ADVANCING WOMEN LEADERS:
The Connection Between Women Board Directors
and Women Corporate Officers
About Catalyst

Founded in 1962, Catalyst is the leading nonprofit membership organization working globally with businesses and the professions to build inclusive workplaces and expand opportunities for women and business. With offices in the United States, Canada, and Europe, and the support of more than 370 member organizations, Catalyst is the premier resource for research, information, and trusted advice about women at work. Catalyst annually honors exemplary organizational initiatives that promote women's advancement with the Catalyst Award.
ADVANCING WOMEN LEADERS:  
The Connection Between Women Board Directors and Women Corporate Officers

Lois Joy

Partnering Sponsor:  
The Chubb Corporation

Contributing Sponsors:  
Citizens Communications  
IBM Corporation

© 2008 Catalyst

NEW YORK 120 Wall Street, 5th Floor, New York, NY 10005; (212) 514-7600; (212) 514-8470 fax
SUNNYVALE 165 Gibraltar Court, Sunnyvale, CA 94089; (408) 400-0287; (408) 744-9084 fax
TORONTO 8 King Street, Suite 505, Toronto, Ontario M5C 1B5; (416) 815-7600; (416) 815-7601 fax
ZUG c/o KPMG Fides, Landis+Gyr-Strasse 1, 6300 Zug, Switzerland; +41-(0)44-208-3152; +41-(0)44-208-3500 fax

email: info@catalyst.org; www.catalyst.org

Unauthorized reproduction of this publication or any part thereof is prohibited.
Catalyst Publication Code
ISBN# 0-89584-282-3
Women Board Directors and Women Corporate Officers: Making the Connection

Over the past several decades, businesses have become more inclusive of women, dismantling many of the traditional barriers to women's advancement. Although progress has been significant and is reflected in the number of women managers at the world's largest companies and professional firms, it has been slow at the very top.

Catalyst has counted the number of women on Fortune 500 boards and in corporate officer positions for more than ten years. Corporate officers are the highest-level executives in an organization, often board-appointed or board-approved.

The resulting censuses show that women have steadily gained access to this elite level of corporate leadership, but that in the last two years progress has stalled.¹

Why is it important to break down the barriers to top leadership positions? What are the benefits of more women on corporate boards and in corporate officer ranks?

Catalyst has already studied these questions from a financial perspective and found that companies with higher percentages of women board directors, on average, financially outperformed companies with the lowest percentages of women board directors by significant margins.² The same correlation exists between the percentage of women corporate officers and financial performance.³

In this report, we explore the link between women board directors and women corporate officers. Specifically:

- What does the percentage of board seats held by women tell us about future increases in corporate officer positions held by women?
- What are the implications for businesses and for women?

Catalyst analyzed⁴ the relationship between the percentage of women board directors that a Fortune 500 company had in 2001 and the percentage of women corporate officers the same company had in 2006. The analysis controlled for the effects of industry (since some industries are more likely

---

⁴ In statistical terms, we regressed the percentage of women corporate officers in 2006 on the percentage of women corporate officers in 2001, the percentage of women board directors in 2001, and dummy variables for industry and rank. For a more detailed description of methodology, see the Technical Appendix on page 11.
to employ women than others), revenue (since company size may affect promotion of women), and the percentage of corporate officer positions held by women in 2000 (since companies with more women corporate officers in the past may also have higher levels of women corporate officers in the future). These controls allowed for a more precise depiction of the effect women board directors have on women corporate officers.

Our results showed that there is a clear and positive correlation between the percentage of women board directors in the past and the percentage of women corporate officers in the future. This finding holds for three different measures:

- The percentage of women on a company’s board.
- Company quartile when ranked by percentage of women board directors.
- The number of women on a company’s board.

In addition, women board directors appear to have a greater effect on increasing the percentage of line positions held by women than they do on staff positions held by women. This is a critical finding because line jobs, which involve profit-and-loss responsibility, are considered necessary for advancing into top leadership.

Put simply, **women board directors are a predictor of women corporate officers**: the more women board directors a company has in the past, the more women corporate officers it will have in the future.

These findings are significant because companies with more women board directors are more likely to select leaders from a broader, more inclusive talent pool that values skills and results regardless of gender, ultimately positioning themselves for better financial performance.
To illustrate the effect of women board directors on women corporate officers, consider the following example: at two companies (Company A and Company B), in 2001, women hold 12.0 percent of corporate officer positions. The companies are in the same industry and have the same Fortune rank. At Company A, however, 30 percent of the board seats are held by women, whereas Company B has no women board directors. Our analysis showed that in 2006, Company A would have 45 percent more women corporate officers than Company B—women at Company A would hold 17.4 percent of corporate officer positions, while women at Company B would still only hold 12.0 percent.

5. This is the average percentage of women corporate officers in 2000 for the 359 companies we analyzed, all of which were in the Fortune 500 in 2000, 2001, and 2006.
Furthermore, the analysis showed that, when ranked by percentage of women board directors in 2001, companies in the top 25 percent—the highest quartile—would have 33 percent more women corporate officers in 2006 than companies in the lowest quartile in 2001.6

---

6. As part of the analyses, we calculated the average percentage of women board directors for companies in the top and bottom quartiles, which was 23.0 percent and 0.4 percent, respectively.
Finally, the analysis indicated that companies with two or more women board directors in 2001 would have 28 percent more women corporate officers in 2006 than companies with one woman board director in 2001.
Significantly, women board directors had a greater impact on the growth of women corporate officers in line positions—those making or selling the company’s products or services and thus responsible for profit—than on the growth of women corporate officers in staff positions. This is critical because line experience is a de facto requirement for CEO and other top leadership appointments.

Consider a company in 2001 with 12.2% percent women board directors, the average percentage for that year. If 10.0 percent of this company’s line officers were women and 10.0 percent of its staff officers were women, our analysis indicated that in 2006, 13.1 percent of this company’s line officers would be women and 12.1 percent of its staff officers would be women. In other words, the percentage of women officers in line positions would increase by 31 percent, while the percentage of women officers in staff positions would increase by a lesser 21 percent.

Figure 4: Women Board Directors Predict More Women in Line Officer Positions

7. Line functions include manufacturing, production, marketing, and sales; staff functions, which support the business operations, include human resources, corporate affairs, legal, and finance.

8. This is the average for the 359 companies we analyzed, all of which were in the Fortune 500 in 2000, 2001, and 2006.
Why Do Women Board Directors Predict More Women Corporate Officers?

Catalyst’s research and experience working with companies provide possible explanations for why the presence of women board directors is such a strong indicator of the eventual advancement of women into leadership roles. For example, it may be that:

• Companies with more women board directors have more inclusive workplace cultures, policies, and programs that support women’s advancement.
• Women board directors serve as role models to women in the pipeline and demonstrate that women can fulfill their highest ambitions.
• Women board directors are a powerful antidote to damaging stereotypes that devalue women’s abilities.

What’s Good for Women Is Good for Business

Catalyst’s experience also suggests reasons why businesses should want to promote women to leadership positions.

- **Women leaders correlate with better financial performance.** As discussed on page 2, a previous Catalyst study showed that Fortune 500 companies with higher percentages of women board directors, on average, financially outperformed companies with the lowest percentages of women board directors by significant margins. We found the same correlation between the percentage of women corporate officers and financial performance.

- **Women leaders signify a broader and deeper talent pool.** Opening leadership positions to employees who don’t fulfill traditional leader stereotypes expands talent pools.

- **Women leaders are encouraging to women in the pipeline.** Women in leadership positions can become role models and mentors for younger women, potentially increasing engagement and retention rates.

- **Women leaders signify “employers of choice.”** This is especially important to younger women who seek the “best places to work.” Talented women being recruited by companies will want to see women in leadership positions—not just as tokens—to know that their skills will be valued and rewarded.

- **Women leaders are a feature of inclusive workplaces.** Inclusive workplaces have been shown to yield better results—more independent thought leads to more innovation and a better reflection of stakeholders.

Increasing the number of women on corporate boards is important for both financial performance and gender diversity in the corporate officer ranks. Besides giving voice and power to smart, experienced women, it signals a commitment to inclusion that is essential to hiring—and keeping—women and men with leadership potential. When companies can demonstrate that they value women at the top, employees will know that they have the potential to be leaders in the future, and companies will know that their talent pool is rich enough to enable continued success.

---

To conduct our analyses, we used data from the 2000 Catalyst Census of Women Corporate Officers and Top Earners, 2001 Catalyst Census of Women Board Directors, and 2006 Catalyst Census of Women Corporate Officers and Top Earners of the Fortune 500. We examined the 359 companies that were in the Fortune 500 during the years under investigation, 2000, 2001, and 2006. The data were collected from publicly available annual reports and 10K forms and included the number of women and men board directors and corporate officers, company rank (measured by revenue), and industry.

We used regression analyses to examine the relationship between women board directors in the past and women corporate officers in the future. Regressions allowed us to observe the net effects of the percentage of women board directors in 2001 (WBD01) on the percentage of women corporate officers in 2006 (WCO06), while controlling for factors that might impact the relationship, such as the percentage of women corporate officers in 2001 (WCO01), company rank, and industry. The results showed a positive relationship such that for every 1 percentage point increase in WBD01, the percentage of WCO06 increased by 0.18 percentage points. Thus, a company with 10 percent women corporate officers in 2001 would have 1.8 percentage points more women corporate officers by 2006 (10 x 0.18).

To test the nature and strength of the relationship, we divided the companies into quartiles based on the percentage of WBD01 and then compared the percentage of WCO06 in the top and bottom quartiles. As part of the analyses, we calculated the average percentage of women board directors for companies in the top and bottom quartiles, which was 23.0 percent and 0.4 percent, respectively. Using the coefficient from the previous regression, we then calculated the increase in the percentage of WCO06 that would have resulted from being in the top or bottom WBD01 quartile (0.18 x 23.0 and 0.18 x 0.4, respectively).

We next tested whether the positive impact of women board directors on women corporate officers depended on there being a critical number of women serving on the board. In this regression, we assessed the possible dampening effect of serving alone or in small numbers. To examine the effect of the number of WBD01 on the percentage of WCO06, we replaced percentage of WBD01 with three dummy variables for one, two, and three or more WBD01. Regression results showed that the coefficient for one WBD01 was not significantly different from zero. In other words, having one WBD01 did not add to the percentage of WCO06. The coefficient for two WBD01 was 3.3 and significantly different from zero at the 5 percent level; the coefficient for three or more WBD01 was 3.5 and significantly different from zero at the 10 percent level. In essence, the positive relationship between WBD01 and WCO06 is evident for companies with two or more women serving on their boards. In the report, we show how companies with two or more WBD01 had at least 3.3 percent more WCO06 than companies with one or zero WBD01.

Finally, for the examination of line and staff positions for WCO06, we ran two separate regressions. In the first regression, percentage of WCO06 in line positions was regressed on percentage of WBD01; in the second regression, percentage of WCO06 in staff positions was regressed on percentage of WBD01. As before, we included control variables for the percentage of WCO00, company rank, and industry. The coefficient for the first regression was a positive 0.25 and significant at the 5 percent level; the coefficient for the second regression was a positive 0.17 and significant at the 10 percent level.

ACKNOWLEDGMENTS

This report is the result of the teamwork and dedication of many on the Catalyst staff, as well as two members of the Catalyst Board of Advisors. Catalyst President Ilene H. Lang provided leadership on the development of the project. Nancy M. Carter, Ph.D., Vice President, Research, contributed insight and guidance on the research, and Lois Joy, Ph.D., conceptualized and led the study.

Catalyst Research Interns Sarah Lang and Jennie Mitchell provided research assistance that contributed to data preparation and analysis. Mathieu Belanger, former Director, Information Technology, prepared the data for analysis. In addition, we are grateful to the following Catalyst staff members who reviewed the report and provided insights and perspectives: Deepali Bagati, Ph.D., Michael Chamberlain, Jan Combopiano, Heather Foust-Cummings, Ph.D., Laura Jenner, Susan Nierenberg, and Jeanine Prime, Ph.D.

The report was produced and edited under the leadership of Deborah M. Soon, Vice President, Marketing & Executive Leadership Initiatives, and Liz Roman Gallese, Vice President & Publisher. Joy Ohm, Senior Associate Editor, edited the report. Sonia Nikolic, Graphic Designer, designed the report. Deepali Bagati, Ph.D., and Anika Warren, Ph.D., fact-checked the report. Catalyst Board of Advisor members Janice Fields, Executive Vice President & Chief Operating Officer, McDonald’s USA, LLC, and Maureen A. McGuire, Executive Vice President & Chief Marketing Officer, Sears Holdings Corporation, commented on the report.

We extend a special thanks to our sponsors: The Chubb Corporation, Partnering Sponsor; and Citizens Communications and IBM Corporation, Contributing Sponsors.
### CATALYST BOARD OF DIRECTORS

**Chair**
Charles O. Holliday, Jr.  
Chairman & CEO  
DuPont

**Secretary**
Anne M. Mulcahy  
Chairman & CEO  
Xerox Corporation

**Treasurer**
Susan Arnold  
President,  
Global Business Units  
The Procter & Gamble Company

Brenda C. Barnes  
Chairman & CEO  
Sara Lee Corporation

Lloyd C. Blankfein  
Chairman & CEO  
The Goldman Sachs Group, Inc.

Ian M. Cook  
President & CEO  
Colgate-Palmolive Company

Mary B. Cranston, Esq.  
Firm Senior Partner  
Pillsbury Winthrop Shaw Pittman LLP

Michael J. Critelli  
Executive Chairman  
Pitney Bowes Inc.

David B. Dillon  
Chairman & CEO  
The Kroger Co.

James Dimon  
Chairman & CEO  
JPMorgan Chase & Co.

William A. Downe  
President & CEO  
BMO Financial Group

Mary Beth Hogan, Esq.  
Partner & Management Committee Member  
Debevoise & Plimpton LLP

Jeffrey R. Immelt  
Chairman & CEO  
General Electric Company

Ann Dibble Jordan  
Consultant

Andrea Jung  
Chairman & CEO  
Avon Products, Inc.

Karen Katen  
Chairman  
Pfizer Foundation

Jeffrey B. Kindler  
Chairman & CEO  
Pfizer Inc

Iliene H. Lang  
President  
Catalyst Inc.

John Mack  
Chairman & CEO  
Morgan Stanley

Renetta E. McCann  
CEO  
Starcom MediaVest Group

Marilyn Carlson Nelson  
Chairman  
Carlson Companies, Inc.

Joseph Neubauer  
Chairman & CEO  
ARAMARK

James H. Quigley  
CEO  
Deloitte Touche Tohmatsu

Stephanie A. Streeter  
Former Chairman,  
President & CEO  
Banta Corporation

Richard K. Templeton  
Chairman,  
President & CEO  
Texas Instruments Incorporated

James S. Turley  
Chairman & CEO  
Ernst & Young LLP

G. Richard Wagoner, Jr.  
Chairman & CEO  
General Motors Corporation

**Chair Emeriti**
John H. Bryan  
Retired Chairman & CEO  
Sara Lee Corporation

J. Michael Cook  
Retired Chairman & CEO  
Deloitte & Touche LLP

Thomas J. Engibous  
Retired Chairman & CEO  
Texas Instruments Incorporated

Reuben Mark  
Chairman  
Colgate-Palmolive Company

John F. Smith, Jr.  
Retired Chairman & CEO  
General Motors Corporation

**Honorary Directors**
Tony Comper  
Retired President & CEO  
BMO Financial Group

Thomas J. Engibous  
Retired Chairman & CEO  
Texas Instruments Incorporated

Ann M. Fudge  
Retired Chairman & CEO  
Young & Rubicam Brands

**Firm Senior Partner**
Barbara Paul Robinson, Esq.  
Partner  
Debevoise & Plimpton LLP

**Former Chairman, President & CEO**
Maggie Wilderotter  
Chairman & CEO  
Citizens Communications Company

Thomas J. Wilson  
Chairman,  
President & CEO  
The Allstate Corporation
Expanding opportunities for women and business

NEW YORK
120 Wall Street, 5th Floor
New York, NY 10005
tel (212) 514-7600
fax (212) 514-8470

SUNNYVALE
165 Gibraltar Court
Sunnyvale, CA 94089
tel (408) 400-0287
fax (408) 744-9084

TORONTO
8 King Street East, Suite 505
Toronto, Ontario M5C 1B5
tel (416) 815-7600
fax (416) 815-7601

ZUG
c/o KPMG Fides
Landis+Gyr-Strasse 1
6300 Zug, Switzerland
tel +41-(0)44-208-3152
fax +41-(0)44-208-3500

www.catalyst.org