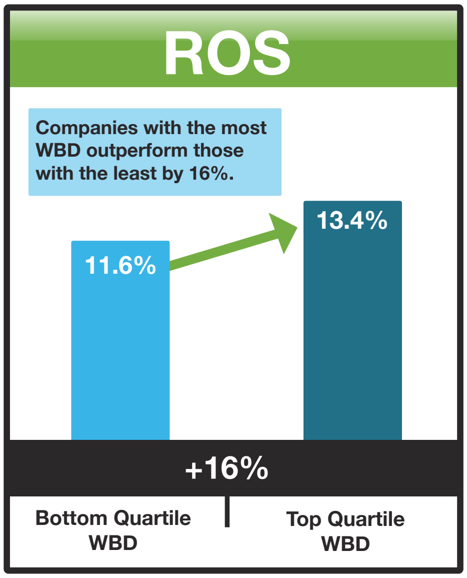
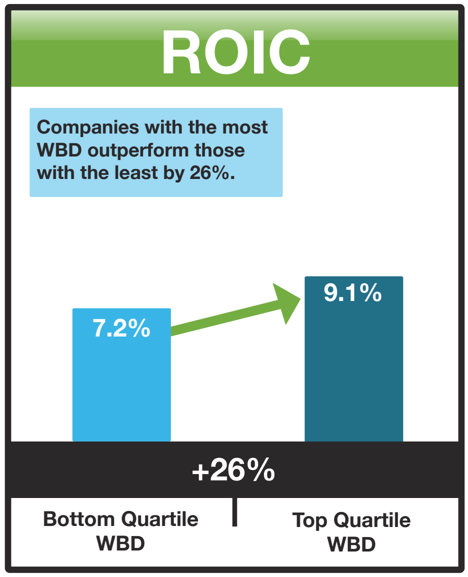
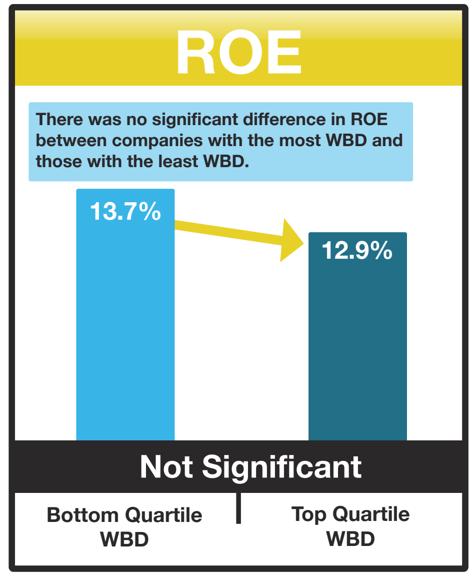
THE BOTTOM LINE: CORPORATE PERFORMANCE AND WOMEN'S REPRESENTATION ON BOARDS (2004–2008)

Women Board Directors: A Comparison of Economic Results

Women Board Directors (WBD), Strong Financial Performance at *Fortune* 500 Companies Align

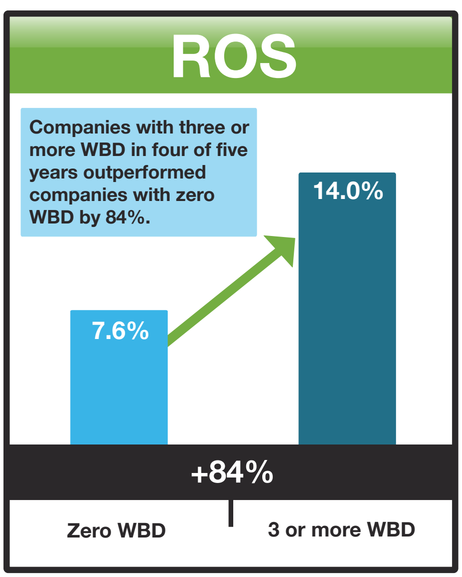


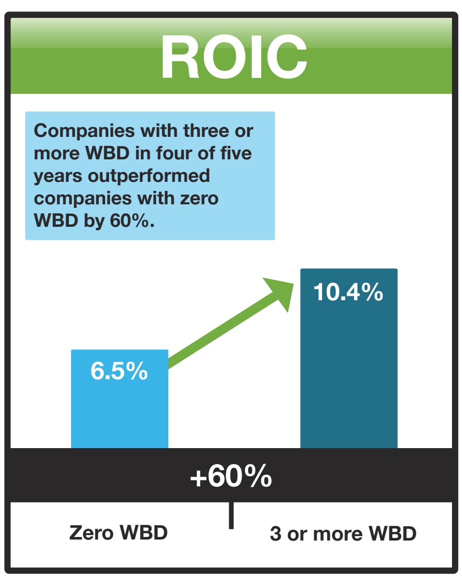


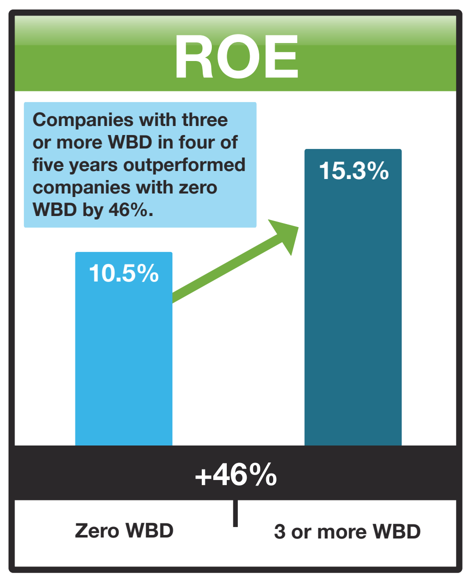


Financial Performance at Companies With Three or More WBD vs. Those With Zero WBD

Companies with sustained high representation of WBD (three or more WBD in at least four of five years) significantly outperform those with sustained low representation (zero WBD in at least four of five years).







METHODOLOGY

Catalyst Bottom Line Series Objectives

Catalyst designed the Bottom Line report series to establish whether an empirical link exists between gender diversity in corporate leadership and financial performance. These studies have examined historical data and revealed statistically significant correlations. The studies do not, however, establish or imply causal connections.

For each report in the series, Catalyst compiled a list of all companies that appeared in the *Fortune* 500 for a specified time span, after accounting for name changes and merger and acquisitions activity. Gender diversity data for senior leadership teams and boards of directors were compiled from Catalyst's *Fortune* 500 Census report series. Financial data for the companies examined were obtained from the Standard & Poor's Compustat database.

Research Design

For this report, Catalyst utilized gender diversity data from Catalyst's annual *Fortune* 500 Census of Women Board Directors (WBD) report series for the years 2005–2009. Corresponding financial data for the companies examined were obtained from the Standard & Poor's Compustat database for the years 2004–2008.[1]

The performance measures return on sales (ROS), return on invested capital (ROIC), and return on equity (ROE) for each company are averages across the study time span. Likewise, the gender diversity measures for each company are averages across the study time span. Only companies with at least three years of financial measures as well as at least two years of gender diversity data are included in this report's analyses. Because of movement into and out of the *Fortune* 500 list each year, there were a total of 524 companies in this study.

A few companies exhibit extreme values for the average financial performance measures. In addition, overall averages of financial performance measures differ among this study's 20 Standard & Poor's Global Industry Classification Standard (GICS) groups, (which have a four-digit designation). First, these extreme values were Winsorized for each of the 20 GICS groups, and then the resulting average performance measures were standardized (mean 0, standard deviation 1) within each of the 20 GICS group. Lastly, the standardized measures for all companies were reverse standardized to reflect the actual averages of the financial measures across all companies in the time span.

Analyses

Quartile Analysis

Catalyst constructed two portfolios based on women's representation in the boardroom drawn from the 524 companies. The top quartile portfolio contains the 129 companies that have the highest average percentage of women directors, while the bottom quartile portfolio contains the 133 companies with the lowest average percentage of women directors.

For companies in the top quartile portfolio, the average percentage for women's representation ranges from 19 percent to 44 percent WBD, with an overall average of 25 percent WBD. For companies in the bottom quartile portfolio, the average percentage for women's representation ranges from 0 percent to 9 percent WBD, with an overall average of 4 percent WBD.

To establish whether an empirical link exists between gender diversity in leadership and a financial performance measure, Catalyst first calculated the difference between the means of this measure for the top and bottom quartile portfolios. Then a two-sample, one-tail t-test using unequal variances was applied to assess the statistical significance of each difference in the means.

The difference in means for the top and bottom quartile portfolios was significant for ROS at $p=.07$ and for ROIC at $p=.06$. There was no statistically significant difference in means for ROE.

Sustained Representation Analysis

Catalyst also examined whether the strength of the empirical link is more pronounced when there is a sustained commitment or lack of commitment to gender diversity across time. Companies were selected for analysis that, for at least four years across 2005–2009, had three or more WBD (high-commitment portfolio) and zero WBD (low-commitment portfolio).

The high-commitment portfolio (three or more WBD) included 48 companies with average WBD across the time span that ranged from 2.8 to 5.8 and an overall average 3.5. The low-commitment (zero WBD) included 24 companies with average WBD across the time span that ranged from 0.00 to 0.02 and an overall average 0.02.

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[1] Catalyst's annual *Fortune* 500 Census report series reflects the publication year of the *Fortune* list. The *Fortune* rank, however, reflects company financial performance for the prior year. Due to this publication timing, the span 2005–2009 for the *Fortune* 500 and Catalyst's Census data corresponds to the span 2004–2008 for the Standard & Poor's Compustat database financial performance data.

To ascertain the strength of the link for sustained gender diversity and a financial performance measure, Catalyst first calculated the difference between the means of this measure for the high- and low-commitment portfolios. Then a two-sample, one-tail t-test using unequal variances was applied to assess the statistical significance of each difference in the means.

The difference in means for the high- and low-commitment portfolios was significant for ROS at p=.00, for ROIC at p=.07, and for ROE at p=.08.

Definitions

***Fortune* 500:** *Fortune* magazine's ranking of the top 500 U.S. incorporated companies filing financial statements with the government is based on each company's gross annual revenue. Included in the list are public companies, private companies, and cooperatives that file a 10-K with the SEC, and mutual insurance companies that file with state regulators.[2]

Return on Sales (ROS): The pre-tax net profit divided by revenue.

Return on Invested Capital (ROIC): The ratio of after-tax net operating profit to invested capital.

Return on Equity (ROE): The ratio of after-tax net profit to stockholders' equity.

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Research Partners: American Express Company, BMO Financial Group, Chevron Corporation, Deloitte LLP, Desjardins Group, Deutsche Bank AG, Ernst & Young LLP, Hewlett-Packard Company, IBM Corporation, McDonald's Corporation, UPS

[2] *Fortune* magazine, *Fortune* 500 http://money.cnn.com/magazines/fortune/fortune500/2010/faq/.