IMPAX Asset Management

# The Financial Impact of Diversity

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## INTRODUCTION

Our world thrives on thousands of kinds of diversity — creatures, habitats, biomes, plants, microorganisms, races, religions, experiences, preferences. Business and finance thrive on diversity, too, and though the value it brings has often gone unrecognized, the world of finance is waking up to it — slowly, but surely.

The simplest way to understand the value of diversity in business and finance is in terms of group decision-making. Groups that bring multiple points of view, different experiences and diverse skills to the task are usually able to make better decisions than more homogeneous groups, which are often subject to the perils of groupthink. Over and over, the value of diversity in the quality and thoroughness of decision-making has been proved, including in financial and corporate decision-making.

## EVIDENCE ON THE VALUE OF DIVERSITY

There is a great deal of evidence that simply having diversity in decision-making groups such as boards and management teams is positively correlated with better financial performance. While gender diversity has been studied more often, and in more depth, than racial or ethnic diversity, there is evidence that all diversity has value.

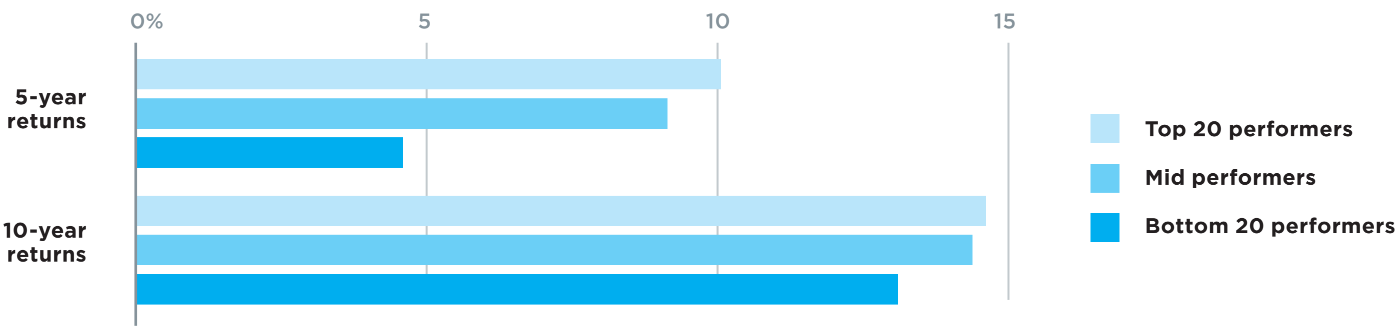
Overall, that value is enormous. Full economic equality for women could boost[1] global gross domestic product (GDP) by $28 trillion by 2025, while closing the racial wealth gap in the United States alone could boost GDP by 4-6% by 2028 ($822 – 1.23 trillion, in terms of 2020 GDP) and by trillions more globally.[2] Those GDP gains are often signals of financial gains as well.

But it's not just a matter of a rising GDP lifting all the financial boats. Even at the company level, diversity is often correlated with outperformance. For example, The Wall Street Journal reported in 2019 that the 20 most diverse companies in the S&P 500 Index — based on representation of women, age and ethnic diversity, and the presence of diversity programs — had better operating results than the lowest-scoring firms, as well as superior share price performance.[3] (Figure 1) The WSJ report noted that some of the outperformance may be an outcome of the fact that companies that really embrace diversity may have an easier time attracting and retaining talent. It can cost 20% of annual salary to replace a midlevel position ($30,000 – $50,000 in annual salary), and more than 200% of annual salary to replace executive positions.[4]

**FIGURE 1:** Diversity and the Market

**The stocks of companies that score well in diversity have outperformed low scorers.**

Diversity and inclusion performance




*Note: Average compounded annual total stock return data is for the five and 10 years ended June 28.*

*Source: Dieter Holger, "The Business Case for More Diversity," The Wall Street Journal, Oct. 26, 2019.*

*Past performance is no guarantee of future results.*

[1] Haim Israel, Savita Subramanian, Jill Carey Hall, Sameer Chopra, Manish Kabra, Lauma Kalns-Timans, Pinaki Das, Felix Tran, Marisa Sullilvan and James Yeo, "Womentum!" Bank of American Global Research, March 3, 2020.
[2] Nick Noel, Duwain Pinder, Shelley Stewart III and Jason Wright, "The Economic Impact of Closing the Racial Wealth Gap," McKinsey & Company, Aug. 2019."
[3] Dieter Holger, "The Business Case for More Diversity," The Wall Street Journal, Oct. 26, 2019.
[4] Heather Boushey and Sarah Jane Glynn, "There Are Significant Business Costs to Replacing Employees," The Center for American Progress, Nov. 16, 2012.

Further, multiple sources document that both sexism and racism in the workforce can prove corrosive to morale, job attitudes, worker retention, productivity and, ultimately, stock price and financial performance.[5] One recent study documented that sexual harassment in the U.S. alone was costly: A portfolio of firms in the top 1-5% ranked by Glassdoor in terms of their reported sexual harassment incidents lost an average of $0.9 billion to $2.2 billion per year compared with peers. Higher numbers of reports of sexual harassment were associated with lower operating productivity and increased labor costs — possibly a result of higher turnover.[6]

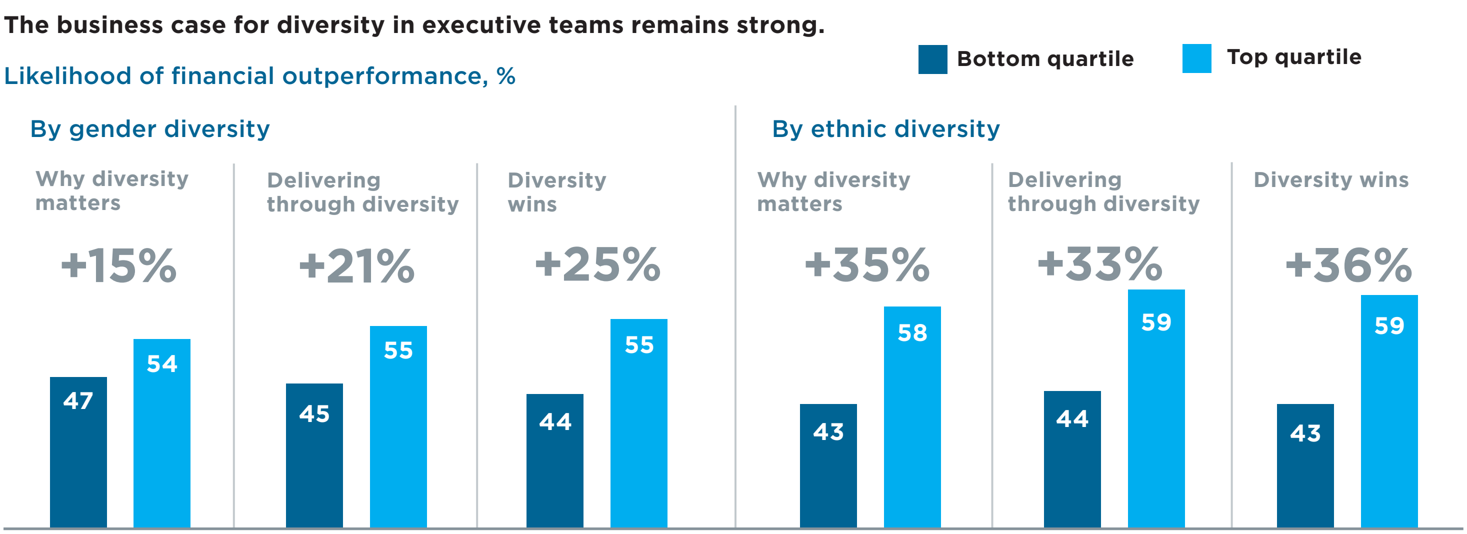
Much has been written about board diversity, specifically, most of it focusing on gender diversity. That literature does not have one general finding or trend; some studies find that board diversity is statistically correlated with various measures of financial performance, and others do not. Some of that inconclusiveness in the overall literature may be a result of what statisticians call endogeneity — that is, one of the variables being tested (e.g. the proportion of women or minorities on a board) is not actually independent of the result being tested for (e.g., profitability). For example, one recent paper points out that there may be some unobserved variable that affects for firm performance and board diversity.[7]

Accordingly, that paper uses a different method, the control function, to try to avoid the endogeneity problem. The authors found a positive correlation between gender diversity on corporate boards in the S&P 500 and return on assets, and that the correlation was significant at the 1% level. That level is considered highly significant.

Another 2019 study established a causal link between board diversity and firms' total factor productivity (TFP) by looking into what happened to TFP after France implemented a board gender diversity quota in 2011.[8] While the rate of growth of TFP declined in the initial year after the quota was implemented, the second year saw an increase in the rate of growth of TFP that was significantly higher than the initial drop. The authors note these results illustrate the opportunity costs associated with homogeneous boards.

Unlike the board diversity literature, new work on diversity in executive suites continues to show a strong tendency toward an association between diversity and financial performance. McKinsey's new study, "Diversity Wins," shows that companies with executive teams that have greater gender and ethnic diversity tend to be the better financial performers (Figure 2).[9]

**FIGURE 2: The Business Case for Diversity in Executive Teams Remains Strong**




*Source: Sundiatu Dixon-Fyle, Kevin Dolan, Vivian Hunt and Sara Prince, "Diversity Wins: How Inclusion Matters," McKinsey & Company, May 2020.*

[5] See, for example, Yin Paradies and Amanuel Elias "How Racism and a Lack of Diversity Can Harm Productivity in Our Workplaces," The Conversation, Feb. 27, 2017; Maria del Carmen Triana, Mevan Jeyasinghe and Jenna R. Pieper, "Perceived Workplace Racial Discrimination and Its Correlates: A Meta-analysis,"Journal of Organizational Behavior, April 7, 2015; Brandon N. Cline, Ralph A. Walkling and Adam S. Yore, "The Market Price of Managerial Indiscretions," Journal of Applied Corporate Finance,Vol. 30, Issue 4, 2018.

[6] Shiu-Yik, Ming Dong and Andreanne Tremblay, "How Much Does Workplace Sexual Harassment Hurt Firm Value?" June 4, 2020.

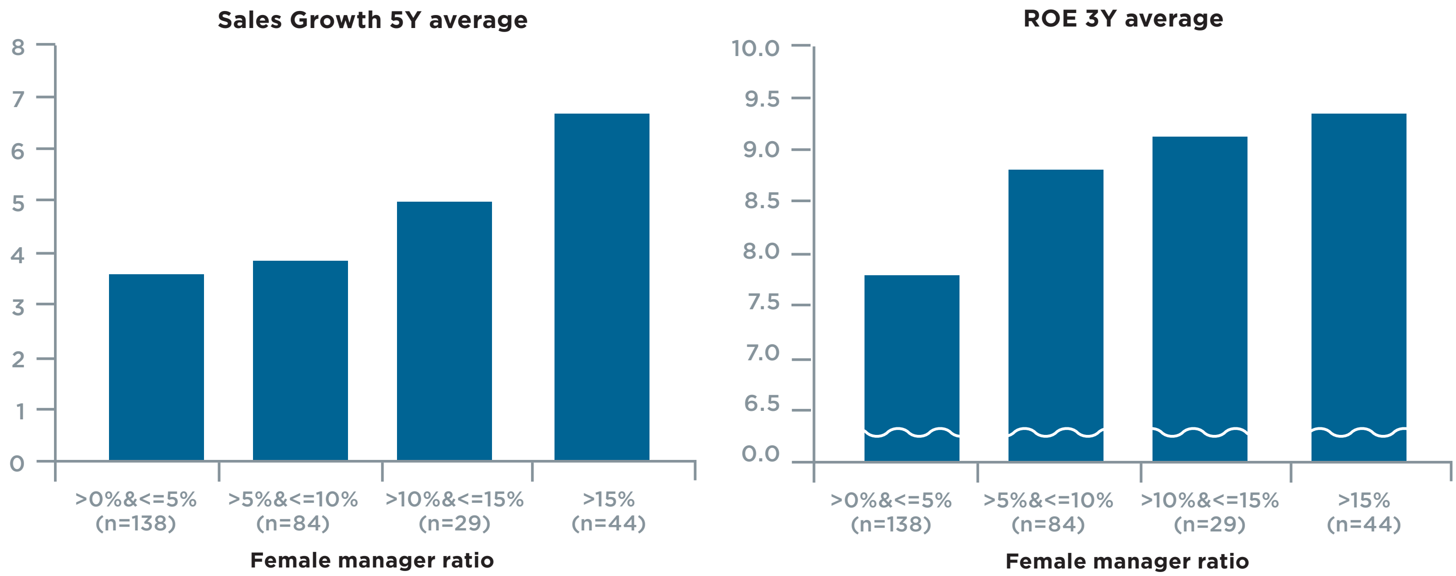
[7] Rey Đăng, L'Hocine Houanti, Krishna Reddy and Michel Simioni, "Does Board Gender Diversity Influence Firm Profitability? A Control Function Approach," Economic Modelling, Vol. 90, Aug. 2020.

[8] Maghin, Helene, "Cracks in the Boards: The Opportunity Cost of Homogeneous Boards of Directors," July 24, 2019.

[9] Sundiatu Dixon-Fyle, Vivian Hunt, Kevin Dolan and Sara Prince, "Diversity Wins: How Inclusion Matters," McKinsey & Company, May 2020.

The relationship between gender balance in management and financial performance even holds in Japan, a nation that is unique among developed countries for its lack of progress on many aspects of gender equality, including representation of women in senior decision-making groups in companies. Despite the fact that women hold far fewer management positions (at any level) than men, Japanese companies with more female managers still had higher sales growth and 30-year average growth in return on equity.[10] (Figure 3)

**FIGURE 3: Comparison of Japanese Firms' Performance by Female-Manager Ratios**




*Source: Nikkei Valuesearch, QUICK, FactSet, data compiled by Goldman Sachs Global Investment Research.*
*Past performance is no guarantee of future results.*

Increasingly, the literature on diversity is moving away from simply correlating some measure of diversity with some measure of financial performance and, instead, is focusing on how diversity might be related to other factors that are also useful on financial markets.

For instance, one of the things investors value most is complete, honest reporting from corporations; without it, stock markets can seriously misprice stocks and other securities. A recent paper showed that U.S. firms with more women on their boards also provided more firm-specific information, making stock prices more informative to investors.[11] As the study's authors put it, "Increased public disclosure price-protects uninformed investors and is likely to increase confidence and encourage ownership by uninformed investors."

## RESILIENCE

As this paper is written, we're amid what some have called twin viruses — COVID-19 and racism. Our economy has fallen from one of its longest periods of growth in the postwar period to recession and record-high claims for unemployment and drops in retail sales, all in less than half a year. We are also on the brink of another disaster — climate change — which, like racism, is a long-term ball and chain to economic prosperity.

One thing that many have noticed during the recent crises is that more sustainable companies and sustainable funds tend to better weather crises and downturns than does the average company or fund.[12] They are more resilient, and thus they can better protect their investors. There are many reasons behind this apparent link between sustainability and resilience, and diversity is one of them.

[10] Kathy Matsui, "Is Womenomics Working?" Project Syndicate, June 7, 2019.
[11] Ferdinand A. Gul, Bin Srinidhi, Anthony C. Ng, "Does Board Gender Diversity Improve the Informativeness of Stock Prices?" Journal of Accounting and Economics, Vol. 51, Issue 3, April 2011.
[12] Charles McGrath, "Sustainable Funds Outperform in Returns and Flows," Pensions & Investments, April 13, 2020.

For instance, having more women on corporate boards is correlated with less overconfidence on the part of male CEOs.[13] Confidence is a good thing; overconfidence — not so much. This can be particularly valuable during stressful times: During the 2007-2009 period, the depth of the Great Recession, firms that had more female directors experienced smaller drops in performance, and that, in turn, was attributed to a reduction of CEO overconfidence.

Another paper found the same effect — firms with more female directors had "significantly improved firm performance during the Great Recession of 2008" — and attributed it to the fact that firms often need more monitoring and advice during crises than under normal circumstances.[14] Specifically, the authors found that a one-standard-deviation increase in the percentage of female directors improved return on assets by 8.41% during the downturn, but they also noted that the effect did not persist after the economy recovered.

McKinsey echoed this theme, finding that "as companies and their leaders navigate the (COVID-19) crisis itself and plan their emergence from it, they will find that (inclusion and diversity) is an essential enabler of recovery, resilience and reimagination."[9]

While recessions and pandemics can be crises for everybody, other crises can be more selective. One issue that has affected several firms during the last few years is sexual harassment and discrimination exposed by the #TimesUp and #MeToo movements. Many are familiar with what happened to the stock prices and corporate fortunes of some of the more high-profile cases: Wynn Resorts, the Weinstein Company, Guess, CBS, Fox News and others.[15] We are starting to see the same thing happen with respect to racism. The most recent example is that of CrossFit, whose CEO's racist remarks have caused gyms and other brands to quickly sever relationships with the company.[16]

Beyond individual examples, there is evidence that involvement in scandals like these can prove costly. As the #MeToo movement picked up steam in 2017, firms with higher percentages of women among their top five executives earned excess returns of 1.5% per highly paid female executive.[17] The presence of more women among the top executives is likely an indicator of a firm's more ethical behavior toward women. A more specific inquiry into the effects of #MeToo focused on the male-dominated mutual fund industry. Looking at lawsuits and organizational changes to reduce sexual harassment in that industry, the authors found that reducing or eliminating the threat of sexual harassment improved the productivity of female fund managers. The authors postulate that the boost to productivity from removing the tension of an environment of harassment would likely be found in other industries as well.[18]

Another recent paper takes an innovative approach to examining the impact of board and executive diversity on corporate culture, looking into whether companies' existing board composition "reflects a culture that embraces versus excludes women." Overall, the authors find that the average cumulative abnormal returns associated with a #MeToo event are -4.45% for the 37 firms that experienced them. The firms in the sample were divided into those that were inclusive of women (e.g., where women had strong presence on the board) and those that were exclusive (firms with boards that were exclusively male). They found that the exclusive firms were far less likely to have women executives; more than 77% of those companies also had no women executives, while only 40% of the companies with inclusive boards had senior women executives. Importantly, companies in the exclusive (all-male teams) group experienced far worse cumulative abnormal returns of -7.08% to #MeToo events, while the inclusive firms experienced a much lower cumulative abnormal return of -1.50% during #MeToo events. Notably, these returns measured investors' expectations that a firm could have such an event; most of the firms in the sample didn't have any actual public allegations of harassment. But investors' reactions when those events did occur were significantly less negative for firms with women directors and executives than they were for those whose leadership was all-male. Investors may not know for certain what company cultures are, but they do see the presence (or absence) of women in leadership groups as indicative of those cultures, and their likelihood of being involved in a sexual harassment scandal.[19]

[13] Jie Chen, Woon Sau Leung, Wei Song, Marc Goergen, "Why Female Board Representation Matters: The Role of Female Directors in Reducing Male CEO Overconfidence in Corporate Decisions," Cardiff Business School, Cardiff University, Sept. 2017.

[14] Suwongrat Papangkorn, Pattanaporn Chatjuthamard, Pornsit Jiraporn, Sirisak Chueykamhang, "The Effect of Female Directors on Firm Performance: Evidence From the Great Recession," April 21, 2019.

[15] See, for example, Lauren Hirsch, "From Wynn Resorts to Lululemon, 2018 Was the Year of #MeToo Mea Culpa," CNBC, Jan. 3, 2019; Samantha Cooney, "Companies Are Losing Millions After #MeToo Allegations Like Kate Upton's Claim Against Guess's Paul Marciano," Time, Feb. 2, 2018; Susan Antilla, "Stark Lessons from Wall Street's #MeToo Moment," The Intercept, Oct. 7, 2019; and Jackie Wattles and Chris Isidore, "Guess Stock Plummets After Kate Upton Accuses Exec of Harassment," CNN Business, Feb. 1, 2018.

[16] Amanda Capritto, "Can CrossFit Survive the Fallout from Founder's Racist Remarks? A Trainer Weighs In," CNet, June 17, 2020. See also RTT News, "10 Major Companies Accused of Racism," Business Insider, June 18, 2018.

[17] Karl V. Lins, Lukas Roth, Henri Servaes, Ane Tamayo, "Gender, Culture, and Firm Value: Evidence from the Harvey Weinstein Scandal and the #MeToo Movement," European Corporate Governance Institute, May 2020.

[18] Gjergji Cici, Mario Hendriock, Stefan Jaspersen and Alexander Kempf, "#MeToo Meets the Mutual Fund Industry: Productivity Effects of Sexual Harassment," Aug. 2019.

[19] Mary Billings, April Klein, Crystal (Yanting) Shi, "Investors' Response to the #MeToo Movement: Does Corporate Culture Matter?" Stern School of Business, New York University, Oct. 2019.

Any kind of misconduct can leave a financial crater, of course. The effect isn't limited to sexual misconduct. Having more women on boards of directors is also associated with more thorough monitoring and diligence, and that can also be helpful in reducing transgressions of many different sorts. For instance, European banks with a higher proportion of women on their boards also had a lower incidence of financial misconduct fines for activities such as tax evasion, money laundering, market manipulation and fraud.[20]

Default is also, for the firm involved and its investors, a crisis. A 2019 study of more than 80,000 Spanish companies showed that while female entrepreneurs were significantly less likely than males to get a bank loan in the year they founded their firms, the difference disappeared as firms established financial track records. Notably, firms led by women that did get loans in their founding year were significantly less likely to default on those loans compared with male-led companies.[21]

## PROTECTING THE PLANET

Having more women in the decision-making room also seems to be good for the environment, and environmental impact is also related to financial performance, especially as the world faces the global threat of climate change.

Like inequality, climate change is one of the most vexing problems confronting the global community. Importantly, there is some synergy in the solutions to these problems. Having more women on boards in the United States was positively and significantly correlated with renewable energy consumption between 2008 and 2016, according to European Corporate Governance Institute research.[22] Like many other studies that show a critical mass of women on boards contributes more to performance than tokenism, this work finds that it takes two or more women on boards before we start to see the correlation with renewable energy consumption. There was at least a hint at causality, as well: The company's consumption of renewable energy was higher one year after the appointment of a female director, but not for the appointment of a male director. Both board gender diversity and renewable energy consumption were positively correlated with financial performance, using return on equity and Tobin's Q[23] as measures.

Another study examined Turkish companies' board gender diversity and their reporting on climate change risks and opportunities through CDP, formerly known as the Carbon Disclosure Project. While there was no relationship between the overall presence of women on boards and CDP reporting, there was a significant positive relationship between the presence of women on board committees, which the authors used as a proxy for effective involvement of women in corporate governance. "These findings," the paper states, "lend support to board reforms that aim to increase effective representation of women on boards for the better management of sustainability risks and responsiveness to stakeholder demands in countries where legislators are reluctant to introduce climate change reforms."[24]

## INNOVATION

In past discussions of the value of diversity to corporations, we've noted that increasingly studies are finding positive links between diversity and innovation. The last two years have seen several new studies in this area.

The Womentum! paper from Bank of America Merrill Lynch[1] put an interesting new spin on this idea by noting that the total shareholder return of companies in which women have materially more patents (5x the average) significantly outperformed the laggards, where women's share of the patents was -3x the average (Figure 4). "More women in innovation leads to greater shareholder returns" was how the paper summed things up. The Wall Street Journal's piece, "The Business Case for More Diversity,"[3] noted that many of the companies in its Top 20 list of most diverse companies noted that diversity helped fuel innovation.

Diversity may also deliver technological advantages to national economies. Bahar, Choudhury and Rapoport found that migrants often take technological knowledge with them when they move to new countries, and that knowledge can

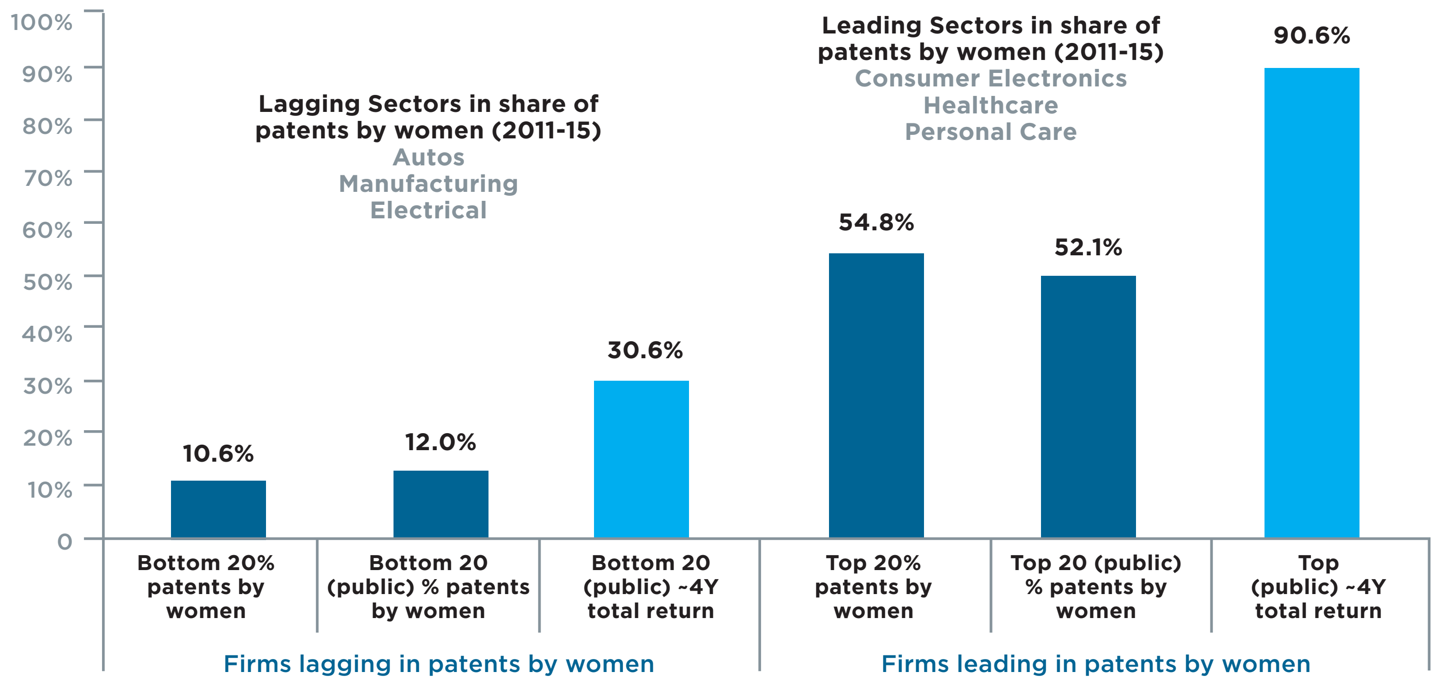
[20] Francesca Arnaboldi, Barbara Casu Lukac, Angela Gallo, Elena Kalotychou, and Anna Sarkisyan, "Can Gender-diverse Boards Reduce Bank Misconduct?" Principles for Responsible Investment, March 20, 2020.
[21] Pablo de Andrés, Ricardo Gimeno and Ruth Mateos de Cabo, "The Gender Gap in Bank Credit Access," Banco de Espana Working Paper No. 1945, 2019.
[22] Muhammad Atif, Mohammed Hossain, Md. Samsul Alam and Marc Goergen, "Does Board Gender Diversity Affect Renewable Energy Consumption?" European Corporate Governance Institute, Feb. 17, 2020.
[23] Tobin's Q is a ratio that measures the market value of a company divided by the replacement cost of its assets.
[24] Melsa Ararat and Borhan Sayedy, "Gender and Climate Change Disclosure: An Interdimensional Policy Approach," Sustainability, 2019.

contribute positively to the ability of their new home countries' patenting and innovation, and subsequent technological advantage.[25] This happens at a subnational level, as well, as a 2016 paper on LGBT-supportive policies showed.[26] Not only did firms with LGBT-supportive policies perform better than those without such policies in terms of productivity and profitability, the effect was especially pronounced in organizations with research and development activities. LGBT-supportive policies, the authors concluded, could help to increase companies' competitive advantage.

**FIGURE 4:** Share of Patents by Women and Public Company Performance

**Companies where women innovate materially more (patents' share ~5x) outperformed the laggards by ~3x on shareholder returns**

Data of 100 most active firms in patents during the period 2011-15




Source: Patent data from Center for Global Development, Performance data from Bloomberg (for top and bottom publicly listed names from the 100 firms in study), BofA Global Research, NB: Total return since 01-Jan-2016 (ie. subsequent to 2011-15 patent data period).

*Source: Haim Israel, Savita Subramanian, Jill Carey Hall, Sameer Chopra, Manish Kabra, Lauma Kalns-Timans, Pinaki Das, Felix Tran, Marisa Sullivan and James Yeo, "Womentum!" BofA Global Research, March 3, 2020.*

## CONCLUSION

Diversity is a source of strength, innovation and productivity in the private sector, and that often shows up in financial performance. The relationship between diversity and financial performance is supported by literature that is expanding not only in depth, but in breadth, encompassing many more forms of diversity than gender alone, and expanding to many measures of corporate prosperity beyond just profits.

That's an important point. While we have long highlighted the financial benefits of diversity, we are by no means advocating that only financial results matter. Diversity is something that is worth embracing for its own sake. There are societies, past and present, that countenance the domination of some races by others, or the few over the many; we cannot allow ours to be one of them. Not valuing diversity means not valuing each other, and that isn't the foundation of

[25] Dany Bahar, Prithwiraj Choudhury and Hillel Rapoport, "Migrant Inventors and the Technological Advantage of Nations," IZA Institute of Labor Economics, Feb. 2020.
[26] Chuah Jim Leon Yeow, "Do LGBT-supportive Corporate Policies Enhance Firm Performance?" Deloitte, Aug. 21, 2019.

a just and harmonious society any more than it is the foundation of a thriving business. We can and must do better than that. Valuing diversity is something we need to embrace — as businesses, as investors, as fellow citizens and as citizens of the global community.

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Julie Gorte is Senior Vice President for Sustainable Investing at Impax Asset Management LLC, the North American division of Impax Asset Management Group and investment adviser to Pax World Funds. She oversees environmental, social and governance-related research on prospective and current investments as well as the firm's shareholder engagement and public policy advocacy. Julie is also a member of the Impax Gender Analytics team.

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