

Impact of Women in Corporate Leadership

The Relative Stock Performance of Gender Diverse Boards

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Background

Despite a plethora of academic research on the benefits of gender diversity in groups, corporations are painfully slow in adding women to their boards. The main question for investors, however, is whether the presence of women on boards improves stock performance. In order to answer this question, we evaluated the companies in the S&P500 Index in 2006 and tracked their performance for 10 years.

Historical Context

For the first 144 years of the United States of America, women were not considered citizens with the right to vote. Only 40 years ago were unmarried women granted the right to obtain credit on their own. Job protection during 12 weeks of unpaid maternity leave is a creation from the 1990s. Today, women make up half of the workforce, are the breadwinners in 4 out of 10 families, and earn more college and graduate degrees than men.

Yet the gender pay gap remains, with women earning only 79 cents for every dollar earned by men.¹ American women have made progress in their participation in society, but progress is slow. The presence of women on corporate boards of directors is an indication of this slow progress. In 2016, less than 15% of board members were women.²

Research Findings

Our research found that the presence of women on boards did make a difference in stock performance over the 10-year period. Companies with zero women on their boards underperformed those with one or more woman and, to a greater extent, underperformed companies with more than 25% female board members. These findings mirror the results of the Credit Suisse Gender 3000 report, which measured similar results in 3,400 global companies.

Research Methodology

Our research began with the 501 stocks in the S&P500 Index as of December 31, 2005. We eliminated companies that experienced mergers, acquisitions, bankruptcies, or any other corporate action that prohibited them from having a 10-year track record of performance between January 2006 and December 2015. There were 340 companies remaining in the universe.

We reviewed the 2005 Annual 10-K report for each company to identify the members of the board and their gender. The average number of women on each board was 1.8, and the average percentage of board members who were women was 14.06%. This is higher than the average for all US companies in 2006. The S&P500 Index is comprised of the 500 largest companies, leading to the conclusion that large companies have made more progress in adding women to their boards than small companies.³

1. Institute for Women's Policy Research; www.iwpr.org

2. Credit Suisse Research Institute, "The CS Gender 3000: The Reward for Change", September 2016.

3. 2020 Women on Boards Gender Diversity Index: 2011-2013 Progress of Women Corporate Directors by State, Sector and Size of Company.

Portfolios with Varied Gender Representation

Of the remaining 340 companies, 33 companies had zero women on the board (WOB), 307 companies had one or more WOB, and 34 companies had 25% or more WOB. We created three hypothetical portfolios from these groups of companies: Zero WOB, 1+ WOB and 25%+ WOB. In each portfolio, the companies were purchased at equal weight. The portfolios were rebalanced annually.

Demographic Breakdown by Portfolio

Portfolio	Average # of WOB	Average % WOB
Zero WOB	0	0
1+ WOB	1.99	15.54%
25%+ WOB	3.79	29.48%

Market Cap Breakdown by Portfolio

Portfolio	Average Market Cap (\$B)	Median Market Cap (\$B)
Zero WOB	10.33	7.99
1+ WOB	28.67	13.4
25%+ WOB	33.5	15.55

The sector allocations reveal details about the types of companies that have more women on their boards. For Zero WOB, there were no consumer staples or telecommunications companies represented. For 25%+ WOB there were no energy or basic materials companies. The lack of women on boards in energy and materials persists. Credit Suisse found that 47.4% of global materials companies and 46.7% of energy companies had zero women directors in 2013.⁴

The consumer discretionary, consumer staples, and healthcare sectors are overweight in 25% WOB.

One interesting note is that Apple Computer, one of the best performing stocks during the time period, was one of the 33 companies with zero women on the board in 2005. Despite Apple Computer's exceptional performance, the Zero WOB portfolio significantly underperformed the other two portfolios.



Sector Breakdown by Portfolio

Sector	Zero WOB	1+ WOB	25% + WOB
Consumer Discretionary	12.12%	17.26%	17.65%
Consumer Staples	0.00%	9.77%	20.59%
Energy	15.15%	5.54%	0.00%
Financials	18.18%	16.29%	11.76%
Healthcare	3.03%	10.42%	17.65%
Industrials	15.15%	15.31%	17.65%
Technology	24.24%	11.07%	8.82%
Basic Materials	6.06%	5.86%	0.00%
Telecommunications	0.00%	1.95%	2.94%
Utilities	6.06%	6.51%	2.94%

4. Credit Suisse Research Institute, "The CS Gender 3000: Women in Senior Management", September 2014.

Detailed Findings

As evidenced in the graph below, the portfolio of companies with one or more WOB outperformed the portfolio with zero women on the board. Meanwhile, companies with 25% or more WOB exhibited even more superior performance.

Portfolio Performance

Portfolio	3 Years	5 Years	10 Years
Zero WOB	13.81%	11.66%	8.77%
1 or More WOB	15.70%	12.42%	9.46%
25% or More WOB	15.69%	13.95%	10.29%

December 31, 2005 - December 31, 2015

Performance of Portfolios with Varying Composition of WOB
2006 - 2015



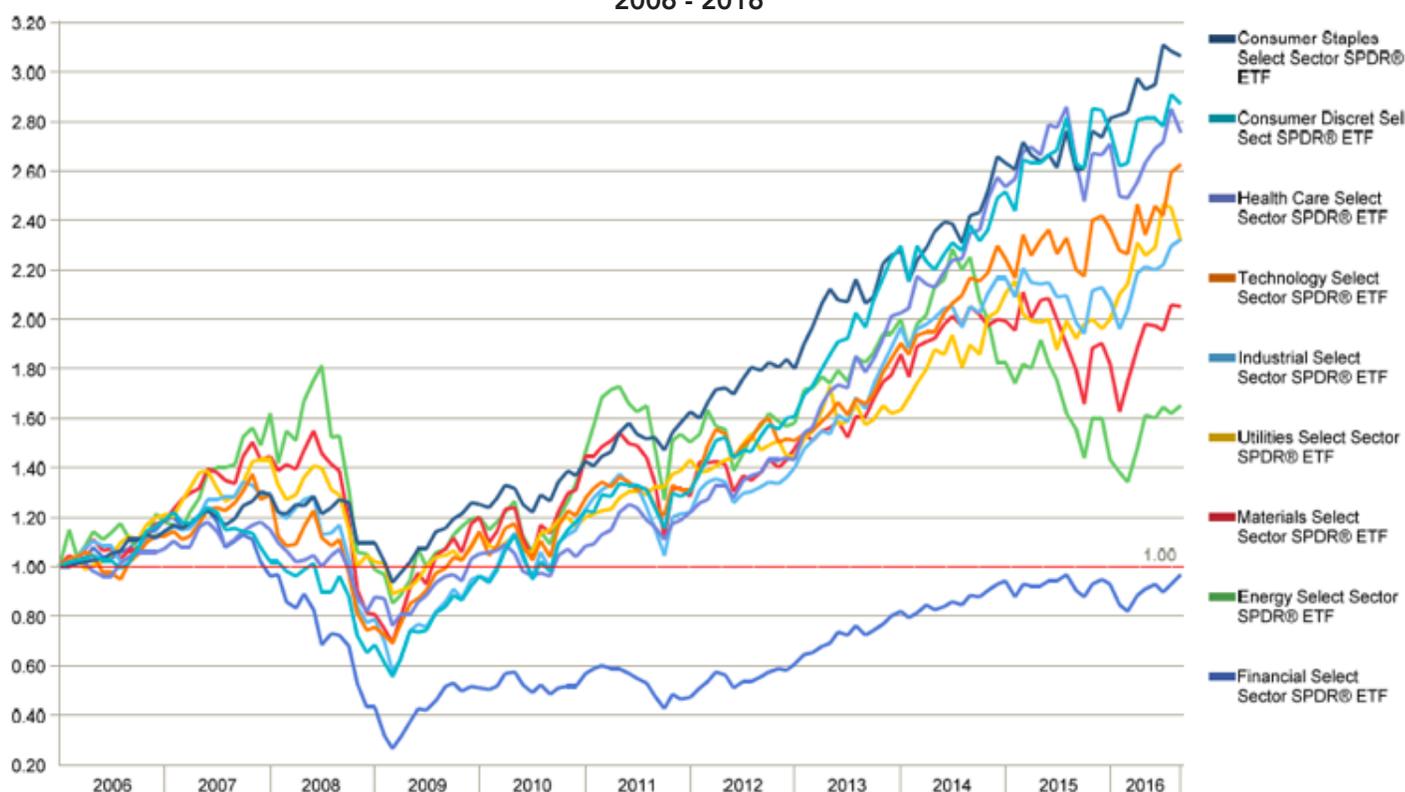
Another Look: Sector Neutral

We questioned whether the sector weightings of the three portfolios had an effect on performance. If, for example, healthcare was the best performing sector during the analysis, might the 25%+ WOB portfolio have an advantage merely by sector overweight?

The chart on the following page illustrates the performance of the sectors over the analysis period. As you can see, the top performers were consumer discretionary, consumer staples, and healthcare. The worst performers were financials, energy, and materials.

Financials were by far the worst performing sector, with a negative -1.00% return over 10 years. This may have contributed to Zero WOB's weak performance. Likewise, 25%+ WOB had high weightings in consumer discretionary, consumer staples, and healthcare, the three best performing sectors.

S&P 500 — Sector Performance 2006 - 2016



Sector Neutral Portfolios Still Outperform

We deepened our analysis by reconstructing our portfolios as sector neutral portfolios, matching the sector weight of the S&P500 Index at the end of the previous calendar year. When a sector weighting was zero, we used a sector ETF as a proxy for the sector in the portfolio. Below are the S&P500 sector

Portfolio	10 Year Performance
Zero WOB	8.37%
1+ WOB	8.42%
25% + WOB	9.19%

The persistence of outperformance, particularly for 25%+ WOB, is compelling, despite the narrowing of returns. A Catalyst report found that companies where three or more women served on the Board for a sustained period of time significantly outperformed those with sustained low representation of women on their board.⁵

Data showed that the 10-year performance results were similar for the sector neutral portfolios. 25%+ WOB outperformed 1+ WOB, and both portfolios outperformed Zero WOB, even when controlling for sector exposure.

The stock performance results from our research support the Catalyst findings because our portfolio with 25%+ WOB significantly outperformed the other two portfolios.

S&P 500 Sector Weightings

Year	Consumer Discretionary	Consumer Staples	Energy	Financials	Health Care	Industrials	Technology	Basic Materials	Telecom	Utilities
2015	12.9%	10.1%	6.5%	16.5%	15.2%	10.0%	20.7%	2.8%	2.4%	3.0%
2014	12.1%	9.8%	8.4%	16.8%	14.3%	10.4%	19.4%	3.2%	2.3%	3.3%
2013	12.6%	9.8%	10.4%	16.5%	13.0%	10.9%	18.4%	3.4%	2.2%	2.9%
2012	11.5%	10.5%	11.1%	16.0%	12.0%	10.1%	18.9%	3.6%	2.9%	3.4%
2011	10.6%	11.4%	12.3%	14.2%	11.8%	10.6%	18.9%	3.5%	3.0%	3.8%
2010	10.4%	10.6%	12.1%	16.8%	10.8%	10.9%	18.5%	3.8%	2.9%	3.3%
2009	9.4%	11.3%	11.6%	14.8%	12.8%	10.1%	19.8%	3.6%	3.0%	3.7%
2008	8.4%	12.9%	13.3%	13.3%	14.8%	11.1%	15.3%	2.9%	3.8%	4.2%
2007	8.5%	10.2%	12.9%	17.6%	12.0%	11.5%	16.7%	3.3%	3.6%	3.6%
2006	10.6%	9.3%	9.8%	22.3%	12.0%	10.8%	15.1%	3.0%	3.5%	3.6%
2005	10.8%	9.5%	9.3%	21.3%	13.3%	11.3%	15.1%	3.0%	3.0%	3.4%

5. Catalyst; The Bottom Line: Corporate Performance and Women's Representation on Boards (2004-2008), 2011.

Where are They Today?

The gender diversity of the boards of the companies we studied has changed over time. Of the 33 companies with zero women on their boards in 2005, only 2 companies have zero women on their boards today. In fact, 10 out of 33 companies now have greater than 25% women on their boards. The majority of these female directors were added in the last 5 years. More than 72% of the female directors we tracked became board members after 2010. The 34 companies in 25%+ WOB portfolio overall maintained their levels of WOB, with some losing ground on female board representation and some gaining ground.

**Change in Board Demographics
2005 to 2016**

Portfolio	Avg # WOB 2005	Avg % WOB 2005	Avg # WOB 2016	Avg % WOB 2016
Zero WOB	0	0	1.76	18.20%
25% + WOB	3.8	29.50%	3.4	28.00%

While more companies are focused on adding women to the boards, diversity percentages may change due to director retirements or resignations. A further analysis accounting for the dynamic changes in gender diversity on boards would be a next step in identifying the persistency of the Woman Factor.

Conclusion

Does the presence of women on boards signal superior stock performance for the company? Gender diversity of boards was associated with higher returns in the subset of our analysis. One question we did not answer; however, is the causality of the link between gender diverse boards and stock performance. Do women directors create better companies, or do great companies have women directors? Perhaps this is an unanswerable question. For investors, does it matter? Board gender diversity is associated with higher stock performance, and investors would be wise to pay attention.

ThirtyNorth Investments has created the Women Impact Strategy to capture both the financial and social benefits of investing in companies where women are represented on the board and in senior leadership. The Women Impact Strategy, a separately managed account, is a carefully crafted portfolio of fifty companies screened for both gender diversity and economic factors. The companies in the portfolio are leaders in gender representation in terms of board and executive team composition. In addition to the gender criteria, companies are screened based on the economic performance indicators of size, value, and profitability. The result is an actively managed portfolio that offers a first-movers advantage and gives investors the benefit of social impact with the potential for competitive returns.

With the ThirtyNorth Women Impact Strategy, investors also benefit from a female-led portfolio management team with a deep and genuine passion for gender lens investing. We believe the market has failed to price the Woman Factor, giving investors the opportunity to capture a premium by investing in companies led by gender diverse teams.

**For more information on the ThirtyNorth Women Impact Strategy
contact info@thirtynorth.com or (504) 528-3685.**

Disclaimers:

The performance of portfolios referred to in this white paper do not represent the results achieved by ThirtyNorth Investments, LLC, or any of its advisory clients. They do not reflect the impact that advisory fees and other expenses will have on returns. The Women Impact Strategy was not utilized with advisory clients until April 7, 2016.

Backtesting was used in calculating how certain types of portfolios would have performed. Backtesting involves a hypothetical reconstruction, based on past market data, of what the performance of a particular account would have been had the adviser been managing the account using a particular investment strategy. Performance results presented do not represent actual trading using client assets but were achieved through retroactive application of a strategy that was designed with the benefit of hindsight.

Backtested performance results have inherent limitations, particularly the fact that these results do not represent actual trading and may not reflect the impact that material economic and market factors might have placed on the advisor's decision-making if the firm were actually managing the client's money. These results should not be viewed as indicative of the advisor's skill and do not reflect the performance results that were achieved by any particular client. During this period, the adviser was not providing advice using this strategy, and clients' results were materially different.

Historical performance results for the Russell 3000 Index do not reflect the deduction of transaction and/or custodial charges or the deduction of an investment-management fee, the incurrence of which would have the effect of decreasing historical performance results. Short-term results are much less reliable than results from a longer time frame.

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