Economics

Australia's Hidden Resource: The Economic Case For Increasing Female Participation

Chief Economist: Tim Toohey
+61 3 9679 1079
tim.toohey@gsjbw.com

Economist: David Colosimo
+61 3 9679 1085
david.colosimo@gsjbw.com

Economist: Andrew Boak
+61 2 9321 8576
andrew.boak@gsjbw.com
Executive Summary

Government response to skill shortages has been focussed on migration and training...

Australia’s labour productivity growth has been on a steady decline over the past decade. Part of this decline has been attributed to the lack of skilled labour as the economic expansion reached a new record duration in the post-war period. The response by governments has been to lift net international migration levels to unprecedented levels and to boost training initiatives with a particular focus on apprenticeships for the industrial and building sectors.

Closing the male-female employment gap could boost Australian GDP by 11%... or by 20% if the gender productivity gap was also closed

This would help address the problem of pension sustainability and lift savings rates and tax receipts

In this report we argue that an alternative source of highly educated labour is already at Australia’s disposal and with the right set of policy options this pool of labour can be unlocked.

Closing the gap between male and female employment rates would have important implications for the Australian economy. We estimate that closing this gap would boost the level of Australian GDP by 11%. Indeed, much progress in closing this gap has already occurred over the past 30 years with the rise in the female employment rate since 1974 boosting economic activity by 22%. In this respect, Australia is only 2/3rds of the way to unlocking the hidden value of the female labour pool.

Conducting the analysis for other major nations suggest that US GDP could be boosted by as much as 10%, Eurozone GDP by 14% and Japanese GDP by 21%. The experience in Scandinavia suggests that such an outcome is achievable, given the right government policies and a wide cultural acceptance of equal female employment.

However, policies aimed at merely bringing women into the workforce are inadequate. A large gulf exists in the historical measures of male and female productivity growth in Australia. Male productivity has historically averaged over double that of female productivity over the past 30 years. We refuse to believe that a female with the same educational and work experience as a male will be 50% less productive in a similar role. Instead, we find that an important element of gender equality is the dominance of females in low productivity sectors of the economy, particularly health care and training, a bias to clerical roles and a bias to working short hours.

Policies aimed at directing women joining the workforce into more productive sectors of the economy and retaining women in the workforce for longer would narrow or even eliminate the productivity gender gap. The impact upon the level of economic activity of such a change would be profound. On the assumption that females already in the workforce remain in their existing roles, then new female entrants exhibiting equal productivity gains as male workers would have the potential to boost the level of economic activity by over 20%.

Closing the male-female employment gap and boosting female productivity would also help to address the problem of pension sustainability via boosting employment among those of working age (thereby reducing the dependency ratio), lifting household saving rates and lifting taxation receipts for government.
Governments could do much more to close the male-female employment gap including:

i. Incentivising females at higher levels of education to move into courses and career paths beyond education, training, health and social services.

ii. Incentivising employers to keep links with female employees who have left work on parental leave. For instance, topping up the new parental payment for undertaking employer sanctioned training.

iii. Incentivising females to return to the workforce after child birth. Child care, flexible working hours, retraining programs are all important in this regard. Reducing direct child subsidies for those outside of the workforce could be used to fund these initiatives since these payments discourage female labour supply.

iv. Funding educational programs within schools to break stereotypes of females choosing low pay, low hours, clerical or social service roles. Funding education programs in the workplace targeting discrimination, pay equality and reluctance to use flexible working entitlements.

v. 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 better decisions may be reached but that the second round impacts on mentoring and visibility of females would encourage a lift in female participation in general and a more even distribution of females across the workforce.

Progress in this area would both significantly boost potential economic growth and help to solve the looming fiscal burden of the ageing problem.

Women in the Australian Workforce: An Overview

Basic facts

Females represent 50.2% of the Australian population and 45.7% of the workforce. Females worked 7,651,000 hours in the past 12 months or 38.6% of all hours worked and earn 89% of males' income on both an average hourly rate (for non-managerial employees) and full-time earnings basis.

Structure of the workforce

Charts 3 and 4 provide a detailed schematic of the structure of the female and male workforces in 2009. Five key points can be ascertained:

i. Although the male and female working age population is of equal size and the proportion of males and females that work part-time are equivalent, only 40% of females of working age worked the whole year compared to 53% of males.

ii. One-third of females of working age did not work and did not look for work at any time in the past 12 months. This compares with 22% of males.

iii. Female part-time employees appear more stable in their roles than male counterparts with a higher proportion of females who were working part-time not also having to look for work in the past year.

iv. Male part-time workers when out of work are more likely to spend some of that time disengaged from the workforce and not actively seek out work.

v. There is no evidence that females are less employable with 0.7% of both the male and female labour force who were actively seeking work all year unable to secure employment.
Chart 3: Structure of the Female Workforce

Females aged 15 and over

<table>
<thead>
<tr>
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<th>Worked for part of the year</th>
<th>Did not work during the year</th>
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<table>
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<td>283,400</td>
<td>1,774,100</td>
<td>26,100</td>
<td>2,825,800</td>
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<td>3.3%</td>
<td>20.8%</td>
<td>0.2%</td>
<td>33.2%</td>
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<th>Looked for the whole year</th>
<th>Spent some time not looking for work</th>
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<td>263,100</td>
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<td>3.1%</td>
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<th>In the labour force for none of the year</th>
</tr>
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<tbody>
<tr>
<td>3,681,300</td>
<td>2,016,100</td>
<td>1,825,800</td>
</tr>
<tr>
<td>43.2%</td>
<td>23.7%</td>
<td>33.2%</td>
</tr>
</tbody>
</table>

Source: ABS, GSJBW Research estimates

Chart 4: Structure of the Male Workforce

Males aged 15 and over

<table>
<thead>
<tr>
<th>Worked the whole year</th>
<th>Worked for part of the year</th>
<th>Did not work during the year</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,384,600</td>
<td>1,924,200</td>
<td>1,044,100</td>
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<tr>
<td>52.5%</td>
<td>23.0%</td>
<td>24.9%</td>
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<table>
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</thead>
<tbody>
<tr>
<td>643,700</td>
<td>1,280,500</td>
<td>212,700</td>
<td>1,831,400</td>
</tr>
<tr>
<td>7.7%</td>
<td>15.3%</td>
<td>2.5%</td>
<td>21.9%</td>
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<table>
<thead>
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<th>Spent some time not looking while not working</th>
<th>Looked for the whole year</th>
<th>Spent some time not looking for work</th>
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</thead>
<tbody>
<tr>
<td>212,700</td>
<td>431,000</td>
<td>60,800</td>
<td>151,900</td>
</tr>
<tr>
<td>2.5%</td>
<td>5.2%</td>
<td>0.7%</td>
<td>1.8%</td>
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<table>
<thead>
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<th>In the labour force for part of the year</th>
<th>In the labour force for none of the year</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,825,800</td>
<td>1,695,700</td>
<td>1,831,400</td>
</tr>
<tr>
<td>57.8%</td>
<td>20.3%</td>
<td>21.9%</td>
</tr>
</tbody>
</table>

Source: ABS, GSJBW Research estimates
Hours worked

A distinguishing feature of the female labour force since the mid-1980's, when the data first became available, is that during sharp economic downturns total female hours worked tended to decline far less than total male hours worked. Nevertheless, on an hours worked per person employed basis the male and female experience is similar.

![Total Hours Worked Growth](chart5.png)

![Hours Worked Per Employed Person](chart6.png)

Females are less likely to lose their job during a downturn

This implies that during economic downturns male employees are more likely to lose their jobs than female employees which can be seen from the greater volatility of male employment growth and the unemployment rate during the economic contraction cycles. This is despite there being no material difference in volatility of employment or the unemployment rate between the genders during the economic expansion phases.

![Unemployment Rate](chart7.png)

![Employment Growth](chart8.png)

There are 2 main reasons for this stability in female employment:

- **because of more flexible work arrangements and employment in less cyclical industries**

  - The high concentration of female employment in part-time roles which tend to provide more flexible scheduling. That is, part-time employees are likely to accept fewer hours of work during a downturn in return for remaining employed. In contrast, full-time employees are more likely to be retrenched.
ii. The high concentration of females working in the non-cyclical sectors of health care and social assistance and education and training (30% of all female hours worked). Combined with the retail industry, 44% of total female hours worked are concentrated in just 3 industries.

Occupation

Females are more likely to be employed in clerical or 'vocational' roles...

...and 50% less likely to be in a management position...

In addition a female is approximately 50% less likely to be employed as a manager. This is despite females being equally likely to be in a full-time role in a professional capacity.
Moreover, despite the number of female payroll employees being only slightly less than the number of male payroll employees, females are 50% less likely to be an owner manager of an incorporated or unincorporated enterprise.

Education

Females are more likely to attain a higher level of education

Although females demonstrate a materially lower participation rate in the workforce, females in Australia are more educated than their male counterparts, particularly younger females. Young Australian females not only demonstrate higher educational attainment than their mothers, the number of females vastly exceed that the number of males completing year 12.
Female v Male Educational Achievement

Importantly, at higher levels of education females are just as likely as men to complete a post graduate qualification and more likely than males to achieve a bachelor degree and advanced diploma.

Female v Male Postgraduate Education Achievement

Despite this higher level of educational attainment the major issue facing the employment market is the extraordinary over representation of females with higher degrees focusing their talents in just two industries: health care and social assistance and education and training. Females with high levels of academic qualifications are especially under represented in professional, scientific and technical industries as well as manufacturing and construction industries.
Income disparities

Females are persistently underpaid relative to males

The most alarming aspect of comparison between the male and female labour pools is the persistent underpaying of women relative to men. Amazingly, the disparity of income between male and females has deteriorated in many industries over the past 14 years.

As the chart below highlights, young females are up to 5 times more likely to have average weekly income of less than $150 per week and twice as likely to have average weekly income less than $600 per week.

In the prime working age brackets of 35-64 years the number of females earning above $1,300 per week are less than half that of their males colleagues. Above $2,000 a week the proportion slips to less than 25%.
Despite higher educational attainment and the dominance of females in 3 main industries, there is not a single industry in Australia that females are paid more than males. This is evident regardless of whether the comparison is done on the basis of aggregate hourly earnings or on the basis of hourly earnings for full-time employees.

Females earn 11% less than males on average, are paid less than males in every industry and in many industries the gender pay gap has widened in the past 14 years.

Finance is the industry with the widest gender pay gap.

On average females are likely to earn 11% less than males in non-managerial roles per hour based on 2008 data. While this is a marked improvement on the 23% gap recorded in 1994, genuine improvement in hour pay rates was recorded in just 3 industries, accommodation, café and restaurants, education and transport and storage.

Indeed, significant deterioration in female earnings per hour relative to males has been recorded through the 1994 to 2008 period. The industries where women have been most disadvantaged in descending order are:

- Finance and insurance (paid 27% less than males)
- Health and community services (23%)
- Mining (22%)
- Property and business services (21%)
- Personal and other services (18%)
- Construction (17%)
- Cultural and recreational services (13%)
- Communication services (13%)

Rectifying these imbalances would present a strong economic incentive for females to train in disciplines that are less vocational in nature and more career orientated, enter and maintain attachment with the workforce,

The gender productivity conundrum

As mentioned above, Australia’s labour productivity performance this decade has been poor by historical comparison. This affliction has affected female and male employees alike. Most analysts have put this down to the observation that the lower the unemployment rate the lower the quality of the remaining labour pool to draw upon. That is, the marginal product of labour declines in tandem with a declining unemployment rate.

Improving female productivity could help alleviate labour market shortages

A lack of spare capacity in the overall economy suggests that this is not a problem that can be navigated easily. However, as charts 19 and 20 illustrate, policies directed at lifting female productivity in the workforce could be an important micro economic reform in its own right that would assist in alleviating labour market stresses as the recovery gains momentum.
A successful set of policy initiatives that lifts female productivity growth from the historic average of 0.9%pa into alignment with the historical average for male productivity growth of 2.1%pa would generate dramatic economic benefits for the Australian economy. These would include:

- Lower average interest rates over the course of the economic cycle via improved labour force capacity.
- Higher household income, with positive second round impacts for final demand.
- A reduction in public sector liabilities from an aging population. Increased female participation and employment would boost to superannuation savings and provide a marked reduction in the dependency ratio as the number of families dependent upon the aged pension would decline. Higher female income would also boost income tax received by government.
- The addition of more females in the labour force across a broader range of industries may also help unlock synergies between capital and labour and boost Australia’s multifactor productivity. As chart 23 suggests, a boost to multifactor productivity by using existing factor of production more effectively holds out the promise of a large uplift in economic activity.

Increasing female participation across industries may also help reverse the systemic decline in multifactor productivity.
The drivers of employment growth: past and present

In order to better understand the forces determining female employment growth we have deconstructed employment growth into its 3 primary drivers: population growth, the participation rate and the employment rate (i.e. 1 - the unemployment rate).

Chart 24 shows the evolution of these forces over the current decade with a strong base being provided by underlying population growth, a rise in the employment rate through the decade with the exception of the 2000-01 and 2008-09 economic slowdowns and an important surge in the participation rate through the 2003 to 2007 period.

While these observations will surprise few people, when the analysis is split by gender a very different story can be told.

The driving forces behind male and female employment growth are remarkably different.

The driving forces behind female and male employment growth are remarkably different. Putting aside male and female population growth being virtually identical, male employment growth has come almost exclusively via a rising employment rate. In contrast, female employment growth has overwhelmingly been driven via a rising female participation trend.
While policies designed to lift female participation certainly have merit, the easier gains on this front may have already been achieved. For each incremental lift in the participation rate the incentives will need to be more attractive. Policies such as:

- Increased child care subsidies. Over 2.5 million females and 1.8 million males currently provide unpaid for childcare for their own or others’ children. Over 400,000 females in prime working age could be released to the workforce if the number of females providing unpaid childcare moved into alignment with males.

- More flexible work arrangements (e.g. flexible hours, ability to work from home). Acknowledging that that the number of females and males not providing unpaid child care spikes after the age of 45, the challenge for policy makers is to keep younger individuals attached to the workforce while providing care for children.

- Equal pay for women, acting as a strong economic incentive for women to enter the workforce.

Policies have been attempted in Australia to facilitate some of these aims; however, on the basis of the evidence presented above more can be done to lift female participation in the workforce. Thus far policy action has been more piecemeal rather than a uniform strategy to increase female engagement with the workforce. Indeed, increases in family support payments this decade have vastly exceeded the funds dedicated to increasing female participation and may be acting as a strong disincentive to seek employment. The policy approach to female employment should not be one dimensional. As the decomposition of male employment shows, lifting the female employment rate also holds out the promise of providing a meaningful contribution to economic activity.
The economic benefits of lifting the female employment rate

Employment rates differ substantially across countries. The proportion of 15-64 year olds in employment in Italy is just 46% and in France it is 52.1%. This compares with rates of 64.5% in the Netherlands, 64.2% in Canada and 63.8% in Australia. Although economists have long pondered over the causes of low European employment rates than on any other economic issue facing Europe, the role that gender inequality plays in driving these differences is not widely appreciated.

While the total employment rate in the Eurozone is substantially lower than in the US, UK and Australia, this gap becomes a gulf when female employment rates are considered in isolation. Female employment rates in Italy stand at just 35%, Japan is just 46% and France 47%. The gap between female employment in the Mediterranean and Scandinavian countries is a massive 20-25pp.

Closing the gap between male and female employment rates would boost GDP significantly. Were Italian female employment to rise to the level of male employment, then the level of GDP (assuming everything else equal) would be boosted by 24%. For Japan, GDP would be 21% higher, Germany 12%, France 11%, and for the UK and Australia the boost would be 11%. The boost in Sweden would be in the order of 6% given their prior success in narrowing the female employment rate gap. These international estimates are similar to the results found in Goldman Sachs' Global Economic Paper No. 154 "Gender Inequality, Growth and Global Ageing" (2007).
Indeed, much progress in closing this gap has already occurred over the past 30 years with the rise in the female employment rate since 1974 boosting economic activity by 22%. In this respect, Australia is only 2/3rds of the way to unlocking the hidden value of the female labour pool.

These estimates assume that raising female employment would leave average productivity (output per hour) and average hours worked unchanged, but it is probably unrealistic to assume that everything else would be equal in this way. First, raising the employment rate (for males or females) tends to lower overall productivity, because it reduces the capital-to-labour ratio and new hires typically have fewer work-related skills than those already in employment. Second, the ability to work on a part-time basis appears to be one of the key factors in attracting females back into work after child birth, so policies designed to boost female employment could also result in a decline in average hours worked. Empirical estimates that allow for the decline in average productivity would still yield a meaningful 8% boost to the level of Australian GDP if achieved.

Nevertheless, a distinction needs to be made between the average impact on productivity across the existing workforce and the marginal impact from new female entrants. The combined impact of higher educated female new entrants moving into a wider range of industries, more career-orientated roles and given the correct incentives to re-engage with the workforce after childbirth may eliminate the impact on aggregate productivity through time.
The economic benefits of redressing the balance of power

Australia’s female representation at board and senior executive level is low in absolute terms and relative to peer countries.

Females’ share of workforce, educational attainment, share of wallet argues for increased representation.

The dominance of white males at board level and senior executive levels in the US, UK, Canada and Australia is an historical fact. Although some progress has been made over the last 20 years, the number of females at board level for Fortune 1000 companies in the US in 2008 stood at just 11% (Catalyst census figures). This compares with just over 8% in Australia. In fact, Australia trails the US, UK, South Africa and NZ in terms of the percentage of women in senior executive or board member roles.

Since women represent half the workforce, over half the number of year 12 completions, over half the number of higher education graduates, comprise at least 50% of all consumer spending decisions and via their increased participation in the workforce are shaping the economic landscape by their consumer preferences. It stands to reason that the number of female CEOs and board members should be dramatically lifted on the basis of providing a better match to the economic and workforce representation of females.

![Females in Positions of Power](chart)

There is an emerging body of evidence that companies with higher female management representation deliver better corporate governance and profit outcomes.

However, there is an emerging body of evidence that a higher representation of females on boards improves corporate governance results (see Conference Board of Canada May 2002) and improves corporate profitability. For example, a 19-year study of 215 Fortune 500 firms by Roy Adler of Pepperdine University California showed a strong correlation between a strong record of promoting women into the executive suite and high profitability. Three measures of profitability were used to demonstrate that the 25 Fortune 500 firms with the best record of promoting women to high positions are between 18 and 69 percent more profitable than the median Fortune 500 firms in their industries.

The role of public policy

Policies directed at increasing the female employment rate should be seen as separate to policies directed at lifting the female participation rate and very different from family payments policies.

Recent family payments policies have done little to increase female participation or productivity.

For instance, chart 35 highlights that female productivity has tended to decline coincident with spikes in the birth rate. However, it needs to be kept in mind that the spike in the birth rate followed the 2004-05 Federal Budget, which delivered the biggest boost to family payments on record.
The 2004-05 family payment initiatives include:

- The introduction of a $3000 maternity payment from 1 July 2004 for each new born child at a cost of $2.7bn over four years.
- An increase in to the Family Tax benefit (A) of $600 per child with a reduction in the taper rate from 30 cents in the dollar for each additional dollar of income to 20 cents, at a cost of $11.7bn over five years.
- An additional upfront $600 payment per child by the end of this year at a cost of $2.2bn.
- An increase in the income test thresholds and a reduction in the taper rate of Family Tax Benefit (B) from 30% to 20% at a cost of $1.7bn over the next four years.

The impact of this policy has been to boost birth rates and reduce female engagement with the workforce. Subsequent budgets did little to boost female productivity or female participation.

The 2005-06 Budget focus was to incentivise people on welfare into the workforce. The Welfare to Work package costs the government $3.6 billion over four years included a range of initiatives and rules to assist and encourage participation in the workforce, including:

- $316 million will be invested for work capacity arrangements to provide accurate assessments and referrals to appropriate services to determine who should have an obligation to seek work;
- $681 million over four years for job network, reflecting extra places for jobseekers and new services;
- $266 million to child care over the next four years; and
- $943.3 million over five years to enhance Newstart Allowance.

The 2006-07 Budget again increased family payments announcing:

- Eligibility for the maximum rate of Family Tax Benefit Part A extended to families with an annual income of up to $40,000.
- The large Family Supplement of $248 a year will be extended to eligible families with 3 children.

The 2007-08 Budget did provide some meaningful incentives to increase female participation. In particular:

- The rates of Child Care Benefit increased by 10 per cent on top of annual indexation. This increased the maximum rate of assistance from $2.96 per hour to $3.37. For a family on the maximum rate with one child using 40 hours of care per week in a Long Day Care centre, CCB assistance increased from $118.40 to $134.80 per week, an increase of $16.40.
- Families able to receive their Child Care Tax Rebate — up to a maximum of $4,200 per child — as a direct payment through Centrelink shortly after the financial year in which they incur child care costs. Total cost of $1.9 billion over five years.
- $549 million over four years to first and second year apprentices in skill-shortage trades for an additional tax exempt payment of $1,000 as a wage top-up for those under 30 years of age and, regardless of age, a $500 fee voucher to help offset fees.

However, the government also provided further benefits to families including an increase in the dependent spouse rebate to $2,100 (up from $1,655) for the 2007-08 financial year and beyond. This increase benefited taxpayers with a dependent spouse, who do not have a dependent child. Total cost $425 million over 4 years.
The 2008-09 Budget again provided a mix of increasing family payments and increasing funding for childcare. Specifically the policies included:

- Families who receive Family tax benefit Part A will be able to claim the Education Tax Refund (ETR) from 1 July 2008. Maximum claims are $375 for each primary school child and $1,500 for each secondary school child - costing $4.4 billion over 4 years.
- The Child Care Tax Rebate (CCTR) is to be increased to 50% (from 30%) at a cost of $1.6bn over 4 years - the cap on the amount that can be paid each year will also be lifted to $7,500 per child (from $4,354).

The 2009-10 Budget increased funding for jobs training ($1.5 billion spending over 5 years) with a focus on those likely to be affected by the global recession and in perhaps the biggest step to boosting female participation to date introduced paid parental leave.

Paid parental leave, to come into force in January 2011, will pump $731 million over five years into a scheme under which stay-at-home parents will be paid the equivalent of the minimum wage, now $544 a week, for 18 weeks after the birth of a child.

The payment will be available to people with an income of less than $150,000 in the previous financial year and who have been in paid work for at least 10 of the 13 months prior to the birth of a child, for at least 330 hours, or a rough average of a day a week. In theory, the payment should encourage engagement with the workforce in the year ahead of having a child and encourage re-entrants to the workforce prior to the birth of subsequent children.

Paid parental leave and the lifting of the childcare rebate are without doubt the biggest policy developments that should entice higher female participation and a lift in the female employment ratio.

Looking forward, bigger policy strides need to be made in relation to the female labour pool. From our perspective key initiatives include:

i. Incentivising females at higher levels of education to move into courses and career paths beyond the traditional industries of education, training, health and social services.

ii. Incentivising employers to keep links with female employees who have left work on parental leave. For instance, topping up the new parental payment for undertaking employer sanctioned training.

iii. Incentivising the primary care giver to return to the workforce after child birth or acting as the carer for sick or impaired family members. Child care, flexible working hours, retraining programs are all important in this regard. Reducing direct child subsidies for those outside of the workforce could be used to fund these initiatives since these payments tend to discourage female labour supply.

iv. Funding educational programs within schools to break stereotypes of females choosing low pay, low hours, clerical or social service roles and males considering roles outside of industries historically dominated by males. Funding education programs in the workplace targeting discrimination, pay equality and the stigma attached to using flexible working entitlements.

v. Provide of timetable for increased female participation in Australia’s top 200 boards and executive teams with a minimum quota of 2 females positions per board and an audit on female representation at executive level. In addition, individual firms can incentivise managers to consider gender diversity as part of their key performance criteria. We believe that not only better decisions may be reached but the second round impacts on mentoring and visibility of females would encourage a lift in female participation in general and a more even distribution of females across the workforce.

Progress in this area would both significantly boost potential economic growth and help to solve the looming fiscal burden of an ageing problem.

The biggest policy developments without doubt have been the boost to childcare funding and the introduction of paid paternal leave from 2011.

In order to fully capture the economic benefit from the female labour pool we recommend policy makers adopt some further initiatives.
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Investment Research Team

HEAD OF RESEARCH
Alastair Hunter +61 3 9679 1234

AUSTRALIA

MACRO
Strategy
ChrisPidcock +61 3 9679 1862
Hamish Tadgell +61 3 9679 1124
Jien Goh +61 3 9679 1855
Economics
Tim Toohey +61 3 9679 1079
David Colosimo +61 3 9679 1085
Andrew Boak +61 2 9321 8576

Environmental, Social and Governance
Andrew Gray +61 3 9679 1435

Quantitative
Matthew Ross +61 3 9679 1616
Sam Ferraro +61 3 9679 1123
Alistaire Paterson* +61 3 9679 1579
Alain LeBel* +61 3 9679 1562

COMMUNICATIONS, MEDIA, ENTERTAINMENT
Telecommunications
Christian Guerra +61 3 9679 1302
Raymond Tong* +61 3 9679 1359

Media/News Corporation
Christian Guerra +61 3 9679 1302
Adam Alexander +61 3 9679 1451
Owen Birrell* +61 3 9679 1217

Gaming
Adam Alexander +61 3 9679 1451
Raymond Tong* +61 3 9679 1359

CONSUMER
Beverages
Ian Abbott +61 3 9679 1050
Andrea Chong* +61 3 9679 1126

Retail, Food
Phillip Kimber +61 3 9679 1128
Gabriel Wilson-Otto* +61 3 9679 1069

HEALTHCARE
Ian Abbott +61 3 9679 1050
Andrea Chong* +61 3 9679 1126

FINANCIALS
Banks
Ben Koo +61 2 9321 8543
Elizabeth Rogers* +61 2 9321 8560

Insurance/Diversified Financials
Ryan Fisher +61 2 9321 8857
Ingrid Groer* +61 2 9321 8563

INDUSTRIALS
Building Materials, Chemicals, Agriculture
Matthew McNe +61 3 9679 1426
James Hanham* +61 3 9679 1115

Engineering & Construction
Chris Savage +61 2 9321 8513
Nathan Reilly* +61 2 9321 8546

Paper & Packaging, Steel, Transport
Andrew Gibson +61 3 9679 1122
Andrew McCusker* +61 3 9679 1902

INFRASTRUCTURE & UTILITIES
Infrastructure
Jonathan Collett +61 3 9679 1989
Roy Gilmore* +61 3 9679 1429

Utilities
Kynwyn Strong +61 3 9679 1140
Roy Gilmore* +61 3 9679 1429

REAL ESTATE
Simon Wheatley +61 2 9321 8619
Peter Zuk +61 2 9321 8719

RESOURCES
Strategy & Commodities
Malcolm Southwood +61 3 9679 1647
Paul Gray +44 20 7552 0571

Energy
Aiden Bradley +61 2 9321 8635
Mark Wiseman* +61 2 9321 8938

Base/Precious Metals
Ian Preston +61 3 9679 1453
Andrew Quail* +61 3 9679 1565

BHP/RIO/Coal/Uranium
Neil Goodwill +61 3 9679 1778
Roscoe Widdup* +61 3 9679 1103

EMERGING COMPANIES
George Batsakis +61 3 9679 1245
Chris Savage +61 2 9321 8513
Jim Godsil +61 3 9679 1706
Nathan Reilly* +61 2 9321 8546
Will Charleston* +61 3 9679 1813

NEW ZEALAND
HEAD OF RESEARCH (NZ)
Marcus Curley +64 9 363 1916

Leisure & Tourism, Healthcare, Transport, Services, Property
Marcus Curley +64 9 363 1916

Manufacturing, Primary, Beverages, Financial Services/Investment
Adrian Allbon +64 9 357 3296

Building Materials, Infrastructure & Utilities, Age Care, Energy
Matt Henry +64 9 357 3203

Telecommunications, Media, Technology, Manufacturing
Tristan Joll +64 9 357 3281

Retail, Energy, Property
Buffy Gill +64 9 357 3253

Equity Strategy & Economics
Bernard Doyle +64 9 357 3297

Assistant Analyst
Michael Kenealy* +64 9 357 3206

Goldman Sachs JBWere Offices
Melbourne
101 Collins Street, Melbourne, Victoria, 3000
Tel: +61 3 9679 1111 Fax: +61 3 9679 1493

Sydney
Level 42, Governor Phillip Tower,
1 Farrer Place, Sydney, NSW, 2000
Tel: +61 2 9321 8777 Fax: +61 2 9321 8500

Brisbane
37th Floor, Riverside Centre,
123 Eagle Street, Brisbane, QLD, 4000
Tel: + 61 7 3258 1111 Fax: +61 7 3258 1112

Adelaide
45 Pirie Street, Adelaide, South Australia, 5000
Tel: +61 8 8407 1111 Fax: +61 8 8407 1112

Goldman Sachs JBWere Inc.
Level 44, BankWest Tower,
108 St George’s Terrace, Perth, Western Australia, 6000
Tel: +61 8 9422 3333 Fax: +61 8 9422 3399

Canberra
60 Marcus Clarke Street, Canberra, ACT, 2600
Tel: +61 2 6218 2000 Fax: +61 2 6218 2001

London
Goldman Sachs JBWere (UK) Limited,
Level 7, Daniel House, 133 Fleet Street, London, EC4A 2BB
Tel: +44 20 7774 2002 Fax: +44 20 7552 2278

New York
Goldman Sachs JBWere Inc.
Level 42, 1 New York Plaza, New York, NY, 10004
Tel: +1 212 357 6550 Fax: +1 212 357 1100

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