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Does Female Representation on boards of Directors Associate with Increased Transparency and Ethical Behavior?

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DOES FEMALE REPRESENTATION ON BOARDS OF DIRECTORS ASSOCIATE WITH INCREASED TRANSPARENCY AND ETHICAL BEHAVIOR?

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ABSTRACT

This study examined the association between corporate transparency and ethical orientation of Fortune 500 companies and the number of females represented on the board of directors from 2010 annual report data. My basis for this judgment was whether or not the firm was listed on either (both) *Ethisphere Magazine's* 2010 "World's Most Ethical Companies" or (and) *Corporate Responsibility Magazine's* 2010 "100 Best Corporate Citizens List". My results indicate that, as the number of women directors increased, the probability of a corporation appearing on these lists increases. I also found that a "critical mass" of women directors was indicated by the data for *Ethisphere Magazine's* but not *Corporate Responsibility Magazine's* list. Finally, while being on one of these lists did not increase corporate return data in a statistically significant sense, it did dramatically reduce the level of negative returns.

INTRODUCTION

The number of women on corporate boards has increased in recent years, yet the figure still remains low. Given the breadth of prior research available indicating that women on boards leads to success for corporations, it is surprising to find that this figure has not increased substantially, especially following corporate scandal and newly created regulatory action. Evidence has been found that increased levels of female representation associates with higher levels of profit attainment, increased sense of morale within the corporation, and decreased levels of "group think". While these statements cover only a few of the benefits that women on boards provide, it is important to continue to increase these levels in order to insure that corporations function at the highest possible level. The two sides of the debate for including women in business are the ethical/social benefits and the financial benefits that can arise from having more female directors within an organization.

With corporate scandal at a forefront, there is no doubt that organizations need to become better corporate citizens and increase their levels of corporate social responsibility. My sample includes the 2010 Fortune 500 firms of which 92 (408) corporations appear (do not appear) on *Corporate Responsibility Magazine's* "100 Best Corporate Citizens List". My sample also includes the 46 (454) corporations that appear (do not appear) on *Ethisphere Magazine*'s 2010 "World's Most Ethical Companies" list. My findings indicate that having a higher percentage of women on the board of directors translates into the corporation being viewed as more ethical and more transparent. The data suggests that a higher number of female board members were included in the organizations that were recognized by *Ethisphere Magazine* and *Corporate Responsibility Magazine*. In general, I feel that these publications are a guide to the overall investor sentiment that surrounds the organizations in question.

LITERATURE REVIEW

Board Duties

An organization's board of directors' are responsible for ensuring that a corporation is meeting the objectives of stakeholders and well as developing business strategies to prosper in the future (Arfken et al., 2004; Peterson & Philpot, 2007). When these objectives are not met, many question the ability of the board members. Campbell and Minguez-Vera (2007, p. 435) indicate that the effectiveness of a board depends heavily on "the qualifications and experience of board members". Historically, the boardroom has been comprised of mainly older white males and as more corporate scandals continue to surface stakeholders have pushed for change within the corporate structure (McDaniel et al, 2001; Farrell & Hersch, 2005; Bernardi et al. 2002). As both Burke (1997) and Arfken et al. (2004) explain, adherence to regulatory standards, protection of stakeholder interest, and creation of a return on investments are all actions that the board should be able to ensure when it is functioning properly.

Recent scandals indicate that these objectives are not being met; this suggests that the current homogenous boardroom is unable to achieve its duties (Campbell & Minguez-Vera, 2007). The need for transparency, accessibility of information, and corporate governance might have reduced the likelihood of events such as Enron's collapse, the 2008 Financial Crisis, and the BP oil spill have proven that not knowing information can be costly. Companies now face "increased pressures for more board member responsibility and accountability" as well as "intense scrutiny for all decisions" (Arfken et al. 2004, p. 178). Increased pressure on the board has resulted in changes to the boardroom structure, but these alterations are happening at a slow pace. The Sarbanes-Oxley Act (U.S. Congress, 2002) sets forth guidelines about the composition of a board's audit committee (Dalton & Dalton, 2010) and changed the way that publicallytraded corporations treat corporate governance (Arfken et al., 2004); however, more oversight is still needed.

As consumers and shareholders alike begin to question the ability of a homogenous boardroom atmosphere and an increased desire to have more women represented on corporate boards has surfaced. Many feel that "women have something distinctly new and valuable to offer boards in terms of a strong moral overtone" (Arfken et al., 2004 p. 178). The expectation is that women on boards will improve board processes due to the "important sills, knowledge, and competencies" that women have (Brammer et al., 2009 p. 19). Yet, the under-representation of women on boards has been documented as early as 1977 and research continues to depict this trend (Burgess and Tharenou, 2002). Despite the advances that women have made in the corporate setting and newly enacted regulation, there still are not guidelines that address aspects of diversity or gender inclusion in corporate boards (Dalton & Dalton, 2010). A shift to including more women has become noticeable and the role that women play in the corporate setting is beginning to increase. The question becomes, are the effects of theses chances evident?

Expanding Role of Women

As previously stated, increases in female boardroom participation are evident, but the percentage increase is marginal given the advances that women have made in both academia and the workforce in the past 35 years. While women currently represent a nearly half of the overall population they are still vastly outnumbered in corporate boards (Arfken et al., 2004; Peterson & Philpot, 2007; Farrell & Hersch, 2005; Dunn, 2010). Historically it was true that women did not have the education or corporate experience needed to sit on boards, but this is no longer the case (Farrell & Hersch, 2005). Burke (1997, p. 910) suggests that:

> [W]omen are developing the necessary experience, track records, and abilities to qualify for board membership, though they are often invisible to male CEOs

Furthermore, women are obtaining more roles in the economy as consumers, employees, investors, and business owners (Adams & Flynn, 2005; McDaniel et al., 2001). The skills obtained in these roles increase the qualifications females have to be considered boardroom candidates. Additionally, the Securities and Exchange Commission has required that exchange listed corporations have "financial experts" as members of the board. According to the 2009 US Department of Labor statistics women comprise 61.8% of the accounting and auditing field and 54.7% of finanical managers (U.S. Department of Labor, 2009), clearly qualifing experiences are being obtained.

This fact depicts the dire situation that is now faced by corporations. Although female colleagues have proven their ability, they are overlooked, resulting in large portion of the population having a limited voice. Clearly, this is an issue of concern for females, but it should also concern corporations. Recent research has shown that females control most household consumer decisions as well as the vast percentage of consumer spending (Cohen & Kornfeld, 2006). Relying on a consumer base for profits that has next to no voice within the corporation is a risky and seemingly lackluster initiative.

Barriers to Board Membership

Historically, women were overlooked and not considered as boardroom candidates; however, new research shows that while women may be considered in today's business atmosphere there are many barriers to actually obtaining board members. One of the issues can be explained using "Status Characteristics Theory" that explains that individuals of low-status are expected to have increased levels of ability in order to be viewed the same as high-status individuals (Terjesen et al., 2009). Applying this theory to my study and one can see that women would be considered "low-status" while male counterparts would be "high-status". The development of this theory as well as research conducted by others found that for a female:

> [T]o be perceived as having high ability, she must have more evidence of ability than the evidence required to judge a white male's ability. (Hillman et al., 2002, p. 750)

For example, studies determined that more women on the board of directors for Fortune 1000 companies had advanced degrees than their male counterparts (Hillman et al., 2002). This results in an immediate limitation in the number of women that achieve boardroom status and further promotes the homogenous atmosphere that has existed for decades.

The "Glass Ceiling" affect in another means for limiting female representation on boards. Arfken et al. (2004, p. 180) point out that "glass ceilings in organizations and often glass walls restrict women to certain fields and positions, such as human resources and other staff duties". This in turn limits the networking opportunities that are available to females, and networking plays a large role in the attainment of corporate board seats (Adams & Flynn, 2005). Due to the high exclusion levels of women, not only the boardroom, but also in upper levels of management, it is clear that glass ceilings do exist and they are strong enough to hold women back despite their skills, education, and experience (Goodman et al., 2003).

Those women that are able to obtain entry to corporate boardrooms are often met with a great deal of resistance due to male preconceptions and stereotyping (Arfken et al., 2004). Studies have found that many women feel a great deal of pressure to conform to their male counterparts when they are the first women accepted to the board. The invisibility phase is often cited as a period where a woman feels "ignored, dismissed, not taken seriously, or otherwise excluded" (Kramer, et al., 2007, p. 19). As one can see, entry to a board is just the beginning of the struggle to include women in the boardroom setting. In order for the opinion and voice of a female board member to be heard, the entire atmosphere needs to be altered and this can be a difficult task.

The importance of a female board member should not be overlooked and initiative should be taken to ensure that female viewpoints are heard as this will result in

> [E]nhanced board decision making, creativity, and innovation, but also a number of potential benefits both inside and outside the organization (Burke, 1997, p. 912).

Women are able to bring a new perspective to the homogenous boardroom including raising issues that affect a wider range of stakeholders and using interpersonal skills to promote discussion (Kramer et al., 2007).

Barriers to entry differ across various sectors and industries. Governance-Metrics International (2010) points out that the women are least represented in the boardrooms of basic resources, automobiles and parts, and construction and materials organizations. This is somewhat unsurprising given the fact that these super sectors are historically male dominated (GovernanceMetrics International, 2010). Women tend to be better represented in sectors such as, utilites, retail, and media where on average 71.9% of these firms have at least one woman board member (GovernanceMetrics International, 2010). Theseresults are consistant with other research that shows that women tend to achieve higher status within companies that relate more closely to their consumers. (Terjesen et. al., 2009; Kramer et. al., 2007; GovernanceMetrics International, 2010; Goodman et. al., 2003)

Board Diversity

In general, there are very low levels of diversity within the boardroom setting and this represents "both a breakdown of corporate governance and a missed opportunity" (Brammer et al., 2009 p. 17). Research has shown that lack of diversity within in a boardroom results in "homogeneous ways of solving company problems" (Burgess et al., 2002) that can lead to group think issues as well as lack of achievement within the company. Brown et al. (2002, p. 5) note that a homogenous board has cited as a contributing factor to:

> [I]neffective boards, poor governance, and some of the most spectacular failure we've witnessed in both corporate and public sectors over the past decade.

A more diverse board results in increased moral and ethical viewpoints as discussion can take place before unethical decisions are made (Arfken et al., 2004). Diversity limits the possibility of "group think" a process through which "unhealthy and possibly unethical decisions often result if everyone on the board shares the same demographic characteristics" (Arfken et al., 2004 p. 185). Many studies have sited that diversity not only limits the likelihood of "group think" but also increases the likelihood of positive occurrences such as: fresh ideas, better problem solving, improved strategic planning, and additional accountability (Arfken et al., 2004). Diversity in the boardroom allows members to make better decisions as a more complete picture of the issues at hand are typically discussed (Adams & Flynn, 2005).

Board diversity is, at its heart, a corporate governance issue (GovernanceMetrics International, 2010) and one that corporations should be allocating time to. Corporate governance "refers to the system by which companies are directed and controlled" (Campbell & Minguez-Vera, 2010 p. 436) and governacne has a direct effect on culture and decision making processes of organizations. Diversity within the boardroom has the ability to increase board effectiveness and suggests that firms "actively form professional groups in which women are better represented" (Adams & Ferreira, 2009, p. 292). Focusing on expanding recruitment to women results in a broader talent pool of applicants which can improve the effetiveness of the boardroom. Adams and Ferreira's reseach states that more diverse boards are more liekly to hold CEOs responsible for poor stock price performace and that board compensation is typically equity-based, imply that the board is more aligned with shareholder interests(Adams & Ferreira, 2009). These findings further the idea that women on boards can add value to a company.

Overall, gender-diverse boards have increased levels of boardroom involvement and corporate oversight (Adams & Ferreira, 2009). This claim is supported by the fact that boards with a higher female presence have higher levels of meeting attendance. The primary way in which boards operatate and conduct business is through meetings and thus, attendance is a crucial factor of a successful board (Adams & Ferreira, 2009). Adams' study found that women are "30% less likely to have attendance problems than men" (Adams & Ferreira, 2009 p. 296) and that having females on boards results in a "9% reduction in male director attendance problems" (Adams & Ferreira, 2009 p. 297). Clearly the female influence in this area is quite important as increased attendance should result in better boardroom discussion and higher levels of effeciveness.

Furthermore, new regulations were put into effect following numerous corporate scandles and these policies increase the importance that is placed on board behavior (Adams & Flynn, 2005). Following the Sarbanes-Oxley Act (2002), the Securities and Exchange Commisiion (SEC) increased regulation requirements, namely that the firms must disclose the nomination and serach process used to fill board seats on U.S. exchange listed organizations (Adams & Flynn, 2005). The benefits of this disclosure is increased transparency which should in turn associate with a decreased relience on the past "boy's club" social networking processes that have typically been used to obtain seats. In other words, transparency in the the candidate process should result in a lower percentage of females being overlooked.

Tokenism

One of the largest concerns when conduting research on women board members is the evidence and role of tokenism. Tokenism can be defined as "selecting and promoting individuals based solely on their outer diversity" (Brown et al., 2002, p. 9). In other words, instead of recognizing the benefits that females can bring to a boardroom, women are added mearely to make the corporation appear as though they value female input (Peterson & Philpot, 2007; Farrell & Hersch, 2005). Tokenism prevents females from influencing the overall effectivness of the board and thus their appointment has minimal if any effect on corporate governance. In many cases, having one female director is often seen as evidence of tokenism (Adams & Ferreira, 2009). Whileboards are under increased pressure to introduce female the issue still remains that in order to acheive desired changes there needs to be a way for women to effectively alter the boardroom setting.

A key indication that tokenism exists is the relationships that have been found between a woman leaving a board and the liklihood of another woman be appointed as a board member. Dalton and Dalton (2010) reported that "companies with a woman on the boards were unlikely to add another" while if a "woman left a board, the likelihood of a woman replacing the departee was materially increased" (p. 259). Given the fact that the organization is chosing to maintian the same number of women on their board expresses the idea that they are not chosing women as directors in order to introduce a female perspective in the board room, but rather toappear as though they value diversity.

Critical Mass

The number of women needed on a board to promote change has been debated. Brown et. al. (2002) express that having only one woman serve on a board has no effect on its processes or decisions. This occurrence could be due to numerous issues: the "invisibility effect" or the likelihood that a female will conform to her male counterparts without additional support. When two women are included on a board, change becomes more likely. "Two women validate each other and provide each other with a sounding board" (Kramer et al., 2007, p. 20), which helps to reduce the effects of male stereotyping and the need to conform. Adding more women to the board reduces the preconceived notion that a female is simply working to express a women's point of view rather than speaking for the company's behalf (Kramer et al., 2007). Two women have a greater possibility of altering the way their male counterparts view their role within the boardroom. Still, two women have a limited voice and the likelihood of accomplishing change in the corporation is minimal. In order to achieve tangible change within the boardroom and actively affect corporate governance, a "critical mass" of three or more women is needed (Kramer et al., 2007).

The most difficult aspect of adding women to the boardroom is to effectively change the way that the board functions and in many cases this requires altering the manner in which women are viewed. Research has found that a "critical mass" is most efficiently reached when at least 35 percent of the boardroom population is female. This percentage figure is closely correlated with a change in the way that the male boardroom population sees female directors and their ability to contribute to the corporation (Brown et al., 2002). Once "critical mass" has been reached a sense of normalcy is attained. In this instance, gender is no longer a factor in efficient governance and decision making (Terjesen et al., 2009). Research has found it is essential for directors to take the "critical mass" theory into consideration when including women as directors. It has been previously stated that women have the qualifications and experience necessary to enter the boardroom but they are unable to meet their full potential without the proper support. The advised percentage of 35 percent female to male ratio will allow firms to utilize the full range of attributes that females can bring to the boardroom while at the same time limiting problems such as "group think" and the "invisibility effect" (Kramer et al., 2007).

RQ1a: At what point (i.e., critical mass) does the proportion of women on Fortune 500 boards of directors affect the likelihood that the firm will be listed on *Corporate Responsibility Magazine*'s (2010) "100 Best Corporate Citizens List"?

RQ1b: At what point (i.e., critical mass) does the proportion of women on Fortune 500 boards of directors affect the likelihood that the firm will be listed on Ethisphere *Magazine*'s (2010) "Most Ethical Companies' List"?

Women and Ethics

While the aforementioned information detailed the value that should be placed on having women in the boardroom, the question at hand is how will their presence affect the ethical orientation and transparency of a corporation? The tendency to entice corporate philanthropy, increased sensitivity levels, and a focus extending beyond profit maximization implies that females make more decisions based on corporate responsibility than their male counterparts (Bernardi et al., 2006). Prior research has suggested that there is a difference between the "moral reasoning and development between males and females" (Akaah, 1989, p. 375) implying that the way men and women handle ethical decision-making differs. If females do in fact have higher ethical standards than their male counterparts businesses could increase the male-to-female ratio in order to promote a more ethical corporate environment. Williams (2003) makes clear the correlation between increased levels of female directors and higher levels of "involvement in activities related to corporate social responsibility". The more concerned the firm is with issues of corporate responsibility, the less likely the firm will take actions that are considered unethical or do not promote the overall wellbeing of the firm and the surrounding environment. Adding female board members has proven to increase an organization's sense of responsibility. This further promotes the idea that females are needed within the boardroom.

While men tend to focus on more tangible actions, such as financial performance measures, women concern themselves more with the satisfaction of those in connection with the firm (Burgess and Tharenou, 2002). This ranges through all levels, from those that are connected with the creation of the product to those that purchase the good (Terjesen et al., 2009). For example, women find value in creating performance measures that are inclusive of social responsibility goals and ensuring that said measures are met. Having women on boards can also positively affect the way that internal and external individuals view the operations of the organization (Dunn, forthcoming).

In a corporate landscape where corruption is rampant, it is essential that firms work to ensure their culture is ethical and women are able to enhance this important aspect (McDaniel et al., 2001). Bernardi et al. state that women in academia have been found, in general, to be more ethical than their male counterparts (Bernardi et al., 2009). Therefore,

RQ2a: Is the percent of women on boards of directors higher for Fortune 500 companies on *Corporate Responsibility Magazine*'s (2010) "100 Best Corporate Citizens List"?

RQ2b: Is the percent of women on boards of directors higher for Fortune 500 companies on *Ethisphere Magazine*'s (2010) "Most Ethical Companies List"?

Women and the Bottom Line

Businesses operate with the objective to earn a profit and in turn increase shareholder value. Corporate managers, and those who are interested in positive governance, believe that there is a correlation between board diversity and shareholder value (Carter et al., 2003). Many firms recognize that increasing shareholder value should be done in an ethical manner but the implementation of this process can be difficult. Corporations are under increasing pressure to act in a socially responsible manner while still attaining high profit levels. Corporate social responsibility is defined as the implementation of policies that recognize business ethics, community investment, governance and many other aspects of business (Tsoutsoura, 2004; Bernardi et al., 2006). For the purposes of this paper, the governance aspect of social responsibility will be most heavily analyzed.

Prior information has expressed the benefits that women on boards can bring to an organization, but many question the ability of organizations to be socially responsible while still meeting shareholder expectations. Some feel that social responsibility results in increased cost pressures on organizations which can affect the bottom line. However, firms that engage in socially responsible practices have "enhanced brand image and reputation", an "increased ability to attract capital and trading partners" and "less risk of negative rare events" (Tsoursoura, 2004, p. 6). Together, these aspects help improve the public's view of the firm thus increasing profitability. Tsoursoura (2004) also found that "corporate social responsibility is positively related to better financial performance and this relationship is statistically significant" (p. 18). Most importantly, Tsoursoura found that the industries with the lowest rating of social responsibility include mining and construction, the same sectors with the lowest number of women on boards. (GovernanceMetrics International, 2010). These findings show that having women on boards does in fact positively affect the social responsibility behaviors of an organization. Similar results were also found by Bernardi et al. in their 2006 study of female representation and the "100 Best Companies to Work For" list.

Also, firms that value diversity have proven to be more competitive in the overall business setting (McDaniel et al, 2001). Farrell and Hersch (2005) conducted research on the effect that women board members have on a corporation's common stock performance. They found that there was a "positive relation between return on assets and the likelihood of adding a woman to the board" but "failed to detect any significant market reaction to female additions" (p. 86). This information expresses the idea that women on boards have a direct impact on the bottom-line profits of an organization, but at this point fail to influence investor opinion.

Women can also bring different viewpoints to an organization. Carter et al. (2003, p. 36) note that "corporate diversity promotes a better understanding of the marketplace". Women are able to bring their insights to the boardroom and match the diversity of the organization's consumer base of an organization. In general, boards that closely match the makeup of the general population provide increased corporate social performance (Bernardi et al., 2006). Diversity also allows an organization to view problems in a different manner and reevaluate the way in which they do business. Prior research shows a "correlation between gender diverse boards, particularly boards with female directors, and improved performance" (Cohen & Kornfeld, 2005, p. 2; Brady, 2007). Finally, a more diverse boardroom expands the overall scope of management. Carter et al. (2003, p. 36) state that:

> [H]omogeneity at the top of a company is believed to result in a narrow perspective while diverse top managers take a broader view.

This expanded viewpoint can facilitate increased discussion, better problem solving tactics, and a better understanding of the marketplace as a whole.

RQ3a: Does membership on *Corporate Responsibility Magazine*'s (2010) "100 Best Corporate Citizens List" associate with higher percentages of increases in common stock prices in 2010?

RQ3b: Does membership on *Ethisphere Magazine*'s (2010) "Most Ethical Companies List" associate with higher percentages of increases in common stock prices in 2010?

RQ3c: Does the proportion of female representation on a Fortune 500 associate with higher percentages of increases in common stock prices in 2010?

METHODOLOGY

Sample

The current sample includes the 2010 Fortune 500 firms of which 92 (408) corporations appear (do not appear) on *Corporate Responsibility Magazine's* "100 Best Corporate Citizens List" (Table 1). My sample also includes the 46 (454) corporations that appear (do not appear) on *Ethisphere Magazine*'s 2010 "World's Most Ethical Companies" list (Table 2). The methodology for *Corporate Responsibility Magazine's* "100 Best Corporate Citizens List" is shown in Appendix A. The methodology for *Ethisphere Magazine*'s 2010 "World's Most Ethical Companies" list is shown in Appendix B. I determined the size and gender composition of the corporate boards of directors by referring to the companies' actual 2010 annual reports or from data included in the *Merchant Online Data Base*.

Annual Report Data

The Research Questions were analyzed using both a by-firm average and an overall average to test female representation on boards of directors. The by-firm average was computed by averaging the percent of female board members of each of the 92 (408) firms that appear (do not appear) on *Corporate Responsibility Magazine's* "100 Best Corporate Citizens List" and the 46 (454) firms that appear (do not appear) on *Ethisphere Magazine*'s "World's Most Ethical Companies" list. For instance, if female directors made up 20 percent of the directors of firm one and 10 percent of the directors of firm two, the average percent of female directors would be 15 percent ([20 + 10]/2). The overall average was computed by dividing the total number of female board members by the total number of board members (i.e., both females and male directors).

For the firms that appear on *Corporate Responsibility Magazine's* "100 Best Corporate Citizens List" there were 201 female directors and 1094 total directors; consequently, the female representation on the boards is 18.4 percent (201/1094). For the firms that appear on *Ethisphere Magazine*'s "World's Most Ethical Companies" list, there were 98 female directors and 519 total directors; consequently, the female representation on the boards is 18.9 percent (98/519).

The use of both of these measures is essential to the research questions. Had I only used the by-firm average in my analysis, a relatively small board primarily made up of (with no) women could have an undue influence in the statistics since this method treats all boards equally regardless of their size. On the other hand, had I only used the overall average in my analysis, a relatively large board primarily made up of (with no) women could have an undue influence in the statistics since this method treats all individuals equally regardless of their affiliation.

Background Information on Selection Processes

Corporate Responsibility Magazine's list (Appendix A) took into consideration both the transparency and the level of social responsibility that an organization has. It is important to note that our basis for considering an organization to be transparent lies with the fact that corporations were penalized by the magazine for not publically disclosing information relating social responsibility. *Ethisphere Magazine* list (Appendix B) acknowledges corporations for being ethical and following compliance measures through positive leadership.

Corporate Return Data

The research question with relation to the organization's financial return was analyzed by using a rate of return for the period between January 1, 2010 and December 31, 2010. Historical stock prices were used to determine the price per share of each organization at the earliest available stock price in 2010 in relation to the latest available stock price in 2010 at the close of the trading day. In order to determine the percentage change of the stock price for the given year, the beginning (January 1) stock price was subtracted from the ending (December 31) stock price and this figure was then divided by the beginning stock price.

DATA ANALYSIS

Overview of the Sample

The average size of the board of directors was 11.0 directors for the 500 corporations on Fortune's 500 list. Of the 5,518 directors in the sample, 863 (13.4 percent) were women and 4,465 were men. Of the 500 corporations, 285 (57.0 percent) had multiple female directors, 148 (29.6 percent) had only one female director, and the remaining 67 (13.4 percent) did not have any female directors.

The average size of the board of directors for the 46 (454) corporations that appeared (did not appear) on *Ethisphere Magazine*'s "World's Most Ethical Companies" list was 11.3 (11.0) directors. The data for the 46 corporations that appeared on *Ethisphere Magazine*'s "World's Most Ethical Companies" list indicate that: only 2 (4.4 percent) did not have any female directors; 10 (21.7 percent) had only one female director; and, 34 (73.9 percent) had multiple female directors. Contrast these numbers and percentages with those of the 46 corporations that did not appear on *Ethisphere Magazine*'s "World's Most Ethical Companies", which indicate that: only 65 (14.3 percent) did not have any female directors; 138 (30.4 percent) had only one female director; and, 251 (55.3 percent) had multiple female directors.

Based on the information gathered, I found that critical mass does in fact occur around the point that three women enter a board. My conclusion on this fact was made by comparing the number of women on a board and the likelihood that the organization would be included on either the "100 Best Corporate Citizen's List" or the "Most Ethical Companies" List. I believed that having been recognized by either publication indicates that corporate governance is functioning at a high level within the organization, thus the number of women can be viewed as significant.

Critical Mass and Listings (RQ1)

In this part of the analysis, I examine the presence of women on corporate boards (both as an overall number and as a proportion of the board) to determine if there is evidence of a 'critical mass' for women board members and being on either *Corporate Responsibility Magazine's* or *Ethisphere Magazine's* list, which the literature suggests. The data in Figure 1 shows the probability of appearing on *Corporate Responsibility Magazine's* list by the number of women on the board and the percent of women on the board by categories present in prior research. The data in Panel A indicate an approximately equal increase in the probability between no women and one woman and between one woman and two women on the board. While there is an increase between two women and three plus women on the board, the increase is not as great as the initial categories. For the proportion of women on the board (Panel B), 33 percent and higher was used instead of the "critical mass" figure of 35 percent as this would have reduced our sample size considerably.[1] We found similar increases occur between the initial two categories and the final two categories with a smaller increase occurring between the second-and-third categories.

The data in Figure 2 shows the probability of appearing on *Ethisphere Magazine's* list by the number of women on the board and the percent of women on the board by categories present in prior research. The data in Panel A indicate an approximately equal increase in the probability between the first-and-second category and second-and-third categories. While there is an increase between two women and three plus women on the board, the increase is only about half that of the initial categories. For the proportion of women on the board (Panel B) approximately similar increases occur between the middle two categories with a large increase occurring between the third and fourth category.

Female Representation and Listings (RQ2)

The first part of my second research question examines the difference in female representation on corporate boards of directors between corporations that appeared (did not appear) on *Corporate Responsibility Magazine's* "100 Best Corporate Citizens List". The data were analyzed using students' t-tests that compared the average percent of female directors for the 92 corporations that appeared on *Corporate Responsibility Magazine's* "100 Best Corporate Citizens List" with the average percent of women for the 408 corporations that did not appear on this list. Corporations that appeared on *Corporate Responsibility Magazine's* "100 Best Corporate Citizens List" had a higher average representation of women (18.7 percent versus 14.3 percent) on their boards ($t = 4.47$, $p < 0.0001$). My results do not change if I compare overall percentages. Of the 1,094 directors for the 92 firms that appeared on *Corporate Responsibility Magazine's* "100 Best Corporate Citizens List", there were 201 female directors (18.4 percent). This compares to a female representation of 15.0 percent (662/4,424) for the 408 corporations that did not appear on this list. The difference in the gross percentages (18.4 percent versus 15.0 percent) is significant ($t = 3.50$, $p = 0.0002$). Research Question 3a was supported using both average and overall data.

As shown in Table 3, the average size of the board of directors for the 92 (408) corporations that appeared (did not appear) on *Corporate Responsibility Magazine's* "100 Best Corporate Citizens List" was 11.9 (10.8) directors. The data for the 92 corporations that appeared on *Corporate Responsibility Magazine's* "100 Best Corporate Citizens List" indicate that: only one (1.1 percent) did not have any female directors; 19 (20.6 percent) had only one female director; and, 72 (78.3 percent) had multiple female directors. Contrasting these numbers and percentages with those of the 408 corporations that did not appear on *Corporate Responsibility*

Magazine's "100 Best Corporate Citizens List", indicates that: 66 (16.2 percent) did not have any female directors; 129 (31.6 percent) had only one female director; and, 213 (52.2 percent) had multiple female directors.

The second part of this research question examines the difference in female representation on corporate boards of directors between corporations that appeared (did not appear) on *Ethisphere Magazine's* "Most Ethical Companies" List. The data were analyzed using students' t-tests that compared the average percent of female directors for the 46 corporations that appeared on *Ethisphere Magazine's* "Most Ethical Companies" List with the average percent of women for the 454 corporations that did not appear on this list. Table 4 indicates that ccorporations that appeared on *Ethisphere Magazine's* "Most Ethical Companies" List had a higher average representation of women (18.5 percent versus 14.8 percent) on their boards ($t = 2.65$, $p = 0.0106$). My results do not change if I compare overall percentages. Of the 519 directors for the 46 firms that appeared on *Ethisphere Magazine's* "Most Ethical Companies" List, there were 98 female directors (18.9 percent). This compares to a female representation of 15.3 percent (765/4,999) for the 454 corporations that did not appear on this list. The difference in the average percentages (18.9 percent versus 15.3 percent) is significant ($t = 2.63$, $p = 0.0110$). Research Question 3b was supported using both average and overall data.

As shown in Table 4, the average size of the board of directors for the 46 (454) corporations that appeared (did not appear) on *Ethisphere Magazine's* "Most Ethical Companies" List was 11.3 (11.0) directors. The data for the 46 corporations that appeared on *Ethisphere Magazine's* "Most Ethical Companies" List indicate that: two (4.4 percent) did not have any female directors; 10 (21.7 percent) had only one female director; and, 34 (73.9 percent) had multiple female directors. Contrast these numbers and percentages with those of the 454 corporations that did not appear on *Ethisphere Magazine's* "Most Ethical Companies" List, which indicate that: 65 (14.3 percent) did not have any female directors; 138 (30.4 percent) had only one female director; and, 251 (55.3 percent) had multiple female directors.

The statistics show that the percent of women on boards is in fact higher for the Fortune 500 companies listed on *Corporate Responsibility Magazine's* "100 Best Corporate Citizen's List" and *Ethisphere Magazine's* "Most Ethical Companies" List.

Women and Corporate Performance (RQ3)

This part of the analysis tests for an association among being listed on either *Corporate Responsibility Magazine's* or *Ethisphere Magazine's* list, women on boards and corporate performance. For this part of the analysis, I used the data from 449 of the Fortune 500 companies that had publicly listed performance data (the other 51 companies were not publically listed.) Overall, the statistics I found showed that the corporations included on (not on) *Corporate Responsibility Magazine's* list had an increase of 11.9 (6.7) percent. In this case my initial hypothesis was correct. The organizations listed on (not on) *Ethisphere Magazine's* "Most Ethical Companies List" had an increase of 16.2 (6.8) percent.

While the data in Table 5 suggest an association among the number of women on corporate boards, being listed by either of the publications and corporate returns, this was not the case. My analysis indicates no significant variables (i.e., number or percent of women on the board, or either list). Given this unanticipated result, I divided my list of firms into those companies that had positive returns (n = 354) and those that had negative returns (n = 95).

For the 354 companies that had positive returns, 70 (19.8 percent) were on *Corporate Responsibility Magazine's* list and 37 (10.5 percent) were on *Ethisphere Magazine's* list. The 70 companies that appeared on *Corporate Responsibility Magazine's* list had an average return of

17.3 percent, while the remaining 284 companies that did not appear on this list had a 20.6 percent average return; this difference was significant ($t = 2.161$, $p = 0.0307$). The 37 companies that appeared on *Ethisphere Magazine's* list had an average return of 20.4 percent, while the remaining 317 companies that did not appear on this list had a 19.9 percent average return, which was not significant.

For the 95 companies that had negative returns, 19 (20.0 percent) were on *Corporate Responsibility Magazine's* list and six (6.3 percent) were on *Ethisphere Magazine's* list. The 19 companies that appeared on *Corporate Responsibility Magazine's* list had an average return of -9.1 percent, while the remaining 76 companies that did not appear on this list had a -45.2 percent average return; this difference was significant ($t = 2.579$, $p = 0.0099$). The six companies that appeared on *Ethisphere Magazine's* list had an average return of -10.1 percent, while the remaining 89 companies that did not appear on this list had a -39.8 percent average return; this difference was significant ($t = 2.417$, $p = 0.0160$).

When considering the affect that women on the board have on the financial returns, it was interesting to find that this figure does not significantly influence the value of the corporation. This holds true to some of the previous research that has been conducted in the field. It is important to note however that with respect to *Ethisphere Magazine's* list, the hypothesis that more women on the board results in higher earnings is validated. In this case, the "Most Ethical Companies" saw increased returns as the number of women on the board increased (no women - 10.7 percent, one woman - 15.9 percent, and multiple women - 16.1 percent). This implies that perhaps the relationship between an ethical company and the number of women on the board is the significant factor effecting stock price and firm value. Rather than merely the number of women being a driving force, the organization as a whole needs to practice ethical behavior. As has been previously noted, women tend to influence the level of ethics within an organization and thus the number of women on the board and the ethics of an organization could go hand in hand with firm value.

CONCLUSIONS AND FUTURE RESEARCH

The findings indicate that having a higher percentage of women on the board of directors translates into the corporation being viewed as more ethical and more transparent. The data suggests that a higher number of female board members were included in the organizations that were recognized by *Ethisphere Magazine* and *Corporate Responsibility Magazine*. In general, I feel that these publications are a guide to the overall investor sentiment that surrounds the organizations in question.

With corporate scandal at a forefront, there is no doubt that organizations need to become better corporate citizens and increase their levels of corporate social responsibility. As this study as showed, increasing the number of women on boards is a viable means for improving a corporation's image, and one that shareholders desire. While the advances of women have been increasing at a faster rate following the Sarbanes-Oxley Act (U.S. Congress, 2002), there is still a large discrepancy between the number of men and women that hold board seats. As this study and prior research has shown, incorporating women in the boardroom has numerous benefits including: improving the perception of the firm, increasing firm value, and attracting a wider range of qualified individuals.

Corporate social responsibility has recently become a buzz word for shareholders and expresses the level of commitment that an organization has to its surrounding environment while obtaining bottom-line results. In an era where numerous businesses have failed and many more have blurred the line between acceptable and non-acceptable behavior, shareholders need to be privy to the activities that take place behind the scenes of organizations. Corporations that choose to publically disclose their efforts to be socially responsible are practicing increased transparency and allowing shareholders to fully understand all aspects of the business. Making information publicly available also increases the pressure on the organization to act in a socially acceptable manner and reduces the likelihood of negative events. Similar to corporate responsibility, the ethical orientation of an organization is also a key indicator of a corporation's values. Unlike corporate responsibility that measures how an organization relates to external entities, ethics is more concerned with internal choices and policies of organizations (training and communication, company standards, leadership, governance, etc).

The research questions discussed within this paper measure the likelihood that having more women on boards will result in quantifiable changes within organizations. As the "Critical Mass Theory" (Kramer et al., 2007) explained, there needs to be a certain number of women present on a board for a shift in the board atmosphere to take place. For this reason, I believed that a critical mass (3 or more or 33 percent or more) female board members would be present on the boards of directors for the organizations listed on the "100 Best Corporate Citizens List" and the "Most Ethical Companies List" respectively. My data suggest that this is correct. As Figures 1 and 2 depict, there is a clear increase in both the number and percentage of women on a corporation's board and the likelihood that the board will be included on either *Corporate Responsibility Magazine's* or *Ethisphere Magazine*'s list. Figure 2 Panel B most clearly represents the "Critical Mass Theory". One can see that the likelihood of an organization being listed on the "Most Ethical Companies" List is comparable for organization with an 11-33 percent female board population, but jumps considerably when the board is comprised of 33 percent or more females. This finding indicates that in order for women to improve the ethical orientation of an organization, a critical mass of females must be obtained.

While business should be practicing ethical and responsible methods of business, they do have a responsibility to increase shareholder value. As one of the main goals of organizations is profit attainment, I felt that it was important to see if ethical and socially responsible organizations could in fact create shareholder value. My study relied on using stock performance for a one year period and the data suggests that the firms included on the "100 Best Corporate Citizens List" and the "Most Ethical Companies List" outperformed the rest of the Fortune 500. This shows that firms that conduct business in an ethical, transparent, and socially responsible manner are able to generate higher increases in shareholder value.

The second aspect of my hypothesis was to determine if the number of women on the board of directors influences the return percentage. While the data in Table 5 suggest an association among the number of women on corporate boards, being listed by either of the publications and corporate returns, this was not the case. My analysis indicated no significant variables (i.e., number or percent of women on the board, or either list). Given this unanticipated result, I divided my list of firms into those companies that had positive returns and those that had negative returns. The data (Table 5) shows that corporations included on either list had significantly lower overall stock decreases than those firms not included on a list. These findings agree with prior research that states, women on boards can reduce the likelihood of negative actions.

When analyzing the gains separately, I found that the number of women on the board affected the stock price increases for the firms on *Corporate Responsibility Magazine*'s list in the opposite direction I anticipated. The firms that were not listed had a slightly higher (3.3 percent) but statistically significant return advantage; there was not a difference with respect to the firms on/not on *Ethisphere Magazine*'s list. Consequently, the data did not support our research question dealing with female directors.

When analyzing the losses separately, I found that the number of women on the board affected the stock price decreases for the firms on both *Corporate Responsibility Magazine*'s and *Ethisphere Magazine*'s lists. The firms that were listed had a significantly lower loss in value (36.1 and 29.7 percent respectively) than the firms not included on these lists. I believe that these findings indicate that shareholders do not recognize the value that women on boards bring to organizations with respect to how the organization treats external elements (environment protection, human rights, philanthropy). This suggests that there is a direct association between the number of women on boards and the internal functions of the organization.

The stock performance figures imply that higher numbers of women on boards are able to alter the internal elements of an organization, thus decreasing the likelihood of a loss in value to shareholders. Furthermore, the data in Panel B of Table 5 suggest that shareholder do not reward (increase the value of stock) organizations for acts of transparency and corporate responsibility. Ethics on the other hand focuses on the internal aspects of a business; when corporations function at a higher level internally, they are able to promote more effective change and limit negative events.

Based on prior research, I posited that there would be more women on the boards of organizations that were listed on the "100 Best Corporate Citizens List" and the "Most Ethical Companies List" due to the fact that women tend to promote ethical behavior and increased transparency within organizations. As Tables 3 and 4 depict, these hypotheses were supported by my data. This finding implies that the organization's the on the respective lists value the female perspective and actively work to ensure that females have the support available to contribute to the boardroom. Overall, I found that there were a higher percentage of women on the boards of the companies included on the lists than in the remaining Fortune 500 companies. Tokenism was also implied by the high percentage of organizations not included on either list that only had one female director. These findings support the hypotheses that more women can be expected on the boards included on the lists studied.

This study once again solidifies the fact that women belong on boards as they can improve the board culture, promote shareholder value, and increase the perception of the organization. In the future, a longitudinal study that determines if the organizations with a lower female boardroom presence experienced larger stock losses in the period between 2008 and 2009 could be performed. Also using return on assets and return on equity could be used as internal company performance measures to test if the number of women on the board has an impact on these figures. Finally, a survey to determine investor opinion about how the number of women on the board impacts their valuation of the organization could be conducted.

LIMITATIONS

Limitations of the study include the method used to evaluate the firm's performance. In this report, I focused on the short-run financial characteristics of the organizations as only the returns for the period of January 1 to December 31, 2010, were considered. Given that this is a short period of time the results that I received could have been impacted by abnormal company events. Future research could use long-term financial data in order to develop a deeper understanding the firm's typical financial performance. Furthermore, in this study, market measures were used as opposed to accounting measures, the difference being that instead of focusing on accounting ratios such as Return on Assets and Return on Equity, 2010 stock returns were considered. Market measures are impacted heavily by market performance and are more susceptible to investor opinion. Most specifically, the downside of using market measures is the likelihood that these measures evaluate investor's opinion of how they expect the firm to generate earning the future. This opinion can be based on a wide range of information and may not correctly depict the firm's value. Also, as Farrell and Hersch (2005) found, this is a correlation between return on assets and having females on the board, while market data did not seem to reflect the presence of women on boards (p. 86). Also, given that this study takes place shortly following the Economic Downturn of 2008, there is a possibility that the stock prices in question do not accurate reflect the health of the organizations.

ENDNOTE

1. Had 35 percent been used, most firms in our sample would have required nearly 50 percent male to female ratio.

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APPENDIX A

Panel A: Corporate Responsibility Magazine's Criteria for Identifying "100 Best Corporate Citizens"

"100 Best Corporate Citizens" methodology uses publicly available information to determine the world's top corporate responsibility ranking. CR Magazine contracts with a third party research organization to collect data and develop initial rankings. Once all *the necessary information was collected,* the companies were scored relative to their industry peers *324 data elements in 7 categories.*

Data Category	# Data Elements	2010 Weighting Percent
Environment	133	19.5%
Climate Change	60	16.5%
Human Rights	40	16.0%
Employee Relations	65	19.5%
Philanthropy	9	9.0%
Financial	8	12.5%
Governance	9	7.0%

The companies included in the analysis were defined as the 2010 Russell 1000. The rankings are determined from the ordinal list of companies that results from applying the Corporate Citizenship Criteria detailed above.

Panel B: Explanation of Corporate Responsibility Magazine's Process

CR Magazine's researchers and editors employed a detailed process. The separate and sequential analyses conducted were:

STEP 1	Selection of and Contracting with a Research Firm
STEP 2	Determination of Evaluation Criteria
STEP 3	Data Collection
STEP 4	Data Sources
STEP 5	Undisclosed Data
STEP 6	Data Validation
STEP 7	Review and Publication

Where:

Steps 1-2 determined that way that analysis would be completed and includes getting input and opinions from NGOs, academics, investment analysts, etc.

Step 3-6 focus on data collection using only publicly available information (company websites, 10-Ks, government datasets, etc.). Undisclosed information negatively impacts the company's ranking. Data validation is done by the research team reviewing their work and by providing the opportunity for companies to correct factual inaccuracies.

Step 7 allows companies two opportunities to review the datasets determined by the research team (not their rankings), after this period, the information and rankings are provided to CR.

From Corporate Responsibility Magazine (2011)*

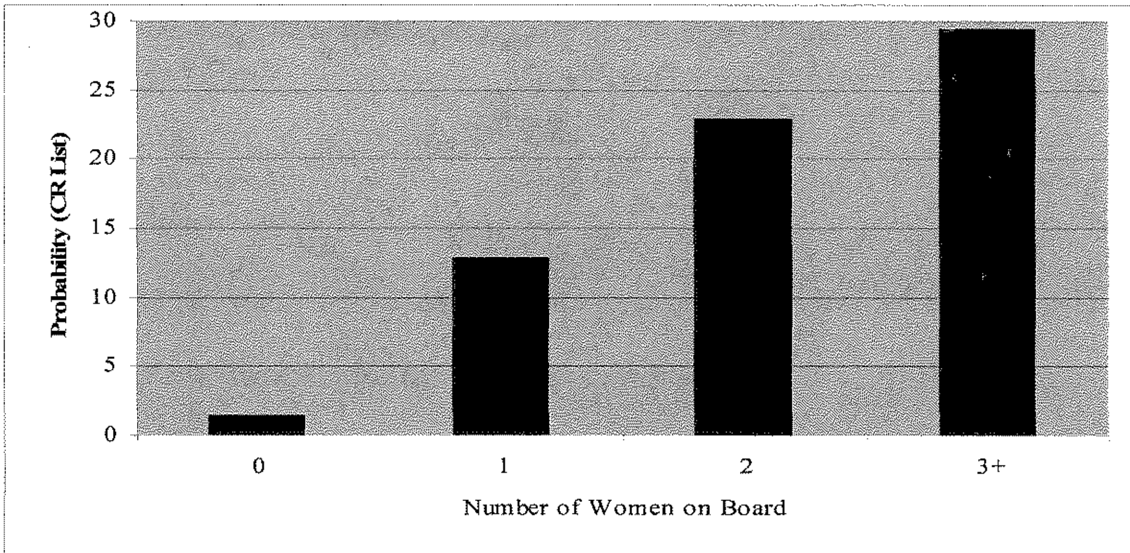
*The 2011 methodology details were used as 2010 details were unavailable

APPENDIX B

Panel A: Ethisphere's Criteria for Identifying "The World's Most Ethical Companies"
World's Most Ethical Companies™ (WME) methodology analyzes companies that go beyond making statements about doing business 'ethically', to translate those words into action. WME winners demonstrate real and sustained ethical leadership within their industries, putting the Council's credo of "Good. Smart. Business. Profit." into real business practice. The Ethics Quotient (EQ) framework is consists of a series of multiple choice questions in five core categories. These are used to capture and rate a company's performance in an objective, consistent, and standard manner. The categories and associated weighting are: 1. Ethics and Compliance Program 30% 2. Reputation, Leadership and Innovation 30% 3. Governance 15% 4. Corporate Citizenship and Responsibility 25% The EQ score is derived given the relationship to answers provided and formulas based on demographic qualifiers. The top percentile of performers in each of the 35 industries are then independently researched and analyzed to verify ethics performance.
From Ethisphere (2010)

Figure 1. Probability of Being on *Corporate Responsibility's* Magazine List

Panel A: Probability by the Number of Women on Board



Panel B: Probability by the Percent of Women on Board

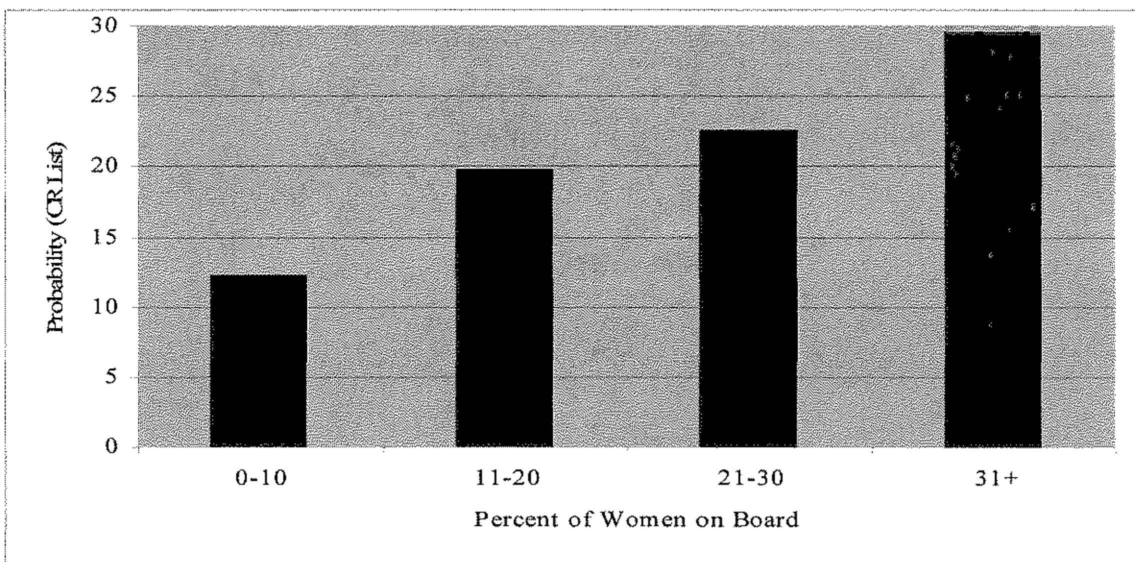
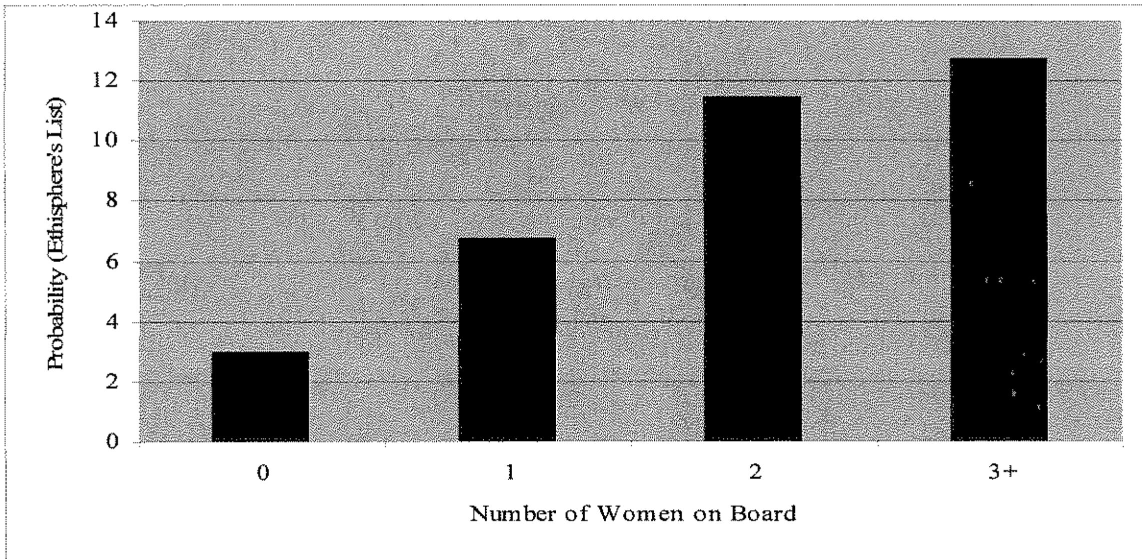


Figure 2. Probability of Being on *Ethisphere's* List

Panel A: Probability by the Number of Women on Board



Panel B: Probability by the Percent of Women on Board

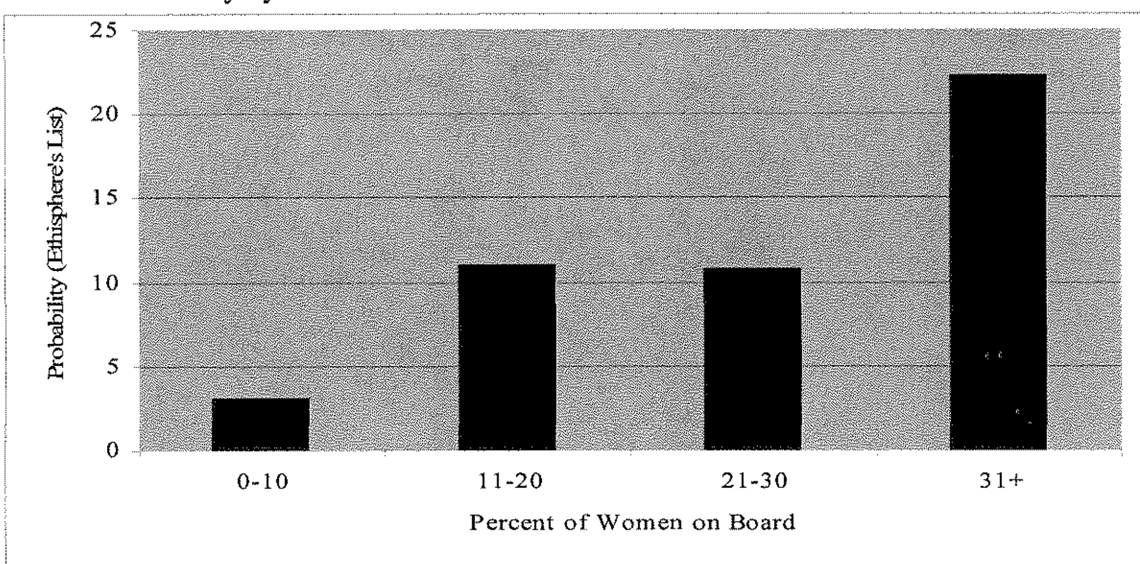


TABLE 1

MOST TRANSPARENT COMPANIES

3M	Ford Motor	Northeast Utilities
Abbott Laboratories	FPL Group	Occidental Petroleum
Advanced Micro Devices	Freeport-McMoRan Copper & Gold	Oracle
Air Products & Chemical	Gap	Owens Corning
Alcoa	General Mills	Pepsi Bottling
Allergan	H.J. Heinz	PepsiCo
Applied Materials	Hess	PG&E Corp.
Avon Products	Hewlett-Packard	Procter & Gamble
Ball	Hormel Foods	Quest Diagnostics
Baxter International	Intel	Raytheon
Boeing	International Business Machines	Sara Lee
Bristol-Myers Squibb	International Paper	Sempra Energy
Campbell Soup	ITT	Sherwin-Williams
Chevron	J.C. Penney	Southern
Cisco Systems	J.P. Morgan Chase & Co.	Staples
Citigroup	Johnson & Johnson	Starbucks
Coca-Cola	Johnson Controls	State Street Corp.
Coca-Cola Enterprises	Kellogg	Stryker
Colgate-Palmolive	Kimberly-Clark	Texas Instruments
ConAgra Foods	Lubrizol	TJX
Consolidated Edison	Mattel	Union Pacific
Cummins	McDonald's	United Parcel Service
CVS Caremark	McGraw-Hill	Verizon
Deere	McKesson	Wal-Mart Stores
Dell	Medtronic	Walt Disney
Dominion Resources	Merck	Weyerhaeuser
Duke Energy	Microsoft	Wisconsin Energy
Eaton	Monsanto	Xcel Energy
EMC	Mosaic	Xerox
Exelon	Newmont Mining	Yum Brands
Exxon Mobil	Nike	

TABLE 2

MOST ETHICAL COMPANIES

Aflac	Flour	Pitney Bowes
American Express	Ford Motor	Principal Financial
Aramark	FPL Group	Rockwell Automation
Ashland	Gap	Rockwell Collins
Becton Dickinson	General Electric	Sempra Energy
Best Buy	General Mills	Starbucks
Campbell Soup	Google	Symantec
Caterpillar	Harris	Target
CH2M Hill	Hartford Financial Services	Texas Instruments
Cisco Systems	Hewlett-Packard	Time Warner
Cummins	International Paper	United Parcel Service
Deere	Johnson Controls	Waste Management
Duke Energy	Mattel	Weyerhaeuser
Eaton	Nike	Whole Foods Market
Ecolab	PepsiCo	Wisconsin Energy
		Xerox

TABLE 3

FEMALE DIRECTOR DATA FOR *CORPORATE RESPONSIBILITY MAGAZINE'S* LIST

Measures		Transparent	Remaining	Overall
Number of Firms	(#)	92	408	500
Number of Directors	(#)	1,094	4,424	5,518
Average Number of Directors	(#)	11.9	10.8	11.0
Number of Female Directors	(#)	201	662	863
Percent of Female Directors				
By Firm	(%)	18.7	14.3	15.1
Overall	(%)	18.4	15.0	15.6
Firms With:				
No Female Directors	(#)	1	66	67
	(%)	1.1	16.2	13.4
One Female Director	(#)	19	129	148
	(%)	20.6	31.6	29.6
Multiple Female Directors	(#)	72	213	285
	(%)	78.3	52.2	57.0

Transparent Firms on *Corporate Responsibility Magazine's* list.
Remaining Firms not on *Corporate Responsibility Magazine's* list.

TABLE 4

FEMALE DIRECTOR DATA FOR *ETHISPHERE MAGAZINE'S* LIST

Measures		Ethical	Remaining	Overall
Number of Firms	(#)	46	454	500
Number of Directors	(#)	519	4,999	5,518
Average Number of Directors	(#)	11.3	11.0	11.0
Number of Female Directors	(#)	98	765	863
Percent of Female Directors				
By Firm	(%)	18.5	14.8	15.1
Overall	(%)	18.9	15.3	15.6
Firms With:				
No Female Directors	(#)	2	65	67
	(%)	4.4	14.3	13.4
One Female Director	(#)	10	138	148
	(%)	21.7	30.4	29.6
Multiple Female Directors	(#)	34	251	285
	(%)	73.9	55.3	57.0

Transparent	Firms on *Ethisphere Magazine's* list.
Remaining	Firms not on *Ethisphere Magazine's* list.

TABLE 5

AVERAGE PERCENT CHANGE IN SHARE PRICE

		Corporate Responsibility		*Ethisphere*	
Measures		Transparent	Remaining	Ethical	Remaining
Panel A: Average Percent Change in Share Price for all Firms					
No Female Directors	(%)	31.3	10.5	10.7	10.9
	(n)	(1)	(52)	(1)	(52)
One Female Director	(%)	13.9	5.8	15.9	6.2
	(n)	(19)	(116)	(10)	(125)
Multiple Female Directors	(%)	10.8	6.3	16.4	6.2
	(n)	(69)	(192)	(32)	(229)
Average Increase	(%)	11.9	6.7	16.2	6.8
		(89)	(360)	(43)	(406)
Panel B: Average Percent Change in Share Price for Firms with Positive Returns					
No Female Directors	(%)	31.3	23.2	10.7	23.7
	(n)	(1)	(43)	(1)	(43)
One Female Director	(%)	17.8	20.3	21.5	19.8
	(n)	(16)	(92)	(8)	(100)
Multiple Female Directors	(%)	16.9	20.0	20.5	19.0
	(n)	(53)	(149)	(28)	(174)
Average Positive Change	(%)	17.3	20.6	20.4	19.9
	(n)	(70)	(284)	(37)	(317)
Panel C: Average Percent Change in Share Price for Firms with Negative Returns					
No Female Directors	(%)	na	-50.4	na	-50.4
	(n)	(0)	(9)	(0)	(9)
One Female Director	(%)	-6.9	-49.8	-6.6	-48.1
	(n)	(3)	(24)	(2)	(25)
Multiple Female Directors	(%)	-9.5	-41.5	-11.9	-34.4
	(n)	(16)	(43)	(4)	(55)
Average Negative Change	(%)	-9.1	-45.2	-10.1	-39.8
	(n)	(19)	(76)	(6)	(89)