Women in Business Leadership Boost ESG Performance: Existing Body of Evidence Makes Compelling Case

Alexandre Di Miceli and Angela Donaggio

This paper explores the existing body of research linking a higher proportion of women in business leadership—including on boards of directors and in senior management—to improve overall company performance. The authors conducted a comprehensive literature review to uncover substantial evidence connecting increased gender diversity at the top with enhanced environmental, social, and governance standards. They identified equally strong evidence connecting better ESG with stronger corporate performance, building a comprehensive business case for the value of women’s participation on boards and in senior management.

Foreword

There is an alchemy that goes on in the best boardrooms—as with the best teams—that creates extra value from the combination of individuals and differing views. To be sure, gathering a group with similar backgrounds and skills may yield benefits. However, the larger opportunity lies in bringing together a diverse range of perspectives, because it offers a better chance of generating positive impacts far greater than the sum of its parts.

This is the promise of diversity: that the convergence of varied perspectives, experiences and backgrounds in the boardroom will stimulate more robust debate and discussion, driving richer challenge and decision making, and delivering greater value. A diverse board is less likely to fall into the trap of groupthink, less likely to get caught up in the present, and more likely to ask itself the fundamental questions that will sustain the business over the long term.

Similarly, a diverse team of executives in the senior leadership cadre offers a breadth and depth of expertise, creating added value that emanates from different experiences and perspectives.

Diversity is about a whole range of issues, from skills and experience to culture, national origin, race, and style of thought. Gender is among the most visible types of diversity, attracting considerable attention in popular culture and among market-creators, politicians, and regulators alike.

Investors, too, are increasingly focused on gender diversity in boardrooms and in senior leadership, and for good reason. Investors understand the value opportunity
in boosting the number of women in business leadership—bringing in the viewpoints of fully half the world’s population as a more realistic reflection of customers, communities, and other stakeholders. Investors also see the value risks in failing to take action on the gender-diversity-in-leadership front.

This Private Sector Opinion by Alexandre Di Miceli and Angela Donaggio adds to the burgeoning range of evidence that bolsters investors’ confidence in the common-sense view that diversity, and specifically gender diversity, genuinely adds value at companies. It draws together much of the existing evidence and forms a useful primer of key research in this area.

In analyzing and codifying the existing research, the authors present a comprehensive and common-sense rationale for greater diversity at the top. They highlight a considerable body of evidence linking gender-diverse boards and senior leadership with stronger environmental, social, and governance standards. And they detail a similarly considerable body of evidence that links stronger environmental, social, and governance standards with enhanced company performance. For instance, the authors highlight papers demonstrating that gender-diverse boards deliver more transparent reporting, fewer internal controls weaknesses, and greater earnings quality. Other papers note a positive correlation between the presence of women on boards and firm value, profitability, ethical and social compliance, and community engagement.

Such findings build investor confidence, leading to longer-term investment and more valuable companies. Common sense delivered.

The ongoing discussion about diversity—and, more broadly, about the importance of environmental, social, and governance performance—plays to a growing sense that the business world should be less distant from the population as a whole and that there is a growing need to be energized by a sense of fairness. A business world that more fully reflects its community and customers is more likely to be seen as fair and trusted.

By boosting the diversity of their boards and leadership, which contributes to increased focus on environmental, social, and governance considerations, companies can reduce the perception among some quarters that business is something set apart, in which few have a stake. If, at the same time, this contributes to improved performance, creating more value within those businesses, so much the better.

This Public Sector Opinion indicates that both are possible, and indeed that they are closely associated. It is heartening and welcome evidence for those of us at investment institutions working to encourage greater board and business leadership diversity.

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Women in Business Leadership Boost ESG Performance: Existing Body of Evidence Makes Compelling Case

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Plenty of evidence supports the link between having more women in business leadership positions and higher profitability. Yet, the research also reveals a somewhat nuanced and conditional financial business case, rather than a sweeping generality. Among the more thorough analyses is a 2015 paper that aggregates the results of 140 studies, with data from 35 countries and 90,070 firms. In this paper, authors Kris Byron and Corinne Post show that having more women in boardrooms is positively related to profitability measures. Of note, however, the study shows that this relationship is more robust in countries with stronger shareholder protections, presumably because boards are more active and powerful in these countries.

Another recent study of the impact of women in senior management revealed a connection—albeit a weak one—to better long-term financial indicators, such as profitability, stock price, and shareholder returns. This 2017 meta-analysis by Seung-Hwan Jeong and David Harrison aggregated the results of 146 studies conducted in 33 different countries over more than two decades, yielding a sample size of more than 46,000 firms.

Financial performance is not the only indicator of company success

That said, we also believe that there are limitations in the school of thought that considers financial performance as the only measure of corporate success. In this narrow, strictly financial view of corporate performance, the sole justification for adding more women to company boards and in leadership positions would be to improve the bottom line.

However, we contend that the concept of corporate performance should extend well beyond what’s happening with the bottom line. The reason? In the wake of so many corporate crises and scandals, stakeholders are demanding significantly higher ethical, environmental, and social standards—not because they necessarily lead to direct increases in profits, but because they reduce risks, improve community engagement, and enhance the long-term viability of the company.

What do we mean by women in business leadership?

This catch-all phrase includes women on boards of directors and women in senior-level management positions.

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3 The study also shows that the female board representation/social performance relationship is even more positive in contexts where intra-board power distribution may be more balanced (i.e., in countries with higher gender parity). The authors’ hypothesis is that the relationship between women’s representation on boards and corporate social performance is more positive among studies conducted in countries where gender parity is higher, because, in those contexts, women directors are more likely to possess the prestige and expertise, along with structural and ownership power that will provide them with voice in the boardroom. Thus, they expected that the relationship between women’s representation on boards and corporate social performance would be more positive among studies conducted where gender parity is greater because gender parity is likely to increase intra-board power distribution. The results confirm the authors’ hypothesis.
Thus, we believe that there is a more comprehensive business case to be made for greater gender diversity at the top by taking a broader view: that increasing the number of women in business leadership is likely to lead to better overall company performance—*including but not limited to financial performance*—through improved non-financial indicators, such as reputation, investor perceptions, and stakeholder engagement.

We set out to explore this argument, broadening the rationale for more women in business leadership—including women on boards and in senior management—by connecting it to enhanced environmental, social, and governance (ESG) standards.

**Comprehensive literature review yields positive correlations**

We searched for scientific evidence to substantiate our premise. Our initial scan of Google Scholar and top business journals yielded 184 papers dealing with a variety of gender diversity issues in the corporate world. After analyzing these papers and narrowing the time frame to more recent research, we identified 70 peer-reviewed papers published between 2008 and 2017 that support our proposition.

Our findings revealed two sets of connections. The first is that having more women in business leadership positions leads to higher environmental, social, and governance standards, with a particularly clear connection when women comprise a critical mass of about 30 percent on company boards. The second is that companies with enhanced ESG perform better on critical metrics: stronger internal controls and management oversight, reduced risk of fraud or other ethical violations, positive workplace environment, greater stakeholder engagement, and improved reputation and brand.

Combined, the results offer a convincing argument that having a more gender-balanced board and leadership team contributes to stronger environmental, social, and governance performance, which in turn, leads to better business performance.

*Figure 1. The presence of more women in business leadership is connected to better ESG standards*
In the following sections, we break down the evidence, highlighting key findings on the connection between greater gender diversity at the top and the environmental, social, and governance dimensions of business operations.

**The Environmental Dimension**

Among the 70 papers corroborating the women in business leadership-ESG business case, 16 focus specifically on the positive impacts on firms’ environmental practices, such as sustainability standards and the quality of environmental reporting, while seven others address both environmental and social standards. They span multiple countries, thousands of businesses across multiple industry sectors, and include nine longitudinal studies averaging six years of analysis.

For instance, in one 2017 paper, authors Walid Ben-Amar, Millicent Chang, and Philip McIlkenny observed about 100 Canadian companies over a five-year period. The researchers concluded that female boardroom participation is positively associated with the voluntary disclosure of climate change information. Specifically, they noted that more women in senior leadership influences a firm’s decision to address demands from major stakeholders by reporting more extensively on greenhouse gas emission levels and climate change-related risks. The authors also note the importance of a critical mass of female directors. The results are quite clear when boards include at least two women, but are less apparent when the board only has one female director.4

A second 2017 study looks at China, an emerging economy. For this paper, authors Feng Wei, Binyan Ding, and Yu Kong observed more than 100 companies a year for eight years, from 2008 to 2015. Among the conclusions: that boards with at least three female directors have a significant and positive impact on the scale of their companies’ corporate environmental impact. Notably, the impact is not the same when there are only one or two female directors on the board. The authors also observed that their results are particularly strong for state-owned enterprises and enterprises from heavily-polluting industries.5

Other key takeaways from the papers we reviewed include the following:

- There are strong and positive correlations between more female board directors and:
  - better sustainability practices, including reduced greenhouse gas emissions
  - higher firm rankings on environmental performance
  - increased corporate environmental investments
  - reduction in environmentally-related problems and community concerns
  - quality and extent of sustainability reporting, including level of disclosure on environmental practices

- Female entrepreneurs are more engaged with environmental issues than male entrepreneurs:
  - stronger commitment to green approaches
  - more attentive to triple bottom line of people, planet, and profit

**The Social Dimension**

We identified 25 papers specifically focused on the connection between increased representation of women in business leadership and enhanced social outcomes, along with the seven noted above that explored both environmental and social dimensions. Studies covered multiple countries and included 19 multi-year studies averaging six years of analysis each.

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These papers looked at thousands of companies and spanned the range of social aspects, including employee relations, work-life balance, gender equity practices in the workplace, social and ethical reputation, human rights, and corporate social responsibility initiatives.

In one expansive study, authors Geoffrey Tate and Liu Yang analyzed 9,244 closing plants in the U.S. over a nine-year period. They observed that women displaced by plant closures experienced significant wage losses relative to men when they started a new job. However, if these new jobs were at female-led firms, this wage gap was narrowed considerably—by roughly 50 percent—yielding a more equitable pay scale for new hires, regardless of gender. The results show an important externality of having women in leadership positions: they cultivate more gender-equitable and female-friendly cultures inside their firms.\(^6\)

Similarly, in a ten-year study of U.S. Fortune 500 companies published in 2017, authors Christy Glass and Alison Cook found that firms with female CEOs or gender-diverse boards are associated with a range of stronger business and equity practices, including diversity, corporate governance, product strengths, and community engagement.\(^7\)

Were such results only evident in developed economies? We sought out papers that looked specifically at emerging markets and found some evidence in support of our underlying hypothesis. A 2016 study of 450 Malaysian companies showed that the presence of women on the boards of these firms is the only variable that positively affects the level and degree of their CSR initiatives. The authors showed that other efforts at diversifying boards, such as appointing non-executive and independent directors, may have a negative impact on the company’s CSR initiatives.\(^8\)

### Evidentiary Conclusions: Women in Business Leadership and Company Social Performance

**Having more female board directors is positively correlated with:**
- improved CSR practices in emerging market companies
- stronger commitment to corporate social responsibility (CSR) initiatives and practices
- overall social performance
- better community engagement
- stronger worker relations, positive business culture, and better work-life balance
- improved human rights
- ethical conduct and reputation

**Firms with more women in leadership demonstrate a stronger emphasis on workplace environment, workforce issues, and worker satisfaction, including:**
- gender-equitable hiring practices
- gender-equitable opportunities for promotion
- equal pay for equal work
- male and female talent development
- women-friendly policies

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Another emerging market study, published in 2018, focused on China. For this paper, the authors analyzed 12,941 firm-year observations over a nine-year period from 2006 to 2014—about 1,200 companies per year. The conclusions highlight the importance of women in senior executive leadership for comprehensive CSR reporting. The authors found that compared with their male counterparts, female C-level executives are more likely to encourage CSR reporting and strengthen the content of CSR statements.9

The Governance Dimension

Of the studies we analyzed, 22 focused on corporate governance issues. Most of these studies explored the governance context in individual countries, including Australia, Canada, China, Israel, Norway, Spain, and the U.S, while several looked at data from multiple countries.10 The studies we reviewed found links between more women in business leadership and better corporate governance practices, including internal controls, transparency, integrated reporting, ethics and compliance, and board processes and dynamics.

Among the notable findings are the results of a paper by Yu Chen, John Daniel Eshleman, and Jared Soileau. This paper examined the internal controls that are critical to ensuring the effectiveness and efficiency of company operations, accuracy in reporting, and compliance with laws and regulations. The authors analyzed about 400 U.S. companies per year over a ten-year period and concluded that firms with greater female board representation are less likely to have internal control weaknesses. The results are independent of whether or not women are members of audit committees.11

Another paper of note, by Douglas Cumming, Tak Yang Leung, and Oliver Rui, examined whether the presence of more female board directors would decrease the potential for securities fraud. For this first-of-its-kind study, the authors conducted an econometric analysis of 1,422 frauds committed at 742 Chinese companies during the time period 2001–2010. They concluded that companies with more women in leadership had a reduced risk of securities fraud. Specifically, they observed that a one standard deviation increase in the proportion of women directors is associated with a 14.6 percent reduction in the probability of fraud. Of note, to optimize this risk mitigation, companies should have full gender parity on their boards—50 percent male and 50 percent female.

A third study, by Helena Isidro and Marcia Sobral,12 looked at the boards of more than 900 firms in 16 European countries over a three-year period ending in 2012. The authors found that the presence of women on boards is positively related with firm value, profitability, and ethical and social compliance. The findings suggest that the indirect effect of greater female representation in leadership on firm value comes from stronger compliance with ethical principles, which is not captured by accounting-based financial performance.

In our analysis of the papers addressing women in leadership and the governance dimension, we identified several important takeaways, including positive correlations between gender-diverse boards and female leaders and indicators of firm performance, measures of board effectiveness, and nature

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massive meta-analyses connecting more women in business leadership with better financial performance

Post & Byron (2015)
Jeong & Harrison (2017)
and extent of transparency and disclosure. The research also associates female representation on audit committees with better financial reporting discipline and fewer audit qualifications due to errors, non-compliance, or omission.

### Evidentiary Conclusions: Women in Business Leadership and Company Corporate Governance

**Gender-diverse boards and female leaders are associated with enhanced firm performance:**
- ✔ better returns on assets and sales
- ✔ stronger earnings quality
- ✔ enhanced firm value
- ✔ tighter internal controls
- ✔ increased ethical and social compliance
- ✔ reduced incidence of fraud, insider trading, and other unethical practices

**Gender-diverse boards are associated with increased board effectiveness:**
- ✔ stronger control over companies’ strategic direction
- ✔ more active board meetings
- ✔ reduced levels of conflict
- ✔ greater emphasis on board development
- ✔ increased willingness to replace underperforming CEOs

**Gender-diverse boards influence the nature, extent, and monitoring of reporting:**
- ✔ reduced risk of financial restatement
- ✔ more conservative approach to earnings statements
- ✔ increased transparency and disclosure

### Addressing the Skeptics

Despite the mounting evidence, some skeptics remain unconvinced of the connection between more women in leadership and stronger company performance. As researchers ourselves, we are well aware that all studies come with relevant limitations.

However, social science researchers make use of several procedures to increase the likelihood that the positive association between women in business leadership and improved company performance proves out as valid and true, and that the presence of women on boards and in C-suites is related to such improvements. Among these techniques:

- Using large samples with thousands of companies over long time frames
- Controlling the relationship between women in business leadership and company performance for several corporate attributes and governance factors
- Conducting sophisticated econometric analysis that accounts for unobserved firm heterogeneity and the dynamic relationships of the variables of interest, such as lagged measures of variables
- Applying specific tests to see if reverse causality is taking place
- Carrying out robustness checks with different proxies for the variables of interest

Researchers also point to the value of anecdotal evidence in supporting their conclusions—and the argument that causality runs from more women in leadership to improved performance. For
example, one recent paper found statistically significant results—based on thousands of firm-year observations—showing that more women on boards leads to better corporate social responsibility. As part of the study, the authors wove in excerpts from interviews, such as “Caterpillar went from zero women on its board to one woman, and the following year its environmental strengths score increased,” and “Honeywell went from one woman on its board to no women on its board, and the following year its community strengths score decreased.” The study features many other such anecdotal observations, which further bolstered the authors’ argument.

**Conclusion**

Our research bears out our hypothesis that gender-diverse business leadership is positively connected to ESG performance and ESG is associated with enhanced company performance—including financial performance.

In our view, analyzing the impact of more women in leadership on ESG is the next logical step in building out a comprehensive business case for greater gender balance at the top. As we present in this Public Sector Opinion, the empirical evidence shows that women in leadership are more likely to care about the broader implications of company decisions. This, in turn, is likely to lead to more balanced decisions—decisions that take into account the interests of all stakeholders, which will help maintain strong, long-term relationships and ensure business sustainability. Ultimately, this will reflect back on the company in a positive way, leading to enhanced firm value.

Given the clear connection between more women at the top and better ESG, the results provide an even stronger rationale for business leaders to address the lack of gender balance in their boardrooms and senior management. Reducing these imbalances will improve relationships with stakeholders—and with institutional investors increasingly focused on effective environmental and social stewardship of their investee companies, as many countries put in place new codes that call for higher standards in these dimensions. Along the way, taking action toward greater gender balance in corporate leadership is likely to enhance financial performance as well.

Such an approach also addresses critics of the research connecting increased women’s representation in boardrooms and senior management with better financial performance. Viewing firm performance, corporate purpose, and the role of directors through this broader lens—as stakeholders demand the adoption of higher ethical, environmental, social, and governance standards—will encourage an assessment of value that goes well beyond the narrow focus on financial indicators.

Still, while we demonstrate the existence of a substantial body of evidence showing that more women in leadership matters for adoption of sound ESG standards and that strong ESG matters for financial performance, we also suggest that the business case for women in business leadership could be enriched even further.

**More studies of smaller emerging market companies needed**

In the course of our literature review, we discovered some significant gaps. The vast majority of studies to date have made use of quantitative analysis, which, while effective, can sometimes yield an incomplete picture of the situation. This void could be filled by qualitative works based on interviews, survey questionnaires, and in-depth case analyses.

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14 New studies based on interviews could improve the current understanding of how increasing boardroom diversity changes board behavior regarding ethical, social, and environmental issues. This information, in turn, would reinforce the case for causality.
Another gap is in the lack of evidence exploring the impact of women in senior management. A significant majority (69 percent) of the studies we reviewed focus on the ESG impact of adding more women on boards of directors. The ESG business case could be enriched with studies analyzing the outcomes of having more women in C-level positions, including as CEOs, particularly since increasing gender diversity in the C-suite is critical to deepening the pipeline of women for board positions.

Also missing are studies focusing on small to medium-sized unlisted firms from emerging markets. In the 70 studies we analyzed, only five—7 percent—were conducted in emerging economies. And, although unlisted firms represent the overwhelming majority of businesses around the world, and particularly in emerging markets, only four papers—5 percent of our sample—analyzed unlisted firms, probably due to the lack of publicly available information for these companies.

As emerging markets look to attract additional foreign investment, understanding how such companies perform with regard to gender diversity and ESG will become increasingly critical. These foreign investors may view stronger company ESG standards as a mitigating factor to the risks associated with wading into markets with weaker regulatory environments.

So, while our analysis uncovered a wealth of evidence connecting greater gender diversity in leadership with stronger ESG standards and improved company performance, we see a new and exciting frontier opening in the research on gender diversity in senior business leadership positions. These efforts would focus on unlisted companies from multiple emerging countries, using a qualitative approach through interviews or surveys.

We also envision an important role for development finance institutions in such efforts, for several reasons. First, the investment portfolios of development banks typically include many unlisted companies in emerging markets—precisely the firms that are under-represented in the current body of research. Second, because development finance institutions require strong ESG standards of their investee companies—and because some, like IFC, are pushing for more gender diversity in the leadership of their investee companies—tracking the performance of these companies over time could yield valuable insights. Third, such studies would be bolstered by development banks’ direct access to these companies, which would enable the collection of qualitative information through in-depth interviews and questionnaires, in addition to the quantitative measures.

Taken as a whole, the compendium of available evidence presents the strongest business case to date for prioritizing efforts to accelerate the number of women on boards and in other leadership positions. Yet, as we note, more work remains, particularly in efforts to demonstrate the value of gender-diverse leadership for smaller, unlisted, and emerging market companies.

**A final thought: the moral imperative for gender-diverse business leadership**

We conclude this PSO with a reminder. Beyond the business case, there is a powerful moral justice argument for equitable gender representation in the upper echelons of the corporate world. Equity and fairness should be sufficient justification for gender diversity, regardless of whether there is a utilitarian purpose for adding more women in business leadership.15 Building business institutions that are inherently fair and inclusive, to better reflect all company stakeholders and society as a whole, is a moral and ethical imperative of our times.

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15 In addition, it is important to highlight that the overwhelming majority of empirical studies conclude that a higher ratio of women in business leadership does not impair corporate performance (virtually all studies find positive or non-statistically significant results). Thus, because it is clear that a higher representation of women in leadership is not associated with a detrimental effect on firm performance, this result supports the moral justice argument for board gender diversity. Given the current under-representation of women in leadership around the world, the argument that equally-qualified women should be prioritized for promotions is clearly justified and socially desirable.
### Table 1: Empirical evidence of the positive relationship between women in business leadership and ESG standards (By ESG dimension, year, author)

<table>
<thead>
<tr>
<th>ESG dimension</th>
<th>Title</th>
<th>Year</th>
<th>Author</th>
<th>Number of firms analyzed</th>
<th>Number of countries analyzed</th>
<th>Number of years analyzed</th>
<th>Main conclusions</th>
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</table>
| E             | Going green: women entrepreneurs and the environment | 2010 | Braun | 154 entrepreneurs interviewed | 1 (Australia) | 1 (2008) | - Women entrepreneurs are more engaged with green issues than their male counterparts. They exhibited stronger environmental attitudes and commitment to a green entrepreneurship program than males.  
- Male entrepreneurs tended to look for bottom-line outcomes and competitive advantage, seeing the program as an opportunity for leaner business practices and operational savings, while the female entrepreneurs tended to lean towards broader ethical concerns and the greater good.  
- Women were more proactive in participating in green networking opportunities and expanding their business and social capital. |
| E             | Green Governance: Boards of Directors’ Composition and Environmental Corporate Social Responsibility | 2011 | Post, Rahman & Rubow | 78 | 1 (U.S.) | 1 (2007) | - Firms with boards composed of three or more female directors exhibit higher natural environment ratings, based on Kinder Lydenberg Domini (KLD) Inc. scores. |
| E             | Does Workforce Diversity Matter in the Fight against Climate Change? An Analysis of Fortune 500 Companies | 2012 | Ciocirlan & Pettersson | 94 | 1 (U.S.) | 1 (2008) | - Companies that employ more women tend to exhibit a higher concern for climate change.  
- As a broader implication, the study suggests that a company’s HR strategy should be linked to its environmental strategy and vice versa. |
<p>| E             | Boards' Gender Mix and Extent of Environmental Responsibility Information Disclosure in Nigeria: An Empirical Study | 2012 | Fodio &amp; Oba | 16 | 1 (Nigeria) | 3 (2005-2007) | - The presence and proportion of female directors on the board has a significant impact on a company’s environmental information disclosure. |
| E             | Corporate Governance and Environmental Reporting: An Australian Study | 2012 | Rao, Tilt &amp; Lester | 100 | 1 (Australia) | 1 (2008) | - There is a significant positive relationship between the extent of environmental reporting and the proportion of female directors on the board of directors. |</p>
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▪ With more female directors on their boards, companies faced fewer environmental concerns, especially in firms with a high degree of shareholder concentration and institutional ownership. |
| E             | Do Women Leaders Promote Sustainability? Analyzing the Effect of Corporate Governance Composition on Environmental Performance | 2015 | Glass, Cook & Ingersoll | 500 | 1 (U.S.) | 10 (2001-2010) | ▪ Firms characterized by gender-diverse leadership teams are more effective than other firms at pursuing environmentally friendly strategies.  
▪ Gender diversity on the board is related to a small positive effect on a firm’s likelihood of supporting positive environmental initiatives.  
▪ Companies with female board members who are interlinked with other firms exhibit stronger environmental practices. |
| E             | Gender Diversity, Board Independence, Environmental Committee and Greenhouse Gas Disclosure | 2015 | Liao, Luo, & Tang | 329 | 1 (U.K.) | 1 (2011) | ▪ There is a strong positive association between board gender diversity and the propensity of companies to disclose greenhouse gas (GHG) information as well as the comprehensiveness of the disclosure. |
| E             | From Board Composition to Corporate Environmental Performance through Sustainability-Themed Alliances | 2015 | Post, Rahman & McQuillen | 36 oil and gas firms | 1 (U.S.) | 5 (2004-2008) | ▪ The higher the representation of women on a firm’s board, the more likely the firm is to form sustainability-themed alliances.  
▪ Such alliances, in turn, positively contribute to corporate environmental performance. |
| E             | Board Gender Diversity and Sustainability Reporting Quality | 2016 | Al-Shaer & Zaman | 333 | 1 (U.K.) | 1 (2012) | ▪ After controlling for corporate governance and firm reporting incentives, the authors find that gender-diverse boards are associated with higher quality sustainability reports.  
▪ Independent female directors have a greater effect on sustainability reporting quality than female directors. |
| E             | Gender and Environmental Sustainability: A Longitudinal Analysis | 2016 | Kassinis, Panayiotou, Dimou & Katsifarakis | 1,480 firm-year observations | 1 (U.S.) | 5 (2008-2012) | ▪ Firms with more gender-diverse boards of directors and more policies and practices that enable or reinforce gender diversity throughout the organization adopt more environmentally responsible policies and practices.  
▪ The findings corroborate the idea that gender diversity on the board matters for both organization-wide diversity and for sustainability. |
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| E             | Board Gender Diversity and Corporate Response to Sustainability Initiatives: Evidence from the Carbon Disclosure Project | 2017 | Ben-Amar, Chang & McIlkenny | 541 firm-year observations | 1 (Canada) | 5 (2004–2008) | - Female boardroom participation is positively related to the voluntary disclosure of climate change information, after board attributes and firm factors are taken into consideration.  
- Specifically, female board representation increases the firm’s decision to voluntarily respond to major stakeholders’ demands for increased reporting about greenhouse gas (GHG) emission levels and climate change-related risks.  
- Female board participation needs to reach a critical mass of two directors before it starts influencing disclosure about climate change strategies. |
- To have an impact on voluntary GHG emission, the board must have multiple female directors. This finding raises questions regarding the optimal proportion of female directors needed to improve board processes. |
| E             | Women in the boardroom and their impact on climate change-related disclosure | 2017 | Hossain, Farooque, Momin & Almotairy | 1,175 firm year observations | 1 (Australia) | 3 (2011–2013) | - There is a positive relationship between board gender diversity and carbon disclosure information as required by the Carbon Disclosure Project (CDP).  
- Companies with women directors and a smaller-sized board may achieve a higher level of carbon emission performance and are more likely to voluntarily disclose the level of carbon information assessment requested by the CDP.  
- The findings are supported after accounting for endogeneity, simultaneity, and unobserved time invariant heterogeneity. |
| E             | Boardroom Gender Diversity and Corporate Sustainability Practices: Evidence from Australian Securities Exchange Listed Firms | 2017 | Nadeem, Zaman & Saleem | 1,756 firm-year observations | 1 (Australia) | 5 (2010–2014) | - There is a significant positive relationship between women’s representation on boards and corporate sustainability practices.  
- The findings are supported after accounting for endogeneity, simultaneity, and unobserved time invariant heterogeneity. |
| E             | Female Directors and Corporate Social Responsibility: Evidence from the Environmental Investment of Chinese Listed Companies | 2017 | Wei, Ding & Kong | 910 firm-year observations | 1 (China) | 8 (2008–2015) | - When a board has at least three female directors, there is a significantly positive impact on the scale of corporate environmental investment.  
- The results are not significant when there are only one or two female directors on the board.  
- The results are particularly strong for state-owned enterprises and enterprises from heavily-polluting industries. |
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<td>S</td>
<td>Does female representation on boards of directors associate with the “most ethical companies” list?</td>
<td>2009</td>
<td>Bernardi, Bosco &amp; Columb</td>
<td>500</td>
<td>1 (U.S.)</td>
<td>1 (2007)</td>
<td>■ For Fortune 500 companies, there is a connection between a greater percentage of women on the board and identification by Ethisphere magazine as one of its “World’s Most Ethical Companies.”</td>
</tr>
</tbody>
</table>
■ The reputational impact of having women on the board depends on a firm’s industry environment.  
■ Specifically the presence of women on the board is viewed favorably in only those sectors that operate close to final consumers.                                                                                                           |
| S            | The Impact of Board Diversity and Gender Composition on Corporate Social Responsibility and Firm Reputation | 2010 | Bear, Rahman & Post                        | 51                       | 1 (U.S.)                  | 1 (2009)                | ■ There is a positive relationship between the number of women on the board and KLD’s strength ratings for CSR.  
■ As the number of female directors increases, so does the firm’s CSR, suggesting that contributions women bring to the board in this area are more likely to take place when board dynamics move away from tokenism and toward normality.  
■ There is a positive relationship between the percentage of women on boards and in leadership positions and corporate reputation.                                                                                                   |
■ Having women on boards is positively linked with economic growth, enforcement of ethical conduct, and social responsiveness.  
■ There was no significant relationship between the proportion of women on boards and environmental quality.                                                                                                                   |
■ The results are stronger for the specific indicators related to community performance, employee relations, and human rights.                                                                                           |
### Table 1: Empirical evidence of the positive relationship between women in business leadership and ESG standards (By ESG dimension, year, author)—continued

<table>
<thead>
<tr>
<th>ESG dimension</th>
<th>Title</th>
<th>Year</th>
<th>Author</th>
<th>Number of firms analyzed</th>
<th>Number of countries analyzed</th>
<th>Number of years analyzed</th>
<th>Main conclusions</th>
</tr>
</thead>
</table>
- Demographic diversity on boards determines social performance and the relationship is moderated by structural diversity of boards.  
- The results clearly indicate that inclusion of female directors results in better firm social performance. |
| S             | The Relationship between Women Directors and Corporate Social Responsibility | 2013  | Setó-Pamies         | 94                       | Global                    | 1 (2011)                 | - Firms with a higher percentage of women on the board are more socially responsible.  
- The results suggest that the presence of more women in the top tiers of management can play a key role in driving CSR forward. |
| S             | Board Composition and Corporate Social Responsibility: An Empirical Investigation in the Post Sarbanes-Oxley Era | 2013  | Zhang, Zhu & Ding   | 516                      | 1 (U.S.)                  | 1 (2007)                 | - A greater presence of women directors is linked to better reputation-based CSR measures compared to industry peers.  
- Among the various types of directors, the presence of female outside directors has the largest effect on reputation-based CSR performance. |
| S             | Predictors of the Adoption of LGBT-Friendly HR Policies               | 2014  | Everly & Scharz     | 2,430 firm-year observations | 1 (U.S.)                | 8 (2003–2010)           | - The number of women serving on the board is one of the three main predictors of the adoption of company policies toward its LGBT employees. The other two include state laws on gay rights in non-employment-related areas where the company is headquartered, and whether other companies in the same industry have adopted progressive policies.  
- Specifically, longer board tenure tends to increase female directors’ willingness to advocate for LGBT-friendly HR policies and their effectiveness in doing so. |
| S             | Recognition for Sustained Corporate Social Responsibility: Female Directors Make a Difference | 2014  | Landry, Bernardi & Bosco | 341                      | 1 (U.S.)                  | 7 (2006–2012)           | - The higher the percentage of women on a company’s board of directors, the more likely it is that the company will be included on lists such as: Most Admired Companies, Most Ethical Companies, Best Companies to Work for, and Best Corporate Citizens.  
- As the percentage of female directors increased during the period of analysis, it was more likely that a company would appear on multiple ‘best’ lists. |
<table>
<thead>
<tr>
<th>Title</th>
<th>Year</th>
<th>Number of countries analyzed</th>
<th>Number of firms analyzed</th>
<th>Main conclusions</th>
</tr>
</thead>
</table>
| Workforce Reductions at Women-Owned Businesses in the United States  | 2014   | 1 (U.S.)                    | 121,284 firm-year observations | - This is the first-ever evidence relating the gender of business owners to their firms’ employment strategies.  
- Privately held firms owned by women were less likely than those owned by men to downsize their workforces during the Great Recession.  
- Year-to-year workforce reductions were as much as 29 percent less at women-owned firms, even after controlling for industry, size, and profitability.  
- On the other hand, the impact of a gender-diverse executive board is not entirely clear and the results are mixed. |
| The influence of gender-diverse corporate boards on employee orientation | 2014   | 1 (Germany)                 | 294 firm-year observations | - There is strong evidence that the ethical reputation of financial institutions is positively associated with board gender diversity.  
- Financial institutions with board characteristics that reflect more effective monitoring and oversight have better ethical reputations.  
- The presence of women on corporate boards in top and middle management has a positive impact on CSR activities that have gender equality objectives.  
- The paper’s findings provide an additional reason to promote women into decision-making positions: doing so has a positive impact on CSR. |
| Ethical Reputation of Financial Institutions: Do Board Characteristics Matter? | 2015   | 13 (including Australia, Canada, Germany, Japan, Spain, U.K., U.S.) | 220 firm-year observations | - There is strong evidence that the ethical reputation of financial institutions is positively associated with board gender diversity.  
- Financial institutions with board characteristics that reflect more effective monitoring and oversight have better ethical reputations.  
- The presence of women on corporate boards in top and middle management has a positive impact on CSR activities that have gender equality objectives.  
- The paper’s findings provide an additional reason to promote women into decision-making positions: doing so has a positive impact on CSR. |
| Does Having Women Managers Lead to Increased Gender Equality Practices in Corporate Social Responsibility? | 2015   | 1 (Spain)                  | 42 firm-year observations | - The presence of women on corporate boards in top and middle management has a positive impact on CSR activities that have gender equality objectives.  
- The paper’s findings provide an additional reason to promote women into decision-making positions: doing so has a positive impact on CSR. |
| Corporate Governance Characteristics of Most Admired Companies         | 2015   | Global                      | 50 firms                   | - The Fortune 50’s world’s most admired companies in 2009 had a higher percentage of female directors than their comparable, not-admired peers. |

Table 1. Empirical evidence of the positive relationship between women in business leadership and ESG standards (By ESG dimension, year, author)—continued
<table>
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<tr>
<th>ESG dimension</th>
<th>Title</th>
<th>Year</th>
<th>Number of countries analyzed</th>
<th>Number of firms analyzed</th>
<th>Number of years analyzed</th>
<th>Author(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>Leadership styles and corporate sustainability: Analysis from a gender perspective</td>
<td>2016</td>
<td>1 (Spain)</td>
<td>391 interviews with senior executives</td>
<td>10 (2001-2010)</td>
<td>Alonso-Almeida, Perramon &amp; Bagur-Femenias</td>
</tr>
</tbody>
</table>

Main conclusions:
- There are differences in men's and women's leadership styles and corporate sustainability, with women often adopting a transformational style more frequently.
- Women tend to invest more in the development and welfare of employees and in providing equal employment opportunities for men and women.
- Overall, women seem more likely to balance the interests of the company's key stakeholders.
- Firms with gender-diverse boards are more likely than other firms to have a high CSR score. They also are more likely to rank higher on overall corporate equality index scores.
- Findings for firms with women CEOs on the other hand, offer mixed results: they have a significant positive impact on whether a firm adopts a sexual orientation non-discrimination policy.
- Having a female CEO has no direct impact on whether a firm adopts a sexual identity non-discrimination policy.
- Female managers are more responsive to their employees’ needs. They heavily limit the use of involuntary part-time employment, correspondingly increasing full-time employment, and conceding more part-time arrangements to employees asking for them.
- Unexplored benefits from increasing the number of women in leadership include: containing the widespread phenomenon of involuntary part-time employment and the enhancement of the work-life balance of workers engaged in child care or elderly care activities.
<table>
<thead>
<tr>
<th>Title</th>
<th>Year</th>
<th>Author</th>
<th>Number of Firms (Country)</th>
<th>Number of Countries</th>
<th>Main Conclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td>What If Your Boss is a Woman? Work Organization, Work-Life Balance and Gender Discrimination at the Workplace</td>
<td>2016</td>
<td>Lucifora &amp; Vigani</td>
<td>63,318 workers (30 countries)</td>
<td>30 European Countries</td>
<td>■■ Having a female boss is associated with lower overall pay gap between men and women. ■■ Female workers experience less gender discrimination. ■■ A better balance between work and life—particularly for women in high-skilled jobs—are shown to be effective in reducing gender discrimination. ■■ The presence of women on boards is the only variable that positively affects the level of CSR initiatives of the companies. ■■ There seems to be a negative relationship between the presence of non-executive and independent directors and CSR initiatives. ■■ With the exception of having female directors, the composition of boards in emerging market companies is relatively ineffective in improving CSR initiatives.</td>
</tr>
<tr>
<td>Board Composition and Corporate Social Responsibility in an Emerging Market</td>
<td>2016</td>
<td>Sundarasen, Je-Yen &amp; Rajangam</td>
<td>450 workers (1 Malaysia)</td>
<td>1 (2011–2012)</td>
<td>■■ The presence of women on boards is the only variable that positively affects the level of CSR initiatives of the companies. ■■ There seems to be a negative relationship between the presence of non-executive and independent directors and CSR initiatives. ■■ With the exception of having female directors, the composition of boards in emerging market companies is relatively ineffective in improving CSR initiatives.</td>
</tr>
<tr>
<td>Female Leadership and Gender Equity: Evidence from Plant Closure</td>
<td>2016</td>
<td>Tate &amp; Yang</td>
<td>9,244 closing plants (30 states)</td>
<td>1 (U.S.)</td>
<td>■■ Firms with more women in leadership roles have smaller pay gaps between men and women (controlling for worker characteristics) and offer more equal pay to newly hired employees. ■■ Female workers displaced by plant closures experience significant wage losses of about 5 percent compared to male workers. ■■ The wage gap is far smaller—about 50 percent less—if they are re-hired by female-led firms. ■■ The result is particularly strong when women constitute the majority of the hiring firm's management team. The gender of the CEO matters a great deal! ■■ Having a female boss is associated with lower overall pay gap between men and women. ■■ Female workers experience less gender discrimination. ■■ A better balance between work and life—particularly for women in high-skilled jobs—are shown to be effective in reducing gender discrimination. ■■ The presence of women on boards is the only variable that positively affects the level of CSR initiatives of the companies. ■■ There seems to be a negative relationship between the presence of non-executive and independent directors and CSR initiatives. ■■ With the exception of having female directors, the composition of boards in emerging market companies is relatively ineffective in improving CSR initiatives.</td>
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<tr>
<td>ESG dimension</td>
<td>Title</td>
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<td>Author</td>
<td>Number of firms analyzed</td>
<td>Number of countries analyzed</td>
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</tbody>
</table>
| S            | Do Women Leaders Promote Positive Change? Analyzing the Effect of Gender on Business Practices and Diversity Initiatives | 2017 | Glass & Cook                 | 3,492 firm-year observations | 1 (U.S.)                   | 10 (2001-2010)            | • Firms with female CEOs or gender-diverse boards are associated with a range of stronger business and equity practices, including diversity, corporate governance, product strengths, and community engagement.  
• Female CEOs are more likely than male CEOs to champion diversity policies and practices, in particular when they are backed by influential female board members, such as interlinked directors and female CEOs from other firms.  
• Gender-diverse leadership teams demonstrate stronger business and equity outcomes than teams characterized by gender homogeneity. |
| S            | Women Helping Women? Evidence from Private Sector Data on Workplace Hierarchies | 2017 | Kunze & Miller               | 597,552 worker-year observations | 1 (Norway)                 | 11 (1987–1997)           | • Female workers experience a significantly lower annual likelihood of advancing one rank than their male counterparts, after controlling for a wide range of individual characteristics and workplace fixed effects.  
• The gap is reduced when there are more female bosses in the next highest rank, but it is increased when there are more female peers at the same rank.  
• The finding of narrower gender gaps in worker promotions when there are more female bosses suggests that policies that increase female representation in corporate leadership can have spillover benefits for women in lower ranks. |
| S            | Do Female Executives Prioritize Corporate Social Responsibility?        | 2017 | Zou, Wu, Zhu, & Yang         | 12,941 firm-year observations | 1 (China)                  | 9 (2006–2014)            | • Compared with their male counterparts, female C-level executives are more likely to encourage CSR reporting and are more likely to strengthen the content of CSR statements.  
• Female executives prioritize the reporting of various CSR aspects starting with shareholder protection, followed by staff protection, delivery protection, customer protection, environmental protection, and public relations. |
| E&S          | The Impact of CEO Characteristics on Corporate Social Performance       | 2010 | Manner                       | 650                       | 1 (USA)                    | 1 (2006)                 | • Strong or exemplary corporate social performance is positively related to having a female CEO, a CEO with a bachelor’s degree in humanities, or a CEO with breadth of career experience.  
• There are negative correlations between exemplary CSR and having a CEO with a bachelor’s degree in economics, and between better CSR and the amount of short-term CEO compensation. |
Table 1. Empirical evidence of the positive relationship between women in business leadership and ESG standards (By ESG dimension, year, author)—continued

<table>
<thead>
<tr>
<th>ESG dimension</th>
<th>Title</th>
<th>Year</th>
<th>Author</th>
<th>Number of firms analyzed</th>
<th>Number of countries analyzed</th>
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<th>Main conclusions</th>
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</thead>
</table>
- Specifically, a higher proportion of women on boards is associated with higher institutional and technical strength KLD ratings. |
- In particular, boards that are more gender diverse exert stronger influence on social performance metrics that look at negative business practices, such as the “concerns” dimension of the KLD ratings.  
- Corporate social performance ratings have the potential to induce higher levels of empathic caring, which strongly appeals to female directors. |
| E&S           | Women on Boards: Do they Affect Sustainability Reporting? | 2014 | Fernandez-Feijoo, Romero & Ruiz-Blanco | 2,400 | 22 developed countries    | 1 (2008)              | - The levels of CSR reporting are higher in countries with a higher proportion of boards of directors with at least three women (results controlled for differences among countries and in CSR reporting).  
- Countries with a greater degree of gender equality are home to more companies with boards that have at least three female directors. |
| E&S           | Women on Board of Directors and Corporate Social Performance: A Meta-Analysis. | 2016 | Byron & Post | Meta-analysis of 84 studies with a combined sample of 26,710 firms from more than 20 countries | - The female board representation–social performance relationship is generally positive. The mean effect size relating female board representation and social performance is about five times larger than the one associating women on boards with firm financial performance, presumably because boards have more control over firms’ social performance than over firms’ financial performance.  
- This relationship is even more positive in national contexts characterized by stronger shareholder protections—in which boards may be more motivated to draw on the resources that female directors bring to the table—and higher gender parity, where intra-board power distribution may be more balanced. |
| E&S           | Women on corporate boards: Do they advance corporate social responsibility? | 2017 | Cook & Glass | 2,664 firm-year observations | 1 (U.S.)                   | 10 (2001-2010)       | - Women’s presence on corporate boards is associated with enhanced community engagement, stronger governance and more sustainable environmental practices, three vital areas for CSR policy.  
- As compared to an all-male board, the presence of even one or two women on the board is associated with improvement of a firm’s record in each of these areas. |
<table>
<thead>
<tr>
<th>ESG dimension</th>
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</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>To What Extent Do Gender Diverse Boards Enhance Corporate Social</td>
<td>2017</td>
<td>Francoeur, Labelle, Balti &amp;</td>
<td>1,632 firm-year</td>
<td>1 (U.S.)</td>
<td>7 (2007–2013)</td>
<td>Board gender diversity is positively related to CSR dimensions focused on less powerful stakeholders such as the environment, contractors, and the community. Board gender diversity does not appear to have a significant impact on CSR dimensions that are associated with stakeholders who benefit from more institutionalized power, such as employees and customers.</td>
</tr>
<tr>
<td></td>
<td>Performance?</td>
<td></td>
<td>Bouzaidi</td>
<td>observations</td>
<td></td>
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</tr>
<tr>
<td>G</td>
<td>Getting to the Bottom Line: An Exploration of Gender and Earnings</td>
<td>2008</td>
<td>Krishnan &amp; Parsons</td>
<td>353</td>
<td>1 (U.S.)</td>
<td>5 (1996–2000)</td>
<td>Companies with more women in senior management positions are more profitable and have higher stock returns after initial public offerings. This improved bottom line is not produced through earnings management or lower quality earnings. Rather, earnings quality is positively associated with gender diversity in senior management.</td>
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<td>Quality</td>
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<tr>
<td>G</td>
<td>Managers’ Attitudes Toward Codes of Ethics: Are There Gender</td>
<td>2009</td>
<td>Ibrahim, Angelidis &amp; Tomic</td>
<td>286 interviews with</td>
<td>1 (U.S.)</td>
<td>1 (2008)</td>
<td>Gender has a significant impact on managers’ attitudes toward business ethics. Specifically, female managers had more positive reactions to the impact of codes of ethics, they were more confident that the code would raise the ethical level of the business.</td>
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<td>Differences?</td>
<td></td>
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<td>managers</td>
<td></td>
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<tr>
<td>G</td>
<td>Ethics, Diversity Management, and Financial Reporting</td>
<td>2010</td>
<td>Labelle, Gargouri &amp; Francoeur</td>
<td>156</td>
<td>1 (Canada)</td>
<td>2 (2004–2005)</td>
<td>The more the firm is engaged in promoting and implementing diversity in its governance and management systems, the smaller the firm’s expected earnings management magnitude. The results corroborate the view that firms should promote a diversity management policy in order to develop an organizational culture that will lead to greater aversion of earnings management practices.</td>
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<td>Quality</td>
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<tr>
<td>G</td>
<td>The Contribution of Women on Boards of Directors: Going Beyond the</td>
<td>2010</td>
<td>Nielsen &amp; Huse</td>
<td>234</td>
<td>1 (Norway)</td>
<td>1 (2003)</td>
<td>The authors created an index of board strategic control, as measured by board involvement in decisions on corporate social responsibility, human resources, product quality, and health, environment, and safety. The percentage of female directors is positively associated with board strategic control. The presence of women on boards increases board effectiveness by reducing the level of conflict and ensuring high quality board development activities such as board evaluations, development programs, and introduction of new members.</td>
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</table>
### Table 1. Empirical evidence of the positive relationship between women in business leadership and ESG standards (By ESG dimension, year, author)—continued

<table>
<thead>
<tr>
<th>ESG dimension</th>
<th>Title</th>
<th>Year</th>
<th>Author</th>
<th>Number of firms analyzed</th>
<th>Number of countries analyzed</th>
<th>Number of years analyzed</th>
<th>Main conclusions</th>
</tr>
</thead>
</table>
| G             | Female Executives and Earnings Management                             | 2010 | Peni & Vähämaa                | 1,955 firm-year observations | 1 (U.S.)                    | 4 (2003-2007)            | - Firms with female CFOs are associated with more conservative financial reporting strategies.  
- Gender-based differences in conservatism, risk-aversion, and managerial opportunism may have important implications for financial reporting and corporate governance. |
| G             | Does Board Gender Diversity Improve Informativeness of Stock Prices?  | 2011 | Gul, Srinidhi & Ng            | 5,021 firm-year observations | 1 (U.S.)                    | 7 (2001-2007)            | - Stock prices of firms with gender-diverse boards reflect more firm-specific information provided by managers.  
- Gender diversity improves stock price informativeness by way of increased public disclosure in large firms and by encouraging private information collection in small firms.  
- The relationship is stronger for firms with weak corporate governance, suggesting that gender-diverse boards could act as a substitute mechanism for otherwise weak corporate governance. |
| G             | Female Directors and Earnings Quality                               | 2011 | Srinidhi, Gul & Tsui          | 2,480 firm-year observations | 1 (U.S.)                    | 7 (2001-2007)            | - Companies with greater board gender diversity exhibit higher-quality earnings.  
- Companies with more female directors, especially in the audit committee, exhibit better reporting discipline by managers. |
| G             | Female Board Presence and the Likelihood of Financial Restatement   | 2012 | Abbott, Parker & Persley      | 278                       | 1 (U.S.)                    | 5 (2001-2005)            | - There is a significant association between the presence of at least one woman on the board and a lower likelihood of a financial restatement.  
- The results are consistent with the notion that a female board presence contributes to the board’s ability to maintain an attitude of mental independence, diminishing the extent of groupthink and enhancing the ability of the board to monitor financial reporting. |
| G             | The Role of the Board in the Dissemination of Integrated Corporate Social Reporting | 2013 | Frias-Aceituno, Rodriguez-Ariza & Garcia-Sánchez | 568 | 15 developed countries | 3 (2008-2010) | - Board gender diversity is one of the most important factors in having transparent economic, social, and environmental information that is consolidated into an integrated report.  
- This effect has been observed for companies from the Anglo-Saxon, Germanic and Latin models of corporate governance. |
<table>
<thead>
<tr>
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<th>Number of firms analyzed</th>
<th>Number of countries analyzed</th>
<th>Number of years analyzed</th>
<th>Main conclusions</th>
</tr>
</thead>
</table>
| G             | Does Female Representation on Boards of Directors Associate with Increased Transparency and Ethical Behavior? | 2013 | Larkin, Bernardi & Bosco     | 500                      | 1 (U.S.)                    | 1 (2010)                | - As the number of women directors increased, the probability of a corporation appearing on either (or both) Ethisphere magazine’s “2010 World’s Most Ethical Companies” or Corporate Responsibility magazine’s “100 Best Corporate Citizens 2010” increased.  
- There is evidence that having a critical mass of women directors plays a significant role in achieving listing on Ethisphere magazine’s rankings although this is not the case for Corporate Responsibility’s list. |
- Mostly, women were not part of the conspiracy groups.  
- When women were involved, they had minor roles and earned less profit from the fraud than their male coconspirators. |
| G             | Gender Diversity and Securities Fraud                               | 2015 | Cumming, Leung & Rui         | 742                      | 1 (China)                   | 10 (2001-2010)         | - There is strong evidence that having women on boards mitigates securities fraud.  
- The optimal percentage of women on boards in order to minimize securities fraud is 50 percent.  
- Women are more effective in mitigating both the presence and severity of fraud in male-dominated industries. |
| G             | Gender Differences in Financial Reporting Decision Making: Evidence from Accounting Conservatism | 2015 | Francis, Hasan, Park & Wu    | 974 firm-year observations | 1 (U.S.)                    | 10 (1998-2007)         | - Female CFOs are more conservative in financial reporting than male CFOs. This effect is more pronounced when firms face higher litigation risk, default risk, systematic risk, or management turnover risk.  
- Following the hiring of a female CFO, there is a significant increase in the degree of accounting conservatism compared to the approach under the male predecessor.  
- After firms hire a male CFO to follow a female CFO, accounting conservatism decreases. |
| G             | Board of Directors and Ethics Codes in Different Corporate Governance Systems | 2015 | Garcia-Sanchez, Rodriguez-Dominguez & Frias-Aceituno | 5,380 firm-year observations | 12 developed countries | 7 (2003-2009)       | - Companies with more diverse boards implement the most well-developed ethics codes.  
- Female directors are more sensitive to ethical demands, more concerned about compliance with regulations, and more focused on satisfying the requirements made by different stakeholders. |
### Table 1. Empirical evidence of the positive relationship between women in business leadership and ESG standards (By ESG dimension, year, author)—continued

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</thead>
</table>
| G             | CEO Gender, Ethical Leadership, and Accounting Conservatism          | 2015 | Ho, Li, Tam & Zhang           | 13,206 firm-year observations | 1 (U.S.)                     | 13 (1996–2008)           | - Companies with female CEOs report earnings more conservatively. This association is stronger in firms exposed to high litigation and takeover risks.  
- The results highlight the benefits of gender diversity in upholding the integrity of financial reporting. |
| G             | The Effects of Women on Corporate Boards on Firm Value, Financial Performance, and Ethical and Social Compliance. | 2015 | Isidro & Sobral               | 922                      | 16 European countries       | 3 (2010–2012)            | - Having women on the board is positively related with profitability and ethical and social compliance, which, in turn, are positively related with firm value.  
- The findings suggest that the indirect effect of greater female representation on firm value comes from stronger compliance with ethical principles, something that is not captured by accounting-based financial performance. |
| G             | Women on the Board and Managers’ Pay: Evidence from Spain            | 2015 | Lucas-Pérez, Mínguez-Vera & Sánchez | 714 firm-year observations | 1 (Spain)                   | 6 (2004-2009)            | - A gender-diverse board positively affects the effectiveness of boards—in terms of composition, structure, size, and functioning. This helps ensure the appropriate design of top managers’ compensation so that it is linked to company performance.  
- The results confirm the positive relationship between gender diversity and the establishment of top managers’ compensation packages linked to performance, justifying the business value in legislation aimed at increasing the number of women on boards. |
| G             | CEO and CFO Gender, Corporate Culture and Firm-Wide Insider Trading  | 2015 | Scarlat, Shields & Clacher    | 86 firms with male-to-female CEO and CFO transitions and 1,276 firms with male-to-male transitions | 1 (U.S.)                     | 8 (2003-2011)            | - There is a significant decrease in firm-wide insider trading profitability following a transition from male to female CEOs and CFOs.  
- This evidence suggests female executives change the corporate culture in their organization by way of a stronger tone at the top that limits insiders’ opportunistic trading. |
<table>
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| G             | Board Gender Diversity and Internal Control Weaknesses | 2016 | Chen, Eshelman & Soileau | 4,267 firm-year observations | 1 (U.S.) | 10 (2004–2013) | - Firms with more female representation on their boards are less likely to have internal control weaknesses (ICWs).  
- The results are not driven by having women on the audit committee. Instead, it appears that women on boards reduce ICWs, regardless of whether they sit on the audit committee or not.  
- The evidence is consistent with the characteristic tendency of female directors shown in earlier literature—they are more likely to discuss difficult issues, more fiscally conservative, better monitors, and less tolerant of opportunistic behaviors. |
| G             | Does gender influence managers’ ethics? A cross-cultural analysis | 2016 | Chen, Tuliao, Cullen & Chang | 2,754 interviews with managers | 27 countries | 4 (2005-2008) | - Compared to female managers, male managers are more willing to justify business-related unethical behaviors such as bribery and tax evasion.  
- In countries with higher gender egalitarianism, the ethical differences between women and men are even greater. |
| G             | Corporate governance, female directors and quality of financial information | 2016 | Pucheta-Martinez, Bel-Oms & Olcina-Sempere | 920 firm-year observations | 1 (Spain) | 8 (2004–2011) | - The percentage of females on audit committees makes a difference in reducing the probability of audit qualifications due to errors, non-compliance, or the omission of information.  
- Having a percentage of female directors on ACs or a percentage of independent female directors on ACs—as as having ACs chaired by females—increases the likelihood of further transparency by disclosing audit reports with uncertainties and scope limitation qualifications. |
| G             | A Few Good (Wo) men? Gender Diversity on Australian Boards | 2016 | Strydom, Yong & Rankin | 11,093 firm-year observations | 1 (Australia) | 9 (2005–2013) | - All-male and skewed boards have lower earnings quality compared to tilted and balanced boards.  
- Consistent with critical mass theory, when there is only token representation (less than 20 percent) of woman on the board, earnings quality was lower.  
- When women constitute between 20 and 40 percent of board membership, gender diversity is positively associated with earnings quality. |
| G             | Gender and Board Activeness: The Role of a Critical Mass | 2017 | Schwartz-Ziv | 11 | 1 (Israel) | 3 (2007–2009) | - Boards with at least three directors of each gender are at least 79 percent more active at board meetings than those without such representation.  
- This phenomenon is driven by women directors in particular; female directors are more active when a critical mass of at least three women is in attendance.  
- Gender-balanced boards are more likely to replace underperforming CEOs and are particularly active during periods when CEOs are being replaced. |
Selected References


For a full list of references, please see: https://bit.ly/2QevAcj