



Institute
and Faculty
of Actuaries

Bringing the benefits of gender diversity to all: first steps

by the Diversity Advisory Group

August 2015



Since the 1950s the face of the profession has changed dramatically. Monica Allanach, the first woman on Council, pictured above, helped support young women through the 'Ladies' Tea Parties' providing a network of friendship and support.



The Monica Allanach Lecture was sponsored by The Prudential and presented by Kathryn Morgan at Staple Inn Hall, London on Wednesday 15 July 2015.

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1. Foreword

By: Nick Salter, President, IFoA

I was delighted when the Diversity Advisory Group asked me to write this foreword. Diversity is an integral part of the IFoA's organisational values: Community, Integrity and Progress, and is a core principle of what we stand for.

This report presents the business case for gender diversity, the benefits of which include a larger talent pool, a reduction in 'group think' and improvements in corporate governance and risk management. I believe gender diversity will benefit us all, with the potential for financial benefits, competitive advantage and increased innovation.

I am really pleased to see an increase in the number of women in our membership. Whilst we don't have all the data, we know this doesn't necessarily translate into senior management roles, even though the benefits are obvious. This report highlights some of the extra obstacles women are facing.

After 30 years in the profession, I was still surprised to learn that women are leaving the IFoA on average 13 years earlier than their male counterparts (for reasons other than retirement) and after only 11 years as practising actuaries, compared to an average of 23 years for men. It is important for us to understand why this is. You and I know that there is no quick fix. As this report shows, simply increasing the numbers does not necessarily achieve the benefits. Diversity must be appropriately managed, considered on an individual basis and embedded into organisational strategy; where we can, we should ensure that we do not put unnecessary barriers in the way of any sub-group of our members.

We have made great strides forward as a profession. Raising awareness of gender diversity issues in the profession is a positive step. Let's use this report to start conversations and ultimately change behaviours.

Whether you are a line manager, sit on a committee, set strategy or simply want to bring or increase innovation and creativity in your workplace, I hope you will read this report with interest and will join me in supporting the Diversity Advisory Group in their recommendations.

Gender diversity is not just about increasing the number of women in the profession, it is about what we will lose if we don't.

2. Preface

In the 18 months since the Diversity Advisory Group first met informally, we have already seen a remarkable change in the activities of the IFoA. Our President, Nick Salter, has made diversity a Presidential theme. The number of women on stage at 2014/2015 conferences is up markedly on 2013/2014 and work is underway on a diversity policy for the IFoA with diversity considerations being added into the terms of reference for each of the IFoA's committees. A little noise, a lot of encouragement and some real leadership from the top have already started to go a long way.

This is why right now is an incredibly exciting time to make a real difference. Within the IFoA membership base, our incoming student numbers are approaching parity in gender and the proportion of female qualified actuaries is steadily increasing: we now have a great foundation upon which to build a pipeline of senior female talent.

What we have learned from the wider business press, research and the experience of other professions is that simply playing a waiting game from here will not work. Entirely unintentionally, and whether we are male or female, we have unwittingly stacked the odds in the favour of men. We have addressed discrimination in the workplace and women now have the same opportunities as men; they just need to seize them whilst dancing backwards and in high heels¹. Some do succeed and more will, but to create the diverse profession and senior leadership that we need we must act now to remove the extra obstacles, often unseen and unintended, that women face.

In writing this paper we could have written a novel. Instead we've opted for brevity in the wider context of the gender discussion, preferring instead to provide extensive references, primarily from the UK and further reading for those wanting to know more – the detail is already out there and readily available. We have however added the IFoA context to much of this debate and used this as our platform to make recommendations for where we go next. For me this is the most important and more exciting place to start.

The content of this paper is however, far from my own work. My first thanks go to Helen Crofts and Kathy Byrne, without whom this paper would never have been completed. The rest of the working party also deserves my thanks for their contributions: Caroline Cummings, Kim Durniat, Craig Edmondson, Judith Fish, Catherine McFadden, Kathryn Morgan, Carolyn Rajaratnam, Kerry-Anne Siggers, Martine Scott-Gordon, Payal Shah, Janki Tanna, Debra Webb and Claire Whittaker.

We hope that what we have put together gives you food for thought and we look forward to your support in taking forward the recommendations.

Helen Cooper

Chair, Diversity Advisory Group

Women in Banking and Finance Young Professional 2014

June 2015

¹ Bob Thaves, speaking of Fred Astaire: "Sure he was great, but don't forget Ginger Rogers did everything he did backwards and in high heels"; Frank and Ernest cartoon, 1982.

3. Introduction

It would be easy to assume that gender discrimination in the workplace is a thing of the past, given the long road women have travelled to achieve equality over the last century: from the suffragettes a century ago, to the women's liberation movement of the 1960s to the current attention on board level diversity and gender quotas.

Legislative change began in 1928 when women achieved the same national voting rights as men through the *Representation of the People Act 1928*, and culminated in the *Equal Pay Act 1970* - still potentially within the working lives of some current members of the Institute and Faculty of Actuaries (IFoA).

However, with these dates fading into history, there has perhaps been a relaxation in relation to the pursuit of equal attainment by men and women. Unfortunately a lack of overt discrimination has not been met by a rise through the ranks of the actuarial profession of equal numbers of men and women.

Whilst 38% of IFoA students are now female, 24% of all IFoA Fellows are women². The data presented in Section 6 of this report demonstrate clear evidence of a "lag" factor. Add to this that women leave the IFoA, other than through retirement, at an average age of 40, compared with 53³ for men⁴, and the evidence shows that the IFoA is losing its female talent.

It is important to note that this report is not just written for the female members of the IFoA, or for the even larger set of people who have responsibilities for the diversity agenda. This report is for:

- any member of the IFoA who has a responsibility for talent or pipeline management;
- any member who sits on a committee that is looking for better, more responsible and more balanced decision making;
- anyone setting strategy that hopes to see it better balance risk and reward; and,
- anyone with responsibilities for bringing innovation and creativity into their workplace.

The business case for having more women in senior roles is gaining more and more momentum outside of 'just' the diversity agenda. Business leaders such as Virgin Group founder, Richard Branson; Sir Roger Carr, Chairman of Centrica; KPMG UK Chairman Simon Collins, and most recently Antonio Horta-Osorio, Group Chief Executive of Lloyds Banking Group, have all publically voiced their support for the business case for increasing diversity, and specifically gender diversity, at the top of their organisations.

² Institute and Faculty of Actuaries, (2013), *Our members at a glance*. [internal data]
<http://www.actuaries.org.uk/research-and-resources/documents/our-members-year-numbers-2013>

³ Internal research based on IFoA data undertaken by members of the Diversity Advisory Group.

⁴ Research undertaken by the Diversity Advisory Group using data membership data provided by the Institute and Faculty of Actuaries.

4. The business case for gender diversity

Modern values around the world place a high emphasis on equality,⁵ and as such, attaining gender diversity is simply the right thing to do. But more than this, there is a compelling business case which demonstrates that everyone benefits from gender equality, not just women. It is therefore important that more is done and that it is done at a faster rate for everyone's benefit.

Whilst there are a growing number of individuals and groups, such as Opportunity Now (who are increasingly convinced of the bottom line benefits), these are not proposed as the sole basis for gender diversity. Diversity increases the size of the talent pool that can be accessed, at all levels, it brings a greater level of challenge and reduction in 'group think' and it improves corporate governance and risk management.

The IFoA has a single set of values which are the essence of its culture and a statement of what it stands for as an organisation (see sidebar). In reviewing these, it is difficult to see how the promotion of diversity in the widest sense (and gender diversity within that) is not a core principle of what the IFoA stands for.

Community
<ul style="list-style-type: none">• We are: Building relationships and communities by listening and giving people a clear voice• By being: Inclusive, Accessible and Collaborative
Integrity
<ul style="list-style-type: none">• We are: Doing the right thing for the organisation, our members, the IFoA and the public interest• By being: Honest, Accountable and Professional
Progress
<ul style="list-style-type: none">• We are: Developing the future of the IFoA together• By being: Relevant, Supportive and Purposeful

4.1 Access to a wider pool of talent

The Women And Work Commission⁶ found that unleashing women's full potential could be worth up to £23 billion a year to the Exchequer. To put this into context, this year's central government budget for secondary education is £25.6 billion⁷. Better using women's talents could fund most of our schools and colleges.

In the UK, evidence shows that girls are performing as well, if not better, than boys in public examinations in mathematics. At university women are also leading their male counterparts in achieving first and upper second class degrees (results by subject not available).

⁵ For instance In September 2000, leaders of 189 countries met at the United Nations in New York and endorsed the Millennium Declaration, a commitment to work together to build a safer, more prosperous and equitable world. The third Millennium Development Goal states 'Promote gender equality and empower women'
<http://www.un.org/en/mdg/summit2010/pdf/List%20of%20MDGs%20English.pdf> accessed 25/05/2014

⁶ Women and Work Commission: <http://opportunitynow.bitc.org.uk/WomenWorkFactsheet>. 2013.

Original source: UK budget for tax year 2013 <http://www.ukpublicspending.co.uk>

⁷ UK Public Spending. http://www.ukpublicspending.co.uk/year_spending_2015UKbn_14bc1n_20#ukgs302

A paper⁸ presented at the Actuarial Society of South Africa's 2011 Convention included a comparison of performance in the actuarial examinations by gender. This was based on analysis by Diedericks,⁹ who used internal data to analyse gender differentiated performance in the IFoA examinations and concluded that performance differentials between men and women were not statistically significant.

As a profession, student numbers are already benefitting from the equally strong male and female pipelines. Women are demonstrating equal academic capability up to the level of Fellow and so the challenge is to build on this achievement so that the pipeline flows into senior leadership positions.

4.2 Women think and behave differently

4.2.1 A better mix of leadership skills

A study by McKinsey¹⁰ in 2008 found that financial performance is linked to organisational performance, which is reinforced by nine leadership behaviours. Women apply five of these nine leadership behaviours more frequently than men and thus contribute to stronger organisational performance.

Four of the top six of these leadership behaviours that consistently emerge as of particular importance for corporate performance over the next five years are:

- Intellectual stimulation
- Inspiration
- Participative decision making
- Expectations and rewards

According to McKinsey, intellectual stimulation is applied equally by men and women but the remaining three behaviours are more often demonstrated by women. The study suggests that the challenge of gender and leadership diversity can become a genuine lever of differentiation in the marketplace.

4.2.2 Improved corporate governance

In the corporate arena the Higgs Review of Corporate Governance in 2003 called for greater balance on the board to offset the relative lack of independent advice and to reduce the homogeneity of the directors. The parallels for the actuarial profession are The Penrose Report on Equitable Life and the Morris Review in 2005.

Credit Suisse¹¹ found an unusually strong consensus within academic research that a greater number of women on the board improved performance on corporate and social governance metrics.

4.2.3 Reducing 'groupthink'

Greater team diversity, which includes gender diversity, can lead to better than average performance, whilst homogenous teams can suffer 'groupthink' and are less effective at scrutiny, challenge and innovation. 'Groupthink' is a psychological phenomenon that occurs within a group of people, in which the desire for harmony or conformity in the group results in an irrational or dysfunctional decision-making outcome. Ernst & Young's Groundbreakers study¹² found that when 'groupthink' exists in

⁸ Ramjee, Shivani; Sibiyi, Felicia; Dreyer, Kathryn (2011). *In search of the elusive female actuary*, Actuarial Society of South Africa Annual Convention.

⁹ Diedericks, K. (2009). *South African actuarial student performance*, MCom (Actuarial Science), Stellenbosch University.

¹⁰ McKinsey and Company, (2008), *Women Matter: Female leadership, a competitive edge for the future*, McKinsey and Company, 2008.

management, executives are more likely to ignore alternatives, take excessive risks or fail to form contingency plans.

Credit Suisse cites research from Professor Katherine Phillips and her colleagues at Columbia University who studied the impact of greater diversity in team exercises and found that:

- individuals are, on average, likely to do more preparation for any exercise that they know is going to involve working with a diverse rather than a homogenous group
- a wider range of available data inputs are likely to be debated in a diverse rather than a homogenous setting
- the diverse group, in the end, is more likely to generate the correct answer to a particular problem than is the case for the homogenous group
- it is not necessarily the performance of the minority individuals that have enhanced the result but that the majority group improves its own performance in response to minority involvement.

¹¹ Credit Suisse Research Institute, (2012), *Gender diversity and corporate performance.*, Credit Suisse, 2012.

¹² Ernst & Young, (2009), *Groundbreakers - Using the strength of women to rebuild the World Economy*, Ernst & Young, 2009.

4.2.4 Risk management

Excessive corporate risk-taking can lead to economic instability. There is a body of research^{13 14} that suggests that women tend to be much more risk averse than men and that this leads to less volatility in investment performance. In August 2009, the Independent¹⁵ reported that Harriet Harman laid the blame for the financial crisis on the male domination of the top jobs in banks. The deputy Labour leader suggested that the presence of more women in the boardrooms of financial institutions could have eased the impact of the meltdown.

Women have been found to bring balance and a longer-term view in risk management. In a presentation to The-Women's-Insurance-Net-Work in January 2010, Professor Nick Wilson of Leeds University Business School found a negative association between female directors and insolvency risk and concluded that having gender balance reduces risk. Having at least one female director on the board is associated with a 20% reduction in the likelihood of becoming bankrupt, with a correspondingly lower likelihood when having two or three female directors¹⁶.

As a profession that aims to have a clear voice it is important that that voice reflects the full diversity of thought and behaviours such that it benefits from the best of all of the collective leadership capabilities. That is only possible when 'groupthink' is shunned, inclusivity promoted and there is sufficient female representation so that their voice plays a representative role in the IFoA's voice.

4.3 Financial benefits of gender diversity

There is a significant body of literature outlining the business case for diversity and gender diversity in particular. Many of these studies attempt to quantify the direct impact on the financial performance of companies. Opportunity Now¹⁷, the campaign on gender diversity from Business in the Community, summarises a number of these in their Food for Thought article.

According to McKinsey¹⁸ companies across all sectors with the highest numbers of women on their boards of directors significantly and consistently outperform those with no female representation – those in the top quartile for women's representation on boards outperform by 41% in terms of return on equity and by 56% in terms of operating results compared to those in the lowest quartile.

Likewise, a Catalyst¹⁹ study shows that Fortune 500 companies that have the highest quartile of women on their boards outperformed those in the lowest quartile, notably by a 53% higher return on equity, a 42% higher return on sales, and a 66% higher return on invested capital. A recent Danish

¹³ Barber, B.M. and Odean, T. (2001), Boys will be boys: Gender, overconfidence and common stock investment. *Quarterly Journal of Economics*, February 2001: 261–292.

¹⁴ Felton, J. Gibson, B.M. and Sanbonmatsu, D.M. (2004): Preference for risk in investing as a function of trait optimism and gender. *Journal of Behavioral Finance*, Volume 4, Issue 1, 2003.

¹⁵ Harman, H. (2009). 'If only it had been Lehman Sisters', *The Independent*, 4 August, 2009. Harriet Harman:

<http://www.independent.co.uk/news/uk/home-news/harriet-harman-if-only-it-had-been-lehman-sisters-1766932.html>

¹⁶ Professor Nick Wilson cited in Ahuja, Anjana (2009). Women in the boardroom help companies succeed – *The Times*, March 19, 2009. <http://www.thetimes.co.uk/tto/life/article1855471.ece>

¹⁷ http://opportunitynow.bitc.org.uk/sites/default/files/kcfinder/files/Opportunity%20Now/The_Business_Case_for_Opportunity_Now%20Jan%202013.pdf

¹⁸ McKinsey & Company (2010). *Women Matter: Women at the top of corporations: making it happen*, McKinsey, 2010. (Later Women Matter reports available: http://www.mckinsey.com/client_service/organization/latest_thinking/women_matter).

¹⁹ Catalyst, (2009), *The Bottom Line: corporate performance and women's representation on boards*. Catalyst 2007.

study²⁰ also found that companies with women on the board outperformed those with no women by 17% higher return on sales and 54% higher return on invested capital. Thomson Reuters²¹ examined the performance of companies with more than 30% women on their board compared with those with less than 10% women on their board, and found that companies with greater numbers of women leaders fared better in periods of greater economic volatility. The same study showed that over the course of 2011, companies in the STOXX 600 Index with more than 30% women managers outperformed those with less than 20% women managers by nearly 8%.

However, such studies focusing on real world performance struggle to prove the statistical causal relationship, controlling for other differences. For instance, younger companies grow at faster rates on average than older companies²² and smaller companies have higher proportions of women than larger companies^{23 24}.

Some studies which have attempted to find ways of adjusting for controlling factors found more mixed results but in doing so introduced other problematic factors. For example, a Norwegian study²⁵ compared companies before and after the introduction of quotas for women on boards in 2003/2008. The study concluded that firms reporting the greatest increase in female board membership reported falling-stock market valuations and deterioration in operating performance. However the authors also noted that these companies also had an increase in younger and less experienced boards. Whilst quotas were useful in increasing women on boards there was no increase in women at the levels below, which created a pipeline shortage to meet the targets (and has sometimes been used as evidence against aggressive formal quotas for diversity).

In this vein, although Credit Suisse research indicates that having more women on boards is associated with stronger corporate governance (see 4.2.2 above), it also found a significant body of research that supported the idea that there is no causation between greater gender diversity and improved profitability and stock price performance²⁶.

Instead the link may be the positive signal that is sent to the market by the appointment of more women: first, because it signals greater focus on corporate governance and second, because it is a sign that the company is already doing well.

Evidence of the financial benefits of gender diversity is there in part, but the research reveals complex dynamics and it is affected by other causal factors. However, it is clear the business community is looking to see progress as a sign of a modern corporate governance agenda and the IFoA has a responsibility to support that agenda.

²⁰ Mijntje Lückerath-Rovers, (2010), *Women on board and firm performance*, Mijntje Lückerath-Rovers, Erasmus University Rotterdam, 2010.

²¹ Thomson Reuters (2012). *Women in the workplace: latest trends in gender equality*, Thomson Reuters Special Report. 2012

²² Haltiwanger, J.C., Jarmin, R.S. and Miranda, J. 2010; Neumark, D et al., 2008.

²³ Urwin, P. and Buscha, F. (2012), *Back to work: The role of small businesses in employment and enterprise*, Federation of Small Businesses, London. http://www.fsb.org.uk/policy/assets/publications/fsb_2012_back_%20to_work.pdf

²⁴ United Kingdom, Department for Business, Innovation and Skills. The business case for equality and diversity: a survey of academic literature. BIS Occasional Paper No 4. January 2013.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/49638/the_business_case_for_equality_and_diversity.pdf

²⁵ Ahern, K. and Dittmar, A. (2011), The changing of the boards: the impact on firm valuation of mandated female board representation", Stephen M. Ross School of Business, *Working Paper Series. Quarterly Journal of Economics* 127(1): 137-197.

²⁶ Credit Suisse AG Research Institute (2012), Gender diversity and corporate performance.

4.4 Stakeholder representation

To be relevant as a profession, the make-up of our profession needs to be representative of its members and its customers: the employers of actuaries and customers of these employers. The IFoA takes its public interest role seriously and therefore needs to be able to represent and understand the views of the entire public if it is to discharge that responsibility effectively.

A diverse profession makes us demonstrably representative and gives our public interest voice an increased level of relevance.

4.5 Life is never simple

Whilst there is a clear business case for gender diversity it must be noted that simply increasing the number of women does not necessarily achieve these benefits. It is important that gender diversity is achieved through mechanisms that make women feel included in the IFoA. The findings of a UK Government Department for Business, Innovation and Skills (BIS) paper²⁷ surveying the academic literature on the business case for equity and diversity concluded that:

- Diversity, if appropriately managed, can result in business benefits. However, if poorly managed, it can also increase business cost;
- The firm's economic and organisational context is crucial in determining the way in which equality and diversity brings about business benefits;
- There is no single approach that businesses can adopt to ensure equality and diversity are beneficial;
- Strategic approaches are likely to be more successful: equality and diversity need to be embedded in the business organisational strategy, not ad-hoc additions to the business.

Therefore, in considering the objectives and recommendations of this paper, there needs to be a focus on actions which increase the level of inclusion in the membership of the IFoA as well as the level of diversity to ensure that the IFoA can deliver on the gender business case, and not just on targets.

²⁷ United Kingdom Department for Business and Skills, (2013), *The business case for equality and diversity: A survey of academic literature*, January 2013. (BIS Occasional Paper No 4).

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/49638/the_business_case_for_equality_and_diversity.pdf

5. Barriers

A man starting his career in a UK corporation is 4.5 times more likely to reach Executive Committee than his female counterpart²⁸ and male CEOs in FTSE 100 and S&P 500 companies outweigh females 20 to 1²⁹.

Given there is a clear business case for gender diversity, together with a current lack of women in senior roles, what is it that is damaging the pipeline of talented women and why aren't they reaching senior levels? If we assume for a moment that explicit discrimination and open misogyny are not factors at play³⁰ then what are the drivers behind the figures?

There is a large volume of research on this topic. For the purpose of this paper we have outlined the key factors considered in the research in order to consider what recommendations we may carry forward to address these. As we have not set out to provide a comprehensive review of all barriers, those seeking more information will hopefully find the references in this section and the further reading guides in the appendix particularly useful.

5.1 Career obstacles

Research by Credit Suisse identifies the key obstacles preventing women from advancing in their careers; these are summarised in the table below. In the subsequent section we have picked out those key barriers that can be addressed from within the IFoA.

Table: Main obstacles to women advancing in their careers³¹

Individual	Cultural	Workplace	Structure/policy
Educational choices	Perception of female commitment	Face time and flexibility	Lack of shared parental leave
Sector choices	Double standards	Staff rather than line role promotions	Lack of childcare assistance
Pipeline availability	Spousal role and support	Mentoring for women rather than sponsorship	Differentiated taxation
Risk aversion disparity	Work-life balance priorities	Promotion rates	Organisations were designed for men and manufacturing

²⁸ KPMG LLP, Young Samuel Chambers ('YSC'), 30% Club (2014). *Cracking the Code*. 2014.

<http://www.kpmg.com/UK/en/IssuesAndInsights/ArticlesPublications/Documents/PDF/About/Cracking%20the%20code.pdf>

²⁹ Based on companies in the FTSE 100 and S&P 500 indices. Source: Credit Suisse Research Institute (2014). *The CS Gender 3000: women in senior management*. Credit Suisse, 2014.

³⁰ Indeed if/where they do exist there is a body of legal legislation to support women.

³¹ Credit Suisse Research Institute (2014). *The CS Gender 3000: women in senior management*. Credit Suisse, 2014.

5.1.1 Individual

There are significant differences in the choices made at the individual level by men and women as they choose their degree subjects and industry sector. Whilst mathematics fairs relatively well (43% of UK mathematics graduates are female) other subjects such as computer sciences (18%) and engineering (15%) are failing to attract women³². The growing trend for female actuarial students is indicative of a strong graduate pipeline; however we will want to keep tabs on future trends of mathematics graduates (and other associated numerical degrees) to ensure that a low number of female graduates does not become a limiting factor.

Numerous studies have proven that men prefer taking risks to women³³. This frequently manifests itself in studies on gambling but is also a factor in how women put themselves forward for roles and promotions. Facebook COO Sheryl Sandberg³⁴ cites internal research by Hewlett-Packard which found that women only apply for jobs for which they feel they are a 100% match; men do so even when they meet no more than 60% of the requirements. A 2006 academic study of senior hires in English universities concurs³⁵. This can be considered a lack of confidence or assertion from women during the recruitment and promotion processes.

Columbia Business School's Professor Ernesto Reuben coined the phrase 'honest overconfidence' in 2011³⁶. His study outlines how the differences in the way men and women think of themselves and react to incentives may create gender differences that lead to leadership gaps (rather than the gap being caused solely by discrimination in the selection process). Specifically, men's tendency to exhibit natural overconfidence in their past performances may be attributed to the lack of greater female representation in upper management and executive positions. The reality is that many women are brutally self-honest about their own skills and abilities whereas men are more prone to the 'over-confidence effect'.

Within the IFoA some progress has been made in opening up volunteer opportunities so that a range of candidates is maximised. However, we should also consider the impact of women being less likely to apply for roles where they don't feel they meet all of the job specifications. This could be one reason why there are so few women chairing boards and committees and presenting at major conference plenary sessions.

Recommendation 1: *The Diversity Advisory Group considers whether there are additional steps that can be taken, building on the improvements to the volunteer vacancies process in order to mitigate any impact of risk aversion disparity between male and female members.*

³² Botcherby, S. and Buckner, L. (2012). *Women in science, technology, engineering and mathematics: from classroom to boardroom: UK statistics 2012*. WISE, 2012. <https://www.wisecampaign.org.uk/resources/2012/12/uk-statistics-2012>

³³ Niederle, M. and Vesterlund, L., (2007). Do women shy away from competition? Do men compete too much?. *The Quarterly Journal of Economics* 122(3): 1067-1101. MIT Press;

Croson, R. and Gneezy, U. (2009), Gender differences in preferences, *Journal of Economic Literature* 47(2): 448-472.

Coates, J.M. and Herbert, J. (2008), Endogenous steroids and financial risk taking on a London trading floor. *Proceedings of the National Academy of Sciences of the United States of America* 105(16): 6167-6172.

³⁴ Sandberg, S. (2013). *Lean in: women, work, and the will to lead*. W.H. Allen, 2013.

³⁵ Doherty, L., Manfredi, S. (2006) Women's progression to senior positions in English universities. *Employee Relations*, 28(6): 553-572.

³⁶ Reuben, E. et al. (2012), The emergence of male leadership in competitive environments. *Journal of Economic Behavior and Organization* 83(1): 111-117.

5.1.2 Cultural

5.1.2.1 Unconscious bias

Cultural barriers are often the result of stereotypes and the corresponding assumptions that go along with those stereotypes. These lead into the zone of unconscious bias: the biases that we all hold and unintentionally act upon in our daily lives and that cause us to routinely and automatically sort people into groups. We treat men and women differently because unconsciously we expect different behaviours.

One of the most famous studies on unconscious bias was undertaken in 2001 with the New York Philharmonic Orchestra by Cecilia Rouse and Claudia Goldin³⁷. Selectors had long insisted that the lack of women musicians was not gender discrimination, but instead that they preferred the playing style which happened to prevail amongst male musicians. However, once blind auditions were introduced, the proportion of women in the orchestra increased from 10% to 45% of new hires.

Unconscious bias manifests in very subtle ways; by definition, people are not conscious of the behaviour they are exhibiting. The results are known as 'micro-behaviours' and include actions such as paying less attention to what another person says, and therefore addressing them less warmly, or by limiting time talking to them. People tend to be naturally less empathetic towards people who are not like them.

What makes unconscious bias powerful is that even when people actively try to base decisions on merit, their unconscious systems can override their conscious thought. Whilst they might think they are making a decision in an objective fashion, they are actually finding conscious reasons to justify an unconscious belief. There are, however, things that can be done to tackle these biases. Some of these are in line with tackling stereotypes (see below). It is also true that there are instances when unconscious bias is more likely to overrule conscious behaviour. This is particularly prevalent when people are stressed, tired, under pressure or being asked to make decisions quickly. Being conscious of behaviour during these times, and where possible writing down a rationale or explaining it to others, can help to address some of the unconscious behaviour.

In addition, people can make assumptions about other people, including women, based on stereotypes. This can impact on how people are treated and create double standards.

³⁷ Goldin, C. and Rouse, C., (2000), Orchestrating impartiality: the impact of 'blind' auditions on female musicians. *American Economic Review* 90(4): 715-741.

5.1.2.2 Stereotyping and stereotype threat

Stereotype threat refers to the situation in which people perceive themselves (rightly or wrongly) to be at risk of confirming negative stereotypes about their social group. As many contexts where women are under-represented are stereotypically associated with superior male achievement, they are classical situations for stereotype threat³⁸. Research on stereotype threat³⁹ shows that potential high achievers who strongly identify with the task at hand are susceptible to the negative effects of stereotype threat on performance. Therefore, potentially high performing women are expected to perform worse than equally or less qualified men, or avoid competing against men altogether.

5.1.2.3 Spousal role and work life balance

It is in fact a myth that gender divergence starts when women opt to have children. It actually is prevalent before this and studies comparing the roles of women at work with and without children still show the gender disparity. For example, women with children are more likely to receive five or more promotions than women without children, a phenomenon also observed in men.

Who receives five or more promotions?

Source: KPMG 2014 – Cracking the code

	% without children	% with children
Men	65	74
Women	51	57
Difference	27	30

What has long been an important consideration though is the number of women opting to leave the workforce entirely or to work flexibility in order to function as primary carer. Claudia Goldin argues in 'A Grand Gender Convergence: Its Last Chapter' that the structure of jobs and the time based structure of salaries must be altered for real equality.

The impact of flexible working, career breaks and carer responsibilities is set to move from a gender issue to one that affects the whole workforce as generational shifts in the expectations of work life balance emerge⁴⁰.

Recommendation 2: *The Diversity Advisory Group surveys members to understand what proportion have access to training on unconscious bias and whether any supplementary training should be offered by the IFoA. See also recommendations 3*

5.1.3 Workplace

The modern workplace is becoming increasingly flexible for both men and women offering great opportunities for men and women, with and without children to shape their work life balance. However, the way men and women respond to this flexibility is different and this has an impact on career progression. For example:

³⁸ Gunther, C. et al. (2010). Women can't jump? An experiment on competitive attitudes and stereotype threat, *Journal of Economic Behavior and Organization* 75(3): 395-401.

³⁹ Aronson J. et al. (1999). When white men can't do math: necessary and sufficient factors in stereotype threat, *Journal of Experimental Social Psychology* 35: 29-46.

⁴⁰ PriceWaterhouseCoopers International Ltd. (2011). *Millennials at work: reshaping the workplace*.

- Men presume that women will want to stop working at some stage. However, in a UK survey, 61% of mothers said they would want to work even if they did not have to financially versus just 24% who said they would give up work if they could⁴¹.
- Men and women work flexibly, but women do so contractually whereas men do so unofficially. Men are 25% more likely to take breaks during the working day for personal activities, 7% more likely to go for a walk, 5% more likely to go out at lunch and 35% more likely to take a break to relax compared to their female colleagues⁴².
- In the US, between 1997 and 2014, the increase in women-owned businesses was twice the increase in male-led start-ups⁴³.
- Businesses tend to offer more flexibility in support-side functions (i.e. shared services) rather than the line roles which are the conduit to senior and board positions with 25% of senior women employed in Human Resource functions⁴⁴.

The structure of the workplace is also important for progression. Sponsorship is widely recognised as a quicker route to the top. In the UK, male employees are 25% more likely and senior male employees 50% more likely to have a sponsor⁴⁵.

Recommendation 3: *One of the top perceived barriers by senior women and CEOs is the lack of senior visibly successful female role models⁴⁶. Whilst the IFoA has little input into the working environment of actuarial employers it can play a meaningful role in the promotion of role models, including both successful senior women and successful flexible workers, male or female. The Diversity Advisory Group creates a programme of activity to identify and promote successful role models both explicitly and through increased visible presence within the IFoA.*

5.2 Overcoming the barriers

The combined impact of these and other barriers constitutes significant challenges for many women. It is certainly not the case that no women are making it through, but without a level playing field, the proportions will always be skewed.

⁴¹ National Childbirth Trust, (2009), *Experiences of women returning to work after maternity leave in the UK: a summary of survey results* [2008], NCT, 2009.

⁴² Cranfield Business School and Captivate Network data, quoted from Credit Suisse Research Institute (2014). *The CS Gender 3000: women in senior management*, Credit Suisse, 2014.

⁴³ US Census Bureau data, quoted from Credit Suisse Research Institute (2014). *The CS Gender 3000: women in senior management*, Credit Suisse, 2014.

⁴⁴ Dawson, J.; Kersley, R.; Natella, S. Credit Suisse Research Institute, (2014), *The CS Gender 3000: women in senior management*. Credit Suisse, 2014.

⁴⁵ Hewlett, S.A.H.; Leader-Chivée, L. and , Sumberg K. (2012) *Sponsor effect: UK*, Center for Talent Innovation, 2012.

⁴⁶ Catalyst, Opportunity Now, (2000), *Breaking the barriers: women in senior management in the UK*. Opportunity Now, 2000.

6. Current state of play

6.1 Women in the business world

The 'Women on Boards' Report⁴⁷ by Lord Davies of Abersoch published in 2011 (herein after referred to as 'The Davies Report'), together with continuing monitoring and reporting by the Davies Report Review Panel, provides the most complete and up to date UK-relevant source of women in business statistics.

In 2010, women made up only 12.5% of the members of the corporate boards of FTSE 100 companies, increased from 9.4% in 2004. The Davies Report stated that this rate of increase was too slow, suggesting that at the current rate of change it would take more than 70 years to achieve gender-balanced boardrooms in the UK's largest 100 companies. Three years on from the Davies Report, figures⁴⁸ as at 3 March 2014 show that within the FTSE 100:

- women in 2014 account for 20.7% of all directorships, up from 12.5% in 2011
- women account for 28% of all board appointments in 2013/2014
- there are currently 98 boards with female representation
- there are 36 companies with at least 25% women directors
- fewer than 50 new women appointments need to be made to reach the 25% target.

For FTSE 250 companies:

- women now account for 15.6% of directorships, up from in 7.8% in 2011
- women account for 33% of all board appointments in 2013/2014
- there are currently 202 boards with female representation
- there remain 48 all-male boards
- there are 51 companies with at least 25% women directors.

While female representation in the boardroom is improving, the picture is altogether different for female executives who make up 6.9% of FTSE 100 executives and 5.3% of FTSE 250 executives. Within the FTSE 100, only one woman – Alison Carnwarth at Land Securities – holds the title of Chairman.

Prior to publication of the Davies report, between 2008 and 2010 the number of women directors had effectively reached a plateau, stalling at less than a single percentage point rise year-on-year. Since the report the percentage of female board appointments has increased by nearly 50%. This information has been collated and reported by Cranfield University since 1999. Cranfield's Female FTSE Report 2013 suggests that progress with women on boards is not simply a result of efforts to address the gender imbalance but appointments are being made for valid business reasons.

The 2014 report shows that more and more FTSE Chairs are convinced of the value of women in the boardroom. Twelve companies in the FTSE100 have four or more women in the boardroom, with 39

⁴⁷ Davies, E.M. (Lord Davies of Abersoch), (2011), *Women on boards*, Department for Business, Innovation & Skills. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/31710/11-745-women-on-boards.pdf

⁴⁸ Vinnicombe, S.; Doldor, E.; Turner, C. 2014, *The Female FTSE Board Report 2014: crossing the finish line*, Cranfield International Centre for Women Leaders, 2014.

having more than two. The report also shows that companies are setting themselves challenging targets while the pipeline continues to be strengthened. There are now no FTSE 100 companies with all male boards, with Glencore Xstrata and Antofagasta recently appointing women to their boards.

6.2 Institute and Faculty of Actuaries

6.2.1 Membership

Membership of the IFoA shows an increasing portion of female students and Fellow members⁴⁹. Clearly such developments are positive step forwards in achieving the gender business case. The charts below demonstrate the importance of our student population in driving these figures with women approaching 40% of the student population.

Over the last three years the numbers of female fellows have grown by an average of 8.00% per annum whereas the number of male fellows has grown by an average of only 2.12% per annum. Applying these recent growth rates to the numbers of female and male Fellows, we might expect equal numbers of male and female Fellows by 2034, another 20 years hence.

Where we are making great progress on the numbers of female members in the IFoA, we need to ensure that we keep these women and give them the opportunity to succeed into senior positions if we are to have a representative profession. It is currently very difficult to identify 'a senior actuary' and therefore track the path of seniority of members of the IFoA.

Currently the attrition rate for women is higher than for men when we ignore retirement and deaths. A relatively high proportion of female actuaries are leaving the IFoA in their 30s and 40s: the average age of non-retiree females who have chosen to leave the IFoA in 2014 is 40, compared with the equivalent male age of 53.

The average age on joining the IFoA in the last 10 years was 24 for women and 29 for men. The average age at qualification as a Fellow in the last 10 years was 29 for women and 30 for men. This means that women leave the IFoA after only 11 years practising as actuaries, whilst men leave after 23 years on average.

The reasons for women leaving the IFoA earlier than men are not known so some further research in to the root causes for leaving the IFoA is needed in order to determine how to address this. It is an assumption without evidence at this stage, but one we consider reasonable to make, that some of this attrition will be related to family roles and decisions regarding work life balance. There is an

Chart 1: Fellows of the Institute and Faculty of Actuaries by gender 1997 – 2013

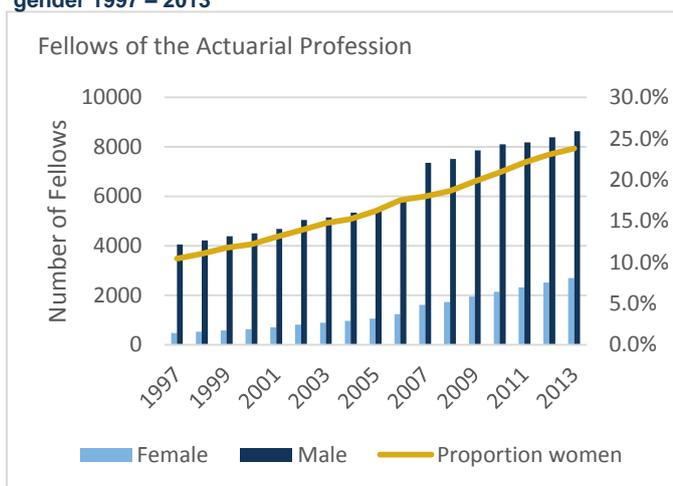
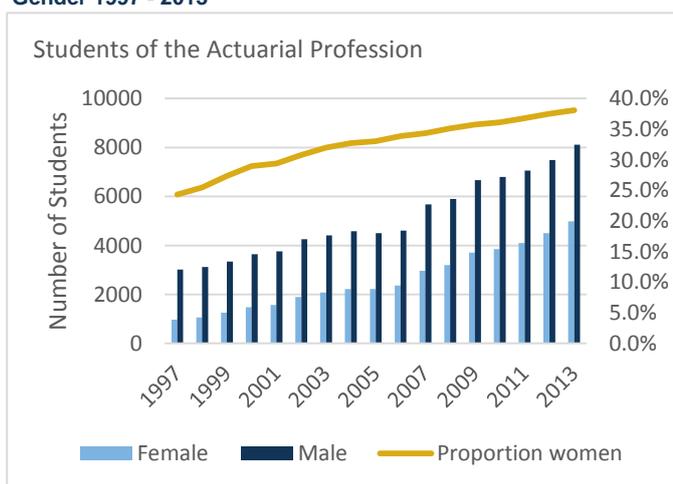


Chart 2: Students of the Institute and Faculty of Actuaries by Gender 1997 - 2013



⁴⁹ Internal research based on IFoA data undertaken by members of the Diversity Advisory Group.

opportunity to address these challenges in light of the recent government policy changes in respect of additional paternity leave and from April 2015 the impact of shared parental leave policies. These provide increased flexibility for both parents and make it much easier for the roles of men and women in families to be more balanced where couples choose to do so. The IFoA can choose to play a role in supporting these decisions.

6.2.2 Senior representation in the IFoA

Whilst the membership numbers show increasing gender diversity, we know from external studies that this doesn't necessarily transpire into diversity at senior levels. Unfortunately, current IFoA statistics make it very difficult to track 'senior actuaries' as a cohort. Anecdotally, it will be clear to those reviewing gender diversity in the insurance industry, the IFoA's conferences and committees, that if there is a significant portion of senior women, they are not very visible.

As a proxy for 'senior' women, we've looked at representation in the IFoA's Council and Boards and the make-up of plenary speakers at major UK actuarial conferences.

Female representation in 2014/2015 female representation is shown below in Table 1.

Table 1: Composition of Council and Boards 2014/2015

	Number of Members	Male	Female	% Female
Council	32	22	10	31
Management Board	10	8	2	20
Practice Boards	87	73	14	16
Board and Committee Chairs and Deputy Chairs	23	23	1	4

There is some success in the gender diversity on Council, interestingly the only group above which is selected by member vote. It is also worth highlighting that as a general rule these figures have shown improvement in recent years. However, there is also clearly room for improvement across the other groups, which historically have been often recruited by existing Board members.

Most recently the IFoA has taken positive steps in regards to the recruitment of all volunteer vacancies with all roles being advertised openly across the membership with a transparent application and selection process against pre-describe criteria. Research into unconscious bias and networks support this as a positive step. Going forward the figures need close monitoring to ensure that other factors don't continue to influence results - for instance women can be brutally self-honest about their skills and abilities⁵⁰ meaning they are less likely to put themselves forward in a formal application situation.

6.2.3 Professional meetings and conferences

Another area of professional activity that until recently was remarkably male dominated is professional meetings and conferences. Chart 3 shows the programme of plenary speakers at IFoA Conferences held in the 2013 autumn conference season. What is striking is that there is not a single female speaker amongst the 22 speakers.

⁵⁰ KPMG LLP, Young Samuel Chambers ('YSC'), 30% Club (2014), *Cracking the code*, 2014. <http://www.kpmg.com/uk/en/issuesandinsights/articlespublications/pages/cracking-the-code-research%E2%80%9393behavioural-differences-in-the-workplace.aspx>

Chart 3: IFoA Conference Plenary Speakers



This is an area where conscious thought and attention has made a real impact in a short period of time. Of the 52 plenary speakers listed in the conference programmes in 2014 for Risk and Investment, Pensions, GIRO, Life and Momentum Conferences, 13 of these speakers (25%) are female. A great improvement as members of the Diversity Advisory Group, conference chairs and committees made a conscious effort to consider a more diverse range of speakers.

6.2.4 Implications

On the basis that, ‘what gets measured gets done’, the working party has a series of recommendations which stem from the current state of play and recent success in conference programming.

The authors of this paper are not yet in a position to make specific recommendations about whether targets are appropriate and at what level they should be set. This is something that should be considered further and in collaboration with the IFoA’s formal governance committees. However, it is worth noting here the goals of the 30% club, (30% women on FTSE 100 boards by the end of 2015) who selected the 30% level as a minimum critical mass. In a group setting, the voices of the minority group become heard in their own right, rather than simply representing the minority^{51, 52} when they account for 30% of the group.

Recommendation 4: *The Diversity Advisory Group undertakes work and analysis of current data to recommend a key set of metrics for tracking gender diversity throughout the IFoA on an annual basis.*

Recommendation 5: *The Diversity Advisory Group conduct research into the reasons that men and women choose to optionally leave the profession (excluding retirement) and where relevant why they choose not to return. This should include looking into what – if anything – should be done to encourage members back into the IFoA after a career break.*

Recommendation 6: *Investigate whether there is a need for a network and programme for members with parental responsibilities/carers. This could*

⁵¹ Kanter, R.M. (1977), *Men and women of the corporation*, Basic Books, 1977.

⁵² Dahlerup, D. (1988). From a small to a large minority: women in Scandinavian politics. *Scandinavian Political Studies* 11(4): 275-298.

include education regarding the new shared parental leave policies as well as a forum to promote interaction.

7. Options and choices

7.1 Summary of approaches taken elsewhere

A number of professions are making a concerted effort in the area of gender equality. Some, like the legal profession, are working through/supporting employers to effect change. Others are playing a more direct role.

Common initiatives found include:

- mentoring or coaching programmes
- maternity/return-to-work/flexible working advice
- regular networking events: often focused around either business skills or topical speakers rather than gender related topics.

Other ideas include:

- awards programmes
- showcasing of female role-models
- experimentation with targets and quotas
- inclusion of diversity champions in key governance roles.

These types of initiatives are being taken by other actuarial professions around the globe and other professional organisations. These provide plenty of opportunities for collaboration within the UK and globally.

In addition, there are a number of other organisations in the UK whose aims are to promote and support women in business via various forums and formats. Those most relevant to the actuarial profession include: Opportunity Now, The 30% Club, The-Women's-Insurance-Net-Work, We are the City, Women on Boards UK, Women in Banking and Finance and Women in the City. Further details of these organisations are included in Appendix 1.

Recommendation 7: *The IFoA finds opportunities to leverage the research of other organisations and collaborates with other professions and organisations.*

8. Recommendations

The recommendations that have formed whilst writing this paper are summarised below. At this stage there are no terms of reference for the work that is proposed. These should be formed by each working group in strong collaboration with the IFoA.

8.1 Objectives

Given the changes in attitude by generation and the legislative changes this support is anticipated to be aimed at both men and women and an opportunity for the IFoA to play a strong member support role.

Recommendation 1: *The Diversity Advisory Group considers whether there are additional steps that can be taken, building on the improvements to the volunteer vacancies process in order to mitigate any impact of risk aversion disparity between male and female members.*

The progress made to date has been excellent. Initiatives such as the volunteer breakfasts at Momentum 2014 and presentations that the Executive do at a wide range of employers are encouraging participation in a wide range of activities.

Recommendation 2: *The Diversity Advisory Group surveys members to understand what proportion have access to training on unconscious bias and whether any supplementary training should be offered by the IFoA.*

A consequence of the IFoA's smaller size means that it may be feasible to contact a large proportion of those men and women who have chosen to leave the IFoA and find out why.

Recommendation 3: *The Diversity Advisory Group creates a programme of activity to identify and promote successful role models both explicitly and through increased visible presence within the IFoA.*

For a number of employers the training is part of in-house diversity programmes. Understanding how many members have access to these courses will help to assess whether there is a need.

Recommendation 4: *The Diversity Advisory Group undertakes work and analysis of current data to recommend a key set of metrics for tracking gender diversity throughout the IFoA on an annual basis. This group should also consider whether introducing targets would be beneficial.*

Whilst 50% split of men and women entering the membership of the IFoA might seem an obvious goal it is not necessarily representative if different proportions of men and women continue to choose to leave the IFoA.

It is however considered important that relevant metrics are identified and tracked if progress is to be measured and it may be that once identified a structure rationale for targets in these metrics can set a level of ambition.

One of the key metrics this group has struggled to define is a “senior” actuary and therefore it is difficult to produce an accurate figure of female representation at the levels beyond the Fellow classification. This would be useful metric to calculate and track.

Recommendation 5: *The Diversity Advisory Group conducts research into the reasons why men and women choose to optionally leave the IFoA (excluding retirement) and where relevant why they choose not to return. This should include looking into what – if anything – should be done to encourage members back into the IFoA after a career break.*

This could include specific publications or sessions on career paths from senior successful members or ensuring that there are adequate female role models at IFoA conferences and events. Other options may include formal mentoring schemes to provide junior members with direct access to role models.

Recommendation 6: *Investigate whether there is a need for a network and programme for members with parental responsibilities/carers. This could include education regarding the new shared parental leave policies as well as a forum to promote interaction.*

Further research is required to clarify what types of additional support would best address the needs of members with parental or caring responsibilities.

Recommendation 7: *The IFoA finds opportunities to leverage the research of other organisations and collaborates with other professions and organisations.*

Other organisations are frequently looking for support and working in collaboration may be a more cost effective way of offering access to training not otherwise cost effective for the IFoA to offer.

Appendix 1

There are a number of other organisations in the UK, whose aims are to promote and support women in business via various forums and formats. Those most relevant to the actuarial profession include:

Organisation

Opportunity Now

www.opportunitynow.bitc.org.uk/

Details

Opportunity Now is the gender campaign from Business in the Community. It lobbies and campaigns to create:

1. A better gender balance for leadership progression
2. Unbiased recognition and reward for all
3. Agile work cultures that are fit for the future.

Professional Women's Network

www.europeanpwn.net/london

The PWNglobal vision is 'a network that crosses boundaries', be that across sectors, generations, professions, countries, nationalities and experience, to name but a few. Being part of PWNlondon gives you the local networking and skills building as well as the opportunity to connect with women from across the globe at their country events or tap into the ready-made contact list of professional women from across the Federation Networks via our online platform. Gaining comments and views on work or personal related issues are only a click away!

The 30% Club

www.30percentclub.org.uk/

Launched in 2010 with a goal of 30% women on UK FTSE-100 boards by 2015. A group of Chairmen voluntarily committed to bringing more women onto corporate boards. Holds events, conducts research, lobbies on diversity issues.

The-Women's-Insurance-Net-Work

www.the-womens-insurance-net-work.com/

Membership organisation founded in 2007. Holds insurance-focused seminars for primarily female audience. Also includes speakers on diversity issues and general business skills.

We are the City

<http://www.wearethecity.com/>

Launched in 2008, an online information portal for London's female workforce. Includes news, reviews, careers advice and events.

Women in Banking and Finance

<http://www.wibf.org.uk/>

Membership organisation founded in 1980. Organises a variety of events that address the needs and aspirations of members to develop, showcase and retain female talent and contribution.

Women in the City

<http://www.wearethecity.com>

Founded in 2002 to promote, recognise and reward female talent, primarily via an annual lunch and awards programme, also providing a monthly e-zine and other networking events.

Women on Boards UK

www.womenonboards.co.uk/

A subsidiary of Women on Boards Australia launched in September 2012. It exists to help women make the right connections and career choices to get to board level within their own company or to take on a non-executive board role, which will develop their skill-sets, networks, confidence and experience and so add value to their career and their employer.

Appendix 2

The members of the IFoA Diversity Advisory Working Group :

Members

Fiona Annandale

Kathy Byrne

Deborah Cooper

Helen Cooper

Helen Crofts

Caroline Cummings

Kim Durniat

Craig Edmondson

Judith Fish

Memoria Lewis

Catherine McFayden

Kathryn Morgan

Feryal Nadeem

Naureen Pasha

Carolyn Rajaratnam

Martine Scott-Gordon

Kerry-Anne Saggars

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Claire Whittaker

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