

## Australia and New Zealand Economics Analyst

## Womenomics in Australia – Some Progress, but More Potential

- Exactly one decade ago we highlighted the compelling economic case for Australia lifting female participation in the workforce.<sup>1</sup> In this note we take stock of where progress has been made, re-estimate the potential boost to growth from closing remaining gender gaps, and suggest some policy options that governments and corporations could employ to accelerate progress.
- The Australian economy has benefited from a marked increase in female participation over the past decade - in both absolute and relative terms. Australia's female participation rate now ranks in the top 10 among OECD economies and the gap between Australia's female and male participation rates has narrowed to 10ppts. We estimate that the 3ppt rise in the female participation rate since 2009 (to a record high 61¼%) has boosted the level of Australia's productive capacity (GDP) by around 2%.
- However, while a major lift in Australia's female participation has been realized, a considerable gender gap persists. This gap is evident in the under-representation of women on the boards of listed companies, in management roles, in politics, and in industries with empirically higher rates of labour productivity (including science, technology, engineering and mathematics: STEM). These disparities may partly explain the persistent gender gaps across employee remuneration and superannuation wealth.
- Looking ahead, we estimate that closing the gap between male and female employment rates alone would boost the level of Australian GDP by up to 8% – with this boost supercharged by a further 10% if the lift in the aggregate female employment rate was accompanied by a compositional rebalancing of female participation towards industries with higher rates of labour productivity. We also note some empirical evidence that firms with greater gender diversity tend to outperform on key equity return metrics.
- There are plenty of policy options to realize benefits from improving gender diversity, but we believe the best strategy is likely one delivered as a holistic package. For governments, policies that enhance paid parental leave, improve access to affordable childcare, lift female representation in STEM industries, encourage female entrepreneurship and innovation, and that allow mothers to

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<sup>1</sup> "Australia's Hidden Resource: The Economic Case For Increasing Female Participation", 26 November 2009

smooth consumption via access to superannuation and/or tax credits are worthy of consideration. For corporations, there is still much progress to be made encouraging flexible workplaces, mentoring of female leaders, and policies that improve visibility and action on gender pay gaps.

## A decade on, Australia has benefited greatly from a lift in female participation

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It is 10 years to the day that we made the economic case for Australia lifting female participation in the labour force. Our argument was that female participation was “Australia’s Hidden Resource” – a pool of underutilized talent that could provide a considerable boost to Australian GDP and broader welfare, including improvements to pension/fiscal sustainability, savings rates, and productivity. We recommended a range of policies to not only encourage women into the workforce and to retain their participation following childbirth, but also strategies that would direct women into industries with empirically higher rates of labour productivity (including STEM).

In the event, female participation has increased substantially over the past 10 years – by around 3ppts, to a record high 61¼% (Exhibit 1; top left). The rise compares favourably to other advanced economies, with Australia’s female participation rate now ranking in the top 10 among OECD economies (Exhibit 1; top right). Australia also ranks well in terms of the gap between male and female participation rates, with Australia’s current gap of 10ppt significantly narrower than the OECD average of 17ppts, albeit still larger than Sweden’s gap of around 5ppts (Exhibit 1).

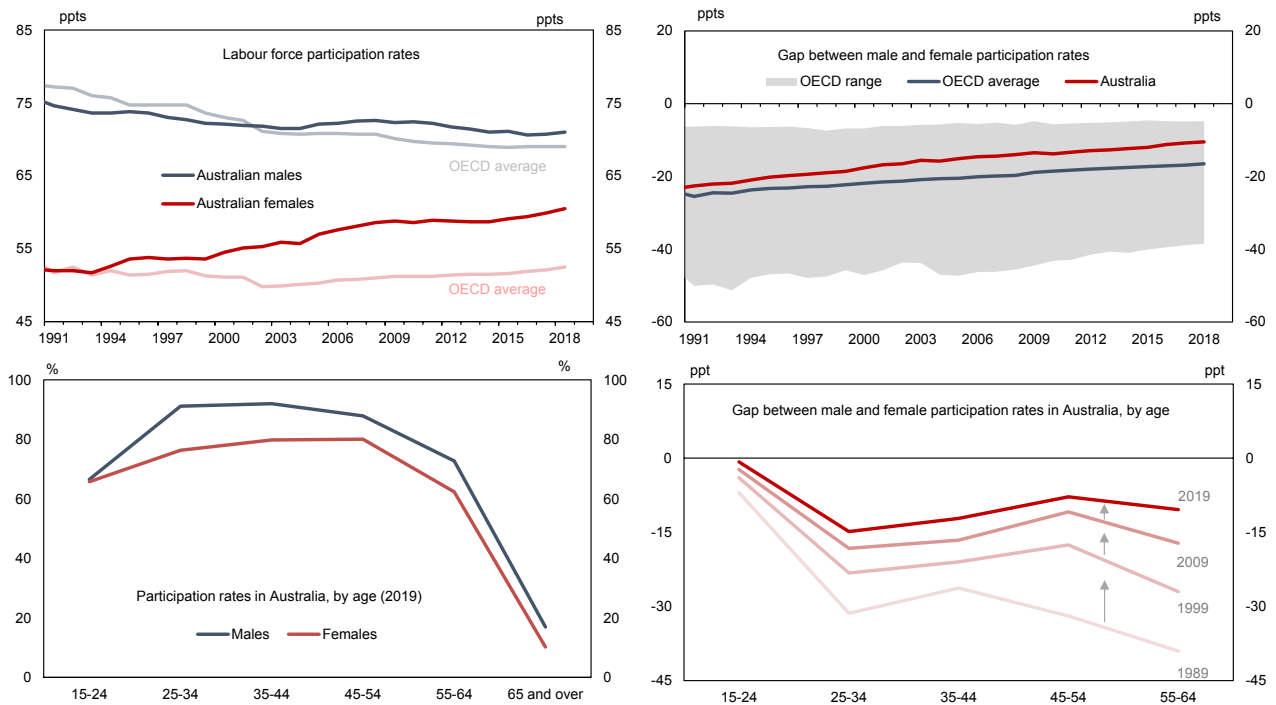
The improvement in Australia’s female participation rate has also been broadly based across age cohorts. Younger women aged 15-24 now have the same levels of participation as their male peers, while the typical ‘dip’ seen in participation among women aged 25-34 relative to males has narrowed markedly (Exhibit 1; bottom panels).

Australia also compares favourably in terms of rising female employment rates – with the 3ppt rise since 2009 roughly consistent with a ~2% boost to Australia’s potential GDP. We estimate that this accounts for a bit less than one tenth of the growth in the size of Australia’s economy over the past decade.<sup>2</sup>

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<sup>2</sup> We note the calculation behind the boost to potential growth makes several implicit assumptions, including that capital-per-worker remained steady alongside the higher labour force.

**Exhibit 1: Female labour participation in Australia has vastly improved over the past few decades**



Source: Goldman Sachs Global Investment Research, ABS, OECD

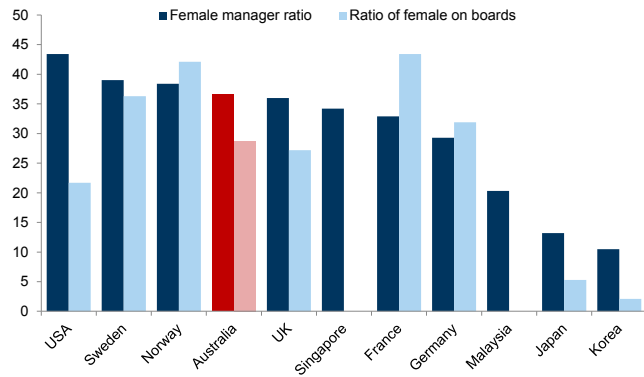
### Progress has been made, but a considerable gender gap persists

Australia has made important progress narrowing the male/female participation gap over the past decade, but there is clear evidence that a considerable gender gap persists. This gap continues to be evident in the under-representation of women on the boards of listed companies, in management roles, in politics, and in industries with empirically higher rates of labour productivity (including STEM).

#### 1. Female representation in corporate management roles

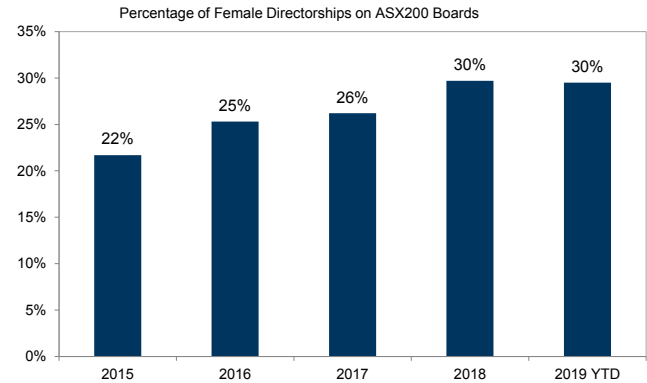
Female representation in corporate leadership has been rising in Australia – female directors make up ~30% of the ASX200 and around 30-50% of new Board appointments are women (Exhibits 3 & 4). However, most of this progress in female leadership has been made in the largest listed corporations where public disclosure and scrutiny is most stringent. Outside these firms, there has been only a very modest increase in the share of female senior leadership in the unlisted space (Exhibit 5).

**Exhibit 2: Australian ranks fairly favourably in terms of female representation in corporate leadership, but this could still be improved**



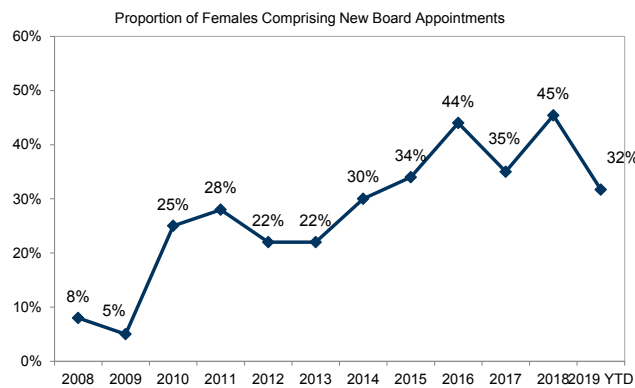
Source: OECD

**Exhibit 3: 30% of ASX200 directors are female**



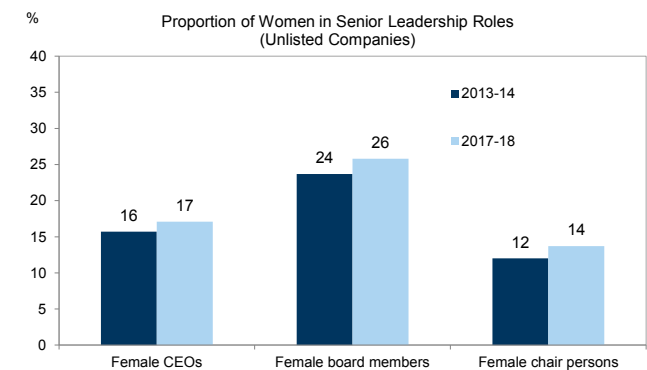
Source: Australian Institute of Company Directors

**Exhibit 4: Around one-third of new director appointments are female**



Source: Australian Institute of Company Directors

**Exhibit 5: Outside of the largest listed corporates, female representation in corporate leadership remains low and has been little changed in recent years**



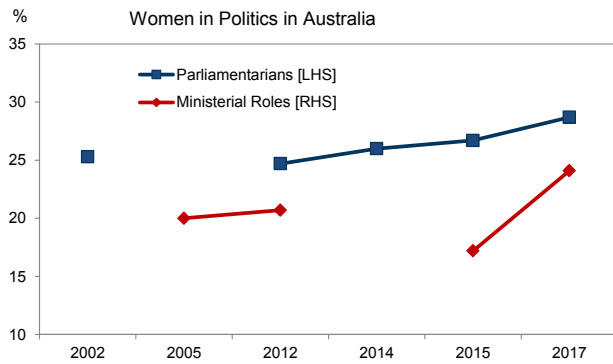
Source: ABS

**2. Female representation in parliament/ministerial positions**

Australian women account for <30% of elected members to parliament and <25% of Government Ministers (Exhibit 6). While these ratios have edged up slightly over recent years, they remain below the OECD average and well below many developed country peers (Exhibit 7).

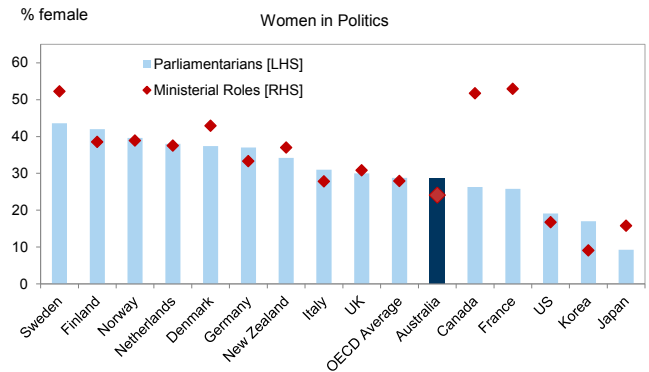
Encouraging more female participation and representation in these public roles is crucial, given the government’s ability to transform policies in key areas such as child care, education and parental leave.

**Exhibit 6: Women make up less than 30% of Parliamentarians and less than 25% of Ministers in Australia**



Source: OECD

**Exhibit 7: Both of these ratios are low compared to OECD peers**

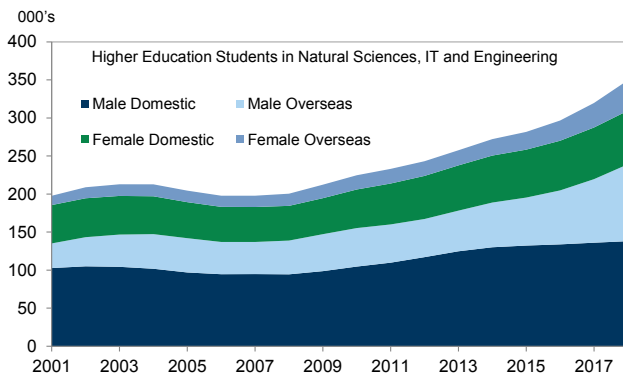


Source: OECD

### 3. Female representation in STEM industries

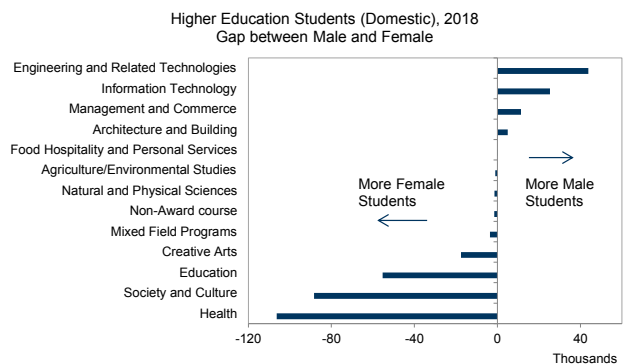
Despite the fact that more Australian women hold university degrees than men and that there has been a sharp rise in overall enrolments in STEM (science, technology, engineering and mathematics; Exhibit 8) disciplines, women remain severely under-represented in STEM (Exhibit 9). We note that men account for the majority of the recent rise in STEM enrolments (mostly foreign students) and Australian women are particularly poorly represented among STEM academics (31%) and especially within their senior ranks (14%)<sup>3</sup>. At one extreme, the share of women in the Information Technology (IT) workforce has not increased since 2015 (28%).

**Exhibit 8: Most of the increase in STEM students has been driven by male and overseas students**



Source: Department of Education and Training

**Exhibit 9: Female students remain vastly under-represented in STEM sectors**



Source: Department of Education and Training

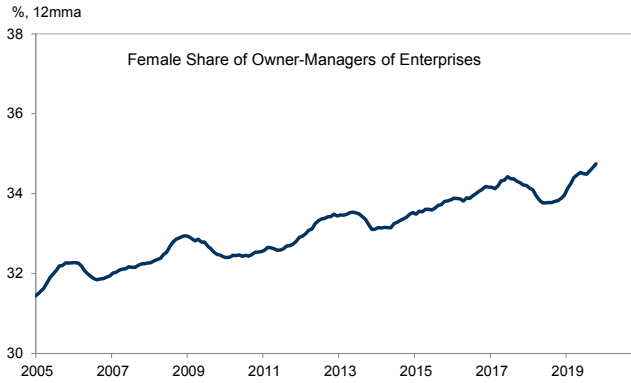
### 4. Female entrepreneurship

In addition to STEM-related education, encouraging female entrepreneurship is also vital given innovation and business dynamism is the key driver of long-run productivity growth. The share of women owner-managers among Australian enterprises has been rising steadily over the past couple of decades (Exhibit 10), but this largely reflects

<sup>3</sup> Workplace Gender Equality Agency, November 2018

relatively strong female employment growth overall, with little change in women’s tendency to become owner-managers. Data on innovation is hard to come by, but we note the share of patents coming from women has gone backwards in Australia over recent years, with the overall rate now below the OECD average (Exhibit 11).

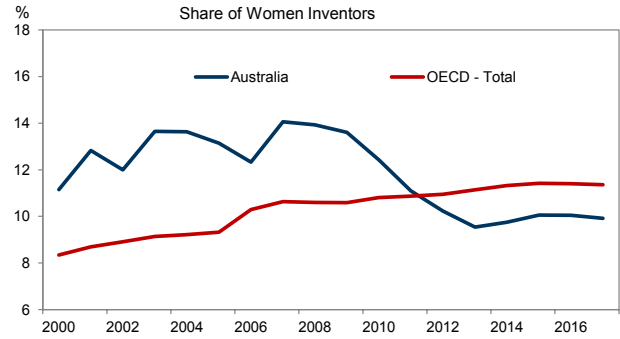
**Exhibit 10: The share of women owner-managers among Australian enterprises has been rising steadily over the past couple of decades**



Source: Goldman Sachs Global Investment Research, ABS

**Exhibit 11: The share of women inventors in Australia has been falling and is now below the OECD**

Share of women inventors as measured by patent counts



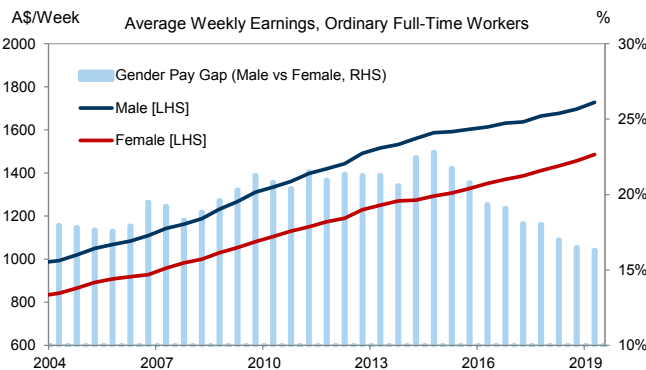
Source: OECD

**This gender gap continues to express itself in significant male/female pay disparities**

One way in which the gender gap continues to express itself is via persistent disparities across gender pay rates and superannuation wealth.

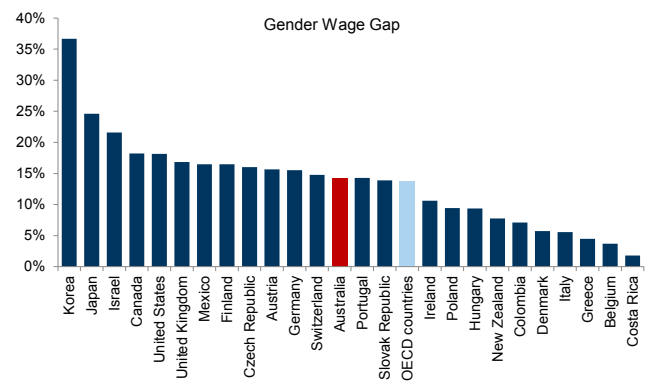
While measuring gender pay gaps is a difficult exercise given the many latent factors that affect workers’ pay, a starting point is to compare the average weekly earnings for ordinary full-time male/female workers. In Australia this ratio has declined only modestly over recent years to 18% and remains above the OECD average (Exhibits 12 & 13). While this wage gap has declined across most sectors over the past decade, we note the gap still tends to be larger in industries with higher average pay (Exhibit 14).

**Exhibit 12: The gender pay gap in Australia has declined in recent years**



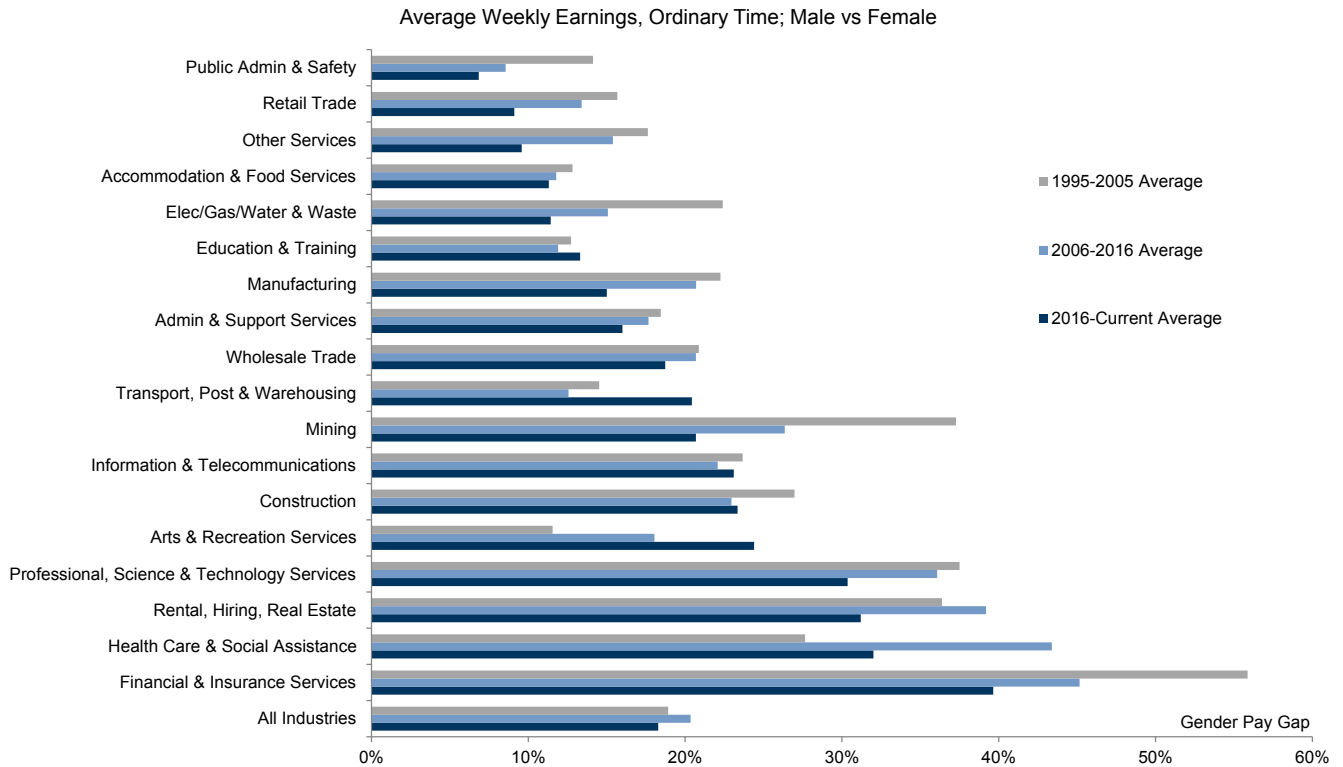
Source: Goldman Sachs Global Investment Research, ABS

**Exhibit 13: The gender wage gap in Australia remains above the OECD average**



Source: OECD

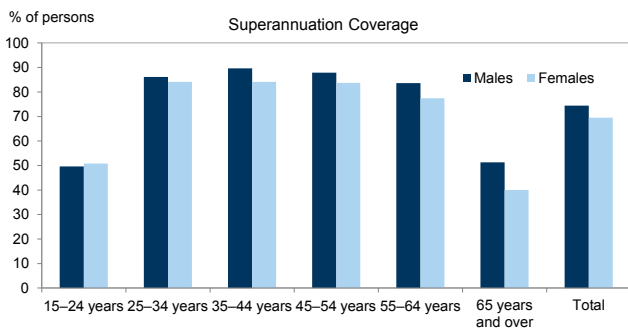
**Exhibit 14: The gender wage gap remains prominent in most industries**



Source: Goldman Sachs Global Investment Research, ABS

Beyond direct income effects, a related and significant gender gap exists across male/female superannuation balances. While Australia’s extensive superannuation system covers both male and female employees fairly equally, the median account balance of female workers is much lower than males – and by as much as ~30-45% for prime-aged workers (Exhibit 16). Moreover, while there is evidence this gap in superannuation balances has narrowed over the longer run, the pace of narrowing seems to have slowed recently (and has even risen in a few age brackets).

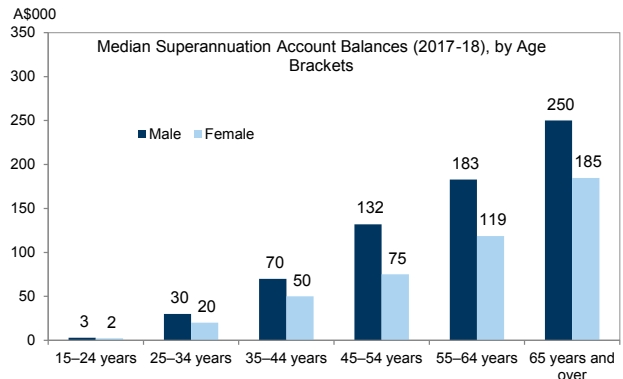
**Exhibit 15: Australia’s extensive superannuation system covers both male and female employees fairly equally**



\* Persons with a superannuation account balance above zero and/or receiving regular income from superannuation and/or who received a lump sum superannuation payment in the last two years.

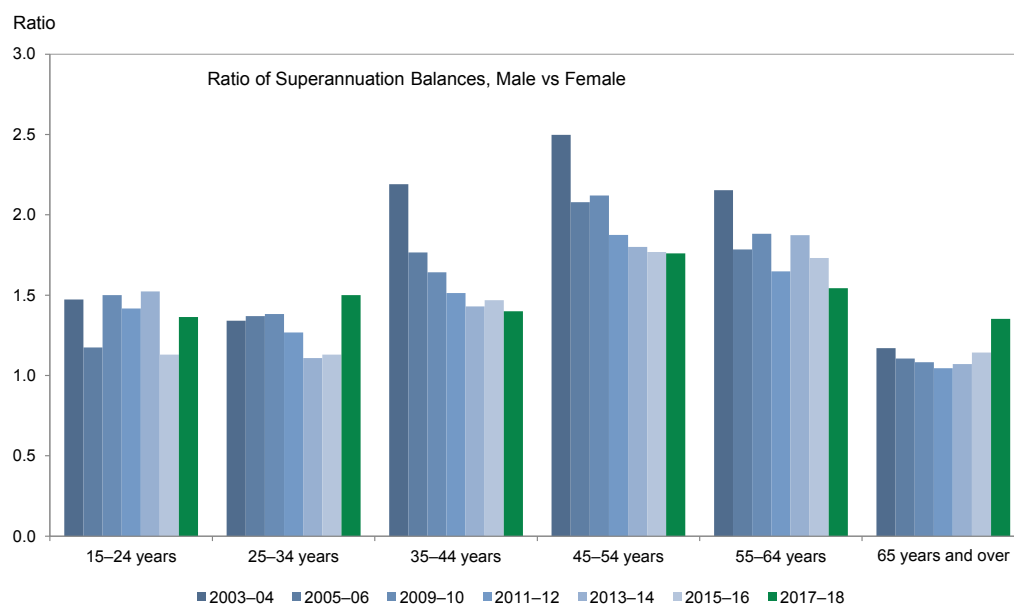
Source: ABS

**Exhibit 16: The median superannuation account balance of female workers is much lower than males**



Source: ABS

**Exhibit 17: While there is evidence this gap in superannuation balances has narrowed over the longer run, the pace of narrowing seems to have slowed recently**



Source: ABS

## Upside From Correcting Imbalances

We see significant economic gains from the continued narrowing in the labour participation gap between female and male workers in Australia. In context, we calculate that halving the gap between female and male labour force participation from around 10ppts to 5ppts – which would be the equal best in the OECD – would boost potential GDP by around 4%, while eliminating the participation gap entirely would boost Australia's potential GDP by around 8%.<sup>4</sup>

In addition to encouraging more female participation at the aggregate level, another potential channel of economic gains is through the rebalancing of the workforce towards industries with higher rates of measured labour productivity. Unlike the aggregate female participation rate, which has risen significantly, males continue to significantly outnumber women in sectors with higher rates of measured labour productivity, including mining, professional, technical & scientific services, wholesale trade and IT & communications services. In contrast, women significantly outnumber men in industries such as education, retail trade and healthcare & social assistance (Exhibit 18).

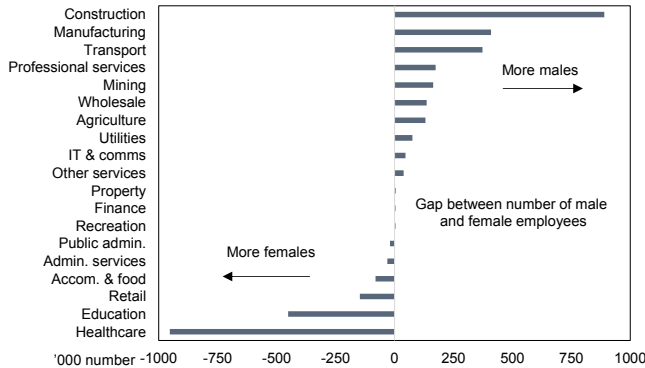
While all industries are important from the point of view of overall social welfare, a rebalancing in this disparity could provide a significant boost to overall labour productivity and ultimately GDP. Indeed, we estimate that shifting each industry's female-to-male employment ratio to be in line with the economy-wide average could boost GDP by up to 10%. While there are many caveats to this sort of calculation, it

<sup>4</sup> The calculation assumes that average hours worked of new entrants to the labour force is equal to economy-wide average hours worked, and that output per hour is unchanged from its current level.



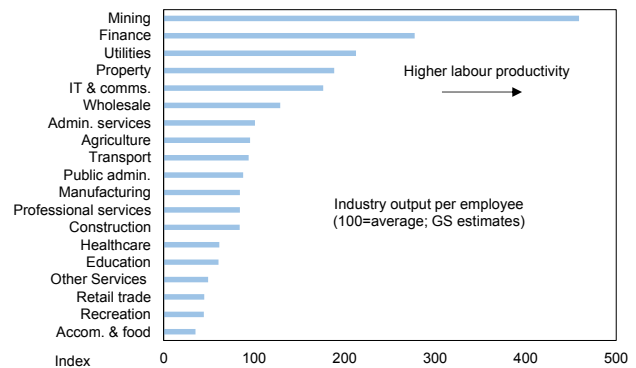
suggests that Australia’s economy stands to realize significant economic gains from boosting female participation in a broader range of industries.<sup>5</sup>

**Exhibit 18: Males significantly outnumber females in sectors such as construction, manufacturing and transport, while the female share of workers is higher in industries such as healthcare and education**



Source: ABS

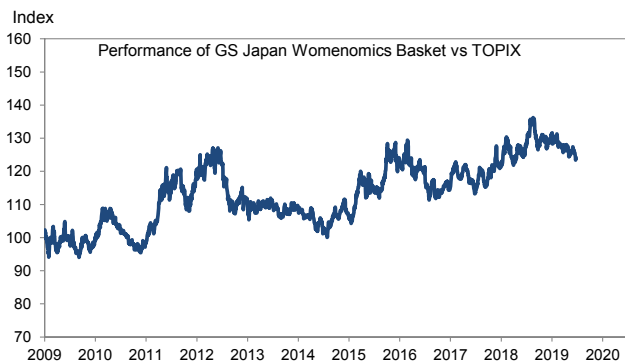
**Exhibit 19: A rebalancing of female employees towards high labour productivity sectors would boost overall productivity and GDP**



Source: ABS

At a more micro level, there is also plenty of overseas evidence that suggests higher female participation improves firms’ economic performance. In particular, companies with higher female leadership representation on average have higher returns on equity and profit margins (Exhibit 21), and it is no surprise that over time these types of companies (as proxied by our Japanese portfolio strategists’ Womenomics basket; Bloomberg ticker GSJPWMN2 Index) outperform the broader stock market (Exhibit 20).

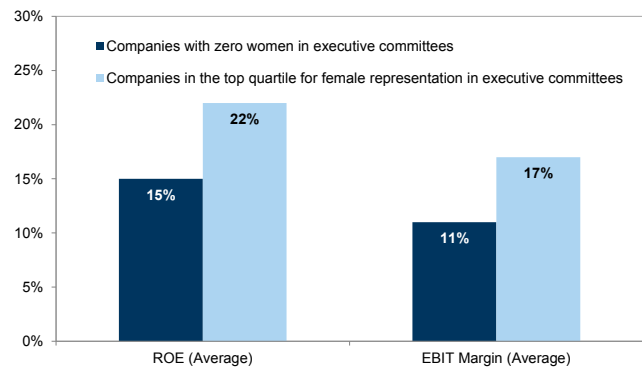
**Exhibit 20: Our Japanese equity strategists’ Womenomics basket has outperformed the TOPIX by ~20% over the past decade**



Source: Goldman Sachs Global Investment Research, Bloomberg

**Exhibit 21: Positive correlation between diverse leadership and business performance**

Gap between companies with high vs zero female leadership representation, 300 companies in 10 countries, 2007-2009



Source: McKinsey

<sup>5</sup> Specifically, this estimate assumes female employment is rebalanced such that each industry’s male-to-female employment ratio is equal to the economy-wide average of 1.1. This increases aggregate employment in male-dominated industries and lowers aggregate employment in female-dominated industries. Assuming labour productivity and average hours worked are unchanged in each industry, we then calculate the overall change in output in each industry given changes to employment. The overall change in output is equal to the sum of the change in each industry. There are several implicit assumptions underlying this calculation, including unchanged capital-per-worker and multi-factor productivity (MFP) in each industry, and we view it as providing an upper bound of the impact rather than a near-term sensitivity.

## Policy Options for Government, Corporations and Society

As emphasized by our [Japanese colleagues](#), further progress improving gender diversity is likely to be accelerated when delivered as holistic package – involving government, corporations and society. What follows is not intended to be an exhaustive list, but a range of policy options we believe worthy of consideration in Australia.

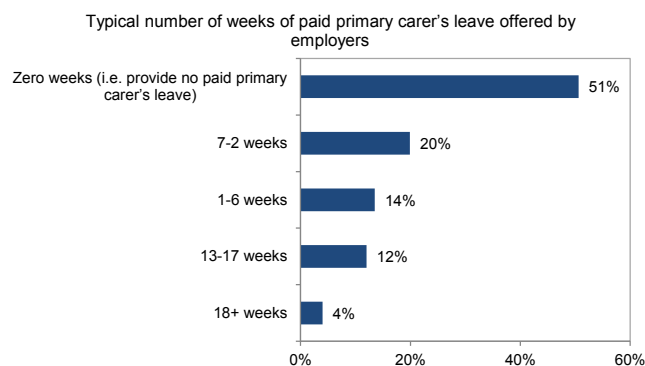
### Governments

#### 1. Paid parental leave

The implementation of Australia’s first government-funded paid parental leave scheme in 2011 – and subsequent enhancement in 2013 – marked major improvements in arrangements for young working families. Currently providing 18 weeks’ pay at the minimum wage for eligible caregivers (and 2 weeks for secondary carers), the scheme has no doubt assisted women to return to work following childbirth.

Even so, the Australian government’s provision of around 20 weeks paid parental leave falls well short of the OECD average (61 weeks; Exhibit 23), as does the government’s public expenditure on paid parental leave (around half the OECD average). The Government’s Workplace Gender Equality Agency also recently reported that most Australian employers do not “top-up” the Government-funded scheme with private money.

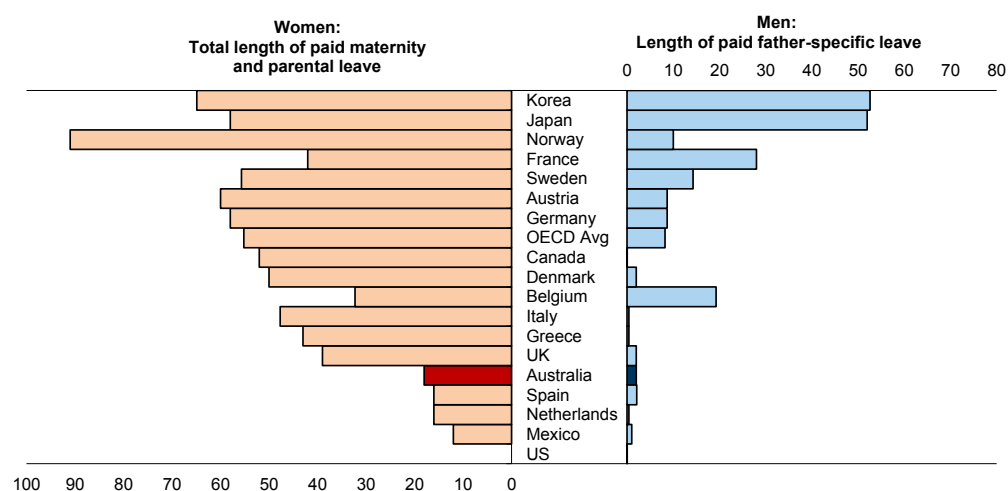
#### Exhibit 22: Most employers in Australia do not offer paid primary carer’s leave



Source: Australia Workplace Gender Equality Agency

**Exhibit 23: Australia's paid parental leave policies fall well-short of the OECD average**

2016, Number of weeks



Source: OECD

**2. Superannuation/tax concessions**

Providing new parents with concessional access to their superannuation and/or personal income tax credits could allow these carers to better smooth their consumption and return to the work force.

We note that there is already a precedent for this style of policy, with the Government's 2018 [First Home Super Saver Scheme](#) allowing first home buyers early access to their superannuation at concessional rates.

Targeted tax incentives that promote flexible work practices and provide support for the costs of domestic caregiving might also be considered.

**3. Affordable child care**

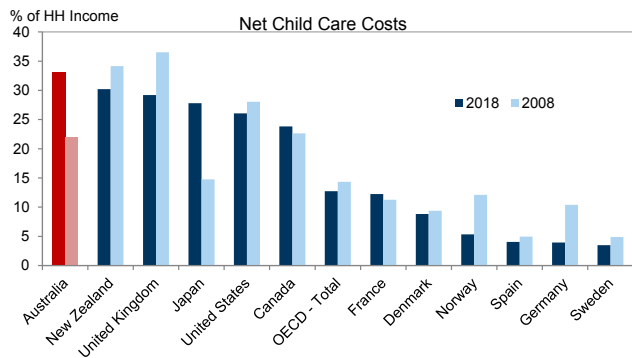
According to the OECD, Australia currently ranks as having the most expensive childcare costs among member countries – at more than twice the OECD average (after accounting for allowances / tax concessions / rebates; Exhibit 24). And these costs have also been rising rapidly. While there have been three major efforts to lower Australian childcare costs (during the GFC and more recently in 2018), increases in child care costs have outpaced the CPI by as much as ~50% over the past decade (Exhibit 25).

While we acknowledge that differences in rebate structures across the world make these kinds of regional comparisons imperfect, at a minimum the data suggests there is some room for improvement when it comes to the affordability of Australian childcare. Looking ahead, we welcome the [ongoing discussion on allowing tax deductions on child care costs](#) – a policy that would leave more than 205k Australian households better off (22.5% of households with children) by an average of A\$618p.a., according to research by the UNSW.<sup>6</sup>

<sup>6</sup> That said, we also recognize the importance of further analyzing how families across different income distributions are affected by these policies – given the recent academic literature that shows the efficiency

**Exhibit 24: Australia has the highest child care costs (as a share of household income) among OECD peers**

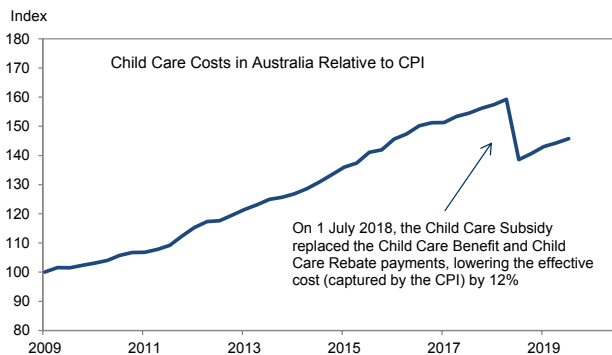
Based on the OECD Tax-Benefit Model. Costs are after any benefits designed to reduce the gross childcare fees.



Calculations are for families with two children aged 2 and 3, assuming parents are aged 40, both working full-time and receive the average wage.

Source: OECD

**Exhibit 25: Increases in child care costs have outpaced the CPI by as much as ~50% over the past decade**



Source: Goldman Sachs Global Investment Research, ABS

**4. Boosts to Entrepreneurship**

Given the relatively low ratio of female entrepreneurship in Australia, consideration might be given to policies that address the social safety net for women entrepreneurs to encourage more risk-taking.

Research in Europe suggests that the low ratio of female entrepreneurship is partly explained by concerns around job security (should the venture fail). To overcome this, the evidence from Canada suggests that extending job-protected leave entitlements for women can significantly raise the ratio of female entrepreneurship. By extending leave entitlements by ~5 months (to one full year), this has led to a 1.8ppt increase in entrepreneurship (versus a 5% base rate of female entrepreneurs prior to the law change) – in context, a 37% increase in innovation rates.

**5. Advancing female opportunities in STEM**

As our Japanese colleagues have recommended, there are opportunities to advance women in STEM by taking concrete steps in several areas, including: i) showcasing female STEM role models such as science and technology entrepreneurs in schools and in the media<sup>7</sup>, and ii) launch STEM mentorship programs in junior- and senior-high schools to help boost interest in science prior to university matriculation, and in order to help women re-enter the workforce more easily.

**6. Gender pay gap and diversity disclosure requirements**

Although a fairly extreme option, we note that there is now some empirical evidence that gender pay gaps tend to narrow when government-mandated reporting improves

and welfare effects of childcare subsidies depends crucially on how the subsidy varies with labour income (see here).

<sup>7</sup> Surveys have found more than 80% of women perceive a lack of female role models as a significant hurdle for gender equality in their field.

transparency.<sup>8</sup>

## 7. A quota system for female participation on Boards

One option that might be considered – and which we recommended a decade ago – is to provide a timetable for increased female participation in Australia’s top 200 boards and executive teams with a minimum quota of 2 female positions per board and an audit on female representation at the executive level. We believe not only that more inclusive decisions may be reached but that the second round impacts on mentoring and visibility of women would encourage a lift in female participation in general and a more even distribution of women across the workforce.

## Corporations

### 1. Encouraging flexible workplace arrangements

Flexible work arrangements are essential and beneficial for individuals returning to work, but there is also empirical evidence of wider societal benefits as women employed in highly flexible roles tend to be more productive than the rest of the working population.<sup>9</sup>

We recommend that employers continue to promote more flexible work arrangements, including job-sharing and telecommuting, and importantly, employees in flexible work arrangements should not be discriminated against in terms of career opportunities or compensation.

### 2. Leaders proactively managing women’s careers & male champions of change

To allow employees to maximize their full potential, companies need to create initiatives that prioritise gender diversity – including recruiting, retention and promotion. Specific policies might include training to identify and remove unconscious biases and encouraging formal female mentoring/sponsorship programs.

In addition to women promoting the diversity agenda, it is also critically important to engage male leaders. Successful initiatives on this front include the “Male Champions for Change” (Australia), the “30% Clubs” (initially launched in the UK), and a “Group of Male Leaders Who Will Create a Society in which Women Shine” (Japan).

### 3. Action on pay equity and gender diversity targets

Recently published data by the Workplace Gender Equality Agency highlights some encouraging evidence of an increase in the share of companies:

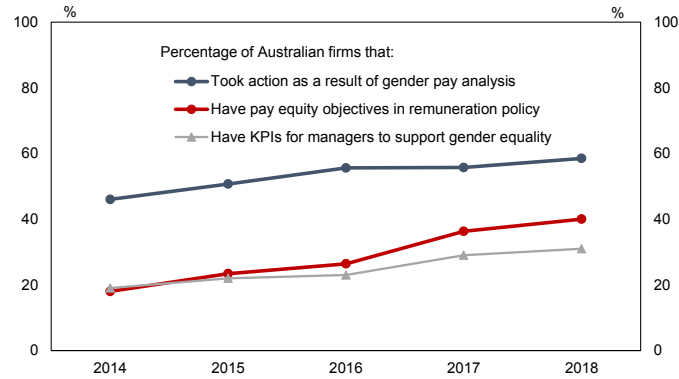
1. conducting analysis on their payroll data for gender pay gaps;
2. taking action as a result of this gender pay gap analysis;
3. incorporating pay equity objectives in their remuneration policies (Exhibit 26).

<sup>8</sup> Gender Pay Gaps Shrink When Companies Are Required to Disclose Them, by Morten Bennedsen, Elena Simintzi, Margarita Tsoutsoura, and Daniel Wolfenzon, in the Harvard Business Review, January 23, 2019. This study was based on Denmark’s wage statistics before and after the introduction of its 2006 legislation, ‘Act on Gender Specific Pay Statistics.’

<sup>9</sup> Amy Poynton and Louise Rolland, July 2013 Untapped opportunity: The role of women in unlocking Australia’s productivity potential.

While high level policies may increasingly be put in place, it is still relatively rare for gender equality strategies to be formally reflected in managers' key performance indicators (KPIs; Exhibit 26). Stronger integration of diversity goals/targets into KPIs is one option to hold management accountable for monitoring progress and reaching these goals.

**Exhibit 26: Stronger integration of diversity goals/targets into KPIs is one option to hold management accountable for monitoring progress and reaching these goals**



Source: Australian Workplace Gender Equality Agency

# Appendix

## Exhibit 27: Women in leadership - the most senior roles are heavily male-dominated in corporate Australia

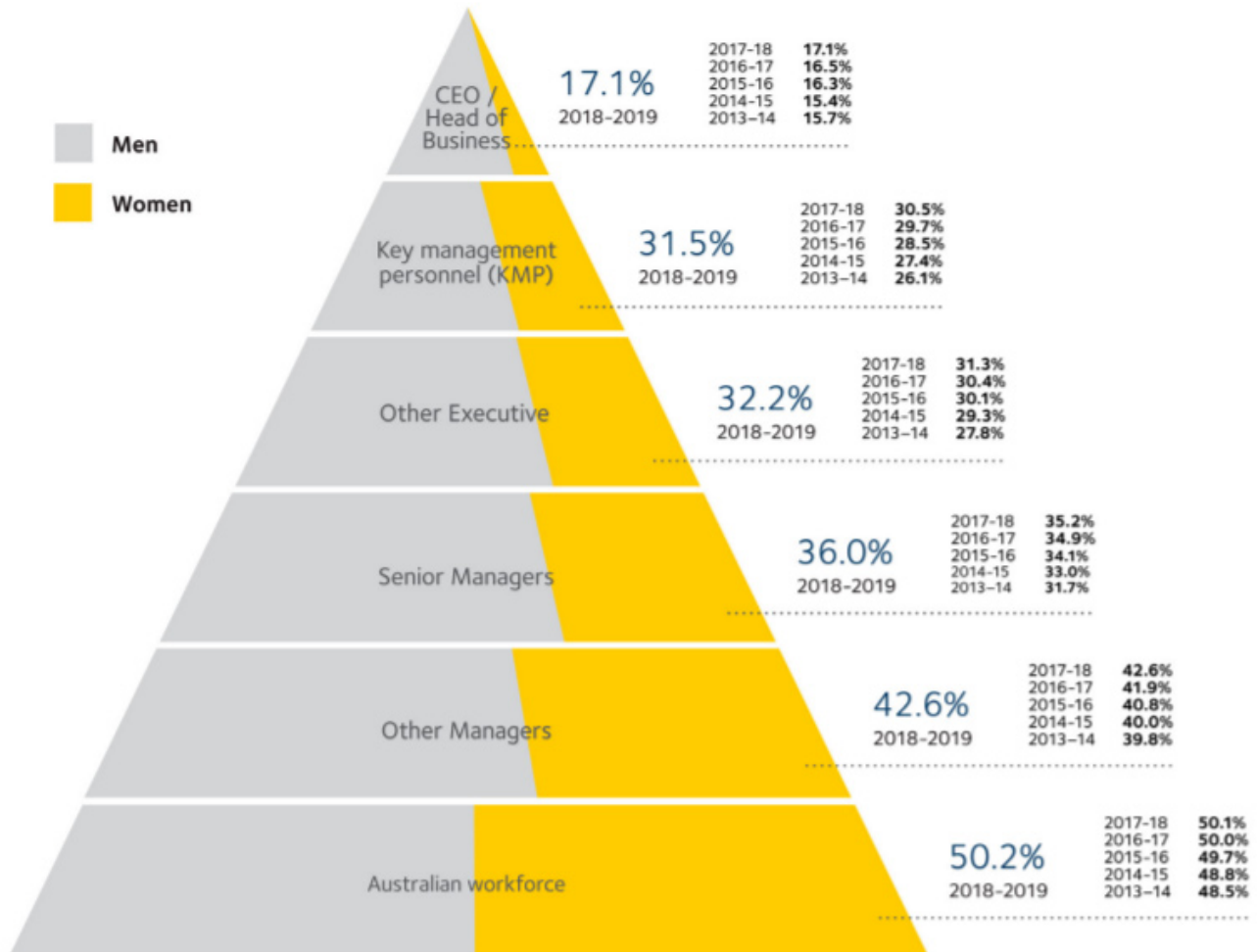
### Women in leadership

#### The most senior roles are heavily male-dominated

The representation of women declines with seniority. However, the representation of women across all manager categories has grown consistently since 2013-14.

**Chart 12**

Proportion of women by management category



Female managers overall **39.4%**  
(up from **35.9%** in 2013-14)

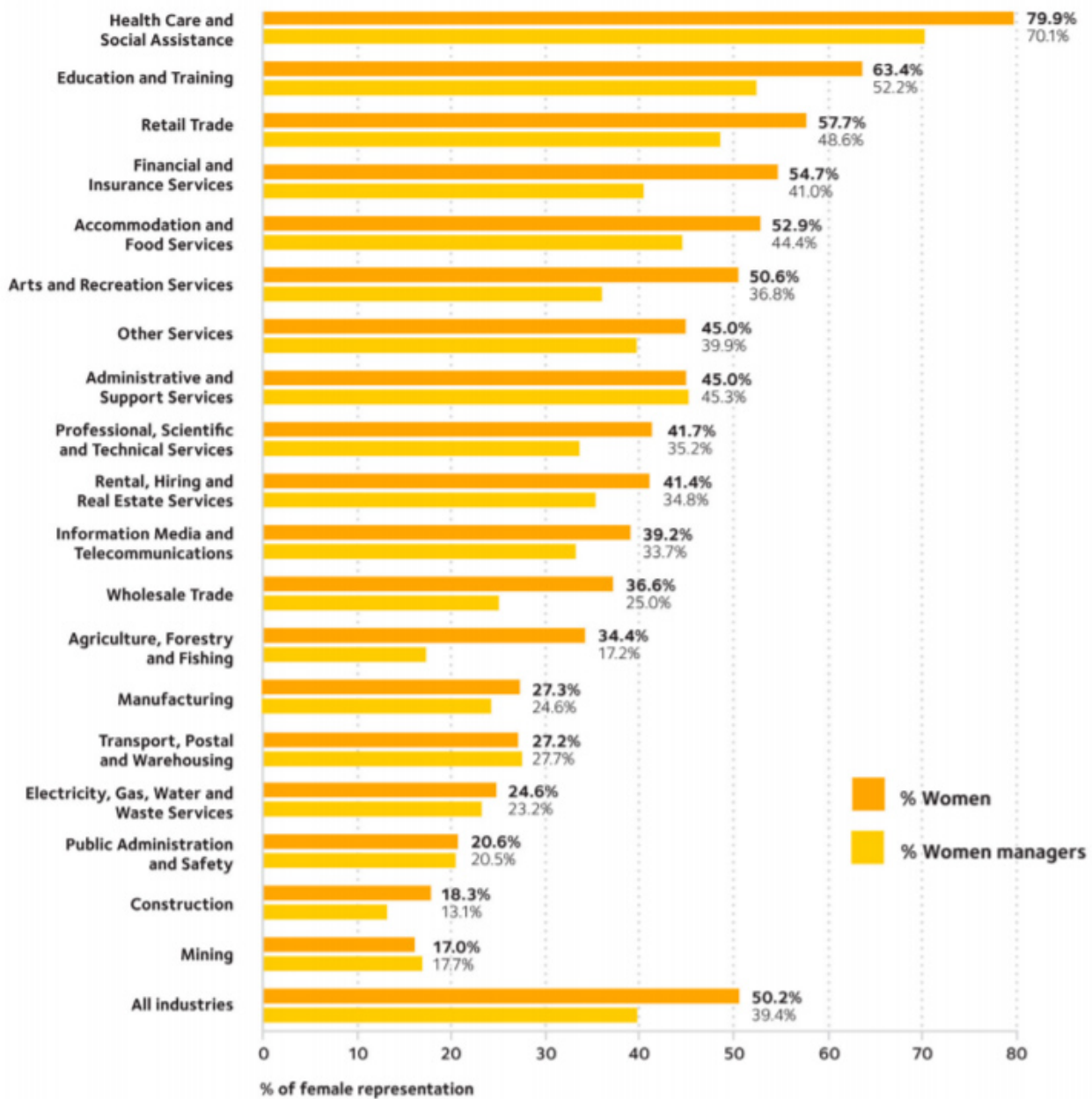
**6.4%** of all managers are employed on a part-time basis

Proportion of women appointed to manager roles  
(including promotions) increased by 0.5pp to **43.8%**

Source: Australian Workplace Gender Equality Agency

**Exhibit 28: Women in corporate leadership, by industry**

Proportion of women employees and representation of women in management by industry



Source: Australian Workplace Gender Equality Agency



# Disclosure Appendix

## Reg AC

We, Andrew Boak, CFA, Bill Zu and William Nixon, hereby certify that all of the views expressed in this report accurately reflect our personal views, which have not been influenced by considerations of the firm's business or client relationships.

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