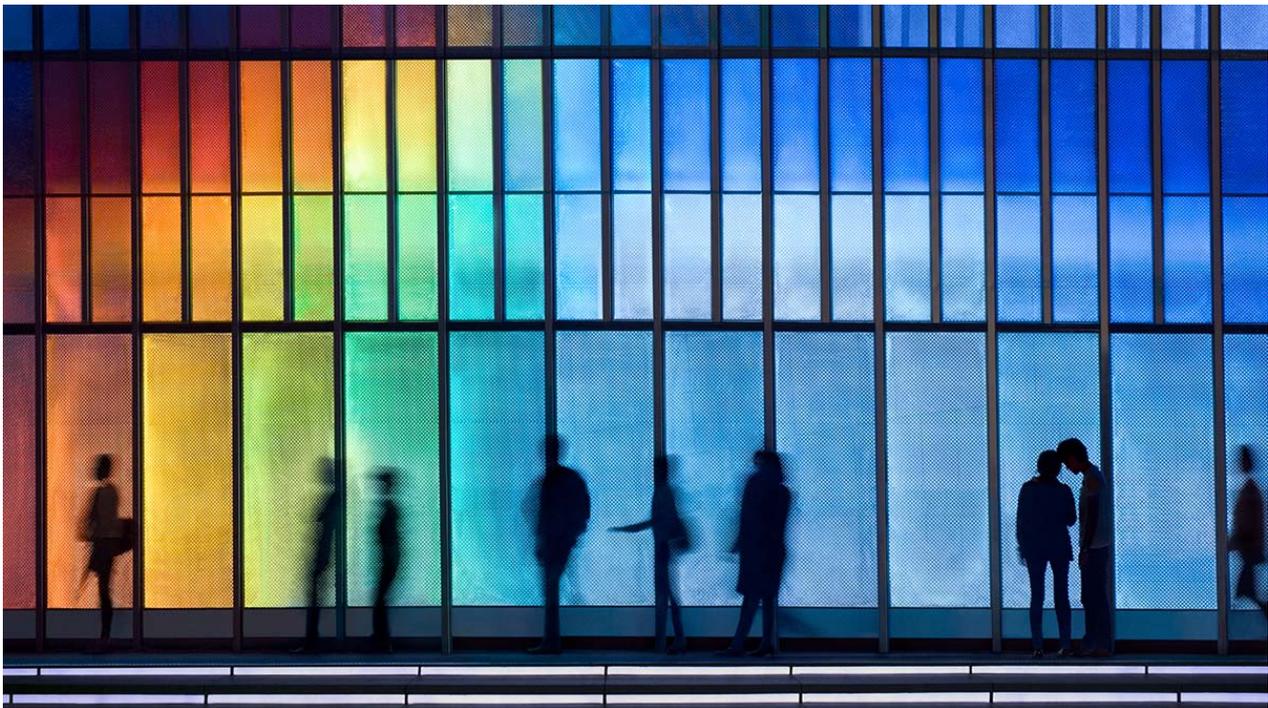


GENDER

Research: When Gender Diversity Makes Firms More Productive

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The business world has long debated the effect of gender diversity on business outcomes. Does diversity make a company more productive?

Many say yes. Some researchers argue that gender diversity leads to more innovative thinking and signals to investors that a company is competently run.

Others say no. Conflicting research indicates that gender diversity can sometimes harm firm performance.

But most research has looked at this question within a single country or industry. As a result, their findings are likely limited to that country or industry. This got us thinking: Could the conflicting research be due to differences in context? Region and industry might affect people's opinions of gender diversity, and this might then affect whether or not diversity leads to stronger outcomes.

In research one of us (Professor Zhang) conducted, this is exactly what was found. In a study of 1,069 leading firms across 35 countries and 24 industries, we found that gender diversity relates to more productive companies, as measured by market value and revenue, *only* in contexts where gender diversity is viewed as “normatively” accepted. By normative acceptance, we mean a widespread cultural belief that gender diversity is important.

In other words, beliefs about gender diversity create a self-fulfilling cycle. Countries and industries that view gender diversity as important capture benefits from it. Those that don't, don't.

More on our methodology

To do this research, we created a dataset of companies in a variety of countries and industries. We took the top 1200 firms listed in the S&P Global Index and supplemented them with leading firms across 15 country-specific indexes (e.g., the Australia ASX 200 Index). We then filtered out countries and industries with less

For example, we found that the percentage of women in telecommunication companies in Western Europe, historically a relatively gender-inclusive context, was significantly tied to a company's market value. Specifically, a 10% increase in Blau's gender diversity index (see more in our sidebar) related to a roughly 7% increase in market value. However, in the energy sector in the Middle East,

than five firms in the samples. This gave us 1703 firms, across 35 countries, and 24 industries.

For each company, we collected two types of data from Bloomberg: gender diversity and financial performance. To measure a firm's gender diversity, we used one conventional measure defined as "Blau's index," which measures the ratio of men and women at the firm overall. Over the past few years, a growing number of firms have self-disclosed their gender diversity annually which allowed us to collect this data.

We used two common measures for firm financial performance. The first was asset turnover ratio, which measures revenue per asset, and is a strong indicator of actual performance. We used Tobin's q to measure investor's market valuations. Tobin's q is the market value divided by the replacement cost of the company's assets.

We then collected data on the country-industry context, specifically the normative acceptance of gender diversity. To measure "normative acceptance" of gender diversity in a country and industry (e.g., manufacturing in Brazil), we used two types of measures. The first measure was the prevalence of women in board positions in the industry-country

which has historically not been gender-inclusive, firms' gender diversity was unrelated to company performance.

Interestingly, we saw the positive effects of diversity in societies with *normative acceptance* of working women, but not in societies with only *regulatory support*. Though regulatory support of working women is correlated with normative acceptance, they are not the same. Some countries have strong cultural support, but few legal structures in place. Others have established legal structures, but cultures that are strongly male-dominant.

Take Japan, for instance. It has some of the most generous parental and homecare leave policies globally, but also suffers from stiffly-patriarchal work cultures. So, we found countries like Japan do not much benefit as much from gender diversity when compared with firms in places like Western Europe that have more cultural acceptance.

Our international comparisons revealed the striking importance of a country's diversity norms, such as gender role attitudes. The data suggests that for diversity to work, workers have to buy

combination. The second measure was the percentage of companies that had publicly announced pro-diversity policies or programs. Both signal a public and significant commitment, showing that these contexts care about gender diversity.

We also looked at regulatory support and whether or not it related to diverse companies' productivity. To measure the regulatory support, we looked at the World Bank's biannual report that measures gender inequality in the law.

After controlling for numerous other factors, such as company size, employee turnover, country-level GDP, and past performance, we found that gender diversity positively related to financial performance only in contexts where gender diversity was normatively accepted.

into the value of diversity, not just hear some rules about it. Diversity creates positive benefits when people believe in its intrinsic value. They can't just see gender inclusion as an obligation.

We believe there are three main reasons why opinions about the value of diversity matter so much to the actual value it brings. And these may provide lessons for managers who wish to capture the benefits of gender diversity.

A diverse workforce signals an attractive work environment for talent.

In numerous studies, research has shown that employees in pro-diversity regions, like the U.S. and Western Europe, prefer diverse work environments. In a survey of 1,000 respondents, the job site Glassdoor found that 67% of job seekers overall look at workforce diversity when evaluating an offer. Top female

candidates, in particular, care about gender diverse work environments. A recent survey found that 61% of women look at the gender diversity of the employer's leadership team when deciding where to work. The takeaway is the most talented individuals go to places that do better with diversity, and this may be what is driving diverse firms in certain contexts to outperform their peers.

Critics may argue that causality might go the other way: it's possible that high-performing firms simply attracted a wider range of talent. However, we performed a number of checks that helped rule out reverse causality.

In one of these checks, we tracked performance changes *after* an organization added more women to its workforce. By tracking patterns of hiring and performance across time for the companies we measured, we were better able to disentangle cause and effect between these two variables. Because performance followed hiring, not the other way around, we supported our results that diversity led to better financial returns.

In short, we didn't find evidence that firm performance led to diversity. Rather, we found that diversity was a driver for these companies' success.

When you value diversity, you encourage diverse idea exchange.

Significant research has shown that diverse teams can develop more innovative ideas. When people from different contexts work together, their unique perspectives often lead to greater creativity.

Research by Hewlett, Marshall, and Sherbin, for example, showed that leaders with diverse backgrounds and experience helped companies innovate more. Diverse leaders were more likely to create an environment where new, creative ideas were considered. And diverse teams, they found, were more likely to have some common experiences with their end user. With this advantage, teams created better products.

But diversity doesn't work without psychological safety. People only contributed unique ideas to the group when they felt comfortable enough to speak up and present a contrarian view. Experimental studies further support this, showing that psychological safety is key to idea generation.

These conclusions are in line with our findings. When countries and industries don't value women equally, women working in those countries likely don't feel psychologically safe speaking up in their organizations. Even though these women may have innovative ideas, they might hesitate to bring them to the table. And when that happens, everyone loses.

A diverse workforce signals competent management for investors.

Gender diversity can also signal to investors that a firm is well-run. Sociological research on market valuation suggests that investors value when firms use commonly-accepted "best practices," such as the inclusion of diverse groups in hiring, and they penalize those that break these norms.

If an investor was in a context that accepted gender diversity, they were more likely to value those diverse companies highly. In fact, prior research has even shown a jump in stock prices after firms win an award related to diversity initiatives.

Our finding extends past research that analyzed the differences between investors who rewarded firms that hired female board members from those that did not. Those that did value female board members were often part of pension funds, an industry that tends to strongly value gender and other forms of diversity. Those that did not were often part of older, less culturally liberal industries.

In sum, the link between diversity and company performance isn't as black and white as we once thought. Like many aspects of business, the effect of diversity is context dependent, especially on country and industry norms around gender diversity and inclusion.

However, for almost all companies, we believe the investment in gender diversity is a good one. By most measures, the global business community is becoming more supportive of women and of women's importance in economy. This leads to a positive feedback loop - firms that support gender diversity will capture these benefits earlier, leading them to outlast their competitors.

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Love this research! The insight that the economic benefits that companies derive from gender diversity are dependent on the social context in which those companies operate highlights the complex interdependencies at play. It also highlights that gender diversity should be regarded as a systemic opportunity rather than merely an issue of social justice.

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