

Mining for talent

A study of women on boards in the mining industry by WIM (UK) and PwC

Women in Mining (UK)

January 2013

RioTinto



LATHAM & WATKINS

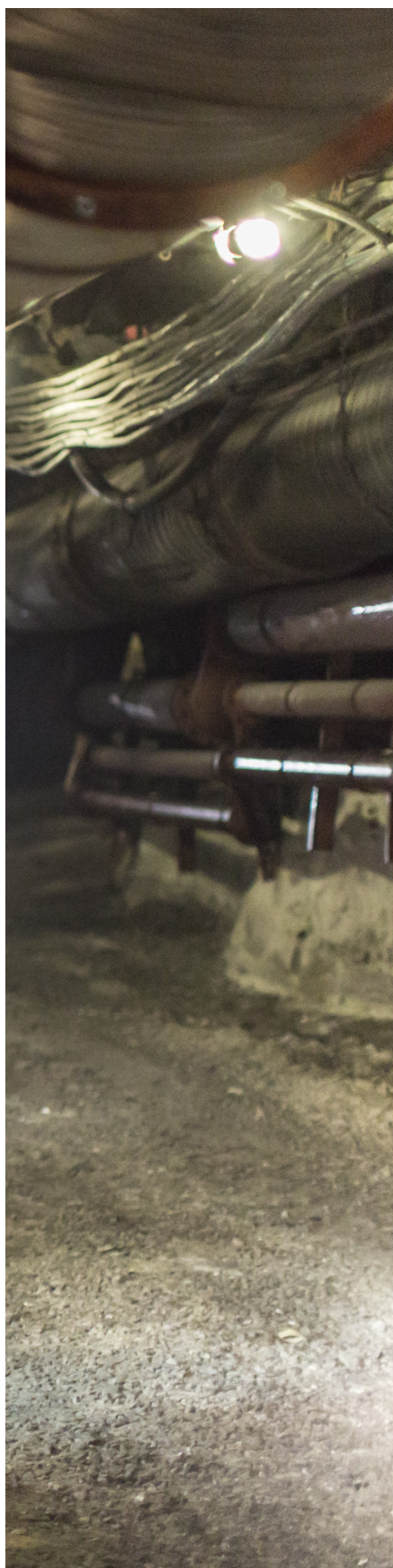


pwc

Photograph courtesy of Anglo American







Contents

<i>Executive summary</i>	2
<i>Introduction</i>	4
<i>Methodology</i>	5
<i>The findings of the study</i>	6
<i>Board composition</i>	6
<i>Financial performance</i>	9
<i>Committee participation</i>	10
<i>Comparison to other industries</i>	12
<i>Executive management – The pipeline</i>	14
<i>Leading by example</i>	15
<i>Why does it matter?</i>	17
<i>Why has it been difficult getting women into mining?</i>	20
<i>What are the options for changing the status quo?</i>	22
<i>Next steps</i>	24
<i>Acknowledgements</i>	25

Executive summary

This is the first of three reports undertaken by Women in Mining (UK) in conjunction with our sponsors Anglo American, Rio Tinto, PwC and Latham & Watkins designed to widen the already well discussed debate about the lack of representation of women on boards to the mining industry.

There have been many studies demonstrating why it makes good business sense to have a diverse board, and in some countries legislation has ensured this takes place. Whilst this report agrees that gender diversity has a positive impact on the financial and social success of companies, its purpose is not to make judgement calls on quotas or legislation. Instead, it sets out to identify and analyse the current situation in the mining industry with respect to the number of women on boards and in senior executive positions, the comparison of the size of the companies and the jurisdiction in which these companies are listed, the impact to the financial health of the companies and the board committees that attract women. With that baseline data in place, it will be possible to measure the changes in the industry over the next three years as the debate around the 'how' encourages solutions.

The top 500 globally listed mining companies were surveyed for this first report, out of a total of 2600 listed mining companies. Together, these companies have a market capitalisation comprising 97% of the global industry, or \$1.05 trillion of the \$1.09 trillion industry total.

While the findings are not astonishing – the mining industry has the lowest number of women on boards of any industry group in the world – they are nonetheless interesting and expose a number of jurisdictions, namely London, for not addressing the issue. It goes further to support other published reports regarding the strong correlation between financial performance and the participation of women on the board.

The top line findings of the research are:

- The top 100 mining companies have more women on boards, while the top 101 – 500 mining companies have more women in senior executive positions.
- The larger the market capitalisation of the company, the more likely there is to be a woman on the board.
- Mining companies listed on the Johannesburg Stock Exchange had the best level of female board representation, while those listed on the London Stock Exchange had the worst level of representation.
- Profit margins are higher for mining companies with women on the board, which is consistent with the findings of a study by Catalyst, which found that companies with female board representation also had higher return on sales, higher return on invested capital and higher return on equity. Similarly, a study by the Credit Suisse Research Institute found that companies with women on their boards have a higher return on equity, lower gearing, higher price/book value and better than average growth.
- Women tend to hold more than one committee seat, and these tend to be on the HSEC and Investment Committees.
- Mining is the worst sector for gender diversity – worse than the oil and gas industry – with just 5% of board seats held by women in the top 500 mining companies.



- There are more women in senior executive positions in South African-listed mining companies, while London-listed mining companies have the least representation of women in senior executive positions.

Looking beyond the significant benefits of female representation on boards, the mining industry is currently facing serious challenges in both recruitment and cost inflation. Making use of a wider talent pool to tackle these problems could lead to better outcomes for both the industry and the individuals involved. In this context, encouraging recruitment and career development across the gender line is essential.

There are myriad reasons why there are fewer women employed within mining companies and on mining company boards. The industry needs to identify and address the issues that prevent or indeed restrict the development of women in mining to reach senior management and board positions. This series of reports aims to explore the current situation, understand the dynamics which have led to it, raise awareness of the issues in a wider forum and, most importantly, to challenge current thinking in order to encourage debate and find solutions for the benefit of the sector as a whole.



Introduction

Women's representation in the senior management of companies has been the subject of considerable public debate in recent years, particularly concerning calls for the introduction of legislative quotas. In addition to the case for greater gender equality, a growing body of evidence suggests that stronger financial performance, improved governance and reduced risk of bankruptcy are associated with the participation of women on corporate boards and in senior management positions. However, there are diverse views, including amongst women, as how to achieve greater gender diversity.

The mining sector has faced a particular challenge in this regard, with a low level of female participation at all levels of the industry. Estimates suggest that women comprise only 10% of the global mining workforce. This undoubtedly contributes to the small number of women in senior management positions, with women occupying only 5% of the board positions at the top 500 mining companies.¹

Acknowledging that the mining industry lags behind other sectors (including the oil and gas industry) on gender diversity in the workplace, there are a number of questions that need to be addressed:

Why?

Does it matter?

What can or should be done about it?

Women In Mining (UK) has commissioned a series of three reports to address these questions. The reports will focus on: building an understanding of the current status of women on corporate boards and in senior management in the mining industry; analysing the challenges that women working in the mining sector face; and providing recommendations to improve gender diversity to help companies benefit from the broader talent pool and diverse perspectives that female participation at the highest level will bring.

The purpose of this first report is to present data on the recent (FY2011) level of the participation of women in the mining industry. This data will be used to track, measure and analyse changes to trends in female development and

retention in the mining industry over the next three years. This report also assesses the performance of the top 500 mining companies and seeks to determine whether and to what extent gender diversity within boards and senior management can be shown to improve the performance of these companies. While this is the first instalment of a three-part report, like similar reports on other industries there is already a demonstrable correlation between gender diversity and corporate performance.

The second report, to be released in 2014, will update the data contained herein, examine more closely views from those working in the industry on the rewards and obstacles that are faced by employees and employers relating to gender diversity, and contain gender diversity best practice recommendations that have been developed in consultation with industry leaders and participants.

The final report, to be released in 2015, will analyse the data tracked in the previous reports to identify trends and highlight further recommendations for change.

The aim of these reports is to raise awareness of the barriers and opportunities relating to gender diversity that are specific to the mining sector. In addition, we hope that these reports will encourage fact-based discussions within and outside the industry, set out the business case for gender-diverse corporate boards and senior management teams, and serve as a best practice example for other industries.

¹ For the purpose of this report, the top 500 mining companies means the 500 largest mining companies (ranked by market capitalisation) that are traded publicly on the following stock exchanges: Australian Securities Exchange (ASX), Toronto Stock Exchange (TSX) and TSX Venture Exchange (TSXv), the main market of the London Stock Exchange (LSE) and the London Stock Exchange's AIM Market (AIM), Johannesburg Stock Exchange (JSE), New York Stock Exchange (NYSE) and Hong Kong Stock Exchange (SEHK).

Methodology

We have analysed the top 500 mining companies across a broad range of factors, including gender diversity and performance indicators, based on publicly-available information to assess the impact of senior-level gender diversity on company performance.

There are approximately 2,600 mining companies listed on the stock exchanges that are most popular for mining companies (ASX, TSX, TSXv, LSE, AIM, JSE, NYSE and SEHK). These companies had an aggregate market capitalisation of approximately \$1.08 trillion as at 31 December 2011. Of this, the top 500 mining companies had an aggregate market capitalisation of \$1.05 trillion and the top 100 mining companies had an aggregate market capitalisation of \$952 billion. The remaining 2,100 mining companies are predominantly exploration-focused companies with an average market capitalisation of \$11.5 million.

To analyse the level and scope of women's participation on the boards and in senior management teams within the mining industry, we have compiled a database of the 500 largest mining companies (ranked by market capitalisation) that are traded publicly on the main mining stock exchanges listed above. We have focused our analysis on the top 500 mining companies to both maintain a

meaningful but manageable dataset and because we anticipate that these companies are likely to have the largest impact on the industry.

Each company considered in this report has been evaluated on:

- **Board composition** (including committee composition and participation).
- **Executive management composition**
- **Performance**, including financial, environmental, health and safety, and corporate governance.

In addition, we have compared the performance of the top 500 mining companies collectively across the above factors to that of **other industries** so as to benchmark the sector as a whole. Furthermore, we have drawn upon certain related third party research as highlighted throughout this report.



The findings of the study

Board composition

31% of the top 500 listed mining companies and **46%** of the top 100 listed mining companies have a minimum of one woman on their board.

How many women are there on boards in the mining industry?

Collectively, women occupy **8%** of all board seats in the top 100 mining companies, with only **four** female executive directors in this group.

The top 101 – 500 mining companies, collectively, have a lower proportion of women on their boards, at less than **4%**. However, this group has a greater proportion of women in executive board positions (as opposed to non-executive board seats), at **nearly 3%** compared to **only 1%** for the boards of the top 100 mining companies.

Overall this gives a representation of women on boards of just 5% in the top 500 mining companies.

Studies have found that there are a number of positive benefits to gender balanced boards and that a ‘critical mass’ of 30% or more women at board level or in senior management produces the best financial results.²

Looking at the mining sector, only 16 of the top 100 mining companies and less than 8% of the top 101 – 500 mining companies have more than one female director, which is a considerable distance from the 30% “critical mass” of a gender-balanced board, and even further from full gender parity”.

In technical industries that are dominated by men (such as mining, oil and gas, aerospace and construction) the challenge of finding women who have considerable industry experience is not to be underestimated. Education plays a part in this, as women are historically less likely to stay in mathematics and science education, which tend to feed into these technical industries. However, other relevant experience and transferable skills (such as legal, financial and management skills) can also provide a valuable contribution to management positions. Therefore, while technical training may increase a woman’s likelihood of entering the mining industry, the presence or lack of industry-specific technical training alone is not dispositive of a woman’s ability to reach the boardroom.

² UK Department of Business, Innovation and Skills, Women on Boards (February 2011) at 8, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/31710/11-745-women-on-boards.pdf; see also McKinsey & Company, Women Matter: Gender diversity, a corporate performance driver (2007), http://www.mckinsey.com/client_service/organization/latest_thinking/women_matter; Ernst Young, Getting on board: Women join boards at higher rates, though progress comes slowly (2012) at 8, [http://www.ey.com/Publication/vwLUAssets/Getting_on_board/\\$FILE/Getting_on_board.pdf](http://www.ey.com/Publication/vwLUAssets/Getting_on_board/$FILE/Getting_on_board.pdf).

Number and percentage of female directors on the boards of listed mining companies

Number of female directors	Top 100 listed mining companies	Top 101–500 listed mining companies	% of female directors	Top 100 listed mining companies	Top 101 – 500 listed mining companies
Executive directors	4	24	Executive directors	1%	3%
Non-executive directors	67	79	Non-executive directors	10%	4%
Total female board members	71	103	Total % female board members	8%	4%

What about the size of the board?

Our research shows that, consistent with the findings of studies of boards across listed companies in other sectors, boards which include women tend to have more members and be found in companies with larger market capitalisations.

Of the top 100 mining companies, the average size of all-male boards is just over **eight** directors. This rises to an average of **10** board members when there is one female director. Boards with more than one female director are the largest, with an average of **12** board members.

While the exact cause of the correlation between market capitalisation, board size, and the level of women's participation on boards is not known, this correlation raises the question of whether board seats have been created

to accommodate female directors and highlights the fact that expanding board size to accommodate female directors dilutes the influence female directors have on such boards. However we acknowledge that the correlation could be due, in part, to the fact that larger companies tend to have larger boards (particularly in territories such as the UK) where regulations require a majority of non-executive directors.

Larger companies may also have more ready access to the talent pool of non-executive directors. Such companies may also be held more accountable to investors on corporate governance issues, including gender diversity.

Average board size

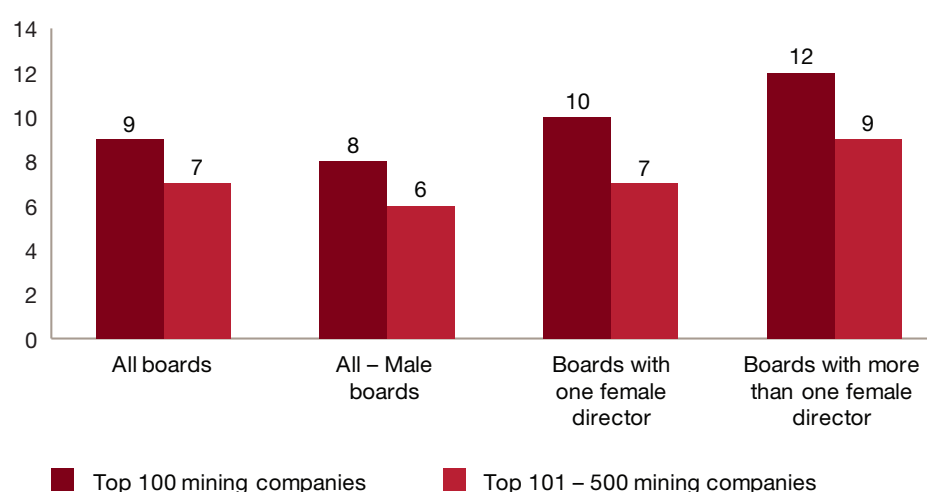


Figure 1 – Average Board size – the chart shows the average board size of all boards compared to i) all male boards; ii) boards with one female director; and iii) boards with more than one female director.

Are there differences between territories?

The table below shows that the percentage of women on boards is significantly higher in those mining companies that are listed in South Africa on the JSE and, to some extent, in Australia on the ASX. South Africa and, more recently, Australia have introduced policies regarding gender equality that apply to companies that are incorporated in, operate in and/or are publicly traded in these jurisdictions.

In South Africa there are a number of laws, rules and regulations that encourage or require that companies ensure and accelerate the sustainable participation of women in the South African economy. For example, as part of South Africa's Broad-Based Black Economic Empowerment (B-BBEE) Codes of Good Practice, qualifying small South African enterprises and all medium to large South African enterprises are encouraged to have greater representation of their board and senior management positions held by persons who are Historically Disadvantaged South Africans (HSDAs), which includes women. There are several other programs that are aimed at supporting or increasing the level of female ownership of companies e.g. The Gender and Women Empowerment Unit

(which aims to support women-owned enterprises), and the 2010 South African Mining Charter (which aims to transfer 26% of the ownership of the mining industry to HDSAs (which includes women)) by 2014.

In Australia, the ASX Corporate Governance Council Principles and Recommendations were re-issued to include recommendations on gender equality. Companies listed on the ASX must: develop and disclose to the public a diversity policy; establish measurable objectives for achieving gender equality which are assessed annually; and disclose in their annual reports the percentage of women on their board and in senior management. Compliance with these corporate governance principles is not mandatory but non-compliance must be disclosed in the company's annual report.

South Africa's and Australia's results indicate that some form of gender equality regulation may lead to improved gender diversity. It follows that the aspirational 25% target set in the Lord Davies Report may be achieved more effectively if it is supported by some form of formal legislation.

Exchange	Average % women on boards of top 100 mining companies
South Africa – JSE	21.05
Australia – ASX	11.97
USA – NYSE	7.34
Hong Kong – SEHK	6.02
Canada – TSX/TSXv	5.24
United Kingdom – LSE/AIM	4.27

The findings of the study

Financial performance

Our research showed that a more gender diverse board is linked to better financial performance. Of the top 500 mining companies surveyed, the 18 mining companies with 25% or more of their board comprised of women had an average net profit margin for the 2011 financial year that was 49% higher than the average net profit margin for all top 500 mining companies. Our research also showed that those mining companies with female board members have a higher average profit margin overall (23%) than the average net profit margin for the top 100 mining companies (20%).³

We also compared Return On Equity, price/earnings ratio, shareholder yield, market capitalisation and net profit margin to the percentage of women on boards for the top 500 mining companies. Whilst we found a positive correlation between net profit margin and market capitalisation with the number of women directors, there was no discernible correlation with the other measures. With women holding only **5%** of board seats in the top 500 mining companies, this suggests that the benefits seen across other industries from gender diversity on boards may not yet have been fully realised by mining companies.

Our findings are consistent with those of other recent studies on gender diversity and corporate performance. For example, a 2007 study by Catalyst found that over a six year period companies with more women on their boards outperformed their rivals with a '42% higher return on sales, 66% higher return on invested capital and 53% higher return on equity'.⁴ More recently, the Credit Suisse Research Institute also found that companies with women on their boards have a higher Return on Equity, lower gearing, higher price/book value and better than average growth.⁵

Average net profit margin for top 100 mining companies

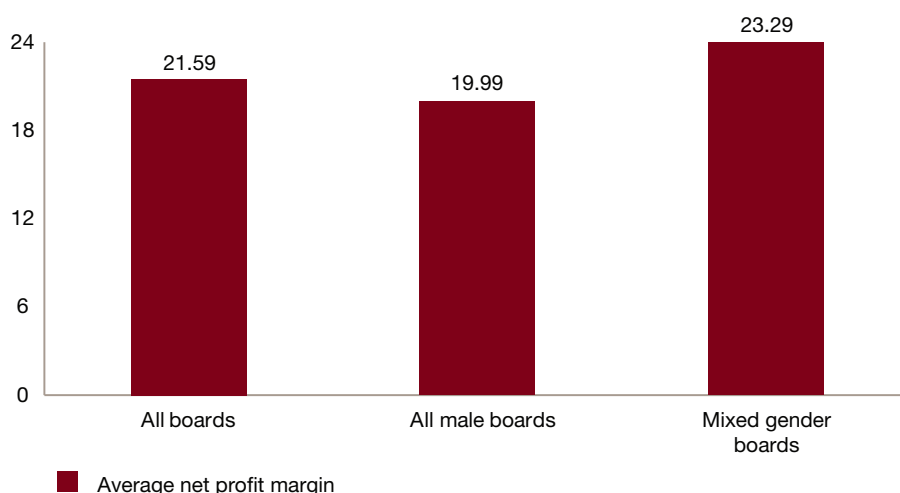


Figure 2 – Average net profit margin for top 100 mining companies – the chart shows the average net profit margin for all male boards, mixed gender boards and all boards.

³ Additionally, as discussed above, we found a positive correlation between the percentage of women on boards and market capitalisation. However this is likely to result from the tendency for larger companies to have larger boards with more women, and such companies being under more pressure to increase gender diversity.

⁴ Catalyst, The Bottom Line: Corporate Performance and Women's Representation on Boards (2007), <http://www.catalyst.org/knowledge/bottom-line-corporate-performance-and-womens-representation-boards>.

⁵ Credit Suisse Research Institute, Gender Diversity and Corporate Performance (August 2012), https://infocus.credit-suisse.com/data/_product_documents/_shop/360145/csri_gender_diversity_and_corporate_performance.pdf.

The findings of the study

Committee participation

Women's level of participation among all of the 'core' board committees⁶ in the top 500 mining companies is low, at just 5.3% of all available committee seats, but it is higher than the average percentage of women on boards generally of such companies.

The chart below shows low participation of women on these committees, with the overall percentage of women holding committee seats being just **5.3%** among all of the main board committees in the top 500 mining companies. Whilst this is very low, it is higher than the average percentage of women on boards in the top 500 mining companies, which suggests that female directors tend to hold more than one committee seat⁷. This may be due to the fact that female directors tend to hold non-executive positions, and in certain jurisdictions (like the UK) all or a majority of such committee seats are required to be allocated to non-executive directors.

Our research also showed that while there is a higher proportion of women members on the health safety and environment committee (the 'HSEC') and the investment/finance committees, there are fewer of these committees overall. The level of female participation on board committees generally is well below the 30% 'critical mass'. Accordingly, for women to have a real influence on a board there would need to be greater representation on all board committees, and, in particular, the core board committees.

Composition of committees of the top 500 mining companies

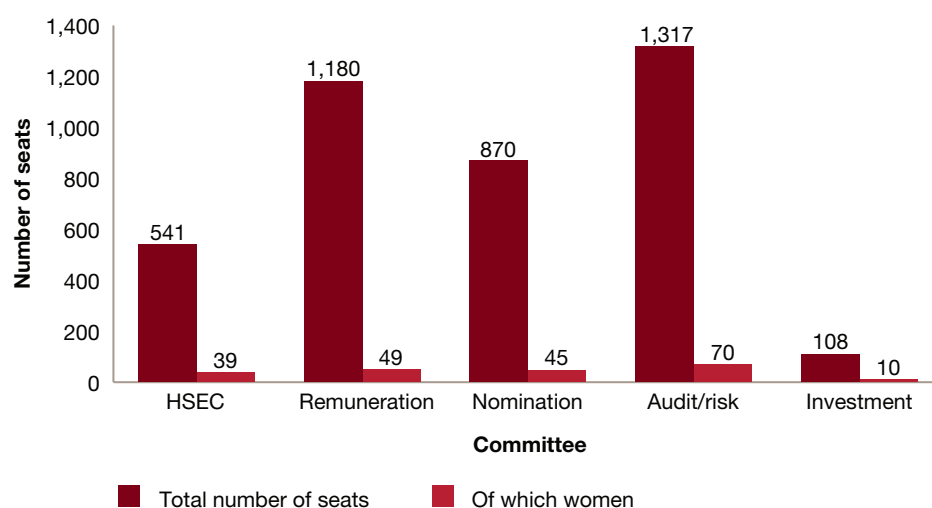


Figure 3 – Composition of committees – the chart shows the total number of committee seats for each of the main board committees and how many of those seats are held by women.

⁶ The three 'core' board committees are the audit, nomination and remuneration committees. These are regarded as core committees as they are required by listing and corporate governance guidelines and therefore are the most common committees.

⁷ See Table 1.

How do the different territories compare?

Our research showed that:

- **Over 19%** of the total available committee seats of those of the top 500 mining companies that are listed on the JSE are occupied by women.
- **Over 7%** of the total available committee seats of those of the top 500 mining companies that are listed on the SEHK are occupied by women.
- **5%** of the total available committee seats of those of the top 500 mining companies that are listed on the NYSE are occupied by women.
- **4%** of the total available committee seats of those of the top 500 mining companies that are listed on the TSX/TSXv are occupied by women.
- **Over 3%** of the total available committee seats of those of the top 500 mining companies that are listed on the ASX are occupied by women notwithstanding that these companies contain the second highest proportion of women on boards generally.
- **Less than 3%** of the total available committee seats of those of the top 500 mining companies that are listed on the LSE/AIM are occupied by women.

Surprisingly, as described in more detail in the chart below, we found that while Canadian mining companies appear to hold a large number of female committee seats, their overall percentage of female committee members is low (**4%**) given the large number of Canadian mining companies. In addition, our research revealed that while London is a major centre for mining companies and home to the largest listed mining companies, LSE- and AIM-listed mining companies have one of the lowest percentages of female participation on board committees at **under 3%**.

Distribution of female committee seats by exchange

Exchange	Total number of seats on committees	Female seats	Percentage
South Africa – JSE	315	61	19.4%
Hong Kong – SEHK	256	19	7.4%
USA – NYSE	360	18	5.0%
Canada – TSX/TSXv	1607	65	4.0%
Australia – ASX	917	35	3.8%
United Kingdom – LSE/AIM	561	15	2.7%

The findings of the study

Comparison to other industries

Research shows that mining companies have lower female board representation than other major industries (including the oil and gas industry, which shares many lifestyle, culture and working practice characteristics with the mining sector), with just **8%** of board seats occupied by women.

How do mining companies compare to other industries?

The consumer goods and services sector has the highest proportion with **16 – 17%** of their boards made up of women.⁸ However, even the consumer goods and services sector falls short of the **30%** ‘critical mass’ level that has

been recommended by McKinsey & Company and the anticipated **25%** target that has been suggested by the Davies Report.⁹ The table below is a comparison of the average percentage of women on boards of the top 100 companies per sector (regardless of each exchange).

Sector	Average percentage of women on boards of top 100 companies per sector
Consumer goods	17.35
Consumer services	16.36
Financial services	14.08
Telecommunications	13.35
Technology	11.43
Oil and gas	8.29
Mining	7.59

⁸ Credit Suisse Research Institute, Gender Diversity and Corporate Performance (August 2012), https://infocus.credit-suisse.com/data/_product_documents/_shop/360145/csri_gender_diversity_and_corporate_performance.pdf.

⁹ See supra note 2.



The table below is a comparison of the average percentage of women on boards of the top 100 companies listed on each exchange surveyed in this report as compared with the mining companies contained in each such sub-group. The table below shows that, in general, the mining companies that are listed on each of the exchanges surveyed in this report have fewer female directors than the relevant exchange's average, with the notable exception of mining companies listed on the JSE in South Africa. Mining companies listed on South Africa's JSE and Australia's ASX are close to or exceed the average percentage of women on boards across

all industries on their respective exchanges and exceed the overall mining industry average percentage of women on boards for the top 100 companies **(8%)**. South African and Australian gender equality and reporting legislation may responsible for the increased participation of women at the board level within mining companies listed in these jurisdictions.

In the other jurisdictions surveyed, while mining companies listed on Hong Kong's SEHK are consistent with the market average in terms of their representation of women on boards, they fall short of the mining industry average and well short of the 30% 'critical mass'. Mining companies listed on exchanges in the United Kingdom, USA and Canada all fell significantly below their respective market average percentage of women on boards. Given that **65%** of mining companies are listed on these exchanges, it will be important to the mining industry to observe developments in these territories.

Board Seats Filled by Women by Territory

Exchange	Top 100 Companies per exchange	Mining Companies within the Top 100 Companies per exchange
Australia – ASX	14%	12%
Canada – TSX/TSXv	10%	5%
Hong Kong – SEHK	6%	6%
South Africa – JSE	12%	21%
United Kingdom – LSE/AIM	12%	4%
USA – NYSE	18%	7%

The findings of the study

Executive management – The pipeline

Across the top 500 mining companies, we found that for every two women directors there are three women in executive management positions (the level immediately below the board).

This indicates that there are women at the top level of organisations who are gaining experience that may lead them to a place on the board. Our research shows that while there is a low percentage of women in executive management positions, there is a solid pipeline of female talent at the executive management level.

When we look across jurisdictions, we find that South African-listed mining companies have a relatively robust pipeline of female talent at the executive management level when compared with

mining companies listed on other exchanges. The higher percentage of women in executive management positions at South African-listed mining companies may be due, in part, to South Africa's general gender diversity policies discussed previously. London-listed mining companies have the lowest proportion of female representation in executive management positions. Looking forward, the depth of the pipeline at the executive management level is likely to affect significantly the rate at which women are appointed to board positions.

Regional comparison of the proportion of women in executive management

Territory	Top 100 Mining companies	Top 500 Mining companies
South Africa – JSE	24%	20%
Canada – TSX/TSXv	15%	12%
Hong Kong – SEHK	13%	13%
Australia – ASX	11%	11%
USA – NYSE	11%	11%
London – LSE/AIM	8%	9%

There could be a number of reasons for the difference between the higher proportion of women in executive management positions as compared with those in board positions: it may reflect a long lead time for women to progress to directorships; or may show willingness of mining companies to appoint women but only up to a certain level. It may also reflect the fact that historically women were not encouraged (or allowed – no women were allowed underground by law in 1960s in Australia) into mining and we consequently have very few women of

board age (50 – 65) in the mining industry at present. The next generation (women aged 40 – 50) are just reaching the executive level now. Further, a recent study in Canada has identified reasons of workplace culture, work and family and balance, gender pay equality and career advancement as important factors in addressing a leaking female pipeline.¹⁰ Overall, however, the larger number of women in executive management positions is positive and will hopefully lead to a higher proportion of directorships being held by women in future.

10 Carleton University, The Pathway Forward: Creating Gender Inclusive Leadership in Mining and Resources (November 2012), <http://www2.carleton.ca/cwppl/ccms/wp-content/ccms-files/Women-in-Mining-2.5.pdf>.

Leading by example

Diversity strategies at work

Anglo American and Rio Tinto share some of the ways in which they have brought diversity to life within their businesses.



Case Study 1 – Anglo American – Pre-Graduate Programme, Copper, Chile

The Pre-Graduate Programme is a corporate programme of the Anglo American Copper Business Unit that aims to attract, develop and retain young students in their last years of study who have been identified as potential candidates to enter the Anglo American Graduate Programme. The Pre-Graduate Programme aims to incorporate at least 30% women pre-graduates into critical and scarce disciplines. In 2012 this goal was reached, with six women pre-graduates in geology, three in mining and five in metallurgy.

To contact young female students, Anglo American visits universities during the year to explain the programme and the possibilities to work for Anglo American in the future. Anglo American also contacts students using Facebook, Twitter, job fairs and organises guided tours of Anglo American operations.

Participants in the Pre-Graduate Programme are provided with US\$ 5,000 to fund their university studies, and have the possibility to realise an internship/research thesis in one of the Anglo American Copper operations. Pre-Graduate Programme participants also benefit from the assignment of a prominent supervisor, the design of a specific working plan, and the option to apply to the Anglo American Graduate Programme.

Case Study 2 – Anglo American’s Diversity Approach

Gender diversity is a key strategic priority for Anglo American. In recent years, Anglo American has set in motion a number of initiatives to improve female representation in its workforce, aligned with its vision of being an employer of choice in the mining industry. To support this objective, in 2011 the Anglo American Group Executive Committee endorsed the setting of formal targets that measure the proportion of women in both the workforce as a whole and within the management population. Each business unit and discipline within Anglo American has established its own internal target, which contributes to the overall corporate level target. As part of the approach, gender statistics are reviewed by each business unit in its Quarterly Performance Report to identify areas where good progress is being made and where additional intervention might be required.

To promote and replicate internal best practice in the area of gender diversity, Anglo American publishes internally on a regular basis a ‘Gender Diversity Compendium’. This compendium highlights initiatives that have been successful around the world in improving the representation of women in the Anglo American workforce, categorised according to the following four strategic themes:

- establishing a conducive working environment;
- driving gender diversity through robust workforce planning and recruitment;
- accelerating gender diversity through employee development;
- improving communication and understanding of gender diversity objectives.

Case Study 3 – Rio Tinto – Bunder Project, India – Female security guards

In July 2010, the Bunder Project in India started a women's empowerment programme to increase the opportunities for women to work at the Bunder Project. The project needed to expand its security force and approached its security provider to provide the project with female security guards. The security provider said this was impossible; no women would be willing to work and stay in a camp in a remote location. The project Security Manager did not agree and took on the task to prove them wrong.

The project Security Manager and his team started to search for options for sourcing female security guards, particularly those trained in security. The team found a police training academy in the Punjab state that was interested in working with Rio Tinto to enable the recruiting of women for this purpose. Women were interviewed and selected by the Rio Tinto team and employed through its security provider.

Four women security officers started to work at the Bunder Project in January 2011, with an additional four starting in March 2011. Direct family members (fathers) were initially invited to visit Bunder and the campsite with the newly-hired guards to receive a briefing and to be assured that their daughters would be working in a safe and protected environment. The female security guards immediately performed at a higher level than the existing team; they had better training. For example, for the first time the security teams located alcohol being brought into site through searches. Within a few weeks,

the existing male security team also increased its performance level and the performance and engagement of all security teams has increased and been maintained for over one year.

Case Study 4 – Rio Tinto – Community Mapping in Mongolia

In late 2005, Rio Tinto Exploration began an early stage exploration programme in Mongolia. In May 2006, two camps – one for exploration and another for drilling – were mobilised.

A Community Advisory Group was established to open communication channels between Rio Tinto and the community. Only men were elected as members of the Community Advisory Group by the community. In addition to the Community Advisory Group, Rio Tinto began a formal programme of consultation to gather feedback from the women in the community. The engagement of the community's women expanded the dialogue to new topics that were not being addressed by the community's men in the context of the Community Advisory Group. For example, after many discussions with the community's women, it became apparent that pasture was extremely important to them. The local women are responsible for processing milk and dairy products and pasture affects the quality of all these dairy products so they were concerned about the impacts that the mine would have on pasture. Based on the information collected, the Community Relations Officer began work on a community movement map to avoid or minimise ground disturbance to areas that the local community had identified as important.

The map became much more detailed as the women's input was gathered, whereas the men talked about the spiritually significant areas and the grass the women talked about vegetation, seasonal migrations and shelters in greater detail than the men. With the information gathered from both men and women a detailed map was developed showing the winter shelters and the most important summer, spring and autumn pastures. The map also plotted the spiritually significant areas. With this detailed information, Rio Tinto Exploration was able to avoid or minimise ground disturbance in important areas for the community. With the joint contributions from both men and women, the quality of the mapping was significantly improved.

Rio Tinto

Why does it matter?

A growing body of evidence has shown a strong business case for increasing the representation of women on boards, something to which many industries are responding.

Better profitability

The Credit Suisse Research Institute has recently reviewed the performance of boards over a six year period and found that those mining companies with women on the board had a higher return on equity, lower gearing, higher price/book value and better than average growth.¹¹

Better talent pool

The proportion of women working in the mining industry stands at around **10%** of its total workforce. According to data from UNESCO, the proportion of female graduates across the world came to a median average of **54%** in 2010, rising from **51%** in 2000.¹² This means that mining companies are sourcing their workforce from less than half of the available talent pool. The low proportion of women in the mining workforce generally is compounded at the board level. The mining industry lags behind all other industries, including the oil and gas industry, with just **4%** of board seats occupied by women.

The mining industry is facing unprecedented challenges in its search for talent. As demographics change and demand for natural resources continues apace, the ability of mining companies to find the right people with the specialised skills to meet this demand is severely stretched. Mining companies will need to widen their recruitment strategies to meet this challenge.

Better governance

In *Women on Boards – Not Just the Right Thing... But the ‘Bright’ Thing*, The Conference Board of Canada found that boards with three or more women showed different governance behaviours to those with all male boards. The more gender balanced boards were more likely to ensure better communication, adhere to a code of conduct, identify criteria for measuring strategy and monitor its implementation. They were also more likely to focus on gender diversity, employee satisfaction and corporate social responsibility.¹³

A gender diverse board is more effective, drawing on a range of experiences and perspectives. Publications such as the Lord Davies Report¹⁴ and *The Female FTSE Board Report 2012 – Milestone or Millstone*¹⁵ reports have found that companies perform better when they include people who come from a range of perspectives and backgrounds including a good gender balance. The Lord Davies Report concluded that ‘inclusive and diverse boards are more likely to be effective, better able to understand customers, and stakeholders and also companies benefit from fresh perspectives, new ideas, vigorous challenges and broad experience, which leads to better decision making’.¹⁶

11 Credit Suisse Research Institute, Gender Diversity and Corporate Performance (August 2012), https://infocus.credit-suisse.com/data/_product_documents/_shop/360145/csri_gender_diversity_and_corporate_performance.pdf.

12 Id. at 18 (citing Global Education Digest 2010: comparing education statistics around the world, UNESCO).

13 The Conference Board of Canada, Report – Women on Boards Not Just the Right Thing . . . But the ‘Bright’ Thing (May 2002), http://www.europeanpwn.net/files/women_on_boards_canada.pdf.

14 UK Department of Business, Innovation and Skills, Women on Boards (February 2011), https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/31710/11-745-women-on-boards.pdf;

15 Dr. Ruth Sealy and Professor Susan Vinnicombe, *The Female FTSE Board Report 2012 – Milestone or Millstone* (Cranfield University School of Management, 2012), <http://www.som.cranfield.ac.uk/som/dinamic-content/research/documents/2012femalftse.pdf>.

16 UK Department of Business, Innovation and Skills, Women on Boards (February 2011), https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/31710/11-745-women-on-boards.pdf.

Diverse boards are important to prevent ‘group think’, where boards are formed of people with similar experience and background and so tend not to question decisions. By having directors from a wider range of backgrounds, companies are subjected to more rigorous questioning by the board. Therefore increasing the numbers of female board members could make a significant difference to the mining industry

Better stakeholder management

External stakeholders are exerting greater influence on mining companies: communities influence their governments and political parties to affect mining licences and legislation; greater employee unrest is occurring, with strikes over pay and working conditions. Having a board that can deal most effectively with these issues can be a differentiator in the performance of a company.

The research has shown that those mining companies that have an environmental policy tend to have a higher percentage of women on their board and on the HSEC than those mining companies that do not have a stated environmental policy.

McKinsey & Company conducted a large scale research survey of more than a thousand managers from a wide range of companies and found that differences exist in the frequency with which men and women use different leadership behaviours.¹⁷

Women have been shown to outperform men on seven out of the top ten leadership qualities, and most decidedly on team building and emotional intelligence in academic research conducted at INSEAD.¹⁸ The global mining sector has more (and sometimes competing) stakeholders than most industries, including: governments, investors, lenders, employees, communities, NGO’s, and the environment. Given the qualities identified in the INSEAD research, it would suggest that mining is a sector that could benefit from increased female participation. Having more meaningful gender balance within the mining industry would increase the likelihood that more of these qualities being present in the industry’s leaders, however organisational cultures also need to support a more gender-balanced approach to leadership.

Better risk management

Leeds University Business School found that having at least one female director on the board reduced a company’s chances of going into liquidation by approximately 20%. Having two to three female directors further reduced the risk of bankruptcy but the advantage eased once the board reached gender parity.¹⁹

Nick Wilson, Professor of Credit Management at the Leeds University Business School, based his findings on 17,000 UK companies that became insolvent in 2008. He suggests that diversity of opinion is an advantage that women bring to the board.²⁰ Other possible explanations are that women resist high debt while being better at cash-flow management, and they are better, on average, at people management.

Halla Tomasadottir, the Icelandic fund manager who predicted the 2008 credit meltdown has been quoted as saying there was an extreme imbalance in the business world and that ‘while male values are about risk-taking, short-term gain and focus on the individual, female values attend towards risk awareness, the long term and team goals. What is needed for a successful future is a better balance between the two and a greater focus on longer-term sustainability’.²¹

17 Avivah Wittenberg-Cox and Alison Maitland, *Why Women Mean Business* (John Wiley & Sons, Ltd., 2007); McKinsey & Company, *Women Matter 2: Female leadership, a competitive edge for the future* (2008), http://www.mckinsey.com/client_service/organisation/latest_thinking/women_matter

18 Avivah Wittenberg-Cox and Alison Maitland, *Why Women Mean Business* (John Wiley & Sons, Ltd., 2007) at 27 (citing research conducted by Leeds University Business School).

19 Avivah Wittenberg-Cox and Alison Maitland, *Why Women Mean Business* (John Wiley & Sons, Ltd., 2007) at 100 (citing Herminaia Ibarra and Otilia Obardaru).

20 Id.

21 Id. at 27 (quoting Halla Tomasadottir).

Better accounting

The American Accounting Association Journal published a study in December 2012 that found that female presence on a company board reduces the chance of financial restatements by close to 40%.²² Restatements are necessitated by material misrepresentation, whether through error or fraud, in corporate financial reports. It showed that ‘the presence of at least one woman on an otherwise male board is associated with a likelihood of restatement that is 62% the likelihood without gender diversity’. Other factors include requiring a board’s

audit committee to consist entirely of independent directors, one of them with financial expertise, and mandating that it meet at least four times annually were found to have only half the effect of one female director. The authors of the study surmise that the reason for this is the ample measure of independence that diversity confers upon corporate boards. According to the authors, “[t]his can be the particular value cases where a ‘CEO or a CFO justifies a financial reporting decision by suggesting that he or she is in a more knowledgeable position regarding

the potential recognizability of this transaction. In this scenario, gender diversity can potentially affect the outcome by generating more question of the status quo, greater acknowledgment and legitimization of the opposition and a third-party viewpoint (including those of the audit committee, auditor, or internal director) and a slower, more deliberative and collaborative decision-making process...heightening the monitoring effectiveness that may (otherwise) be diminished by groupthink.”²³



²² American Accounting Association, Women on corporate boards foster better financial reporting, study finds (December 2012), http://aaahq.org/newsroom/WomenCorpBoard11_16_12.htm.

²³ Id.

Why has it been difficult getting women into mining?

There are difficulties at every stage of the career cycle for mining companies to attract female employees

At university, few women choose degrees that would naturally take them into a career in the mining industry, and very few school-age girls identify mining or industrial careers as their preference. Education and female specific links between higher education and the mining industry might help to attract more women at the beginning of their careers. The perception of the mining industry as a male-dominated industry may further reduce the appeal of the industry to female graduates. Dedicated training schemes and programmes for women may help to alter this perception; only ten of the 500 mining companies studied for the purposes of this report expressly mentioned having an existing training programme for women in their annual reports. This however does not mean that those that have not expressly mentioned having such training programmes do not have one. A changing of attitudes by mining companies, with the introduction of schemes such as flexible working and mentoring may attract more female graduates to enter the industry.

The next stage is to retain the talent of female workers who enter the industry. Women face a number of unique challenges once they are working in the mining industry. A study conducted by Women in Mining Canada on the status of women in Canada's mining and exploration sector cited work culture, lack of mentors, perception of their skills and work-life conflicts as some of the key barriers to their career advancement.²⁴ Women in Mining Canada found that work for those at mine sites on a fly in fly out basis, managing life outside can be

difficult. It would be easy to say that it is too arduous to overcome this sort of problem making mining inherently incompatible with family life and therefore will never be attractive to those workers with a family, including women. However, some mining companies have started to find ways to tackle this and are already seeing improvements. Increasingly, this is not only a gender issue but a generational one as well. Younger workers want more flexibility. There is an increase in men working part-time, taking extended paternity leave etc. Change is happening in the workplace, even if at a slow pace. Workplaces will have to become more flexible and innovative to keep up with the demands of this next generation of workers.

In certain territories, women were not encouraged historically (or allowed) to work underground in the mining industry. As well as it being illegal in 1960s Australia for women to work underground, in South Africa it was considered bad luck to have women underground. This historical legacy takes time to change and can lead to unconscious bias and micro inequities. The UK Government publication setting out the business case for diversity explains that whether discrimination and bias is conscious or unconscious, it is likely to impact negatively on the working lives of those who experience it and ultimately lead to negative impacts on performance and commitment at work. Some mining companies are now addressing unconscious bias through training in their diversity efforts to help workplaces be better ready to understand and accept differences.

²⁴ Women in Mining Canada, Ramp-Up: A Study on the Status of Women in Canada's Mining and Exploration Sector (Women in Mining Canada, February 2010), http://0601.nccdn.net/1_5/054/24c/217/RAMP-UP-Report.pdf.

2.4 – ukgovt citing

In contrast, at the other end of the career cycle, appointments to mining company boards are equally problematic for women. These appointments are generally made via personal networks, with frequent accusations of 'old boys' clubs' and cronyism. Research into the appointment practices of London listed companies has shown that the process for appointing non-executive directors is one marked by a high level of informality and appointments through friends and personal contacts.²⁵ This showed that only 4% of non-executive directors had an interview and 1% had obtained the role through answering an advertisement.

It is possible that women involved in the mining industry do not have as well developed networks as their male counterparts, leading to a lack of female board appointments. This feeds into the cycle where women are not appointed due to lack of networks leads to a lack of women in senior positions and continuing low levels of female recruitment and retention.

The other issue in diversity of any kind is that it is human nature to seek others who are similar. People promote others and recruit others in their own likeness,

meaning that the male domination of mining company boards becomes a self-perpetuating problem. According to Professor Katharine Phillips of Columbia Business School, people inherently do not seek out conflict. A less homogenous group might lead to more conflict within a board even though it will also normally produce better results.²⁶

Mining companies may be required to adhere to gender diversity policies, depending on which exchange they are listed on. This varies from legislation in South Africa to a lack of any guidelines in Hong Kong. The Companies Act in South Africa was updated in 2009 in response to the King III report which highlighted the importance of diversity among the board. Since this was introduced, there has been an increase in female board members. However, the South African legislation does not include a quota system as has been implemented by other countries such as Norway. By encouraging or forcing companies to disclose how board diversity is considered and the percentage of women in the workforce and senior management companies are more likely to improve their attitude to gender diversity.

It is too early to tell whether changes to Australian Stock Exchange guidelines will have an effect on company diversity policies as these guidelines only came into effect for the financial year 2011.

All industries face a higher rate of attrition of women than men at senior levels of their workforce leading to increasing gender inequality. There is a vicious cycle in which a lack of women on boards leads to a lack of female role models which in turn may limit the number of women in senior positions. There are many other factors at play here too but the lack of role models certainly does not help.

As mining companies have a lower than average percentage of women at junior levels this creates an even more unbalanced ratio at senior levels after the expected attrition.

25 Glynis D. Morris and Patrick Dunne, *Non-Executive Director's Handbook* (Butterworth-Heinemann, 2008) at 219 (citing research by Higgs that found that 'A high level of informality surrounds the process of appointing non-executive directors. Half of the non-executive directors surveyed for the review were recruited to the role through friends and personal contacts. Only four per cent had a formal interview.').

26 Credit Suisse Research Institute, *Gender Diversity and Corporate Performance* (August 2012) at 20-21, https://infocus.credit-suisse.com/data/_product_documents/_shop/360145/csri_gender_diversity_and_corporate_performance.pdf.

What are the options for changing the status quo?

There are a variety of strategies to begin to change the status quo, including government-led and business-led initiatives.

Legislation

Legislation in the territories in which mining companies operate or the stock exchanges on which they are listed can play a role. However, in many territories there is little or no legislation yet to require (or encourage) gender diversity. Where such legislation exists, in some cases it focuses on greater disclosure and in others on quotas. The advantages and disadvantages of quotas for gender diversity have been well debated and documented. The advantage of quotas is that they can work more quickly to redress the gender balance. However, this can come at a price with a perception of reduced fairness and a questioning of whether those who have been promoted were selected based on merit or merely to meet a quota. This perception can be unhelpful to both the women in the leadership roles as well as to those around them in the organisation. This is likely to account for the lack of support for quotas amongst professional women. There is a consensus amongst some that legislative quotas may not be the most effective way to achieve the desired result of increased female participation on boards and in senior management positions, arguing in favour of a business-led approach.²⁷

Diversity policies

A policy that is disseminated throughout an organisation to educate employees in the benefits and importance of diversity, raise awareness levels throughout the organisation, and ensure that diversity is one of the considerations when considering appointments as well as policies and strategies. A policy like this

would also allow companies to set their own gender diversity targets and to be held to account for those targets. Companies could be incentivised to do this without the incentive being made a legal requirement. Self-imposed regulation has the advantage of being tailored to the needs of each company, which should make the targets more realistic and achievable for each participating company. It requires real action, achieving progress which the business can focus on to attract and retain more female talent. However, policies alone do not change culture. They must be coupled with meaningful tracking and accountability for the changes needed and the results to be achieved.

Board effectiveness and evaluation reviews

That diversity helps corporate governance is no longer debatable, but gender diversity is just one form of diversity. Board evaluations when completed properly can identify areas of strengths and weakness, leading organisations to make changes that positively impact performance and shareholder value. Done well they can provide independent and impartial advice, objectivity and rigour especially if facilitated externally. Lack of transparency, stagnancy, lack of discussion and boards where all the members are from the same background and tenure are common in the mining industry. Opening those boards up to external reviews we believe would allow for not only gender diversity, but much better governance overall.

²⁷ 30% Club comment on EU Quota announcement (14 November, London), <http://www.30percentclub.org.uk/press/30-club-comment-on-eu-quota-announcement/>, see also Brian Groom and Ines Burckhardt, Business opposes quota of women directors, Financial Times, 4 September 2012, <http://www.ft.com/cms/s/0/a9d17bba-f6ab-11e1-9dff-00144feabdc0.html#axzz2lpao2vy2>.

Broadening perspectives on educational background

Throughout the process of putting together this report we frequently encountered the view that there were simply not enough women with mining related degrees and that these degrees were necessary for success in the industry. This is arguably true in the fields of mining engineering, geophysics, geochemistry and metallurgy and some other technical subjects, although

geology is seeing a growing number of female students. However, we challenge the premise that you need to have specialist expertise in a technical area to work and progress in the mining industry. A large proportion of people working in the mining industry at all levels do not have a technical background and non-technical expertise (such as legal, financial and management skills) can be of vital importance to management positions. The mining industry is a business that calls on many

different professions and skill sets, as illustrated in the diagram below.

Analysis of the impact of gender inclusion on future social, industry, technological and other trends in mining

Mapping out clearly the future trends in the industry and asking research questions through a gender and broader diversity lens about how increasing diversity and inclusion is likely to change the industry or could change the industry more positively. In this way the industry can take control of how it will make the most of the opportunity that gender diversity presents.

We recognise that mining companies are all competing for the right talent. There is no shortage of women in the talent pool; there is simply a perception of a lack of available female talent. Increasing the understanding of the benefits of gender diversity for the industry and making the industry a more attractive place for women to work and remain employed would be a positive step in changing perceptions of the industry.



The diagram shows the business areas relevant to every mining operation and some examples of the types of professionals they require to function.

Next steps

This report, the first of three, has gone a long way to establish the facts around the representation of women on boards and in senior management positions, specifically in the mining industry.

While the findings are not astonishing – mining companies have the lowest number of women on boards of any listed industry group in the world – they are nonetheless interesting and expose a number of jurisdictions, namely London, for not addressing the issue. This report goes further to support other published reports regarding the strong correlation between financial performance and the participation of women on the board.

The next report will update the data, aim to identify the rewards and obstacles that are faced by employees and employers relating to gender diversity, and provide evidence of best practice initiatives from broader industry leaders and participants. The third and final report will analyse the data from previous reports to identify trends and highlight further issues for debate.

The intention of this series of reports is to use fact based evidence to encourage discussion within mining companies and within the industry to challenge current thinking and to find solutions for the benefit of the sector. Where there is no debate is around ‘why’ women are beneficial to companies’ boards, where there should be debate and solutions is around ‘how’ to address the challenges. Women in Mining (UK) in conjunction with our sponsors of these reports – Anglo American, Rio Tinto, PwC and Latham & Watkins – seek to encourage that debate and this report is the first step in that journey.

Acknowledgements

We would like to express our thanks to the many people who have contributed to this report.

The authors: **Amanda van Dyke**, Chair of WIM (UK) and **Stephney Dallmann**, PwC.

Our sponsors: **Anglo American, Rio Tinto, PwC and Latham & Watkins**.

Editing: **Victoria Salem** at Latham and Watkins.

Editing: **Pip Green, Carole Cable** and **Anna Carruth** at Brunswick.

Additional contributors: **Catharine Shaw** from Women in Mining Canada, **Alison Morley** from Women in Mining Australia and **Claire McMaster** from Women in Mining South Africa.

The research interns: **Jadu Puhaleendran** – London School of Economics; **Celia Hayes** – Imperial College London; and **Kate Hankinson** – Imperial College London.

About WIM (UK)

Women in Mining (WIM (UK)) is a non-profit organisation dedicated to promoting the employment, retention and professional development of women in the mining and minerals sector. WIM (UK) provides information and business networking opportunities to its members, and promotes the role of women in the mining industry and the sector as a career choice for women. This group was created in 2006 and now includes nearly 1000 members, representing a variety of mining-related businesses and professions. WIM (UK) is part of a growing number of Women in Mining Groups around the world including in Australia, Canada, USA, South Africa as well as South America, Sweden and Africa.



LATHAM & WATKINS

BRUNSWICK



www.pwc.co.uk

PwC UK helps organisations and individuals create the value they're looking for. We're a member of the PwC network of firms in 158 countries with more than 180,000 people committed to delivering quality in assurance, tax and advisory services. Tell us what matters to you and find out more by visiting us at www.pwc.com/uk.

This publication has been prepared for general guidance on matters of interest only, and does not constitute professional advice. You should not act upon the information contained in this publication without obtaining specific professional advice. No representation or warranty (express or implied) is given as to the accuracy or completeness of the information contained in this publication, and, to the extent permitted by law, PricewaterhouseCoopers LLP, its members, employees and agents do not accept or assume any liability, responsibility or duty of care for any consequences of you or anyone else acting, or refraining to act, in reliance on the information contained in this publication or for any decision based on it.

© 2013 PricewaterhouseCoopers LLP. All rights reserved. In this document, 'PwC' refers to the UK member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

130130-133948-SS-OS