This study examines the extent to which women have circumvented the glass ceiling by empirically examining whether there has been an increase in women’s representation on corporate boards and CEO positions over the 10-year period from 1987 to 1996. Results indicate greatly increased representation on corporate boards. There is, however, no evidence of progress in, or towards, the CEO suite. Moreover, there is no evidence of that circumstance abating in the next several years. The number of female inside directors, an intermediate, and requisite, position in the succession to CEO, is astonishingly small, only 0.006 percent. Notably, there has been no increase in that proportion over the last decade.

INTRODUCTION

There has been extensive commentary on the ‘glass ceiling’ phenomenon (e.g., Karr, 1991; Powell and Butterfield, 1994). The glass ceiling is a metaphor for a barrier preventing women from rising above a certain organizational level (e.g., Morrison et al., 1992; U.S. Department of Labor, 1991). Exactly at what level this glass ceiling is apparent in organizations may differ. Most observers would agree, however, that responsibility beyond the general management level has been difficult for women to achieve (e.g., Barr, 1996; Fisher, 1992; Himelstein and Forest, 1997; Morrison et al., 1992).

Some observers, however, are encouraged by women’s progress in the corporate hierarchy. A decade ago, Williams (1988: 129) noted that ‘women are advancing through the corporation on schedule. . . . Most female managers are still too young in years and training to have reached the upper echelons, but they are maturing into candidates for the senior jobs of the next two decades.’ More recently, Avon Corporation’s retired CEO, James Preston, commented that ‘Women are in the pipeline in droves’ (Himelstein and Forest, 1997: 64). Also, Scherer (1997) suggests that women’s representation on corporate boards continues to grow. Consistent with this view, Catalyst has reported that women now hold 10.6 percent of large firm board seats (Business Week, 1997: 44). Lear (1994: 10) may best capture the ‘positive’ view of women’s progress: ‘The fight is over. The battle is won. Women are now accepted as outside directors in the preponderance of corporate boardrooms.’

In this research, we empirically examine the career progress of women in the corporate environment over the last decade. We focus specifically on progress in their service on boards of directors and what we will refer to as their accession schedule towards the role of CEO.
Advancement to these positions would arguably provide strong evidence of women having circumvented the glass ceiling.

**FACTORS IN WOMEN’S PROGRESS IN THE CORPORATE HIERARCHY**

Powell and Butterfield (1994) recently concluded that the glass ceiling is no longer apparent for women. In an examination of federal government employees, they found no direct or indirect effects for gender on promotion decisions. Moreover, they noted that any significant effects favored women, not men. While their study focused on mid-level promotions, others have noted factors which suggest that the glass ceiling may no longer impede women’s progress toward the uppermost organizational levels.

Increased attention to the presence of women on corporate boards (e.g., Scherer, 1997) may lead organizations to more aggressive searches and internal development for competent women to assume board roles. John H. Bryan, board chairperson of Catalyst and CEO/Chairperson of Sara Lee Corporation, may capture this perspective: ‘The pool of women with the capability and experience to serve on boards is larger than generally believed. Availability is no longer an excuse’ (Sweetman, 1996: 13).

Another factor supporting women’s progress suggests that appointing women to director and high-ranking executive positions is a practical necessity. James Preston, retired CEO of Avon Products Inc., for example, concludes that because ‘60% of all purchases in this country are made by women, having women on the board just makes good business sense’ (see Sweetman, 1996: 13; see also, Bilimoria, 1995; Drury, 1996). This perspective has been mirrored elsewhere: ‘expanding markets require expanding perspectives to meet the demands from diverse cultures in our society’ (*Directors & Boards*, 1996: 18–19).

Other factors may suggest promise for the advancement of women in corporations. A greater presence of women in management positions enhances the probability of women rising to the senior-most organizational ranks (e.g., Harrigan, 1981). Another factor is the reported increase in younger men’s acceptance of women in senior positions. Lastly, women who have ascended to the more senior corporate positions provide role models for more junior women (Morrison et al., 1992).

Appointment to the board of directors or ascension to the position of CEO would seem clear evidence of women’s progress in circumventing the glass ceiling. We have noted several factors which might lead one to accept that women have been successful in their organizational advancement. We recognize, of course, that there are counter arguments which may not support expectations for women’s progress. Our purpose, however, is to empirically assess the extent to which women have progressed in the boardroom and executive suite; therefore, all hypotheses are framed in the affirmative.

**Hypothesis 1:** There will be more women serving on Fortune 500 company boards as compared to 10 years ago.

**Hypothesis 2:** Fortune 500 companies will have more women serving as CEOs as compared to 10 years ago.

These hypotheses may not be fully satisfying, as they only represent final stages. Should they fail to be supported does not, in and of itself, provide evidence that women have not progressed in the corporate environment. It seems that more fine-grained hypotheses may provide a more robust test of that general proposition.

For us, an important key to assessing progression is women’s participation as inside corporate directors (Bilimoria and Piderit, 1994; Harrigan, 1981; Kesner, 1988). While firms may be increasingly open to seeking outside directors, the incidence of outside CEO succession remains low (Lublin, 1993; Taylor, 1988; Vancil, 1987). Successor CEOs are overwhelmingly selected from high-ranking executives of the focal firm. Interestingly, even outside successors are increasingly found among the ranks of the firm’s current outside directors (Lublin, 1993). It is clear, then, that the path to the CEO suite is directly through that firm’s boardroom (e.g., Dobrzynski, 1996; Greene and Greene, 1997). Notable exceptions would only include the replacement of CEOs of firms in crisis, and then only those successors which were not already serving as outside board members (see Daily and Dalton, 1995; Fizel and Louie, 1990; Gilson, 1989; Weisbach, 1988 for CEO turnover in distressed firms), and founder CEOs.
Vancil (1987: 139) captures the role of inside directors in the process of CEO succession: ‘if there are two or three candidates to succeed the incumbent CEO, putting them on the board two or three years ahead of the event is an excellent way for the outside directors to get acquainted with them. This benefit is so desirable that it is not surprising to find that this is fairly common practice.’ Vancil has also described this pattern as a ‘relay race’ where the CEO passes on the baton to an overt heir apparent. We would argue, then, that if women are not currently inside directors for Fortune 500 firms, their accession to the role of CEO will be severely challenged.

Hypothesis 3: Fortune 500 companies will have more women serving as inside directors as compared to 10 years ago.

We may also be able to derive some evidence of women’s progress by examining outside directors. Outside directors may present a variety of backgrounds. Some directors will be ‘corporate,’ serving as CEOs or high-ranking officers of other firms. Other outside directors do not have corporate positions; rather, they may have been in the public sector or may represent public service/community/educational organizations. Others may be associated with firms providing services to the corporation (e.g., representatives of public accounting, consulting, legal, commercial and investment banking firms). It is clear that those with corporate careers are more likely to be involved in succession to high-ranking executive positions (e.g., Lear, 1994). Should the number of women have increased as outside, corporate directors, we would expect a lagged concomitant increase in their representation in the corporate enterprise.

Hypothesis 4: Fortune 500 companies will have more women serving as outside directors with corporate backgrounds as compared to 10 years ago.

A further indicator of women’s progress may be deduced from another factor observed in outside directors. One of directors’ key roles is that of serving as boundary spanning agents by obtaining critical resources from the firm’s environment (Pfeffer, 1973; Pfeffer and Salancik, 1978; Provan, 1980). Outside directors with access to information and resources critical to the firm are important actors for the success of the corporation (Pfeffer and Salancik, 1978; Stearns and Mizuuchi, 1993). Outside directors, then, who represent organizations which provide services to the firm have this character.

Affiliated (6b) directors capture directors with professional (and personal) ties to the firm or firm management (Daily and Dalton, 1994). Included in this classification, among others, are directors who are commercial bankers, investment bankers, and legal counsel of firms which do business with the focal organization. If women’s roles in organizations like these lead to board membership, we would argue that their presence in corporate enterprise, though indirect, is much improved.

Hypothesis 5: Fortune 500 companies will have more women serving as affiliated directors with professional relationships to the firm as compared to 10 years ago.

METHODS
Sample and variables
As all of our hypotheses refer to changes in the representation of women in various corporate roles over a 10-year period, we rely on all firms noted in the 1988 and 1997 Fortune 500 lists for data collection. All data, then, were collected at two time periods, 1987 (1988 Fortune 500 firms) and 1996 (1997 Fortune 500 firms). All data regarding women’s representation were derived from corporate proxy reports.

Hypothesis 1 requires the number of women serving on the board of directors for both time periods. Similarly, Hypothesis 2 requires the number of women serving as CEO of the Fortune 500 firm at both time periods. We also noted the number of women serving as inside director for both time periods (Hypothesis 3). Consistent with past research, an inside director is defined as a member of firm management also serving on the board of directors (e.g., Hermalin and Weisbach, 1988; Seward and Walsh, 1996).

The final two hypotheses address outside directors. We noted those women serving on the board who have corporate professional backgrounds, as compared to noncorporate backgrounds. A female director who serves as chief financial officer of
another *Fortune* 500 firm, for example, would be a director with a corporate background (Hypothesis 4). Directors employed in the nonprofit sector or public service and academicians provide examples of board members with noncorporate backgrounds. For Hypothesis 5 we rely on those directors with professional ties to the firm or firm management. Relying on the SEC 6(b) guidelines, we include those directors employed by firms providing services to the focal firm (e.g., legal counsel, consultant, accountant).

**ANALYSIS AND RESULTS**

We suggested (Hypothesis 1) that more women will be serving on *Fortune* 500 company boards as compared to 10 years ago. This hypothesis received strong support. In 1987, the average board was comprised of 11.5 directors. At that time, 287 (42.6%) of the *Fortune* 500 companies had women on their board of directors. In 1996, board size was essentially stable at 11.7; at this time, however, women’s representation on *Fortune* 500 boards had increased to 81.2 percent. The average board in 1987 had 0.54 women; the average board in 1996 had 1.2 women. This difference is statistically significant ($z = 12.69; p < 0.001$).

Hypothesis 2 posited that *Fortune* 500 companies will have more women serving as CEOs as compared to 10 years ago. There is no support for this hypothesis. Indeed, in both 1987 and 1996 there were two women serving as CEOs.

We also suggested (H3) that *Fortune* 500 companies would have more women serving as inside directors as compared to 10 years ago. In 1987, there were 11 women serving in this capacity. In 1996, there were only eight women serving as inside directors. Accordingly, there is no support for the third hypothesis.

Hypothesis 4 noted that *Fortune* 500 companies would have more women serving as outside directors with corporate backgrounds as compared to 10 years previously. In 1987, 13.3 percent of female outside directors had this profile; by 1996, 37.6 percent of female outside directors had corporate backgrounds. Hypothesis 4 was strongly supported ($z = 7.84; p < 0.001$).

Lastly, we hypothesized (Hypothesis 5) that *Fortune* 500 companies would have more women serving as affiliated directors as compared to 10 years previously. This hypothesis received strong support ($z = 6.45; p < 0.001$). In 1987, 13.3 percent of women on the board were affiliated (6b) directors. By 1996, female outside board members with a 6(b) designation had increased to 32.6 percent.

**DISCUSSION**

For us, these results are easily categorized. With respect to most aspects of board of director representation, there is obvious progress for women in the last decade. With regard to progress towards the executive suite, the results are dramatically different. In fact, we will argue that (1) there has been no progress with respect to women as CEOs and, (2) there is no evidence of that circumstance abating in the next several years.

The results suggest that there has been substantial progress for women with respect to both their presence on *Fortune* 500 boards and their roles on these boards. Over the 1987–96 decade, women’s board seats increased from 270 to 602. At the same time, there is compelling evidence that women’s profiles have changed fundamentally as well. Over the study period, women with corporate backgrounds and those with resource dependence linkages increased substantially. As we noted earlier, these shifts towards corporate backgrounds and resource linkages are fundamental if women are to augment their influence on contemporary boards as well as increase their representation.

These boardroom changes are consistent with the view that a primary rationale for being invited for board service is having the appropriate business experience (e.g., Kesner, 1988; Lear, 1994). Moreover, these findings may support Kesner’s (1988) study which demonstrated that women have equal or better odds of serving on the audit, compensation and nominating committees as compared to men. Rather than being asked to serve on a board for ‘political correctness,’ female directors are apparently valued for their skills and resources. As previously noted, ‘having women on the board just makes good business sense’ (Sweetman, 1996: 13).

Inclusion of women on corporate boards is also an important means for capitalizing on the full
range of intellectual capital available to the firm. As we previously noted, the scope of product markets requires a diversity of perspectives to meet both local and global needs (e.g., Directors & Boards, 1996). One means for increasing diversity of perspective is with the inclusion of women on the board of directors. The advantages of diversity have been previously explored at the top management team (TMT) level (see Daily and Schwenk, 1996, for an overview). While there is no consensus on the benefits of either homogeneity or heterogeneity (diversity), TMT heterogeneity is associated with diversity in views, which may lead to more thorough analysis of strategic options and more effective strategy formulation (Bourgeois, 1985). Female directors, then, may lead to more thorough consideration of strategic alternatives (e.g., Zaltman, 1997).

Pearce and Zahra (1991) have also noted some benefits to including women on corporate boards. They found that participative boards—boards characterized by high CEO and board power, discussion, debate, and disagreement—had higher numbers of female directors than did proactive, statutory, or caretaker boards. Importantly, participative boards were significantly associated with higher perceived and objective company performance.

Progress in, or towards, the executive suite for women compares very poorly with that of the boardroom. It has been suggested that women hold a modest percentage of all large-firm board positions, and even fewer large-firm CEO positions (Directors & Boards, 1992; Dobrzynski, 1996; Greene and Greene, 1997; Industry Week, 1997; Sweetman, 1996). Frankly, based on our findings ‘even fewer’ might be considered something of an understatement (see also, Morris, 1997; Parker-Pope, 1997). Between the 1987 and 1996 time periods there was no increase in the number of female CEOs. This number was constant at two.

While this lack of progress may be disappointing to some, we do not think the change in the number of female CEOs adequately captures the potential barrier to the executive suite. Instead, the issue may be how many women in the last decade have advanced in the executive queue such that they could soon be reasonably considered along with male candidates for CEO positions. Our data suggest that there has been no such progress; indeed, an argument could easily be made that the situation has actually degenerated.

As previously noted, a critical step in women’s progress to the executive suite may be a direct function of their participation as inside directors (e.g., Bilimoria and Piderit, 1994; Dobrzynski, 1996; Greene and Greene, 1997; Kesner, 1988). The majority of successor CEOs are chosen from the executive ranks of the focal firm and have served as inside directors of that firm. Moreover, even outside successors are increasingly found among the ranks of the firm’s current outside directors (Lublin, 1993). A key succession question for women, then, is the extent to which women’s representation as inside corporate directors has increased. There is no such evidence. In 1987, there were 11 women serving as inside directors of Fortune 500 companies; by 1996, that number had been reduced to eight women serving in that capacity. In the 1996 Fortune 500 there are 1251 inside board member positions, with women holding an astonishingly small 0.006 percent of these positions. For us, this is a sobering statistic. One interpretation suggests that not only have women made no progress in their ascension to the executive suite, there is no evidence that such progress is likely to be forthcoming for many years.

These findings are in stark contrast to research which has found the erosion of the glass ceiling for mid-level organizational positions (Powell and Butterfield, 1994). For women, promote-from-within policies apparently do not apply to the executive-level ranks (see Powell and Butterfield, 1994). Taylor’s (1988: 30) observation nearly a decade ago is apparently as applicable today: ‘In some ways tomorrow’s chief executives closely resemble the men they will succeed. . . . There appear to be no ladies-in-waiting about to join them.’ Women are simply not being placed in positions which would appropriately develop them for ascension to the executive suite (see Ohlott, Ruderman and McCauley, 1994 for related discussion). We are struck by the irony that women apparently do not have the appropriate skill set to be considered for service within the executive ranks of the firm (i.e., CEO, inside director), but they do have the necessary qualifications to serve as outside directors.

Based on our findings, benefits similar to those we noted with the inclusion of women on corporate boards are not likely to accrue to corporations.
at the executive-level ranks. This may have important implications for the strategic decision-making process. The paucity of women positioned for ascension to the chief executive office may lead to less discussion, debate, and disagreement on strategic options facing the firm at the TMT level (e.g., Bourgeois, 1985; Pearce and Zahra, 1991). Bantel and Jackson (1989), for example, found that educational and functional diversity within the TMT are associated with increased innovation in banks. Wiersema and Bantel (1992) also noted some support for the benefits of TMT diversity. They found that diversity in educational level, educational specialization, and training in the sciences is positively associated with changes in corporate strategy. While not specifically addressed in previous studies, we would argue that gender diversity may also be a critical factor with regard to firm processes and outcomes.

One example of the importance of gender diversity is related to market segmentation practices. Market segmentation involves identifying distinct groups of buyers which might each require separate product or marketing mixes (e.g., Bucklin and Gupta, 1992; Bucklin, Gupta, and Han, 1995; Grover and Srinivasan, 1987; Kamkura and Russell, 1989). Inclusion of women at the strategic decision-making levels (i.e., board of directors, CEO, TMT), then, may be especially critical for firms operating in markets with high concentrations of female buyers. Consumer products companies such as Procter & Gamble, as well as manufacturing firms (e.g., the automobile industry), rely extensively on market segmentation to target female audiences (Kotler and Armstrong, 1993). This practice enables these companies to develop their products tailored to the specific needs of their female buyers.

Another consequence of a failure to position women for ascension to the executive suite is the potential signal such actions send to current female managers and potential recruits. Organizations which become known for not promoting women to the executive suite may be less likely to retain and recruit the best female talent. Avon Products Inc. provides an interesting example. Avon had become known as a corporation which fast-tracked female executives. With James Preston’s announcement to retire as CEO, many observers believed his successor would be named from a cohort of three high-ranking female executives at Avon. Counter to expectations, however, the board selected outside director, Charles Perrin, to fill the post (Parker-Pope, 1997). Avon was heavily criticized for hiring a male for this position, with one commentator noting: ‘A woman is good enough to be a specialist or a strong No. 2 to a male CEO, but never good enough to be No. 1 herself’ (Dugan, 1998: 58).

At the executive level the glass ceiling apparently persists. Consistent with our findings, Bilimoria (1995: 13) has noted the potential for women’s progress, ‘even when women do all the right things and have all the right stuff, they continue to be blocked from the innermost circles of power.’ Even though women’s participation on corporate boards has significantly increased and female directors increasingly have corporate backgrounds and provide increased resource linkages as directors, their progress in breaking the glass ceiling continues to be seriously compromised if they are not positioned for promotion to the executive suite.

**REFERENCES**


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