WOMEN IN MINING

Mining for talent 2015

A review of women on boards in the mining industry 2012 – 2014

Photo courtesy of BHP Billiton plc

pwc

Introduction

Women in Mining (UK) ('WIM (UK)') is a 1300 strong women's professional association formed in 2006. Our members represent an incredibly diverse range of areas and professions within the mining industry. Together, we work to promote and progress the employment, retention and professional development of women in the mining sector. WIM (UK)'s role includes advocacy – informing industry participants and decision-makers of both the opportunities and the challenges experienced by women pursuing careers in the mining sector. Through our work with universities and key women's organisations, we also aim to promote the mining sector as a career choice to women in all professions. Just as we have encouraged women to become more involved in mining, we have also sought ways to demonstrate to the industry the value of attracting female candidates, emphasising the positive contribution by women to the performance of an organisation.

When we began this series of reports with PwC three years ago, we had two main ambitions. The first was simple – to compile information on the number and proportion of women involved in senior management roles within the mining industry. The second was to examine whether there was any correlation between gender diversity and company performance. Thanks to our sponsors, Anglo American plc, BHP Billiton plc, Glencore plc, Newmont Mining Corporation, and Rio Tinto plc, we have now collated some of the most comprehensive and authoritative data on this subject.

This is our third and final report. As in previous years, we concentrated on the following questions:

1. How many women are there on boards and in the executive levels of mining companies?
2. How do these women affect the performance of these companies?
3. What is the educational and professional experience of these women?
4. What are the differences across the global mining jurisdictions?
5. Why does it matter?
6. What is the trend for women in the industry?
7. How is the role of women perceived in the industry and how do women perceive their position themselves within it?

This year, the report includes a review of financial performance indicators for the full three year period of our research, together with an analysis of results from qualitative data garnered from an online survey completed by mining professionals and telephone interviews with board members and executive management from our sponsors.

As the report shows, there has been a significant improvement in gender diversity in senior management and board roles within the mining industry in recent years, but there remains significant work to be done in removing the remaining barriers for women in the industry. On current trends, it will take a further 25 years for the top 100 mining companies to reach the 30% critical mass of women in senior positions that has been found to have the maximum positive impact on company performance.

The picture differs depending on the company, and more notably, the country of operation, suggesting that culture remains an important barrier to improving the representation of women within the industry.

WIM (UK) commissioned this report because we believe that the starting point for any change must be to create a base of knowledge and use it to inform key influencers. It is undeniably clear from the wide body of research available that gender balanced boards and management teams lead to improved business performance, productivity, and sustainability in all industries, including the mining industry.

We at WIM (UK) truly believe that mining is a vitally important industry, and is an essential driver of global economic development. We want a strong international mining industry that is recognised for the important contribution it makes to the global economy, and we believe that women can, and will, make a positive difference to the industry going forward. We hope this series of reports provides not only a valuable contribution to the future debate over women in mining but also offers possible steps forward to address the existing gender imbalance in the mining industry.

Amanda van Dyke, Chair of Women in Mining (UK)

Stephney Dallmann, PwC

Foreword by Lord Davies of Abersoch

Gender diversity is not about political correctness – better balanced boards bring real business benefits.

The work done by the UK Government on this hugely important issue has helped change boardrooms not only in the UK, but also internationally as other countries continue to seek our help. Despite this improvement, our focus needs to shift to ensure that executive ranks within companies also benefit from the different perspectives and balance of views that gender diversity brings to the table. After all, these executives are the leaders of tomorrow.

It is pleasing to see in the results of this year's report that the mining industry is improving gender diversity at board level, albeit too slowly. Interestingly, the report includes the results of a survey of board and executive members in the mining industry, which has highlighted the perceived barriers to the promotion of women in the minds of industry participants. This report also makes some helpful suggestions for how companies across all sectors can effect change from within both at board and executive level. Now they need to do it.

Enjoy.

E. Mervyn Davies


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Executive summary

There has been a noticeable improvement in gender diversity in senior management and board roles within the mining industry over the last three years, yet women continue to be significantly under-represented. Indeed, there remain fewer women on boards in mining than in most other sectors globally.

Of the 500 mining companies surveyed in connection with this report, 7.9% of boards are female; an improvement of 3.0% over three years. Among the larger companies, the picture is better. Within the top 100, 11.1% of boards are female; an improvement of 3.1% over three years.

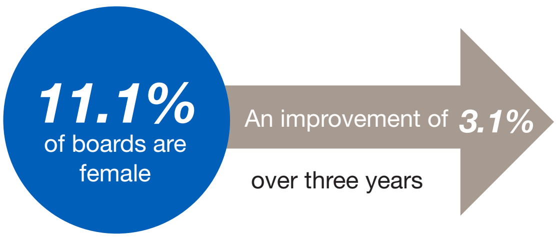
We asked respondents to our survey of mining professionals where they believed the current barriers of entry lay for women in the mining industry. Among the most notable answers were:

- A male dominated culture with a ‘Boys’ Club mentality’
- A small talent pool in the pipeline
- Lack of sponsorship and role models
- Working flexibly in order to raise a family is seen as a hindrance to promotion
- Lack of senior management commitment to diversity

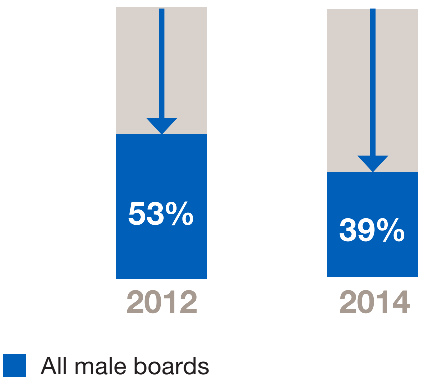
There was also a large geographic disparity when it comes to involvement in senior mining roles. The London Stock Exchange (‘LSE’) accounts for the largest proportion of mining companies in the top 100 listed mining companies by market capitalisation and stands out from the other jurisdictions represented in the top 100 as reflecting the greatest improvement over the last three years. In 2012, those companies in the top 100 listed on the LSE ranked lowest in respect of female representation on boards. Today, it is second highest. This advancement is likely to be attributed to a sustained commitment by the UK government to promote board diversity as an imperative.

Of the **500** mining companies surveyed

Within the top **100**



In 2012, when we started this report, **53%** of the companies in the top **100** companies had all-male boards.



Nevertheless, at this rate of change it will take until **2039** for the top **100** listed mining companies to reach the **30%** critical mass of women that has been found to have the maximum positive impact on company performance, and until **2045** for the top **500** to do the same.

The business case for board diversity

On the basis of the large body of research now available, it is clear that companies with a greater proportion of women on boards achieve better overall results, which can be observed in their better profitability and share price performance. Over a three year period, we have seen that there is a positive correlation between better dividend yield, earnings per share ('EPS'), Enterprise Value to Reserves ('EV/Reserves') and return on capital employed ('ROCE'), and gender diverse boards specifically within the mining industry. An inherent limitation in an analysis of this type is that a correlation between two variables does not necessarily imply that one causes the other, yet the correlation is sufficient for us to take notice.

Over the course of the last three years of these studies, a number of possible reasons for the better overall business performance of companies with diverse boards have come to light:

- The introduction of different leadership behaviours and decision making processes by creating a more open and collaborative atmosphere
- The content of boardroom discussion is more likely to include the perspectives of a greater number of the multiple stakeholders who affect and are affected by company performance
- Difficult issues and problems are considerably less likely to be ignored or brushed aside, resulting in better decision-making
- Diversity plays a role in creating a more sustainable approach to corporate governance
- Increased numbers of women on boards can lead to increased numbers of women in senior management
- The presence of women on boards leads to increased attention on a company's social license to operate. Improved Environmental, Social and Governance ('ESG') management can lead to better sustainability performance by mining companies and is associated with improved benefits for project stakeholders and greater shareholder confidence

Challenging perceptions

In the course of our research, we identified a number of perceptions commonly held by individuals employed within the mining sector as to why women do not advance to a senior management level. We believe that we have successfully challenged a number of these. There is a large pool of talented, educated, and skilled women available to fill roles in the mining industry. While women may be under-represented in maths, science, engineering, and technology qualifications, research shows that not all senior positions in the mining industry require mining or engineering based academic qualifications as a pre-requisite. There are many talented women with the right qualifications to fill the many and varied roles within the mining industry. Our research has led us to the conclusion that the main driver that prevents more women from advancing to board positions is the prevailing culture and perceptions held within the mining industry itself.

Changing cultures

The benefits brought by women to senior management roles within corporations are now well recognised by most corporate governance experts. Our findings suggest that the mining industry still has a long way to go before such benefits are understood and acknowledged; mining is still perceived by both genders to be a male-dominated industry where women do not possess equality of opportunity to advance. The only way that an organisational culture change of this nature can be effective is if it is led from the top. The boards and executive teams of mining companies need to understand and champion the business imperative to promote and support women within their organisations. They need to drive cultural change within their own companies to create a more profitable and sustainable industry.

The way forward

The mining industry has successfully embraced technological innovation over the last 50 years to improve productivity and business output. It now needs to embrace modern management practices, including improving the diversity of senior management, to enable it to progress.

Our suggested way forward identifies six steps that we hope mining companies will consider adopting to improve diversity and thus, applying the correlation identified between gender diversity and financial performance, prosperity.

They include:

- a demonstration of commitment of the leadership from the very top
- the showcasing of female role models
- forming inclusive development programmes
- adopting specific mentoring and sponsorship initiatives
- transcending traditional recruitment methods
- establishing systems that better promote work-life

Methodology

Scope

This year's report analyses the largest 100 ('top 100') and 500 ('top 500') mining companies (ranked by market capitalisation) that were publicly traded as at 30 June 2014 on any recognised exchange and reports on our key findings for 2014, together with trends identified within those findings in data garnered over the full three year period of this study.

Our first report, *Mining for Talent 2013*,[1] analysed the largest 500 mining companies (ranked by market capitalisation) that were publicly traded as at 31 December 2011 on those stock exchanges that historically have been most popular with mining companies (ASX, TSX, TSXv, LSE, AIM, JSE, NYSE and SEHK).

Our second report, *Mining for Talent 2014*,[2] expanded the scope of the exchanges surveyed by analysing the largest 100 and 500 mining companies (ranked by market capitalisation) that were publicly traded as at 22 July 2013 on any recognised exchange.

The approach taken in this report for evaluating and ascertaining data on board composition within the mining sector and how this distribution shows significant correlations to business performance is consistent with that taken in our two earlier reports on *Mining for Talent*.

This year, we have expanded the scope of our earlier reports through the inclusion of a qualitative analysis of anecdotal evidence obtained from interviews and surveys with board members and senior executive management from our sponsors.

Companies surveyed

The top 500 mining companies surveyed had an aggregate market capitalisation of approximately USD 1.46 trillion as at 30 June 2014, an increase of USD 50 billion since 2013. The top 100 mining companies (listed in Appendix 1) had an aggregate market capitalisation of USD 1.28 trillion up from USD 81 billion in 2013; these companies spanned USD 177 billion to USD 2.1 billion in market capitalisation. The top 101-500 mining companies had an aggregate market capitalisation of USD 179.4 billion and market capitalisations that spanned between USD 2.08 billion and USD 65 million.

Statistical evaluation

Each of the top 500 listed mining companies was evaluated on 75 performance metrics including governance, financial, social, and environmental measures. The gender and educational background of each company's board and executive team members was identified and catalogued. Companies were grouped into three categories: boards with no women, boards with one woman, and boards with two or more women. The combined performance of each of these groups was evaluated and compared across the same 75 performance metrics. In addition, we have compared the performance of the top 500 listed mining companies collectively to that of other industries so as to benchmark the sector as a whole.

Qualitative analysis

Our survey, *Women on Boards: Senior leadership and Managers Survey,* was designed by WIM (UK) and PwC with support from key liaisons within each of our sponsors. The survey was disseminated to four mining companies with a total of 169 respondents comprising board members, executive management (C-suite and senior vice-presidents), senior management (for example, heads of departments), and middle managers in the mining industry. The survey responses were cross-analysed with the following characteristics: gender, age, parent/non-parent, and position. WIM (UK) and PwC also carried out telephone interviews with 10 members (both male and female) of both the board and senior executive management from the research report's sponsors.

Limitations

This report is based on statistical analysis and qualitative research. Both have inherent limitations towards solidifying the correlation between women on boards and business performance – a correlation between two variables does not necessarily imply that one causes the other.

Breakdown of companies surveyed by exchange

	Top 100			Top 500		
Country of exchange	**Number of companies in Top 100**	**Total market capitalisation (billions USD)**	**% of top 100 total**	**Number of companies in Top 500**	**Total market capitalisation (billions USD)**	**% of top 500 total**
Australia	5	202.58	15.73	75	226.09	15.41
China	13	48.82	3.79	48	77.38	5.27
South Africa	8	41.79	3.24	16	47.36	3.23
UK	11	262.43	20.38	40	274.05	18.68
USA	10	115.64	8.98	35	129.32	8.81
Hong Kong	7	90.64	7.04	36	101.82	6.94
Canada	17	169.67	13.18	147	217.52	14.83
Europe (ex. London)	8	103.98	8.07	24	114.34	7.79
Asia (ex. China/HK)	12	115.29	8.95	58	136.12	9.28
South Africa	9	136.95	10.63	17	139.53	9.51
Africa	NA	NA	NA	4	3.56	0.24
Total	**100**	**1,287.77**	**100**	**500**	**1,467.14**	**100**

11.1%

of **Top 100** directors are female

7.9%

of **Top 500** directors are female

10 Key findings

This year's report focuses on the three year trends of our top 10 key findings from our statistical analysis and review of performance indicators on women on boards, together with results from qualitative data garnered from an online-survey completed by mining professionals and telephone interviews with board members and executive management from our sponsors. Seven of those findings were featured in our top 10 in our 2014 report. These are: our analysis of board composition, composition of executive management, financial performance, a comparison to other industries, a comparison by jurisdiction, the background of board directors, and contribution to sustainability. Our three new findings report on perceptions held by mid to senior level executive management in the mining sector on key leadership attributes necessary for board level managers, benefits of women on boards, and barriers for appointment of women to board positions.

Women on boards in the mining industry – the statistics

1. The numbers. Women on boards

Where are we today?

Progress is being made but figures are still considerably lower than the 30% critical mass of women in senior positions that has been found to have the maximum positive impact on company performance. In the top 100 listed mining companies in the world, the percentage of female directors has increased by 0.8% to 11.1% over the last year, with the top 500 listed mining companies holding 7.9% of female directors. This is again an increase of only 0.7% over the same period.

There has been no change in the number of female CEOs or female chairs in the top 100 listed mining companies. Kay Priestly, CEO of Turquoise Hill Resources since May 2012, remains the sole female CEO, and Cheryl Carolus of Gold Fields Limited remains the sole female chair. More progress is shown in the wider group of the top 500 listed mining companies where the number of female CEOs has increased by five, bringing it to a total of 12.

Over the last three years we have seen the percentage of women on boards in the top 100 listed mining companies rise from 8% to 11.1%, with the top 500 listed mining companies increasing the number of females on their boards from 4.9% to 7.9%.

What is the distribution of female directors across the mining industry?

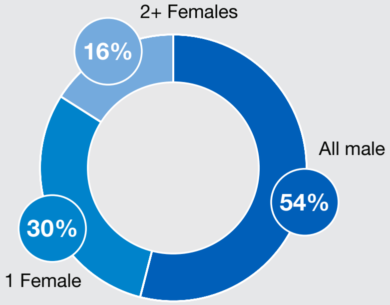
In 2012, 47% of the boards of the top 100 listed mining companies had female board representation. This increased to 58% in 2013 and for this year's report, we see a further rise in that figure to 61%. In parallel with this improvement, the percentage of boards hosting more than two women on the boards of the top 100 listed mining companies has almost doubled over the three year time frame from 16% to 34%.

What does this mean?

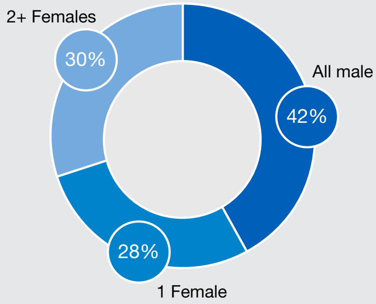
Assuming a linear projection of the rate of increase of women on boards, we have calculated that it will take the top 100 listed mining companies until 2039 to achieve the 30% threshold noted to be critical for women on boards to have the maximum positive impact on company performance, and until 2045 for women on boards in the top 500 listed mining companies to achieve the same. For the top 100, this is a 2% slow-down in the appointment rate for 2013 which has impacted on the anticipated 30% milestone date calculated in our last report by extending it by an additional six years.

Percentage of all male boards, boards with one female, and boards with two or more female directors for the 2012, 2013, and 2014 periods

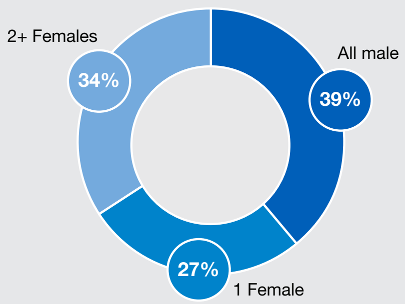
Top 100 in 2012



Top 100 in 2013



Top 100 in 2014



Types of director

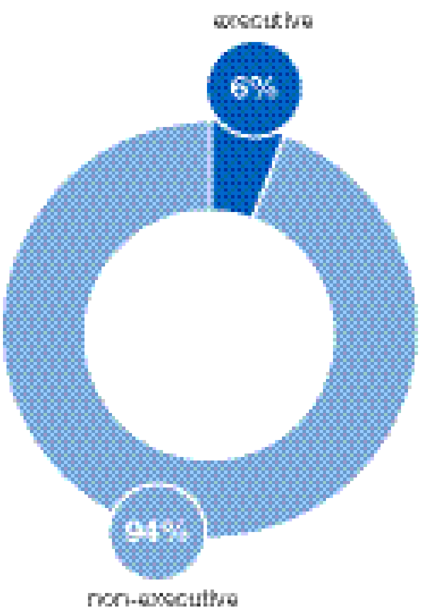
What types of appointments are being made?

Although the number of women on boards has increased in the top 100 listed mining companies by 3.1% since 2013[3], the appointments have been mainly to non-executive director positions; 94% of all board positions held by women in the top 100 listed mining companies in 2014 are non-executive roles. In contrast, only 70% of all board positions held by men in the same period and for the same companies are non-executive roles. This predominance in appointment of women to non-executive rather than executive board positions has been a consistent trend since our first report in 2013.

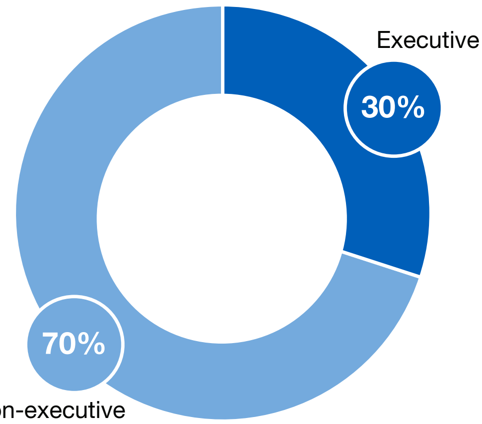
The next challenge

Appointment of women to non-executive roles provides a good place for the mining industry to start to increase the diversity of boards and to experience the benefits of a mixed gender board. The industry's next challenge is to achieve an increase in the ratio of female executive directors to non-executive directors.

Top 100 female directors 2014



Top 100 male directors 2014



Percentage women/men directors 2014.

Are there more women on larger boards?

Yes. In each of our two earlier reports, we reported that boards that include women have larger market capitalisations and that the size of the board increases as the number of women on it increases. This year's findings are consistent with those earlier findings. Larger companies tend to have larger boards with greater accountability to shareholders on corporate governance issues, including gender diversity. As noted in our first report, expanding board size to accommodate female directors dilutes the influence that female directors have on such boards.

Committee participation

Do female directors actively participate on the board?

Yes. For the 2014 period, the percentage of total committee seats held by women in the top 100 listed mining companies is 12.9%. Over the last three years, the percentage of total committee seats held by women has consistently been approximately 1% or 2% more than the percentage of women on boards (being 11.1% for the 2014 period), indicating active participation by female board members. The split of committee seat positions in the 2014 period is very similar to the trends seen in last year's report with the highest proportion of seats held by women being on the key decision making committees: health, safety, environment and community, nomination, and audit/risk committees. Increasing gender diversity on boards allows women to have an impact on the leadership of companies; for women to have an even better influence on the direction of a company they also need to hold seats on the core committees.

2. The pipeline. Women in executive management

What does the pipeline for future executive board appointments look like?

Overall, the percentage of women in executive management has increased over the last three years from 10% in 2012 to 11.48% in 2014 for the top 500 listed mining companies, showing more progress than the larger companies, which had a modest increase from 11.3% in 2012 to 11.49% in 2014.

	2012	2013	2014
	%	%	%
Top 100	11.30	10.60	11.49
101-500	9.30	11.80	11.48
Top 500	10.00	11.50	11.48

Percentage of women in executive management in the top 500 listed mining companies

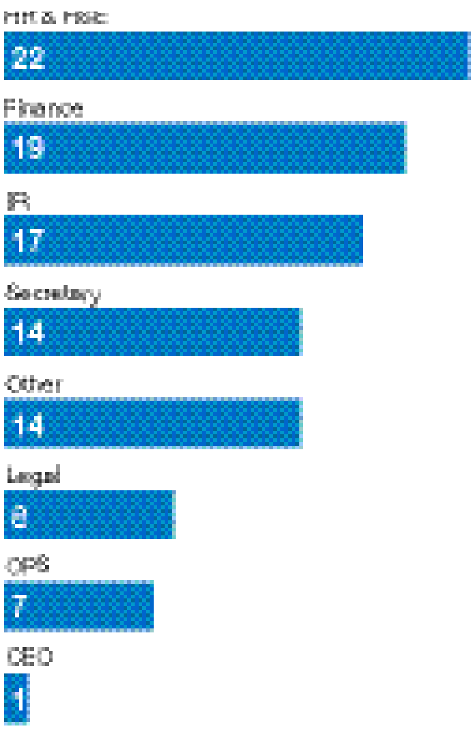
What does this mean?

We have calculated that it will take until 2035 for women in executive management in the top 100 listed mining companies to reach the 30% threshold. Our calculation assumed a forward linear projection of the current rate of appointment of women to executive management positions. We also assumed that studies indicating that 30% is a critical threshold for the effectiveness of women on boards can equally be applied to executive management. The rate of increase of women in executive management has decreased since 2013 and accordingly a forward projection yields a negative result. Overall, this means that there is the opposite trend compared to board appointments and that the pipeline of female talent within the mining industry is actually falling. This highlights the importance of the alternative route to increase numbers of women on boards, that is, being through the recruitment of qualified non-executive directors from other industries.

What roles do women in executive management hold?

Women are well represented across a broad range of executive roles which could lead to positions on the board including in the core areas of HR and finance. This year's findings show that women continue to lack wide representation in operations, which was identified in our last report as being a key path to promotion to the board.

Number of women in executive management in the top 100 mining companies



Retention of women needs to be addressed

Our interviews with senior executive management within the industry reflected a need, as with many other industries, for the retention of women to be addressed; our interviewees reported that, on average, approximately 30% or more of graduate recruitment was female but that by the time that those recruits reached mid-level management, the proportion of women had fallen to 10%. The percentage of women in executive management in the top 100 listed mining companies is only marginally higher than that of women on boards of the same companies. Leaky pipelines are prevalent. Due to exposure to operations being a key catalyst of career progression for an individual within the industry, it may be important for more companies to introduce schemes for women to gain operational experience if we are to increase the number of women that ultimately reach the executive board level in the mining industry.

3. Financial performance

What metrics have we used?

Over the three year period of our research, we have monitored the following financial performance indicators for the top 100 and top 500 listed mining companies: dividend yield, EPS, EV/Reserves, and ROCE. Analysis of EV/Reserves is necessarily limited to the top 100 only as a substantial proportion of the top 500 do not yet hold reported reserves.

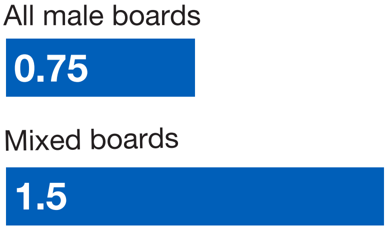
Is there a positive correlation?

Our 2014 report identified a positive correlation between both return on assets ('ROA') and average EV/Reserves to the number of women on boards. This year, we have identified a consistent positive correlation over the three year period of this report with dividend yield, EPS, EV/Reserves and ROCE.

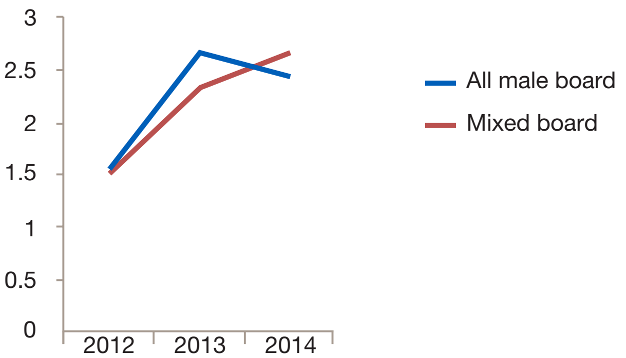
Dividend yield

Dividend yield is a performance measure indicating the ratio of dividends paid out to investors to the price per share. It is very important to investors, both current and potential. Mixed boards in the top 500 mining companies significantly outperformed all male boards in respect to dividend yield.

Top 500 Dividend Yield



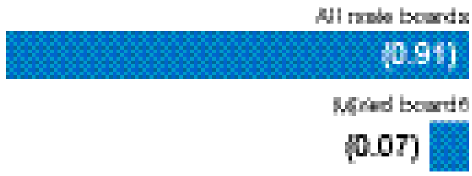
3 year trend Top 100 Dividend Yield



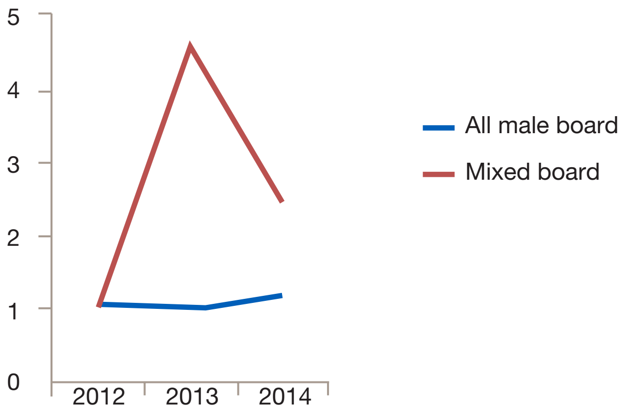
Earnings per share

EPS is an indicator of a company's profitability.
A company that shows less negative EPS means that not only is the company using its capital more efficiently, but that it can attract more investors by demonstrating good management of capital. The EPS for the top 500 listed mining companies, as with ROA, show that companies with mixed boards have the least negative EPS in the period 2013 to 2014.

Top 500 EPS 2014



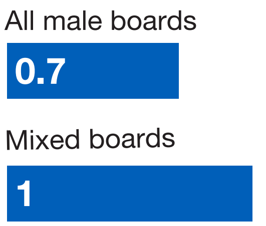
3 year trend Top 500 EPS



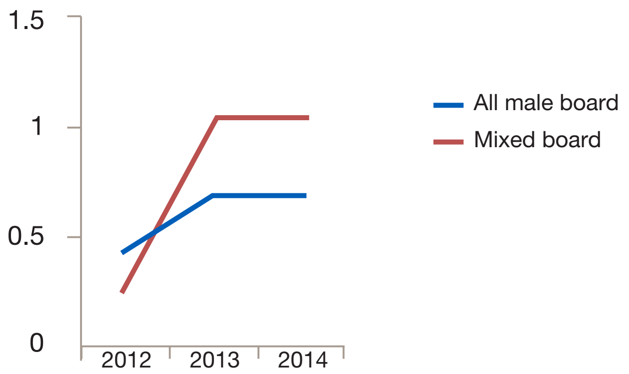
EV/Reserves

EV/Reserves means the ratio of the company's Enterprise Value to its proven mineral assets in the ground. A high EV/Reserves value indicates that a company is trading at a premium and able to increase its value relative to that of the reserves that it owns. A chart of EV/Reserves for the last three years for the top 100 listed mining companies shows that there is a positive correlation with women on boards. Mixed gender boards correlate to a higher EV/Reserves value and the rate of improvement by companies with mixed boards is higher than that of companies with all male boards.

Top 100 EV to Reserves



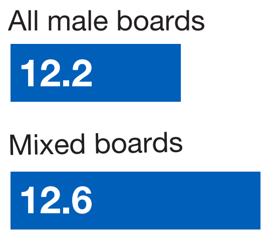
3 year trend Top 100 EV to Reserves



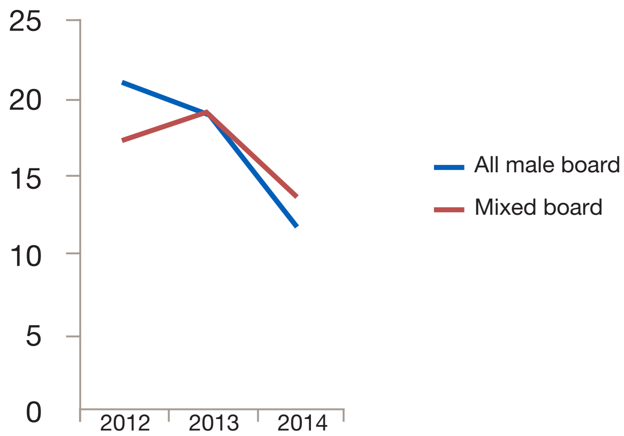
Return on capital employed

ROCE is a financial ratio which measures a company's profitability and the efficiency with which its capital is employed; it is calculated by dividing Earnings before Interest and Tax (EBIT) by Capital Employed. Higher ROCE shows that a company is being operated with greater efficiency and making the most when re-purposing the capital that it has gained; it can be seen from the bar chart that mining companies with mixed gender boards perform at a higher level of ROCE than those with all male boards.

Top 100 ROCE



3 year trend Top 100 ROCE



Mixed boards have generated greater shareholder value

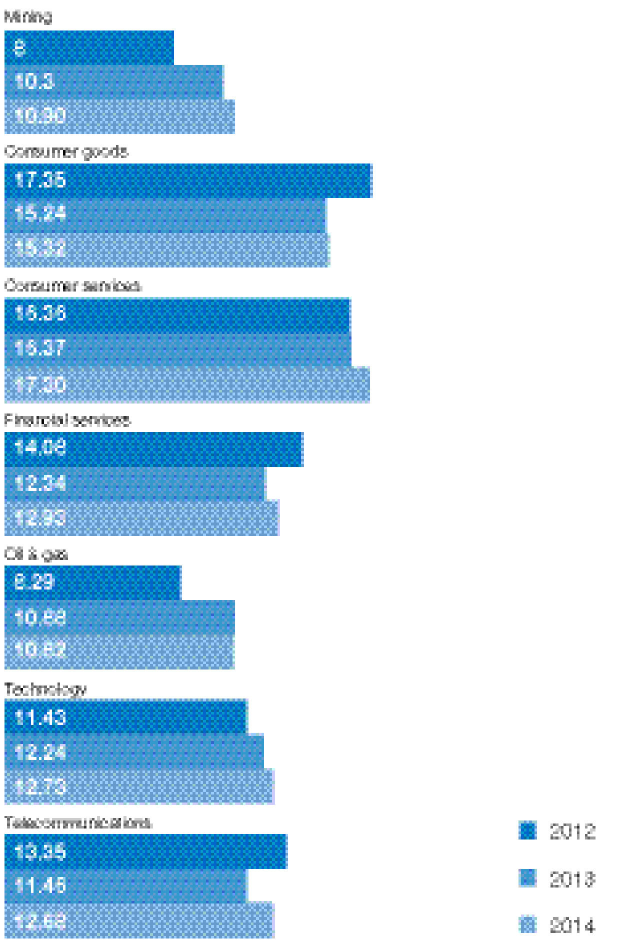
Our research has demonstrated that, on the basis of an analysis of the above four key financial metrics, throughout 2013 and 2014, mixed boards in the mining industry have consistently generated greater potential shareholder value than those with all male boards. Although a positive correlation is not a causal effect, the results of our research are consistent with the results of other studies and cannot be ignored.

4. A comparison to other industries

How does the mining industry compare with other sectors?

On average, the mining industry has lagged behind the progress made by other key sectors, however, it is showing an encouraging positive trend. We have monitored data from Bloomberg comparing the percentage of women on boards across each of the consumer goods, consumer services, financial services, mining, oil and gas, technology, and telecommunications industries. The result of this year's study of the distribution of women on boards between these top seven sectors are consistent with our findings for the last two years. Companies in the consumer goods and consumer services sectors have been shown to have the highest number of women on boards. Those in the consumer services, technology, mining, and oil and gas sectors have shown a consistent positive trend, although oil and gas saw a decrease in the year since the last report (2013-2014 period).

Average % WOB by sector over three years



5. A comparison by jurisdiction

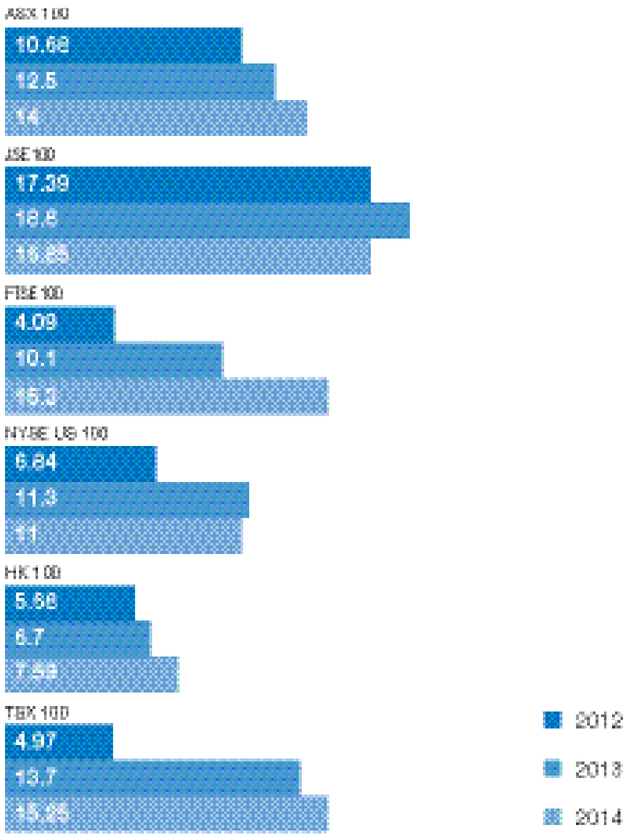
Appendix 2 includes a detailed analysis of the three year trend of women on boards in each of the major jurisdictions. South Africa leads the way with the number of women on boards mainly because of current legislation requiring Historically Disadvantaged South Africans to be represented at board level, which includes women. There has also been a significant change in the LSE where Lord Davies was tasked with increasing the number of women on boards. The representation of women on boards increased significantly mainly with the appointment of non-executive female directors to boards. The appointment of female non-executive directors is a quicker way of obtaining the benefit of board diversity whilst working on the pipeline for executive board members, which may take more time.

How does the mining industry compare internationally?

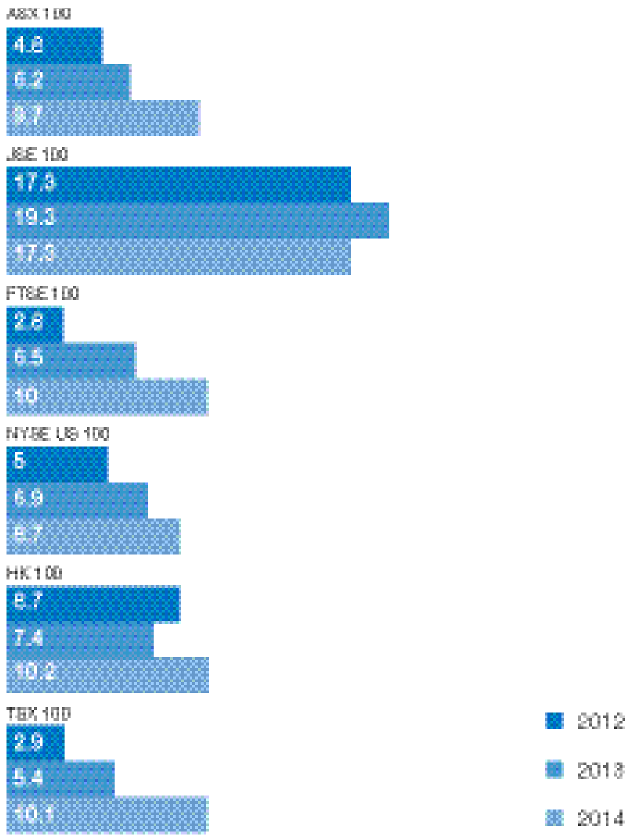
Key global trends:

- Each of the stock exchanges in Australia, Canada, Hong Kong, the United Kingdom, and the United States of America have seen an increase in female board representation in both the top 100 and top 500 listed mining companies over the three year period of our study. Overall, there is a positive trend to increase women on boards in the mining sector. The exception to this is South Africa, where quotas are in place to increase diversity and have remained largely consistent over the last three years.
- The London Stock Exchange stands out as the most improved with a 273% improvement for the top 100 listed mining companies and a 257% improvement for the top 500. The vast improvement of the London Stock Exchange is most likely attributable to the work led by Lord Davies, who was tasked by the UK government in 2010 with determining the barriers to the number of women on boards and to work with UK listed companies to achieve a voluntary target of 25% of women on boards by 2015. The Toronto Stock Exchange with a 206% improvement for the top 100 listed mining companies and a 248% improvement for the top 500 follows closely. In comparison with other jurisdictions such as the ASX 100 and JSE 100, however, the FTSE 100 and TSX 100 had a lower base and therefore further to climb.

Percentage of women on boards by exchange for the top 100 listed mining companies



Percentage of women on boards by exchange for the top 500 listed mining companies



6. The background of board directors

What qualifications do directors in the mining industry hold?

We have found that women directors in the mining industry have more formal academic qualifications than their male counterparts. From this year's data, we identified that 100% of the female board members have undergraduate degrees and 69% have undertaken postgraduate study; whilst 97% of male directors hold an undergraduate degree and 54% hold postgraduate degrees.

Is there a difference in the subjects studied?

The most common degrees for female directors are finance and economics based degrees whereas male directors hold more mining and engineering based degrees. We found that five of the six female executive directors of the top 100 listed mining companies have a finance-based degree.

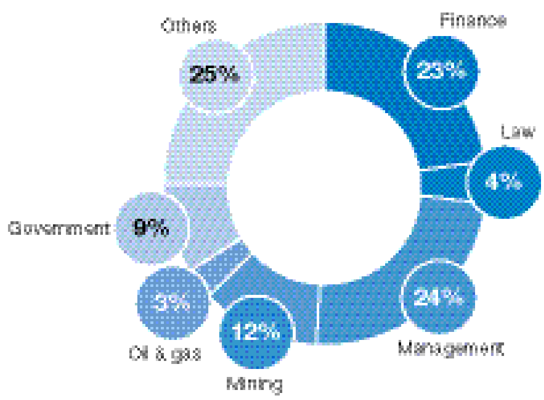
Background education of board members of top 100 listed mining companies 2014

		Female	Male
Undergraduate Degrees	BEng	6.0	21.6
	BSc Geo	4.8	9.2
	Law	16.9	13.0
	BComm/Fin/Eco	34.9	26.9
	BA	15.7	17.0
Postgraduate Degrees	Other	22.9	9.6
	MBA	20.5	18.7
	MA	25.3	12.7
	MEng	1.2	4.5
	MSc	7.2	7.0
	PhD	14.5	11.6

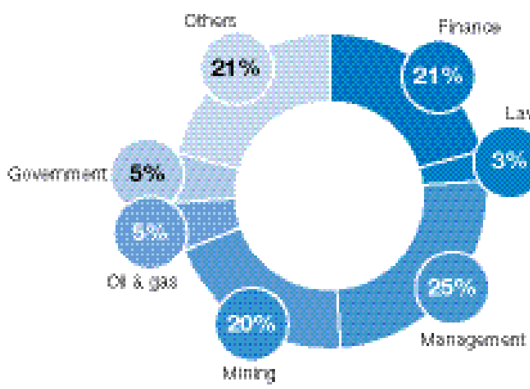
Is an engineering based degree a pre-requisite for board membership?

We identified that only 32% of men on boards in the top 100 listed mining companies for the 2013 period held an engineering based degree. Moreover, having identified companies with varying numbers of engineers serving as board members, we tested the performance of those companies – we were unable to identify any correlation between the number of engineers on boards and financial performance of the company for the 2013 period. This year, we have found that of the top 100 listed mining companies, 87 have at least one director qualified as an engineer. Of all industry experience held by directors prior to assuming a board position, only 20% of male experience and 12% of female experience is directly in mining. Lack of previous mining experience should not be a pre-requisite to appointment to the board.

Professional experience – Female Directors



Professional experience – Male



7. The effect of women on environmental, social and governance factors

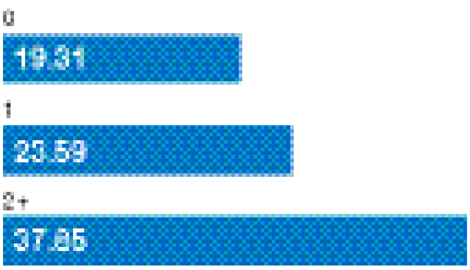
What metrics have we used

As with last year, we have assessed the top 100 listed mining companies for environmental, social and governance ('ESG') performance, using the following metrics: the ESG disclosure score and the signatories to the UN Global Compact. The 'ESG disclosure score' is a score created by Bloomberg to provide a comparative measure of a company's disclosure of ESG matters. Similarly, the UN Global Compact, launched in July 2000, is a global platform which convenes companies to support fundamental principles in the fields of human rights, labour, environment, and anticorruption.

Mixed boards generate greater adherence to global standards

Consistent with last year's results, there is a clear correlation between female representation on boards and increased disclosure and transparency for ESG matters. There is also a significant increase in the likelihood that a company which has agreed to abide by the UN Global Compact principles will have two or more women on the board. Overall, there are only 23 out of 100 signatories to the UN Global Compact. Of those 23, only three do not have any women on their boards. The ESG disclosure score of a company is highly relevant from a financing perspective; 80% of all hits by user type on the Bloomberg ESG disclosure index were from investment advisers or money managers and 86% were by investors.

ESG disclosure score



UN global compact signatories

Women on boards in the mining industry – the perceptions

8. Perceptions about women in the mining industry

What are the perceived top five leadership attributes?

We asked our survey participants to identify the top five key leadership attributes for senior management in the mining industry. Both men and women considered a robust work ethic as being the most important characteristic; willingness to consistently go above and beyond what is required to get the job done is also recognised as a foundational strength required to reach the executive committee. Both groups also agreed that strong teamwork – the ability to inspire, motivate and lead – is important. Other than this, the views of men and women diverged significantly. Only 11% of women, as opposed to 96% of men, placed significant emphasis on having a mining specific degree; 95% of men stated that experience in the sector was important compared to 53% of women. Similarly, 50% of men felt that experience in the field was important in contrast to only 15% of women. Women thought that strong communication skills and risk awareness were key factors for board members.

Women	Men
1. Robust work ethic	1. Robust work ethic
2. Risk awareness	2. Mining specific degree
3. Strong communication skills	3. Strong teamwork
4. Continuous leadership	4. Established sector reputation
5. Strong teamwork	5. Field experience

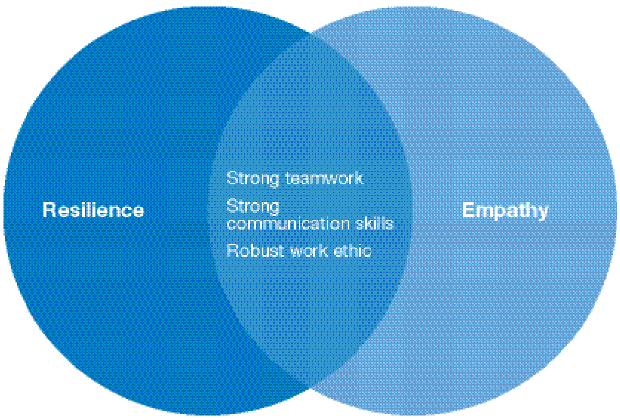
Are the perceptions realised?

One of our key findings from this study is that only 32% of male directors in 2013 held a mining or engineering degree and that there is no identifiable correlation between the financial performance of a company and the number of engineers on the board. A perception remains, however, that an engineering or mining specific degree is critical for board eligibility; this perception needs to be dispelled.

What attributes are recognised as being held by women?

Our survey participants told us that the most important attributes that women bring to business, are a robust work ethic, strong teamwork, strong communication skills, resilience, and empathy. Breaking this down by gender of participation, both men and women agreed that women held a robust work ethic and strong teamwork skills. Both also agreed that women held strong communication skills, although this attribute was not recognised by men as being a key leadership skill. Interestingly, women selected 'resilience' as a female attribute brought to business, contrasting with the selection of 'empathy towards others' by men.

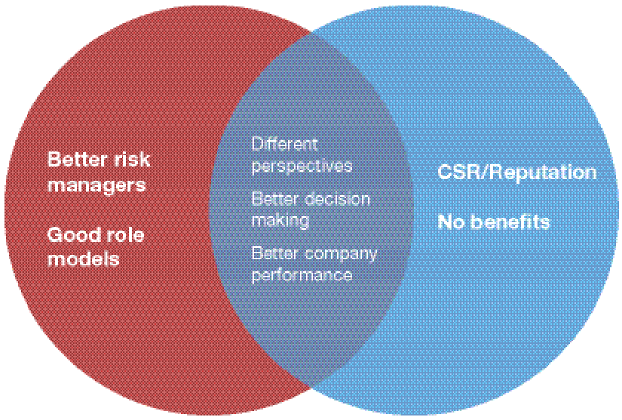
Top 5 attributes brought by women to business



9. The perceived benefits of women in the mining industry

Better Risk Managers
Good Role Models
Different Perspectives
Better Decision Making
Better Company Performance
CSR/Reputation
Cohesive Work Culture
No benefits

Key benefits of women on boards



What are the perceived benefits of women on boards?

Most men and women identified that diversity on boards allows for a variety of ideas. One woman stated that

> *"Women think differently to men. The value in having women participate in the senior level dialogue is to increase options/views/issues under consideration"*

This in turn improves the quality of discussion occurring at board level, making for better decision making and ultimately better company performance. Both male and female respondents identified these three advantages within their top five reasons as to why women on boards benefit the industry.

Men believed that women improved the reputation of the company through their role in corporate social responsibility ('CSR'); women saw themselves as better risk managers.

Are the perceptions realised?

The perceptions summarised above of improved corporate performance and improved CSR are supported by the results of our three year study. We have seen a positive correlation between financial performance and mixed gender boards, a result consistent with research across other industries. We have also highlighted a consistent correlation between increased company reporting for ESG issues and mixed boards. In each case, it is important to note that these results do not demonstrate causation.

Raising awareness

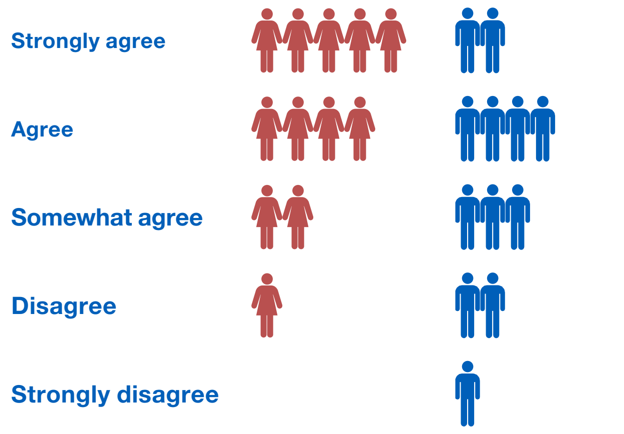
Awareness amongst men of the benefits of diversity is very important to ensure engagement and support from men on this issue; without it, meaningful change will be difficult to achieve. For example, McKinsey's 'Women Matter 2013' report identified that almost one third of men were unaware of the difficulties women faced in reaching senior positions. Notably, 30% of the men whom we interviewed still believe that women bring no benefit at all to boards.

The women whom we interviewed identified women on boards as role models. The presence of female role models can raise awareness to the next generation of women in mining and act to dilute the perception surrounding the difficulty of achieving success in today's business environment.[4]

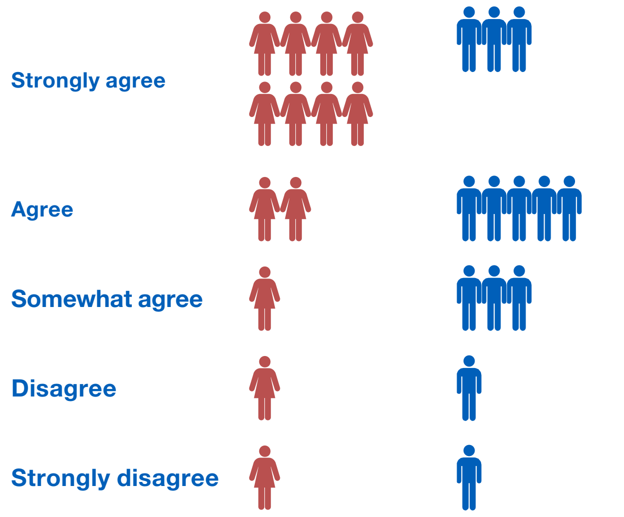
How is gender diversity perceived?

Although there is general consensus that the mining industry would benefit from gender diversity at the senior levels of management, there is still more to be done to convince a significant minority of men in particular, of the business benefits of diversity. Women felt more strongly than men that gender diversity is a driver for company performance and also that the mining industry would benefit from more women in senior management and board positions.

Gender diversity is an imperative driver for company performance



The mining industry would benefit from more women in senior and board roles

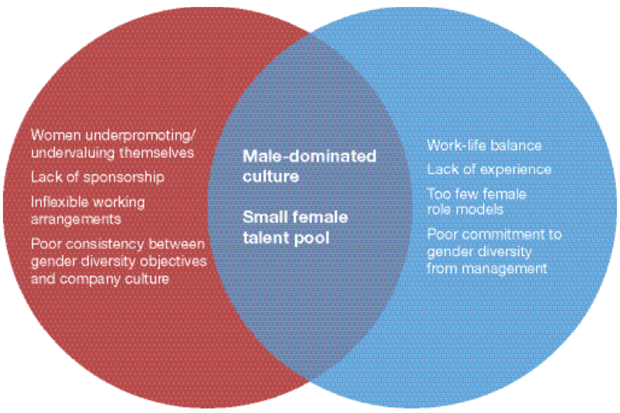


Wider industry engagement

The business case for diversity has been established and accepted by many companies, however, the findings of our survey raise a question as to what more can be done to communicate this more widely in the mining industry. Women appear to be more aware of the impact of diversity, perhaps because of the direct effect it has on their careers. In our view, to really make a difference, more men need to be brought along with the debate.

10. The barriers for women in the mining industry

Barriers for women in the workplace



Male dominated culture

Men and women agreed that a male-dominated culture was one of the most significant barriers to women's success in the mining industry.

"Because it has historically been a male dominated field, many talented women likely gravitate to fields that are more hospitable, such as technology"

Traditional attitudes

The majority of women attributed challenge to the *"Boys' Club mentality [and the] unconscious bias against women."* They see the presence of 'traditional attitudes' as a hindrance that makes the mining sector appear *"to be more resistant than other industries of moving past the good-old-boys-club"* mentality. This in turn pushes women away from the mining sector into other industries.

"In the case of mining, perhaps the issue is lack of experience driven by the bias of 20 years ago that prevented women from gaining experience or exposure necessary to reach the top of mining"

Small talent pool

Both men (82%) and women (73%) found that there was a small talent pool of women in the pipeline for board membership, which would then affect the number of women in senior management and executive positions who may then be considered for an executive position. This small talent pool has been attributed to the lack of technical skills held by women and traditional educational routes expected within the sector, which is seen to hinder women from progressing within mining and prevent them from becoming fully integrated into the business.

"Female profiles can be different than the male 'norm' and hence can be viewed as too different and not fitting the culture or being more of a challenge to integrate within a team"

Sponsorship and role models

However, the other perceived barriers were quite different for men and women. 84% of women identified the tendency of women to under-value or under-promote themselves as a barrier to progression; 60% identified lack of sponsorship. Neither were recognised as significant barriers by men who, in contrast, considered lack of experience and too few role models as more important barriers. Again, there is an interesting divergence of perception amongst men and women that needs to be bridged. Do women need to gain more experience to rise through the ranks? Or do they need more sponsorship from men to get the key roles and experience they need? One respondent believed that women are 'pushed to the side', whilst another puts it down to a 'lack of support'. Recognition of the power of sponsorship and how leaders and managers can make a real difference to individual careers through sponsorship could have a significant effect on women in the workplace.

Flexible working

The often cited key difference in the potential for men and women to progress their careers relates to raising children. 51% of men and 44% of women perceived work-life balance as a key issue; 53% of men and 78% of women believed that working flexibly lowers their chances of promotion. The ability to work and raise a family is critical to the success of women in the workplace and the term 'working flexibly' is seen as a hindrance to promotion.

"Maintaining a good work/life balance is particularly difficult if the company is not supportive of family needs and commitments"

Management commitment

The sixth barrier noted by men and women – commitment to gender diversity from management – shows they both agree that more needs to be done to demonstrate commitment to gender diversity policies and to make these consistent with a company's culture. Interviews with men indicated that the business case for gender diversity was not being effectively communicated to a largely male dominated workforce. Some of the men we interviewed felt that gender targets for hiring and advancement could be discriminatory against men. When the business imperative of diversity is not properly explained it can lead to resentment which can hinder efforts to improve diversity and inclusion.

"Men select male co-workers with whom they are comfortable with"

Stating the business case for women on boards

Over the past decade there have been numerous arguments towards a business case for women on boards. These have demonstrated that once women are actively recruited, developed, and promoted by companies, those same companies then enjoy a series of competitive advantages that are lost by those that fail to integrate inclusivity and diversity into the organisational culture. As the global market becomes increasingly driven by ever-changing global environments, a workforce and senior management that reflects inclusivity and diversity is well positioned to enhance company performance as well as create a robust pipeline of talent that better positions companies for the future. This, we believe, presents a series of opportunities that may potentially be missed by the mining industry.

The business case that we have set out below is based on our analysis of the overall body of available research on women on boards. This spans more than 20 years of data, thousands of companies, and hundreds of researchers and research institutions, as well as our own research. It is a business case that shows the incredible possibilities that could result from diversity in leadership that the mining industry could enjoy. Diverse boards give companies a competitive edge. Our research has established six general areas in which gender diverse boards have improved company performance:

(i) Improved financial performance

(ii) A more robust talent pool

(iii) Improved corporate governance

(iv) Balanced decision making that leads to better results

(v) Better corporate social responsibility practices

(vi) Better risk management

Each of these is addressed below.

Financial performance

Companies that perform best on both organisational and financial performances have a strong presence of female board members and women in senior management.[5] Management teams with the highest level of diversity in most cases outperform the industry average on many, if not most, financial measures. Companies with more women board members, on average, significantly outperform those with fewer women by 53% on ROE, 42% on return on sales and 66% of return on invested capital.[6] Over the course of 2006-2012, large-cap (greater than USD 10 bn) companies with at least one woman on the board have outperformed companies with no women on their board, in terms of share performance, by 26%. For small-to-mid cap stocks, companies with women on the board outperformed those without by 17% over the same period.[7]

A study of 215 Fortune 500 Firms from 1980-1998 showed a significant correlation between a strong record of promoting women into the executive suite and high profitability. The 25 Fortune 500 companies with the best record of promoting women to high positions were between up to 69% more profitable than median firms in their industries. Women in leadership also increased return on equity by 35% and total return to shareholders by 34%.[8]

Our own research showed that mining companies with gender diverse boards outperformed all male boards in 2014 period by 49% on EV/Reserves and that all male boards showed 92% more negative ratings on earnings per share.

A more robust talent pool

By 2010, the proportion of graduates across the world who were female came to a median average of 54%. Only companies that achieve greater gender diversity will be able to tap into the widest possible pool of talent implicit in these statistics.[9] But just getting a higher talent level in the room is not the only advantage. An MIT, Carnegie Mellon University and Union College study found that a group's general collective intelligence is correlated with the social sensitivity of the group members and the proportion of female members. It showed that the group's collective intelligence accounted for approximately 40% increase of the level of performance on a wide range of tasks.[10] The number of women in an otherwise male group is linked to the effectiveness in solving difficult problems and the research shows consistently that when there are more women in the group, the collective group intelligence is higher.[11]

"When you're coming from one pool you miss out other talent and skills" – Female Board Member

Fortune 500 companies with gender diverse boards have been found to be better than others at identifying and capitalising on innovative opportunities.[12] Using panel data spanning a period of 15 years on senior management teams of the S&P 1,500 firms, they argue that "female representation in senior management brings informational and social diversity benefits to the senior management team, enriches the behaviours exhibited by managers throughout the firm, and motivates women in middle management." Boards which include women were also found to be better at identifying and capitalising on innovative opportunities.[13] This helps companies stay ahead of the competition, enriching the behaviours exhibited by managers throughout the firm and overall managerial task performance.[14] Companies with women on their boards are better able to attract and retain excellent employees. Having women on a board sends a strong message that the company is progressive and recognises merit, which then makes the company attractive to high quality candidates.[15] In addition to attracting talent, companies with gender diverse boards have higher retention rates.[16]

In interviews with senior executive management conducted in association with this study, board members commented that the presence of female board members motivate women in middle management to break through the glass ceiling. Our research has also highlighted the diversity in educational backgrounds that appear when more women are included into the pipeline. Although male directors held a wider variation of undergraduate degrees, female directors were found to hold more academic qualifications, with higher rates of postgraduate degrees and MBAs.

Better Corporate Governance

Corporate governance essentially involves balancing the interests of the many stakeholders in a company – these include its shareholders, management, customers, suppliers, financiers, governments and the communities in which the company operates.

It is becoming increasingly important to demonstrate good corporate citizenship through environmental awareness, ethical behaviour and sound corporate governance practices. A study of Canadian companies showed that boards with three or more women performed much better on all metrics in terms of governance than companies with all-male boards.[17] The increased performance was associated with the monitoring role performed by the board of directors as an important corporate governance control mechanism. "The gender composition of the board affects the quality of this monitoring role and thus the financial performance of the firm".[18]

"In a sample of US firms, we find that female directors have better attendance records than male directors"[19] and correspondingly "male directors have fewer attendance problems the more gender-diverse the board is, and women are more likely to join monitoring committees."[20] "Attendance behaviour is important from a governance perspective because the primary way in which directors obtain necessary information to carry out their duties is by attending board meetings."[21] "Boards with more female directors are characterised by the potential for greater participation of directors in decision making (through attendance and committee assignments), by tougher monitoring of the CEO (through greater turnover-performance sensitivity), and by more alignment with the interests of shareholders (through equity-based compensation)".[22]

Female board members are seen to bring a more collaborative leadership style that increases the amount of listening, social support, and successful problem solving, benefitting boardroom dynamics and the ways in which controversial issues are addressed.[23]

"The magic seems to occur when three or more women serve on a board together. Suddenly having women in the room becomes a normal state of affairs. No longer does any one woman represent the "woman's point of view," because the women express different views and often disagree with each other. Women start being treated as individuals with different personalities, styles and interests".[24]

"Having a critical mass of women directors is good for corporate governance in at least three ways:

- The content of boardroom discussion is more likely to include the perspectives of the multiple stakeholders who affect and are affected by company performance, not only shareholders but also employees, customers, suppliers, and the community at large
- Difficult issues and problems are considerably less likely to be ignored or brushed aside, which results in better decision-making
- The boardroom dynamic is more open and collaborative, which helps management hear the board's concerns and take them to heart without defensiveness"[25]

Balanced Decision Making that Leads to Better Results

> *"The reality is that women and men together make better decisions than either group does on their own" – Female Board Member*

Having a gender diverse board provides diversity of thoughts and experiences. Research shows that this gives birth to strategic innovation and greater insight into problem solving as there is not only balance in perspectives but it leads to better more complete corporate development agenda. Our research shows 69% of all respondents agreeing that the balance of perspectives was one of the primary benefits of women on boards, although only 17% believed that it led to better decision making. Balanced perspectives are specifically the reason why gender diversity is correlated with better strategic decision making. This key benefit of diversity was not acknowledged by many participants in the industry in our survey. A 2012 study by MIT, Carnegie Mellon University and Union College on the collective intelligence of groups[26] determined that the three major factors influencing the collective intelligence of the group were:

(i) An increase in the average social sensitivity of group members

(ii) The group's ability to take turns contributing

(iii) The proportion of females in the group

The study also noted that teams that had at least one female member consistently outperformed all male groups. The final conclusion of the study was that collective intelligence increase required to boost problem solving and innovation in fact requires diversity.

Finally, board members from our interviews noted that companies with female board members are seen to be forward-thinking. Our survey revealed that a significant proportion of respondents were not aware that a correlation exists between more women on boards and benefits to corporate governance. Yet, our research also showed that women are recognised for emphasising best practice issues and many agreed that having more women on boards meant that better decision-making processes were taking place.

Better Sustainability Performance

> *"Women's influence is likely to make industry safer, improve reputation, sustainability, mitigate risks (financial, ethical and social)." – Female Board Member*

For the mining sector, CSR has become an increasingly important indicator of company performance and has become synonymous with a company's reputation. In a 2010 study,[27] women on boards were seen to increase companies' CSR ratings, which in turn influences corporate reputation. Research provides evidence that "a link really does exist between women directors and corporate sustainability",[28] and suggests that "Gender diversity is expected to impact on 'good' governance, thereby minimising effects of subversion or misappropriation of shareholder funds that can be detrimental to their returns. Because of their relational abilities, women on boards are more likely able to engage with multiple stakeholders and respond to their needs, resulting in an avenue for demonstrating social responsiveness."[29]

Having gender-inclusive leadership can influence the level or quantity of philanthropic investment corporations make.[30] Gender-inclusive leadership also provides diverse perspectives on fairness, which broadens a company's understanding of CSR.[31] Research has indicated that, as the number of women directors represented on the board of directors of Fortune 500 companies increased, the probability of a corporation appearing on these lists and better share price performance were all correlated.[32] The number of women on boards affects firms' CSR ratings and in turn, CSR influences corporate reputation and share price performance.

As demonstrated in our own statistical analysis, companies with two or more women on their boards performed better on the social and environmental performance indicators. In the past three years, we have seen that boards with two or more women perform remarkably better on the Bloomberg ESG disclosure score and were significantly more likely to be signatories to the UN Global Compact. For the 2014 period, we found that boards with one female director within the top 100 listed mining companies performed better than all male boards by 22% on the ESG disclosure score, whereas boards with two or more women performed an astounding 96% better than all male boards. 86% of the people who monitor ESG scores on Bloomberg are investors, underlying the fact that investors genuinely care about the ESG indicators are important to assessment of a company's value.

Better Risk Management

It is very important to note that women are not generally more risk averse, but rather more risk aware, according to a recent study which found that "Female directors are slightly more risk-loving than male directors. This suggests that having a women on the board need not lead to more risk-averse decision-making."[36] But the nature of the risks women take are slightly different to those taken by men and they balance more factors in the risk decision making process. "Female directors care more about benevolence, universalism, and stimulation. On the other hand, they care less about power, security, conformity, and tradition… surprisingly, women in the boardroom are also slightly more risk-loving than men."[37]

Research compiled by Professor Nick Wilson at Leeds University Business School[38] in 2009 reported that having at least one female director on the board appears to reduce a company's likelihood of becoming bankrupt by 20% and that having two or three female directors lowered the likelihood of bankruptcy even further. Professor Wilson went on to state that "the negative correlation between female directors and insolvency risk appears to hold good, irrespective of size, sector, and ownership, for established companies as well as for newly incorporated companies."[39] Studies by researchers at the University of British Columbia's Sauder School of Business reveal that for each female director on a board, the cost of an acquisition goes down by 15.4%. In addition, the study found that each female board member lowers a company's attempted takeover bids, on average, by 7.6%.[40] The researchers state that their results suggest that women are less interested in pursuing risky transactions and require the promise of a higher return on investment.[41] "Female board members play a significant role in mitigating the empire-building tendency of CEOs through the acquisition of other companies." says Sauder finance professor Kai Li, who co-authored the study. "On average, merger and acquisition transactions don't create shareholder value, so women are having a real impact in protecting shareholder investment and overall firm performance."[42]

The market capitalisation of the mining industry as a whole has fallen significantly in the 2012-2014 period. A large part of that fall has been attributed to high cost acquisitions that have since failed. It can easily be stipulated that better risk management at the board level is required by the mining industry as a whole, and given the growing body of evidence, the mining industry would be remiss if it didn't attempt to mitigate risk by increasing diversity at board level going forward.

Conclusion

So why are there so few women in mining? Despite the massive advances women in the workforce have made globally over the last 50 years, there are still fewer women in mining than in almost any other industry. Over the course of our research, the following themes have emerged to explain the deficit:

Mining is the oldest "Boys' club" in the world

The first is the most obvious. History. Mines have been found that are well over 3000 years old. Since its inception, the mining industry has been an almost exclusively male industry. Mining was a heavy industry that required physical strength to break and haul heavy rocks. Over the last 50 years practices have evolved to a point where today's high tech, large scale, modern mine bears little similarity to a mine from the turn of the century. Modern mining is heavily reliant on advanced geology, engineering and technology. The majority of jobs in mining no longer require physical strength but rather specialisation, training, and skills. Mining is now a global business that has products which serve a global demand, multinational business skill levels, logistics, trading and international standards are now an essential part of an individual mine's ability to be a viable part of the global industry. Whilst the belief that mining is a dirty, heavy, male industry persists, it is very far from the reality.

Gender diversity in the mining industry is a business imperative, not an equality directive

We believe that the business case for women in mining has been made but it is clear that in the mining industry it has not always been understood. Some of the men we interviewed who had been told to implement gender based recruitment and targets felt that this was discriminatory. Diversity policies have often not been well explained. The general rationale for these policies has been better talent and while that is one of the reasons, it is far from the only one. On its own, the talent argument can appear to discriminate against men and can give the impression of positive discrimination which naturally causes resentment. A substantial 32% of men participating in our survey do not believe that there is any correlation between women holding leadership roles within their company and its improved performance. They do not believe that a balanced and a diverse workforce affects the overall standard of work. The issue of gender diversity should not be interpreted or implemented as *'Men v Women'*. The correct message is that *'diverse workforces are stronger and better'*.

Advancement for women in the mining industry is challenging

Our research has shown that women are equally as ambitious as men and equally willing to make personal sacrifices to advance their careers. The problem occurs unless women believe that they are able to succeed. This is partially a confidence issue but mostly it is a result of corporate culture. Leadership styles and lack of corporate support for diversity and inclusion are the main reason that 63% of women don't believe they have equal opportunities for advancement in mining companies. The problem is not only a glass ceiling; it is a leaky pipeline. Women choose to leave the industry as they don't believe that they will have a chance to advance. The most significant barrier to the inclusion of more women in the mining industry appears to be corporate culture. Mining is seen as a male industry. In our survey of more than 250 men and women from senior executive management in the mining industry – unconscious bias was evident throughout. Men generally assume that women don't want to do jobs that involve travel and long hours and that women will make certain choices based on family obligations. Women are often denied advancement because men assume that they are at an age where they are focussing on family. More than 95% of men believe that significant industry experience as well as a mining specific degree is required to advance in the mining industry. This is not supported by an analysis of the backgrounds of existing board members in the mining industry. This perception is preventing many women that are supremely qualified as business people, lawyers, accountants engineers, project managers, and even truck drivers from being able to enter and advance within the industry.

The mining industry has a problem retaining women

In conclusion, gender balanced boards are more productive, more efficient, reduce risk, and perform in a more sustainable manner than those that are not; but this reality needs to be understood and accepted throughout by participating companies. The mining industry has embraced modern technology over the last 50 years; it now needs to embrace modern management and that same management needs to include women. The only way organisational cultural change of this nature can be effected is if it is led from the top. The boards and executive teams of mining companies need to understand the business imperative for getting more women in the industry and choose to change their companies cultures and practices for the better.

Six steps forward

“I think in the resources world… there is no logical reason why we shouldn’t have more women” — Male Board Member

We have identified that gender diverse boards have better financial performance, governance, sustainability, and risk management and accordingly, we believe that there is a strong business case for more women to hold executive as well as non-executive board positions in mining companies. As reflected in this report, there are still significant barriers facing women’s progression and retention within the mining sector. We believe that in order to achieve this aim, companies in the mining industry need to not only increase the pipeline internally, but also revise current policies and procedures through which advancement to executive levels and ultimately, the board, is achieved.

“The only way to do that is to keep demonstrating...the cost of getting it wrong, as much as the benefits of getting it right” — Female Board Member

By way of a conclusion, we have suggested our ‘Six Steps Forward’ which we hope will inspire more mining companies to increase and ensure retention of skilled female employees, promoting the right talent and increasing their overall performance.

1. Leadership Commitment

“The single most important thing...is very very strong leadership commitments, and ultimately that is CEO leadership” — Female Board Member

We believe that there must be commitment from senior management in order for gender diversity as a corporate imperative to trickle down into all aspects of a company:

- Gender diversity must be part of the company’s strategic agenda, with monitoring frameworks in place through which to measure the trends as well as key performance indicators
- The CEO must actively express and reinforce the agenda for gender diversity as an imperative of corporate performance
- The leadership of a company must not only set targets, but also explain why, making the business case for diversity understood and embraced throughout the company
- The board must commit to having balanced recruitment processes for board seats

2. Showcasing female role models

By showcasing female role models, more women are encouraged to aspire for more senior level management roles, eventually reaching to board level positions. In addition, with strong female role models, more women are encouraged to join the industry, thereby increasing the pipeline to management and strengthening the talent pool. The role models would also reinforce the positive role of diversity and the company’s values throughout the business.

3. Inclusive development programmes and networks

When we asked our survey respondents what measures they would recommend to hire, promote, and retain female employees, the most pre-eminent response was to have inclusive development programmes such as corporate leadership development, and sponsorship and mentorship programmes.

“The unintentional and pervasive male networks…makes it particularly difficult for women” — Male Survey Respondent

To add to this, we have recognised the benefits of having strong networks within the mining sector:

- Development programmes that are not women-only solutions, but include women-specific problems,[43] for example, leadership programmes
- Gender inclusive networks that see women gaining equal access to traditionally perceived male-focused networks, for example, going to the races or wine tasting instead of golf days, with the aim of reducing the ‘male networks’ that women may be excluded from
- Gender responsive mentoring programmes to help candidates define their career goals, whilst being sensitive to the differing long term career paths of women and men and help to garner feedback, support, and solutions to career issues

4. Sponsorship of Women with Potential

"Clear benefits if there is a structured mentorship and sponsorship in place" – Male Executive Officer

60% of female respondents commented in our survey that women are not usually sponsored within the mining sector. Sponsorship is seen as a major avenue through which professionals move up the corporate ladder, often providing new roles, exposure to opportunities, and acting as a personal advocate within the company. Sponsors are seen as key to personal and professional development and are able to help to navigate the business and understand the dynamics and responsibilities of corporate leadership roles.

Companies can, therefore, encourage women leaders by adopting sponsorship or mentoring programmes where they actively seek to balance the gender divide in how sponsorship is dispersed. In doing so, female 'high-flyers' or top performers from within the industry may be identified and nurtured, and ultimately rewarded for their achievements.

5. Transcending traditional recruitment practices

We believe that there are three areas through which we can transcend traditional recruitment practices to produce a workforce, and ultimately a board that is heterogeneous – not only in gender, but also in skills and experience.

"The mining industry needs to value non-traditional experiences" – Female Head of Recruitment for a Top 100 Mining company

- Recruiting should be based on general market experience as well as skills. Competency-based rather than industry-based recruitment, which focuses on how well a candidate can execute a role, should be the basis for hiring
- For boards, recruiting should be conducted outside traditional mining networks on the basis of board criteria and not only on board and CEO experience within the mining sector. It is not uncommon to have board members today from other sectors such as the automotive, aerospace and telecommunications industries. Alternatively, using networks from outside industry, such as academia or government, may bring in both a diversity of perspectives, as well as talent.

6. Establishing Systems for Work-Life Balance

Our survey showed that both men and women attributed flexible work arrangements with limited possibilities for progression. We believe that this is not a reflection on the nature of flexibility in the workplace but the result of the influence of corporate culture. We believe that strong flexible work arrangements, which meet both the company's and employees' performance needs, can positively enhance corporate performance whilst ensuring that employees stay motivated and incentivised to put their best foot forward. For example, incentive programmes that reward women for coming back to work ensure that not only do women feel valued and motivated, but the company will retain the high level of experience those women have previously achieved rather than losing it.

Establishing systems that promote a work-life balance is particularly important to the mining sector and its lack of female directors and CEOs, as it actually increases employee productivity whilst making employees feel that they can manage both work and home life needs. Women in general struggle with this, as our survey showed that male board members and CEOs had higher percentage of spouses who stayed at home, whereas female senior managers had a low percentage of stay-at-home spouses. This makes it harder for women to strive for higher positions, which they found demanding.

As a result, by ensuring that the corporate environment allows employees to work in an environment that suits their personal working styles, we see more energised, motivated, and productive employees breaking through. However, this must be a balanced and highly monitored process to ensure that companies are getting the most out of such an arrangement, especially where direct monitoring is not involved.

Appendix 1: Top 100 listed mining companies

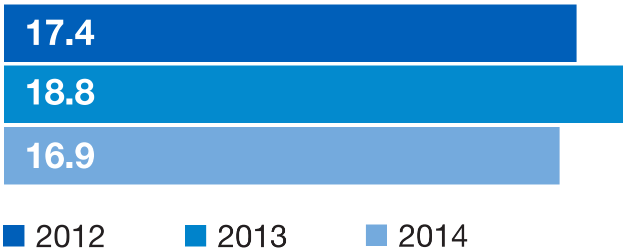
Company	Number of Women on Board	Board Size
BHP BILLITON	2	14
RIO TINTO	2	12
GLENCORE	1	8
VALE	0	11
CHINA SHENHUA	1	8
COAL INDIA	1	12
FREEPORT-MCMORAN	2	16
ANGLO AMERICAN	3	12
POTASH CORP SASKATCH.	4	13
NORILSK NICKEL	1	15
GRUPO MEXICO	0	10
SOUTHERN COPPER	0	12
ARCELORMITTAL	2	11
GOLDCORP INC	2	10
BARRICK GOLD	2	12
THE MOSAIC COMPANY	2	12
SESA STERLITE	1	8
URALKALI	0	9
TECK RESOURCES	2	14
AGRIUM	2	10
ANTOFAGASTA	1	11
FORTESCUE METALS	2	12
NEWMONT MINING	3	9
FIRST QUANTUM	0	9
NMDC	0	14
HINDUSTAN ZINC	2	8
FRESNILLO	2	12
KUMBA IRON ORE	3	11
INDUSTRIAS PENOLES	0	17
POLYUS GOLD	1	8
SUMITOMO MET. MIN.	0	12
FOSUN INTL	0	11
ALROSA	3	15
SAUDI ARABIAN MINING	0	9
KGHM	1	9
SOCIEDAD MINERA	1	12

Company	Number of Women on Board	Board Size
CHINA COAL ENERGY	0	9
AGNICO EAGLE MINING	3	13
SOQUIMICH	0	8
CAMECO	3	13
RANDGOLD RESOURCES	1	9
INNER MONG BAOTOU	1	14
NEWCREST MINING	1	11
YAMANA GOLD	0	8
ZIJIN MINING	0	11
UNITED CO RUSAL	5	18
SEVERSTAL	0	10
ANGLOGOLD ASHANTI	1	9
TURQUOISE HILL	3	7
SHAANXI COAL	0	9
IMERYS	4	15
IMPALA PLATINUM	5	13
JIANGXI COPPER	0	11
SID NACIONAL	0	6
ELDORADO GOLD	0	8
VEDANTA RESOURCES	0	6
MINERA FRISCO	0	11
ROYAL GOLD	0	7
YANZHOU COAL	0	11
KINROSS GOLD	3	12
ASSORE	0	8
EXXARO RESOURCES	1	12
DMCI HOLDINGS	1	9
PEABODY ENERGY	2	12
INNER MONGOLIA	1	11
BOLIDEN	3	14
QINGHAI SALT	2	11
TAHOE RESOURCES	1	8
POLYMETAL INT.	2	9
AFRICAN RAINBOW	2	14
JINDUICHENG MOLY	1	11
ZHONGJIN GOLD	0	9

Company	Number of Women on Board	Board Size
SHANDONG GOLD	0	9
ALLIANCE RESOURCES	0	4
CHINA MINMETAL	0	8
LUNDIN MINING	0	8
COMPASS MINERALS	1	9
ILUKA RESOURCES	1	7
NEW GOLD	0	8
ADARO ENERGY	0	5
BUENAVENTURA	0	8
ARAB POTASH	0	13
SEMIRARA MINING	2	11
SHANXI LU'AN	0	15
GOLD FIELDS	2	9
SHANXI XISHAN	0	11
FORESIGHT ENERGY	0	5
SHOUGAN HIERRO	0	6
INDO TAMBANGRAYA	1	6
YUNNAN CHIHONG	1	9
SIBANYE GOLD	1	13
BANPU PUBLIC CO.	0	12
PAN AMERICAN SILVER	0	8
KAZAKHMYS	1	9
LONMIN	2	10
YANGQUAN COAL	2	9
JIZHONG ENERGY	1	9
DETOUR GOLD	2	11
STILLWATER MINING	1	7
NEW HOPE	1	6

Appendix 2: An in-depth look at the different jurisdictions

% Women on board (Top 100, JSE 100)



% Women on board

South Africa

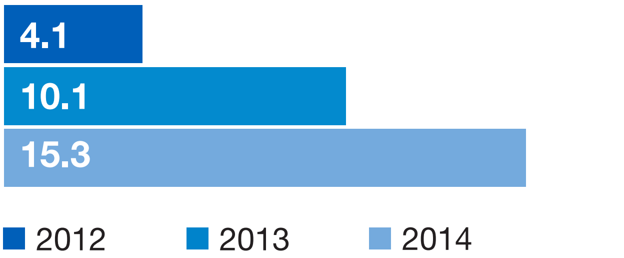
As the only jurisdiction in this study to have active legislation regarding diversity in the workplace and in management, it is unsurprising that South Africa has consistently remained the jurisdiction with the highest percentage of women on boards of listed mining companies trading on the JSE across each of our three reports. The outlook for the future of women on boards in South Africa is buoyed by the strong pipeline shown of 19.8% of females in executive management in 2014. Compared to the JSE 100, the mining sector still shows a slight lag in incorporation of women on boards which can be attributed to only recent overrulings of historical prejudice in the South African mining community.

The three year trend of women on JSE listed mining company boards in the top 100 shows a relatively stable position, with a slight decrease in the last year.

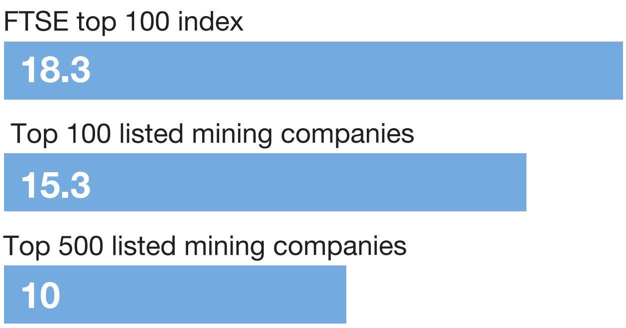
19.8%

females in executive management in JSE 100 listed mining companies, top 100

% Women on board (Top 100, FTSE 100)



% Women on board



United Kingdom

The LSE, the exchange accounting for the largest proportion of mining companies in the top 100 listed mining companies by market capitalisation, stands out as the most improved across the time period covered by our series of reports; starting out with the lowest proportion of women on mining company boards in 2012 to now have the second highest (after the JSE 100).

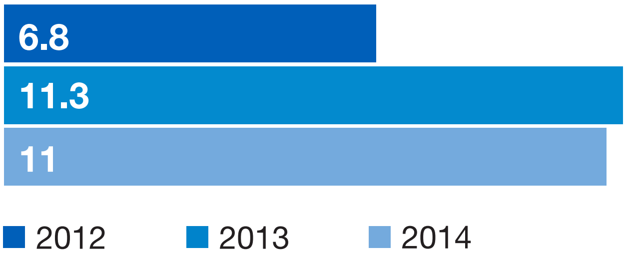
Compared to the FTSE 100, mining companies in the top 100 still have lower proportions of women on boards; the difference between the FTSE 100 and the top 100 is small and could be attributed to the active work recently undertaken with the aim of increasing women on boards, led by Lord Davies.

FTSE 100 listed mining companies in the top 100 have come from the worst position in terms of women on boards, but the growth has come from non-executive appointments. Looking to the future, only 4.6% of executive management is female, and therefore, with this small pipeline, more work needs to be done before the numbers of executive directors increases.

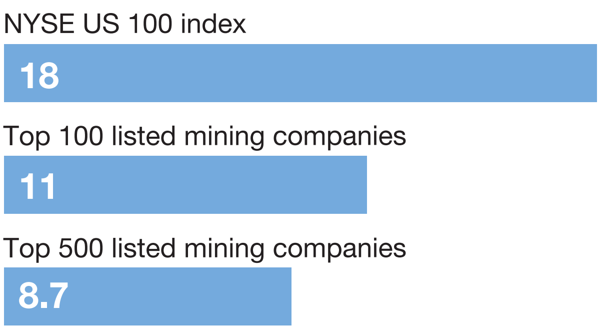
4.6%

females in executive management in the FTSE 100 listed companies, top 100

% Women on board (Top 100, NYSE US 100)



% Women on board



United States

Between 2012 and 2013, there was an almost doubling of women on boards in the NYSE US 100, which then became a negative rate between our 2013 and 2014 reports.

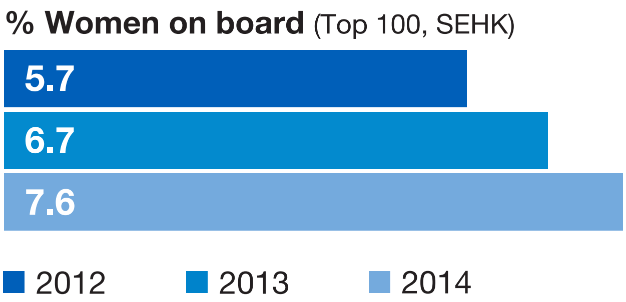
There is an active pro-diversity lobby within the US and the strongest business arguments for increasing female executives and board participation have come from the US.

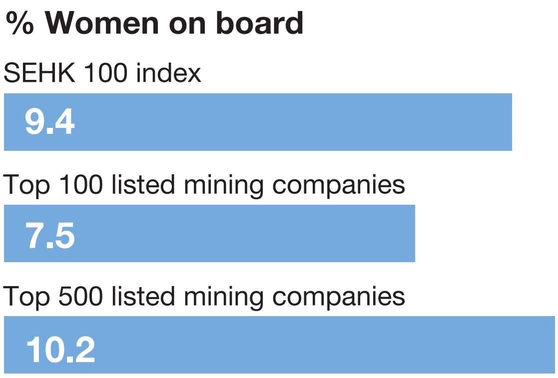
Compared to the NYSE US 100, our top 100 listed mining companies and top 500 have a lower percentage of women on boards and the largest difference between the index and the mining companies, with the top 500 having approximately half the percentage of women on boards that the NYSE US 100 does.

The NYSE US 100 is one of the highest performing exchanges regarding representation of women as boards and has a relatively high proportion of females in excecutive management, forming a wider pipeline for the future then demonstrated on other exchanges.

12.1%

females in executive management in the NYSE US 100 listed companies, top 100





Hong Kong

SEHK, the Hong Kong securities and futures exchange, is now the exchange with the lowest percentage of women on boards of listed mining companies in the global top 100. The indications are that at the corporate level in Asia, there are higher numbers of women in executive management, providing an ample pipeline and reasonable chance of reaching ultimate board level positions in HK companies through organic growth. 21.5% of executive management in SEHK mining companies are female; this can be interpreted as Hong Kong making an effort to put a strong pipeline in place to decrease the deficit of women on boards in the future.

Compared to the HKSE 100, SEHK listed mining companies actually have a similar percentage of women on boards, indicating a failing in the SEHK as a whole and not just the mining industry.

21.5%

females in executive management in the SEHK listed companies, top 100

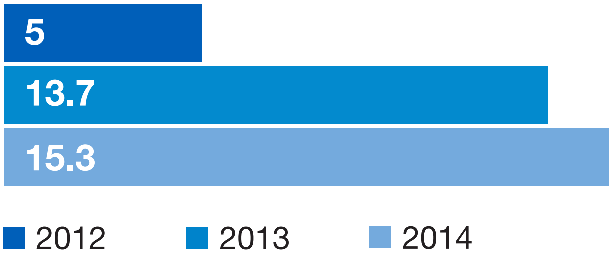
Canada

TSX 100, the Toronto Stock Exchange, is in a similar position to the LSE regarding women on boards of mining companies; starting off at a low position in 2012 and showing a step change over the three year period to now have the third highest proportion of women on boards.

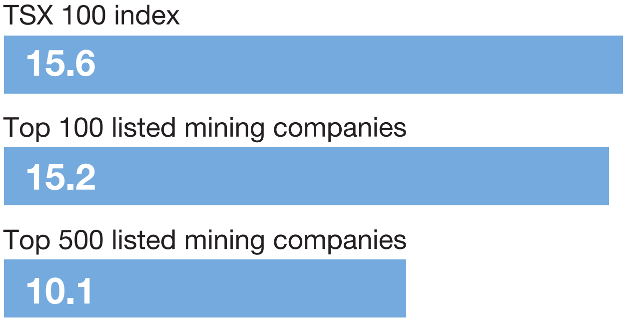
In comparison to the S&P/TSX 100, those listed Canadian companies in the mining top 100 have women on boards to almost the same levels as the 100 index companies; a comparative lack is in the top 500 companies.

TSX 100 shows high proportions of women in executive management, higher than the percentage of women on boards, which is a good indicator for increasing the numbers of appropriate women on boards in the future.

% Women on board (Top 100, TSX 100)



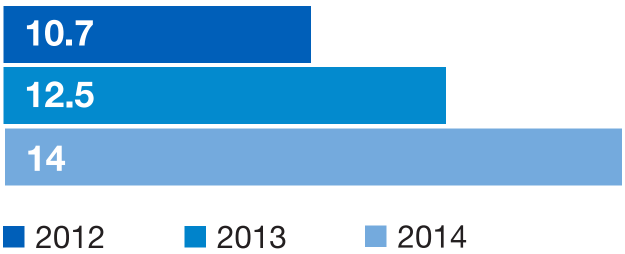
% Women on board



19.5%

females in executive management in the TSX 100 listed companies, top 100

% Women on board (Top 100, TSX 100)



% Women on board

Australia

The Australian Securities Exchange has a high proportion of the S&P/ASX 100 companies in the mining sector. The percentage of women on boards in Australia in general is high, with mining companies showing a distinctly lower average. At only 7.5% of women in executive management, there is not a strong pipeline of women to focus towards future executive board roles.

The three year trend of those companies in the top 100 listed mining companies that are listed on the ASX 100 shows definite improvement at a rate similar to that of the mining industry as a whole.

In 2014, ***7.5%*** females in executive management in the ASX 100 listed mining companies, top 100

Footnotes

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