between not having a written ethics code and having one ( $F = 4,071.143$   $df_1 = 1$ ,  $df_2 = 22,703$ ,  $p < .001$ ). As shown in Figure 4, which is on the next page, the Ethical Effectiveness Index is significantly higher for when organizations have a written ethics code (Mean = 3.945) than when they do not have a written ethics code (Mean = 2.864). Interestingly, there is a moderate level of ethical effectiveness (Mean = 2.864) even when organizations do not operate with a written ethical code for guidance — a value of “3” on the Ethical Effectiveness Index signifies “fairly effective.” Moreover, the effect size is quite substantial ( $\text{Eta}^2 = .1521$  or 15.21%), thereby indicating that whether or not an organization has an ethical code is of considerable practical importance in influencing the occurrence of ethical behavior in organizations.

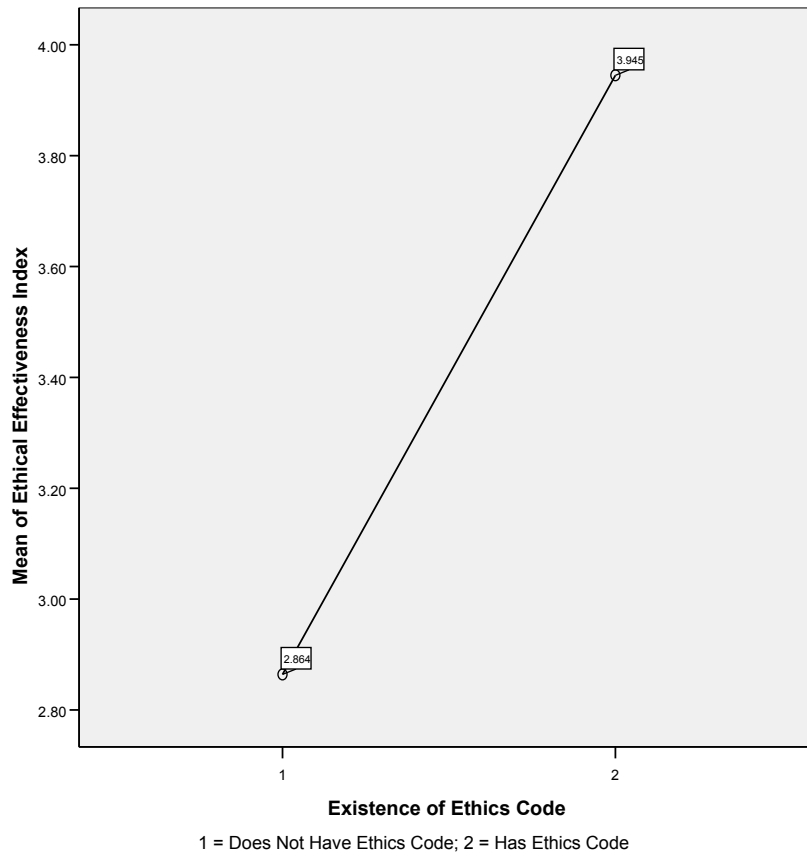
**DISCUSSION AND CONCLUSIONS**

With respect to research questions 5, 6, and 7, having an ethics code as opposed to not having one is independent of the chronological time dimension (RQ<sub>5</sub>), organization size (RQ<sub>6</sub>), and industry type (RQ<sub>7</sub>) in influencing the degree of ethical effectiveness within businesses. Thus, the value of having an ethics code to guide business practices can be viewed as transcending time, size of organization, and type of business. An ethics code can be valuable for all businesses, not just selected ones and not just at particular points in human history.

The results for research question 4 clearly indicate that whether or not a business has an ethical code is of considerable practical importance in influencing the occurrence of ethical behavior in organizations. Ethical effectiveness is significantly greater in businesses with an ethical code than in businesses without one; the code serves to provide appropriate guidance for business decisions and actions. Implied in this greater ethical effectiveness is the notion that the businesses actually follow the codes they have

articulated; that a code is not just a nicely worded set of stipulations and guidelines but that the code is, in fact, implemented in practice.

**FIGURE 4: Ethical Effectiveness Index Relative to Existence of Ethics Code**



For research question 1, the results indicate that businesses have become more ethical over time. Perhaps this is due to the increasing attention that businesses, government, and society in general have placed on ethical business practices in light of the numerous high profile scandals that surfaced shortly after the onset of the 21<sup>st</sup> century and which prompted the passage of the Sarbanes-Oxley Act. Of course, the cynics among us might argue that these results are based on data obtained from “insiders in the business community” — people who might have the motivation and incentives to help create a strong positive image for the business community, even if it means a bit of deception and “sleight of hand” is used. However, for these data, and the results based upon them, to be biased in such a fashion would require a gigantic systemic conspiracy consistently perpetrated over many years. Such a conspiracy is extraordinarily unlikely. Thus, while popular sentiment may be that businesses are becoming less ethical, it is nonetheless an unsubstantiated and sweeping indictment of the business community at large. This is not to deny that there are some unethical businesses — or that some people, perhaps most people, have encountered an unethical business or two (or more) at one time or another. However, this does not mean that all businesses are unethical. Rather, the general trend over time has been for the business community, on average, to be working more diligently at pursuing ethical business practices. This runs counter to the public sentiment that businesses have become less ethical over time.

The results for research question 2 show that ethical effectiveness in businesses varies systematically in relation to organization size. Ethical effectiveness and organization size exist in a U-shaped relationship in which small businesses and large businesses are viewed as being more ethically effective than moderately sized businesses. In smaller businesses, there may be closer personal oversight by the organization's leadership — and employees may be more committed to helping make the small business a success. In larger businesses, the ethical guidelines and stipulations may have become thoroughly institutionalized through appropriate systems, processes, and procedures. In moderately sized businesses, however, there may be a lack of both close personal oversight and adequate systemic institutionalization — and this could diminish, if not undermine, the ethical effectiveness of these businesses. In short, the results for research question 2 run counter to the popular ethical sentiment that businesses being bigger means businesses are being more corrupt and unethical.

The findings for research question 3 do indeed show that some industries are more ethically effective than other industries, which, in general principle, is consistent with the popular ethical sentiment regarding this phenomenon. However, the popular conception that financial services businesses are among some of the most unethical types of business is not borne out by this data set. Rather, quite the opposite occurs; financial services happen to be among the businesses with the highest level of ethical effectiveness. Among the various industry classifications covered in this study, three tiers of ethical effectiveness emerge. The first tier, or lowest level of ethical effectiveness, includes “contract construction” and “wholesale and retail trade.” The second tier, or middle level of ethical effectiveness, covers “agriculture, forestry, and fisheries”; “mining”; “manufacturing”; and “transportation, communication, and utility services.” The third tier, or the highest level of ethical effectiveness, encompasses “finance, insurance, and real estate” and “services, including medical/health services, educational services, and public services.” The bottom line: yes, as public sentiment suggests, some industries are more unethical than other industries, but they are not the ones that public opinion would most likely suggest.

The negative view of business ethicality that is aligned with, if not embodied in, the sentiments expressed by the various incarnations of the *Occupy Wall Street* movement is understandable given the pent-up economic frustrations of the protesters and their supporters. However, the results of this study bring into question the validity of those ethical sentiments. Of course, this is but one study, albeit one that draws on a very large database developed through randomized nationwide surveys from 1994 through 2009. Further longitudinal research is needed with systematic random samples from populations other than members of the Institute of Management Accountants, and particularly samples from the general public without regard to particular occupational groupings.

In the final analysis, perception is reality and reality is perception! The perceptions of members of the *Occupy Wall Street* movement that question the ethical credibility of corporate America is their reality. And the perceptions of members of the Institute of Management Accountants that portray a somewhat more positive image of business ethicality is their reality. Given these juxtaposed views, what must reasonable people do to achieve reasonable outcomes that are beneficial for both sides?

Corporate America needs to do more to show Main Street America that much of Corporate America is diligently working to operate ethically. Corporate America also must recognize that some among them have “tainted the whole barrel” even though unethical practices characterize only a minority of all businesses. Corporate America also must recognize that the OWS sentiments reflect genuine concerns about unethical business practices and how those practices have affected Main Street America. Main Street America needs to be open to the possibility that much of Corporate America actually empathizes with the ethical concerns of Main Street America, but that such corporate empathy must be tempered with the need to make a fair and reasonable profit so the businesses themselves are sustainable. Main Street America needs to focus its efforts, challenging those businesses that are pushing the “ethical envelope” and supporting business that are not pushing the envelope, becoming loyal customers of the latter but not

the former. Perhaps if Corporate America and Main Street America were to take these actions, among others where mutual interests can be promoted, capitalism can be made to work well for both businesses and human beings.

## ENDNOTES

<sup>1</sup> Over the past decade and a half many studies, in addition to the annual salary survey report, have been published drawing on the cumulative IMA database. These studies have focused on different combinations of variables from the survey as well as different time periods from the cumulative database (for a sample of these studies see: McCuddy *et al.*, 2004, 2006, 2007, 2008, 2009). The basic methodology of conducting the survey is the same from year to year, and the questionnaires are nearly identical from year to year — though from time to time a new question has been added to the survey. Thus, the basic methodological description provided herein has appeared previously in a variety of conference papers and journal publications.

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