IMPAX Asset Management

The business case for diversity and inclusion

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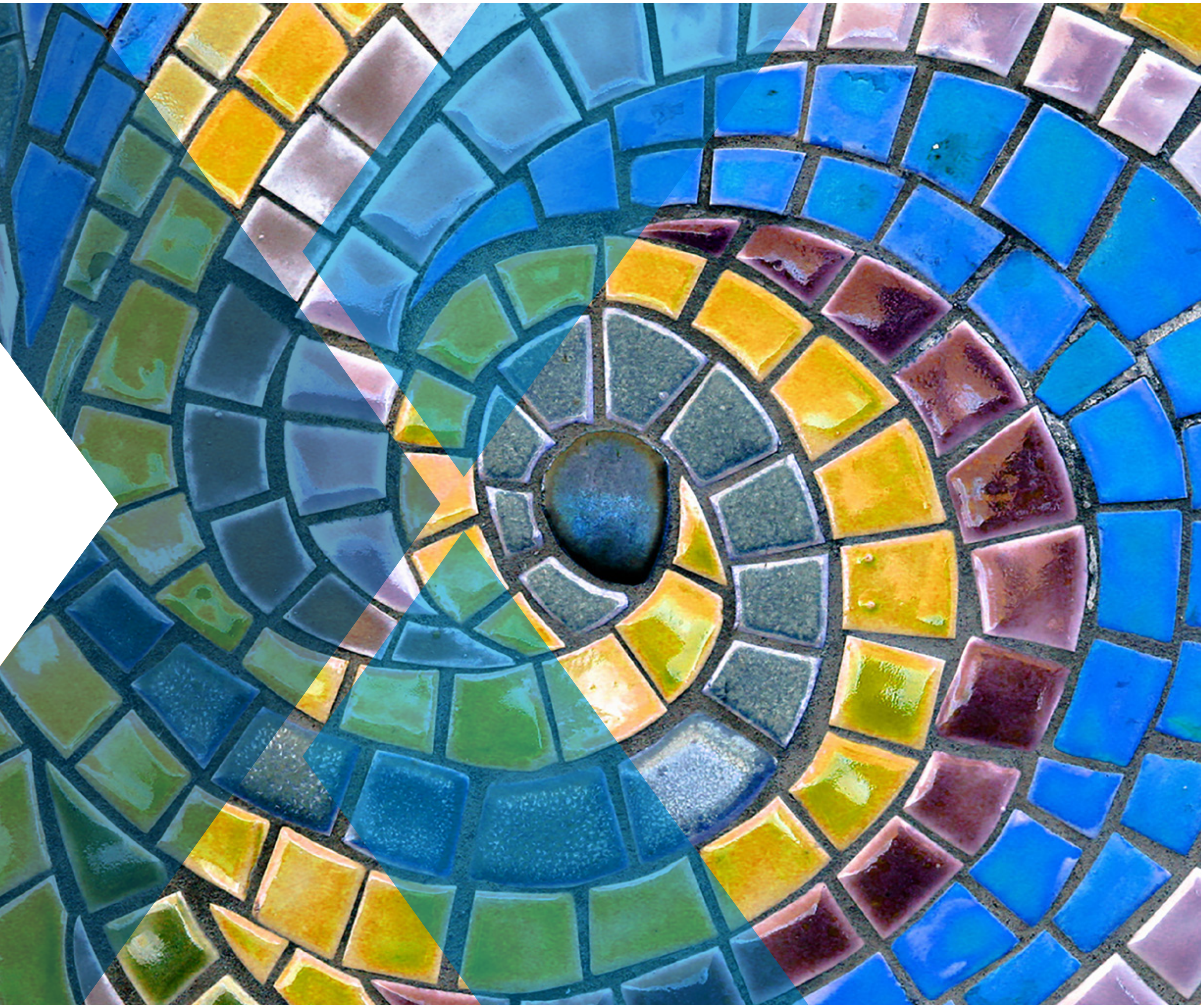

Executive summary

- Positive correlations between workforce diversity and better company financial performance continue to be represented in academic and industry findings.
- A strong relationship between inclusive workplaces and corporate innovation is increasingly present in the literature.
- Diversity supports both environmental and social aspects of the transition to a more sustainable economy; it is positively correlated with better resilience, as measured by crisis management and asset redeployability, and better sustainability outcomes, including lower carbon emissions and renewable energy use.

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Introduction

As long-time, long-term investors in the transition to a more sustainable economy, Impax is well versed in the role of a diverse workforce.

For example, most of the time, companies with demonstrated commitments to gender diversity (as measured by variables like the share of women in decision-making roles) tend to perform better financially.[1] Further, economies that provide more opportunities for women, minorities and other disadvantaged groups often perform better.[2] These findings do not apply universally; no style, discipline or strategy outperforms the market under all conditions. But it does make sense intuitively: companies tend to capture the commitment and imagination of their entire workforces and outperform their peers when they have access to a deeper, wider talent pool.[3]

In recent years, there has been a politicized public dialogue over equity, diversity and inclusion (E,D&I) programs, particularly in the US. Last year, the Supreme Court prohibited the use of race as a factor in college admissions, a decision that was widely seen as opening a door for challenges to corporate E,D&I programs.[4] Subsequently, major corporations, including Lowe's, Tractor Supply, Bank of America, Goldman Sachs, Ford and others modified their E,D&I programs, often opening them to all employees.[5] But in many cases, these companies have continued to support and enhance their current E,D&I programs, even as they have skirted public recognition for them.[6]

In this year's review we find that academic and industry studies still highlight the economic and financial benefits of integrating diversity and inclusion into corporate culture.

We would also note that while corporate culture is difficult to measure in total, workplace metrics can account for much of it and offer some insight into a company's long-term health and competitiveness.[7] In this update, we highlight the findings linking workforce diversity and inclusion with company innovation, resilience, financial performance, and environmental sustainability, and we take a look at some negative correlations associated with ignoring these links.

1 See for example: Gorte, J., August 2023: The financial impact of diversity and culture, Impax Asset Management; Gorte, J., September 2021: The Business Case for Diversity: 2021 Update, Impax Asset Management
2 Ibid.
3 Ibid.
4 Schwadron, T., June 2023: Affirmative Action: A Court at War with Reality, DC Report
5 See for example: Bloomberg, March 2024: Firms are opening up diversity programs to all, which may erase progress, Investment News; Burleigh, E., August 2024: It's been a tough week for ED&I as Lowe's and Ford announce rollbacks – but the bigger picture tells a different story, Fortune; Reuters, September 2024: US companies tweak diversity policies as challenges mount
6 Fortune, 2024, op cit.
7 Impax recently published an article describing our work to measure these workplace factors and their combined potential as a tool to deliver alpha: Untangling the intangible asset of workplace culture – Impax Asset Management (impaxam.com)

Innovation

The most striking theme in recent economic and financial literature has been the link between inclusion and innovation. We have highlighted this correlation in previous years, but studies looking at the relationship between innovation and inclusion have proliferated lately, even as the political landscape around E,D&I has grown more polarized.

> Innovation is one of the most demanding uses of human talent, and an important driver of corporate competitiveness and performance.

Companies that manage the human needs of their workforces better, by providing benefits like paid family leave (PFL), are more likely to have higher innovation outputs. While it can be difficult to discern at the individual company level whether paid family leave is offered, one study compared innovation outputs of companies in states where PFL is mandatory with those where it is not. The authors found that firms in states with mandatory PFL have higher innovation outputs, and they are also more likely to attract and retain female and younger inventors.[8]

A different take on the innovation issue comes from Wu et al., who find that firms that have female Chief Technology Officers (CTOs) are significantly more likely to have higher patent counts and patent citations, both of which are often used as measures of innovative output.[9] Moreover, female CTOs are more likely to provide what this study calls "transformational leadership", which includes inspiration, motivation, intellectual stimulation, communication, collaboration and cooperation, among other things.[10] That style is also positively and significantly correlated with innovation.[11]

"Disruptive innovation" is yet another way to look at innovative capacity. While it has various definitions, it is widely considered to mean change that doesn't just add marginally to the user experience but eventually displaces established products. One recent paper found that boards with more diverse demographic and cognitive attributes produced more disruptive and novel patents, and that those patents also had more technological impact (forward citations) and market impact (economic value).[12] The same group of authors also tested board experiential diversity, and found that diversity in educational, industrial and organizational experience among board members was correlated with both the quantity and quality of novel patents.[13]

Sethuraman and coauthors went down a similar path, looking at the product outcomes of innovation. The authors found that higher female participation on pharmaceutical patent invention teams was correlated with higher likelihoods that the Food and Drug Administration would approve the patent. Greater participation of women was also positively linked with lower future probability of a product recall, possibly because more female participation in the invention team meant that the research and trials tended to focus more equally on women and men.[14,15]

Another study that took an industry approach was Hyun's 2023 paper on the Korean automobile industry's US patents. Here too, the author found that gender diversity on invention teams was positively and significantly correlated with more knowledge diversity (disciplines represented) on the resulting patent's research team, and with higher novelty and broader impact.[16]

8 Jin, Y. and Zhu, Q., July 2021: Paid Family Leave, Inventor Mobility, and Firm Innovation, Social Science Research Network
9 Wu, Q. et al, 2021: Does Gender Affect Innovation? Evidence from Female Chief Technology Officers
10 Ibid.
11 Ibid.
12 Bernile, G. et al, January 2021: Does Board Diversity Promote Disruptive Innovation?
13 Aurora Genin, G. et al, March 2023: Board Experiential Diversity and Corporate Radical Innovation
14 Nagarajan Sethuraman, N. et al, July 2023: Impact of Women in the Invention Team on Product Development Outcomes, Academy of Management
15 R&D and clinical trials in the pharmaceuticals industry have historically focused disproportionately on men. In the past two decades it has become more apparent that men and women's different physiologies may mean that they need different therapies or respond differently to the same therapy. Product recalls can happen because the research and clinical trials didn't take these differences into account. See for instance, National Institutes of Health, May 2022: Improving Representation in Clinical Trials and Research: Building Research Equity for Women and Underrepresented Groups.
16 Eun-Jung Hyun, EJ, February 2023: The Influence of Gender Diversity in Inventor Teams on Technological Innovation in the Korean Automobile Industry: Evidence from Patent Data

Economic growth and resilience

Financial performance is not the same thing as economic performance. However, the two are linked. Anything that generally improves economic performance, or adds to economic growth, is likely to create tailwinds for company financial performance, all else being equal. For example, analysts at Bank of America estimated, in 2021, that full gender equality could increase world GDP by up to $28 trillion by 2025, which is effectively the price we pay for having inequality. The same report noted that S&P 500 companies with higher-than-average percentages of women on their boards had 15% higher return-on-equity, and the figure was 8% higher for board racial and ethnic diversity.[17]

The Economic Policy Institute found that the converse of this concept is also true. The authors of a recent paper note that rising income inequality – much of which is underpinned by gender, racial, ethnic and other forms of inequality – takes an economic toll.[18] Specifically, rising economic inequality since 1979 was reducing aggregate demand to the tune of approximately 1.5% of GDP.[19]

Resilience is a term that secured a permanent place in our financial and economic lexicon with the pandemic. We are accustomed to recessions and their effects on the economy, but beyond war, resilience wasn't a focus in finance and economics until COVID-19. But since COVID established the issue on the financial landscape, we've begun to note many other factors that could cause major economic and financial disruption, including climate change and major controversies. Not surprisingly, the connections between diversity and resilience have also come to the fore.

Akhtar and coauthors found that US companies with more gender-diverse boards were more likely to have higher abnormal returns during the peak of the COVID-19 pandemic, and the effect was particularly striking in firms with more financial constraints and longer cash conversion cycles.[20,21] The paper notes that these findings are "consistent with the narrative that investors view gender diverse boards as being better equipped to monitor and advise management" during crises.[22]

Another measure of resilience is response to inevitable setbacks. Even the best-managed corporations occasionally suffer some sort of crisis.

Investors don't expect companies to be perfect, but would like to see them learn from their mistakes and take steps needed to prevent recurrence.

One recent paper showed that companies with more diverse workforces and boards were more likely to take remedial actions after a serious social or environmental violation, and this resulted in reduced likelihood of future environmental or social violations, for at least the two succeeding years.[23]

Finally, asset redeployability – repurposing assets to preserve liquidity in the face of unforeseen events – is also a measure of resilience, and here too the literature links to diversity. In this case, the researchers tested whether board gender diversity was correlated with asset redeployability and found that the correlation was positive and significant.[24]

17 Israel, H. et al., March 2021: Everybody Counts! Diversity & Inclusion Primer, BofA Global Research
18 Bivens, J. and Banerjee, A., May 2022: Inequality's drag on aggregate demand
19 Ibid.
20 Abnormal returns: "when the performance of an investment exceeds what is expected based on its risk." (The Corporate Finance Institute); financial constraints: "factors which prevent firms from funding their planned investments, including credit constraints, illiquidity, and an inability to borrow or issue equity" (Leong & Yang, 2021); cash conversion cycle: "the number of days it takes for a company to convert its inventory into cash flows" (Investopedia).
21 Akhtar, F et al, June 2021: Gender-Diverse Boards and Firm Value: Evidence from the COVID-19 Pandemic
22 Ibid.
23 Cai, W. et al, February 2022: Remedial Actions After Corporate Social Irresponsibility, The FinRen Blog, Duke Financial Economics Center
24 Pothisarn, T. et al, January 2023: Sustainability, Asset Redeployability, and Board Gender Diversity

Financial performance

The literature on the financial impacts of diversity continues to broaden, but there are still useful and interesting new ideas emerging from academics' and financial professionals' longstanding inquiries. For instance, there is new analysis that complements older studies on the correlations between women CFOs and financial returns, and literature that expands our understanding of the impact of diversity beyond gender.[25,26,27,28,29,30] All this literature shows that diverse teams, whether managers, boards or workforces, continue to be undervalued by the stock market, but that their presence is positively correlated with financial outperformance, or abnormal returns.

The relationship between inclusive workplace practices and financial performance is less well-studied.

> One recent inquiry, using data from Glassdoor, found that companies with smaller gender gaps in reported work-life balance perform better financially.[31]

In response to the political backlash against diversity and inclusion programs, certain studies may have drawn exaggerated, or at least misguided, conclusions. California's attempt to mandate gender diversity on corporate boards, signed into law in 2018, was struck down in 2022, in part because it was judged to discriminate in favor of women. While some studies asserted that the board diversity mandate had a negative impact on shareholder value, much of this was based on event studies, looking at stock prices during relatively short "event windows" following the mandate.[32]

Two more recent studies provide a different perspective. Allen and Wahid document that two-day returns following the passage of the bill were either significantly positive or insignificant, and detail several shortcomings in the papers finding that the bill had negative short-term financial consequences.[33] Gertsberg et al. also challenge the interpretation that board diversity was value-destroying by providing evidence that at least some of the negative stock price reaction to the law's passage was a result of "entrenched boards who fail to turn over the least supported directors when adjusting their boards to comply with the new law."[34]

Diversity is also a factor in fund performance. Stephen Lawrence examined the performance of over 2,600 US active equity funds between 2008 and 2021, and found that more gender-diverse investment teams are significantly correlated with improved fund performance, even when controlling for other forms of diversity (such as education).[35] The effect isn't limited to publicly traded funds; Basu and Chakraborty examined the impact of women in top and senior management teams of companies doing IPOs (initial public offerings) in India, and found that IPOs of companies with more gender-diverse boards and better disclosures of environmental, social and governance data had higher subscription rates.[36]

25 Klevak, J. et al, July 2021: Benefits of Having a Female CFO
26 Frazer, D. et al , August 2021: Investing in racial diversity: North American Equities
27 Israel, H. et al., op cit.
28 Shanaev, S., May 2022: LGBT CEOs and Stock Returns: Diagnosing Rainbow Ceilings and Cliffs
29 As You Sow and Whistle Stop Capital, 2022: Workplace Diversity and Financial Performance: An Analysis of Equal Employment Opportunity (EEO-1) Data
30 Balakrishnan, K. et al, April 2023: Racial Diversity Exposure and Firm Responses Following the Murder of George Floyd, Journal of Accounting Research
31 Chen, J. et al, February 2023: Gender, Workplace Preferences, and Firm Performance: Looking Through the Glass Door
32 Greene, D. et al, February 2020: Do board gender quotas affect firm value? Evidence from California Senate Bill No. 826, Journal of Corporate Finance
33 Allen, A. and Wahid, A., June 2023: Regulating Gender Diversity: Evidence from California Senate Bill 826, Management Science
34 Gertsberg, M. et al, 2022: Gender Quotas and Support for Women in Board Elections, Working Paper Series 1425, Research Institute of Industrial Economics
35 Lawrence, S., April 2022: Diversity Matters: The Role of Gender Diversity on US Active Equity Fund Performance
36 Debrati, B. and Chakraborty, S., January 2023 : How Do Markets React to Women Leaders? An IPO Investigation

Sustainability

There is a great deal of financial and academic literature showing that companies and funds that do better on various measures of sustainability also are likely to do well financially.[37] Over the long term, several studies and meta-analyses have shown that incorporating sustainability into decision-making, both at the company and fund level, is more likely to be correlated with outperformance or competitive performance than underperformance.

> Unsurprisingly, diversity is also correlated with better performance on sustainability metrics.

Most of the work in this area examines the relationship between diversity and environmental measures, and some studies focus specifically on climate change.[38] Gender diversity in the workforce has been found to be correlated with reductions in carbon emissions, while board diversity has a positive, significant correlation with a company's use of renewable energy.[39,40]

Value corrosion

Much of the work described above examines the positive relationship between diversity and performance. The other side of these findings is the result of actions, either at the firm or the economy level, that compromise diversity.

One interesting new paper looks at the impact of limiting abortion rights when states adopted Targeted Regulation of Abortion Providers ("TRAP laws"). After the US Supreme Court overturned *Roe v. Wade* in 2022, many states made access to abortion (and other reproductive care) more difficult, or outright illegal. Not surprisingly, this significantly impacted the female workforce. One recent study looked at nearly 77,000 female auditors, and showed that in states with TRAP laws, these women are more likely than the general auditor population to relocate to states without such laws.[41] The imposition of TRAP laws increased the turnover rate at local audit offices by over 28%, which not only increased turnover costs but also lowered audit quality.[42]

Another cautionary tale comes from the #MeToo movement. A group of researchers found that the announcements of sexual harassment incidents correlated to negative abnormal returns to the tune of 1.5% over a two-day event window, or an average loss in market value of US$450mn for the companies in the sample.[43] Interestingly, the drop was smaller for firms that disclosed the incidents themselves, and higher when the incidents were first described in the media.[44]

37 See, for example, Whelan, T. et al, 2021: ESG and Financial Performance: Uncovering the Relationship by Aggregating Evidence from 1,000 Plus Studies Published between 2015–2020, Rockefeller Asset Management and NYU Stern Center for Sustainable Business
38 Kizys, R. et al, August 2021 : Genetic Diversity and Corporate Environmental Performance
39 Altunbas, Y. et al, December 2022: Does gender diversity in the workplace mitigate climate change? Journal of Corporate Finance
40 Ishwar Khatri, I., December 2021: Dynamic relationship between board gender diversity and renewable energy
41 Lin, Y. et al, September 2024: The Falling Roe and Relocation of Skilled Women
42 Ibid.
43 Mads Borelli-Kjaer, M. et al, April 2021: #MeToo: Sexual harassment and company value, Journal of Corporate Finance
44 Ibid.

Conclusion

Most of the backlash against 'woke capital' has been political.

The arguments against corporate E,D&I initiatives have largely contended that these concerns are nonpecuniary, are not relevant to investment decision-making, or hurt investment performance. But while these arguments shape political reality, they don't always shape economic or financial materiality. Perhaps this is one reason that many firms that have reduced disclosures on E,D&I policies have been careful to note that they still value diverse teams and strive to assure that their workplaces are open to people of all genders, races, ethnicities, ages and other facets of diversity.

We would note that diversity is important from a financial perspective when cognitive diversity can create a more robust decision-making process. In the literature, we find gender, race and other factors as proxies for cognitive diversity because they are measurable. There is certainly evidence that groups think differently from each other, but a new hire (or board member) only adds financial value if they have a different way of thinking, making decisions, etc. Hence some of the rethinking of diversity initiatives, which we hope will bring about a more thorough examination of why diversity is important.

Despite the backlash against environmental, social and governance concerns more broadly, and E,D&I in particular, the research continues to prove out the economic and financial value of diversity. For investors, that makes it a legitimate consideration in fiduciary decision making.

Appendix: Studies cited

Author(s)	Date	Title	Topic
Yaling Jin and Qifei Zhu	2021	Paid Family Leave, Inventor Mobility, and Firm Innovation	Innovation
Qiang Wu, Wassim Dbouk, Iftekhar Hasan, Nada Kobeissi and Li Zheng	2021	Does Gender Affect Innovation? Evidence from Female Chief Technology Officers	Innovation
Genaro Bernile, Vineet Bhagwat, Aurora L. Genin and Wentine Ma	2021	Does Board Diversity Promote Disruptive Innovation?	Innovation
Aurora Genin, Wenting Ma, Vineet Bhagwat and Gennaro Bernile	2023	Board Experiential Diversity and Corporate Radical Innovation	Innovation
Nagarajan Sethuraman, Deepak Jena, Rachna Shah and Shashi Kant Kumawat	2023	Impact of Women in the Invention Team on Product Development Outcomes	Innovation
Eun-Jung Hyun	2023	The Influence of Gender Diversity in Inventor Teams on Technological Innovation in the Korean Automobile Industry: Evidence from Patent Data	Innovation
Haim Israel, Felix Tran, Savita Subramanian, Marisa Sullivan, Lauma Kalns-Timans, Joseph Song, Michelle Meyer, Jill Carey Hall, Manka Bajaj, and Martyn Briggs	2021	Everybody Counts! Diversity & Inclusion Primer	Economic performance, board diversity

Author(s)	Date	Title	Topic
Josh Bivens and Asha Banerjee	2022	Inequality's drag on aggregate demand	Economic performance
Farida Akhtar, Don O'Sullivan and Madhu Veeraraghavan	2021	Gender-Diverse Boards and Firm Value: Evidence from the COVID-19 Pandemic	Resilience
Wei Cai, Aneesh Raghunandan and Shivaram Rajgopal	2023	Remedial Actions After Corporate Social Irresponsibility	Resilience
Thunyanee Pothisarn, Pattanaporn Chatjutharnard, Pornsit Jiraporn and Suwongrat Papangkorn	2023	Sustainability, Asset Redeployability, and Board Gender Diversity	Resilience
Julia Klevak, Joshua Livnat and Kate Suslava	2021	Benefits of Having a Female CFO	Financial performance
David G. Frazer, Nonvignon Kpadonou, and Martin Vezér	2021	Investing in racial diversity: North American Equities	Financial performance and racial diversity
Savva Shanaev, Arina Skorochodova and Mikhail Vesenin	2022	LGBT CEOs and Stock Returns: Diagnosing Rainbow Ceilings and Cliffs	Financial performance and LGBT
As You Sow and Whistle Stop Capital	2022	Workplace Diversity and Financial Performance: An Analysis of Equal Employment Opportunity (EEO-1) Data	Financial performance and workforce diversity
Karthik Balakrishnan, Rafael Copat, Daniela de la Parra and K. Ramesh	2023	Racial Diversity Exposure and Firm Responses Following the Murder of George Floyd	Financial performance and racial diversity
Sandra Lawson, Tanja Boskovic, Ewelina Zurowska, Jessica Huang, Manling Li and Faerlie Wilson	2023	Workforce diversity and financial performance	Financial performance and workforce diversity
Abigail M. Allen and Aida Sijamic Wahid	2023	Regulating Gender Diversity: Evidence from California Senate Bill 826	Financial performance and board gender diversity
Marina Gertsberg, Möllerström and Michaela Pagel	2022	Gender Quotas and Support for Women in Board Elections	Financial performance and board gender diversity
Stephen Lawrence	2022	Diversity Matter: The Role of Gender Diversity on US Active Equity Fund Performance	Fund performance and gender diversity
Debrati Basu and Shreyashi Chakraborty	2023	How Do Markets React to Women Leaders? An IPO Investigation	IPO performance and gender diversity
Yener Altunbas, Leonardo Gambacorta, Alessio Reghezza and Giulio Velliscig	2022	Does gender diversity in the workplace mitigate climate change?	Gender diversity and environmental performance
Ishwar Khatri	2021	Dynamic relationship between board gender diversity and renewable energy	Board gender diversity and renewable energy use
Renatas Kizys, E.C. Mamatzakis and Panagiotis Tzouvanas	2021	Genetic Diversity and Corporate Environmental Performance	Diversity and environmental performance
Jie Chen, Chenxing Jing, Kevin Keasey, Ivan Lim, Bin Xu	2023	Gender, Workplace Preferences, and Firm Performance: Looking Through the Glass Door	Diversity and job satisfaction
Yupeng Lin, Michael Shen, Rui Shi and Jean (Jieyin) Zeng	2024	The Falling Roe and Relocation of Skilled Women	Gender diversity and audit quality
Mads Borelli-Kjaer, Laurids Moehl Schack and Ulf Nielsson	2021	#MeToo: Sexual harassment and company value	Sexual harassment and financial performance

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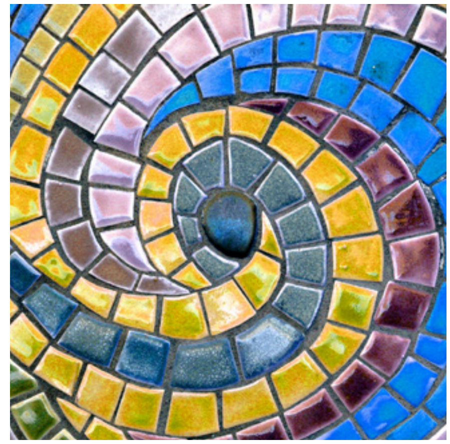

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