Sustainable investing

Investing with a gender lens - update 6 | 20 June 2017

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- Women's role in the workplace is undergoing a dramatic shift. More women are working, and the breadth of knowledge and skills that they are bringing to market is evolving as well.
- Companies that rise to the challenge of adapting to a changing workforce not only will contribute to reducing inequality but also will best utilize female talent.
- Available evidence is supportive of a positive impact of greater gender diversity on company profitability and stock price performance.

A version of this report is available with specific security recommendations for the US onshore investors. For a copy, please consult your UBS Financial Advisor

In this update, we re-ran our gender diversity screen using end of 2016 annual filings, and made some changes based on our sector analysts' recommendations and overall US equity sector strategy positioning.

Since our last update, the World Economic Forum (WEF) has published a 2016 study on gender-based disparities around the globe that includes scorecards that track key indicators such as economic participation and opportunity, educational attainment, health and survival, and political empowerment. In the study, the United States ranked 45th overall out of 144 countries and 26th in economic participation and opportunity. The overall results show room for improvement - although 68 countries narrowed their gender gap from a year ago, 74 saw the gap widen. The United States' ranking dropped from a year ago due to a decrease in economic participation and opportunity score. This is partly explained by revisions in earned income gap estimations. In a positive turn, the US has reached gender parity in education, highlighting the large latent talent pool in our adult female population. The study results indicate that there is more work to do to achieve gender parity worldwide, and estimates that with current trends, the gender gap can be closed in 83 years across 107 countries, this is just within the statistical lifetime of a baby girl born today.[20]

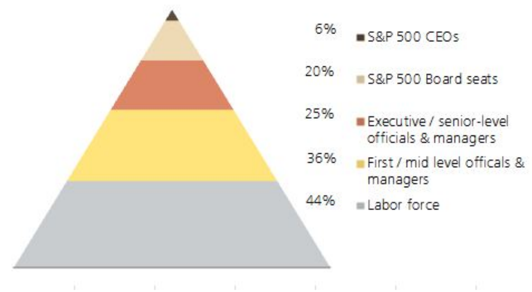
Since our last update, we have seen the percentage of female CEOs at S&P 500 companies increase slightly from 4% previously, to 6% currently (see fig 1). Other categories, such as board seats and executive management remained more or less the same. Although progress has been slow, we reiterate our conviction that gender diverse companies that meet or exceed our criteria stand to outperform their less gender-diverse peers over the long term.

Introduction

A dramatic shift in women's role in the workplace is underway. Currently, women make up 47% of the workforce in the US, up from just 38% in 1970.[1] Not only are more women working, but the breadth of knowledge and skills that they are bringing to market is evolving as well. In fact, in 2015, among 25- to 34-year-olds, there were 20% more women than men with at least a bachelor's degree.[2] Women now account for almost half of all students in JD, MBA, and MD programs, up from less than 10% in the 1960s.[3]

Despite the influx of highly skilled women into the workforce, women remain underrepresented in key leadership positions. Currently, women occupy just 20% of S&P 500 board of directors' seats and 30% of executive management positions (see Fig. 1).[4]
There are many reasons why gender equality remains elusive in the workplace – ranging from discriminatory practices and cultural biases to the often disproportionate share of childcare and household responsibility that women undertake. But the changing demographics of the talent pool, along with the growing acknowledgment of the need for greater gender parity in the workplace, is starting to shift the balance.

Fig. 1: Women are underrepresented in the most senior ranks of S&P 500 companies
in %



Source: UBS, Catalyst. 2015 Catalyst Census: Women and Men Board Directors. New York: Catalyst, 2016, Catalyst. Job Patterns For Minorities and Women In Private Industry (EEO-1), 2015. Last updated: 14 June 2017

Companies that rise to the challenge of adapting to a changing workforce not only will contribute to reducing inequality but also will best utilize female talent. This brings us to our central question as investment professionals: will those companies that more successfully incorporate women into their organizations offer better returns to shareholders than those that fail to do so?

The answer is not straightforward. However, we argue that available evidence is supportive of a positive impact of greater gender diversity on performance and that investors may benefit from factoring such insights into their investment decisions.

The business case

The "best" person for the job

Skeptics argue that, while they have nothing against the empowerment of women, companies that consistently choose the "best" people, regardless of gender, for management and board positions are most likely to outperform. However, the question of the best person for the job cannot be answered in isolation; instead, it must be considered within the context of the organization or group that the new member will join. What experiences, skills, and knowledge will the next board member or executive manager bring to the table that is not already represented by the incumbents?

Insights from the field of social psychology find important benefits of diversity in group decision making processes. Studies have shown that diverse groups yield superior outcomes with respect to decision making and problem-solving tasks relative to homogeneous groups, which are more vulnerable to "groupthink," the psychological phenomenon whereby the desire for conformity and harmony overrides rational decision making.

A 2010 study of group performance found that groups exhibit a level of *collective intelligence* that can predict their ability to complete a variety of tasks, and this collective intelligence level is more than merely the sum of the people within the group. Interestingly, collective intelligence was found not to be correlated with the average or maximum individual intelligence of group members but with the average social sensitivity of group members, equality in conversational turn-taking, and the number of women in a group. These factors were not mutually exclusive. Female participants scored higher on the social sensitivity measure – which partially explains the positive correlation found between women and group intelligence.[5]

Another study found that *informational diversity* – the differences in knowledge bases and perspectives arising from education, experience, and expertise – is positively related to group performance, and that the effect was more pronounced when tasks were complex. The same study also showed, however, that higher levels of value diversity – differences among participants' ideas of what the group's real task, goal, or mission should be – was positively and significantly related to increased conflict within the group.[6] So, while diversity of skills and

perspectives has the potential to lead to better outcomes, caution must be taken to mitigate conflict that may arise as a result.
The benefits of diversity in groups can logically be applied to the question of how women may influence the performance of corporate boards and management teams. Women in leadership broaden the diversity of skillsets and perspectives, and also influence the overall functioning of the boards and teams in which they operate.

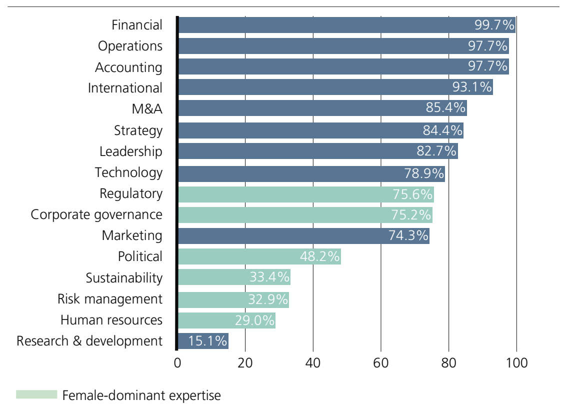
Skills: increasingly an advantage for women

The underrepresentation of women on corporate boards is often blamed on the shortage of eligible female candidates. Board seats are often filled with former chief executives, and currently women hold only 4.0% of CEO positions at S&P 500 companies (see Fig. 1). Despite the very small proportion of women with experience in the highest ranks, many women are qualified for board service under a broader set of selection criteria. Compared to male directors, female directors tend to have more university degrees and are more likely to hold advanced degrees. They are also more likely to have strengths in marketing and sales, and to come from international and non-business backgrounds.

Women have the potential to fill skill gaps on boards. A 2015 study examined 16 critical skillsets and found that of the 594 directors appointed to S&P 600 Small Cap boards between 2010 and 2013, the addition of new skills was larger for female than male appointments. In fact, four out of six female director-dominant traits were represented in only a small proportion of the boards studied: human resources (29%), risk management (33%), sustainability (33%), and political/government (48%) as seen in Fig. 2.[8]

Finally, women tend to possess differentiated leadership skills. McKinsey studies of female leadership qualities found that women (relative to men) tend to more frequently exhibit five of nine leadership behaviors linked to stronger organizational performance. For example, women more frequently demonstrated participative decision making, while men were more apt to employ individualistic decision making.[9] These differences make the case not only for having more females in managerial positions but also for having them occupy more board seats.

Fig. 2: Female-dominant expertise in short supply
Proportions of US boards possessing each expertise, in %



Source: Daehyun Kim, Laura T. Starks, *Gender Diversity and Skill Contribution to Corporate Boards*, forthcoming in American Economic Review, May 2016, UBS

Women bring diversity of experience

Women's life experiences outside of the office are another factor that serves to differentiate their perspective. As more women enter the workforce and earn more income, they are becoming increasingly important players in the economy. It is estimated that women drive over 70% of consumer purchase decisions in the US.[10] As a result, female leaders and board members are likely to be more attuned to consumer spending decisions. It is not surprising that female board representation is highest in consumer-facing sectors.

Strengthening of board functioning and oversight activities

The presence of female directors has been found to positively influence the way boards operate. For example, one study found US firms with a higher representation of women on their boards hold more meetings, have higher attendance rates (not only do women have higher attendance rates, male directors have fewer absences on gender-balanced boards), experience greater participation in decision making, engage in tougher monitoring, and are more likely to replace a CEO when a stock performs poorly.[11, 12]

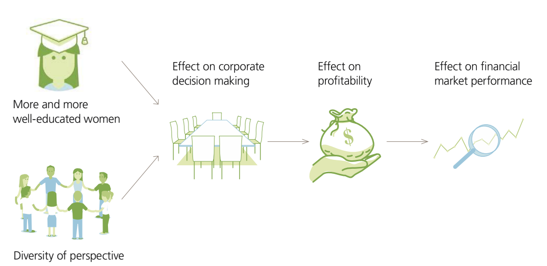
The finding that gender-balanced boards engage in more diligent monitoring has been corroborated by a number of other studies. MSCI ESG Research found that developed market companies with gender-balanced boards had fewer cases of bribery, corruption, and fraud.[13, 14] Further, a study of US companies found that those with a higher representation of women in the top management team faced fewer lawsuits overall, particularly lawsuits related to product liability, environment, medical liability, labor and contracts.[15]

The extent to which female directors are able to influence board efficacy is dependent on a number of variables. For example, the failure to include a *critical mass* of women may reduce the benefits of diversity. A study of US companies found that once a board includes at least three women directors, the women directors no longer represent the "woman's point of view," and directors notice the women directors' opinions rather than their gender.[16] At this threshold of female representation, women are no longer viewed as outsiders and their opinions are given equal consideration in boardroom discussions.

The investment case

Our analysis so far is supportive of the business case for having a greater representation of women in leadership positions, whether at the board or senior executive level. And the notion that it is fair for women to be better represented on corporate boards and in executive management is no longer controversial. But, should investors expect higher returns from companies with greater gender parity in their upper echelons?

Fig. 3: How gender diversity may influence investment returns



Source: UBS

The bottom line: Does gender diversity improve profitability?

A key consideration in assessing whether gender-balanced companies will outperform over the long term is the potential link between gender diversity and firm profitability. The positive effects of diversity on board operations (such as increased monitoring and wider skill variety) have the potential to increase profitability through loss prevention and enhanced strategic decision making. In fact, a 2016 study from the Peterson Institute for International Economics found a substantial correlation between the presence of women on corporate boards and in the C-suite and firm performance. For profitable firms, a move from no female leaders to 30% representation is associated with a 15 percent increase in the net revenue.[17]

Other studies have found a similarly positive relationship between gender diversity and firm profitability. For example, a 2011 Catalyst study found that US companies with three or more women on their boards delivered a higher return on sales, return on invested capital, and return on equity compared to those companies with zero women on their boards.[18] Our own research yielded a similar result: We found that, in the US, Russell 1000 companies with women making up at least 20% of the board and senior management had higher profitability across various metrics relative to their less gender-diverse peers (see Fig. 4).

But there is a chicken and egg problem at work here. Isolating women as the cause of outperformance is a difficult task that involves disentangling the "female factor" from a host of other variables that may lead to financial outperformance. Studies that attempted to correct for this problem have yielded inconclusive results. What we can state with some degree of confidence is that greater female representation in corporate leadership is *associated* with higher profitability.

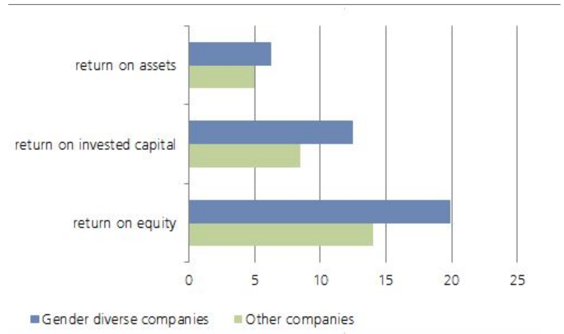
Gender balance: an indicator of future returns?

Regardless of causal links, at the end of the day, what matters for investors is whether gender balance is an indicator of future stock returns. Fortunately, considerable research has addressed this question.

A greater proportion of female executives and directors has generally been found to correlate with higher returns. While women in leadership may not necessarily be the direct cause of outperformance, gender balance may be a reliable proxy indicator for better-performing companies. For example, it may be that female leaders are effective at choosing to work for more successful companies. Or a strong and inclusive corporate culture may lead to better results and better female representation in senior leadership. Finally, the causality may even be reversed with well-performing companies having more flexibility to focus on diversity initiatives.

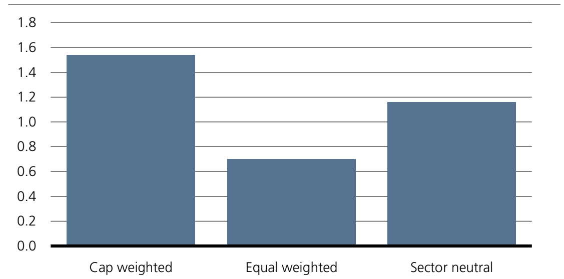
UBS CIO conducted a regression analysis of returns over a six-year period to independently assess whether more gender-balanced S&P 500 companies outperformed the broader market. We attempted to control for size, style, and sector biases, since larger companies and

Fig 4: Gender-diverse companies exhibit higher profitability
Five-year average, in %



Note: Based on Russell 1000 companies. Gender-diverse companies defined as at least 20% women on the board and in senior management.
source: UBS, Bloomberg as of 14 June 2017

Fig. 5: Gender lens investing strategy outperformed
Annual outperformance vs. broad US equity market, 2010-2015, in %



Note: Tested S&P 500 companies with at least 3 women on board or 30% women in executive management

Source: UBS, as of 17 February 2016

consumer-facing businesses, for example, tend to have more female directors.

Gender-balanced companies yielded positive outperformance after controlling for company size and style. This holds true across different stock weighting schemes. In particular, when taking sector effects into account, results were also positive. While the results were not statistically significant, they seem to suggest at least some positive relationship between gender-balanced companies and financial returns (see Fig. 5).

Such results are quite common. A Credit Suisse study of 2,360 companies globally found that companies with at least one female director outperformed those with none. However, the overwhelming majority of the outperformance was in the post-2008 crisis period, meaning that stocks with a greater degree of gender diversification appear to be more defensive and may not outperform in cyclical upturns.[19] This suggests that the time period under study may influence findings as the performance of different companies varies throughout the business and financial market cycle.

While a causal relationship between women in leadership and higher returns is difficult to establish, some indications do exist. For instance, studies focused on dividend payout policy lend some credibility to the claim that diversity at the board level can enhance total returns. Unlike studies of firm performance which may be influenced by a number of external factors, dividend payout policy is a directly measurable corporate decision that is approved by the board of directors. A 2013 study found that firms with diverse boards are more likely to pay dividends and tend to pay larger dividends than those with non-diverse boards, even after taking other relevant explanatory variables into account.[20] Similarly, our own analysis of Russell 1000 companies found that gender-balanced companies have higher dividend yields, on average.

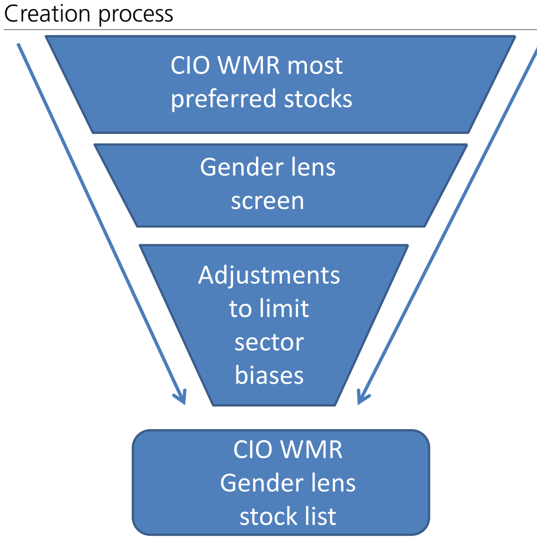
Investing with a gender lens

We distinguish between three different approaches that investors can rely on to invest with a gender lens within listed financial markets. In practice, these are not mutually exclusive but rather can be combined.

1) Screening for companies based on their gender diversity performance. First, investors can construct a portfolio consisting of corporate securities (stocks or bonds) that meet certain minimum criteria with respect to female participation in leadership positions. Such screens may be based on female participation on the board of directors and/or executive management. They may be expressed as a minimum percentage or a minimum number. With available tools and databases, such numeric screens have become quite straightforward to run. Investors wishing to incorporate additional qualitative factors, such as female-friendly human resource policies and corporate culture, may have to rely on greater knowledge of the underlying companies, often through a professional investment manager.

The **list of gender-based screened companies** included in this report relies on such an approach. To derive this list, we start from the

Fig 6: Gender lens investing list
Creation process



Source: UBS

universe of stocks that are included in CIO WM, Americans equity sector strategists' most preferred lists (see Fig. 6). This includes all major sectors except for Utilities and Materials for which we do not currently have coverage. In a second step, we applied a screen to this universe that selected companies with at least three women on their board or at least 30% women in their executive management team. The sector composition of the resulting list of companies contained some significant sector differences relative to the S&P 500. Most notably energy and technology were underrepresented while consumer discretionary and healthcare were overrepresented. In a third step, we therefore made adjustments to the list to reduce the sector deviations from the S&P 500's composition based on the views of the individual equity sector strategists. Overrepresented sectors were trimmed based on strategists' preferences, while we added to underrepresented sectors either based on additional insights on company gender balance not well captured by the two indicators our screen relied on, or by including companies from the sector bellwether list.

We would like to point out that given its construction methodology, the relative performance of this stock list is likely to be influenced at least as much by the quality of the equity selection conducted by our sector strategists as by the mere application of the gender lens screen.

2) Shareholder engagement on gender diversity.
Investors may find that companies that they deem attractive on other grounds do not meet their standards as far as gender diversity is concerned. Rather than eliminating such companies from their portfolios, an alternative approach involves remaining invested but seeking to effect change through shareholder engagement.

Female representation in boards and senior management is in fact a significant area of engagement activities. Proxypreview.org estimates that during the 2015 season nearly one in ten social and environmental shareholder proposals was related to diversity.

For private investors, shareholder engagement is typically delegated to the investment managers represented in the individual's portfolio.

3) Integrating gender diversity into a broader sustainable investing framework.
Rather than focusing exclusively on gender diversity, sustainability-oriented investors may instead decide to incorporate diversity alongside other environmental, social and governance (ESG) criteria as part of their investment framework. This holistic approach is the hallmark of specialized ESG or sustainable investment managers, but increasingly also of traditional managers who see value in integrating sustainability factors into their security selection.

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Appendix

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