There remain persistent gender differences in economic outcomes throughout the world. In 2010 the OECD Gender Initiative was launched to examine existing barriers to gender equality in education, employment, and entrepreneurship (the “three Es”) across Organisation for Economic Co-operation and Development (OECD) countries. In fact, the OECD Gender Initiative was developed as an integral part of a wider policy imperative for new sources of economic growth, and it argues the economic case for achieving gender equality through a more efficient use of everyone’s skills in terms of education and economic participation (OECD, 2012a; 2012b).

Across the OECD, great strides have been made towards gender equality in education in recent decades. Girls today outperform boys in some areas of education and are less likely to drop out of school. But these gains have not yet been fully translated into more equal labour market outcomes—women continue to participate less in paid work, earn less than men, are less likely to make it to the top of the career ladder, and are more likely to spend their final years in poverty. Greater gender equality will reduce wasting years of investment in educating girls and young women. Making the most of the talent pool ensures that men and women have an equal chance to contribute both at home and in the workplace, thereby enhancing their wellbeing and that of society.

Young men and women often become fathers and mothers. Hence, gender equality issues are strongly related to family policy issues. This paper first presents some key education and labour market outcomes and then discusses how certain aspects of family policy can support greater gender equality in paid and unpaid work in the future.

Despite significant gains, gender equality challenges remain in education participation

Compulsory education up to the age of 15 or 16 leads to almost all boys and girls across the
The gains in female educational attainment have contributed to a rise in female labour force participation on average across the OECD, and contributed to a narrowing of the gender gap in labour force participation.

OECD being enrolled in primary and secondary education. However, boys are more likely to drop out of secondary education, particularly in high-income countries, while girls are more likely to pursue university and other tertiary education. On the whole, (young) women are increasingly better educated than (young) men; on average, across the OECD countries since 2006, the proportion of women aged 25–64 who had completed tertiary education (at just below 30%) exceeds that of men. In Australia, women aged 25–64 have been more likely to have successfully completed a tertiary study since the mid-1990s (OECD, 2011c).

However, there remain wide gender gaps in many fields of study. Women are still much under-represented in science, technology, engineering and mathematics (STEM). And even though more women are completing STEM degrees (particularly in biology and agriculture), they still account for a very small share of students in computing and engineering—subjects in great demand in OECD labour markets. In Australia and across the OECD, on average in 2009, about 75% of the tertiary degrees in health and welfare studies were obtained by women, while the proportion was only 20% for degrees awarded in computer sciences (OECD, 2012b).

Furthermore, even when young women choose scientific and technological fields of study, they are less likely than young men to take up careers in those fields (Flabbi, 2011). This is a cause for concern, given the skills shortages in OECD labour markets. In Australia and across the OECD, on average in 2009, about 75% of the tertiary degrees in health and welfare studies were obtained by women, while the proportion was only 20% for degrees awarded in computer sciences (OECD, 2012b).

Gender equality in labour market outcomes is some way off

The gains in female educational attainment have contributed to a rise in female labour force participation on average across the OECD from 58% in 1990 to 72% in 2010, and contributed to a narrowing of the gender gap in labour force participation by nine percentage points. Nevertheless, considerable gender differences in employment outcomes remain, often related to women rather than men adjusting their labour market behaviour to family commitments.

Work and family considerations contribute to women frequently working part-time and/or in health and education sectors rather than working long hours in the business sector. For example, across the OECD, 70% of employed men usually work 40 hours per week or more compared to about 50% of working women (OECD, 2012d), and while only 9% of employed men work part-time, this is 26% of all employed women, with almost 70% of part-timers being women (OECD, 2012e). And these differences in working hours and occupational and sectoral segregation are often key drivers of the pay differentials between men and women (for a “decomposition analysis”, see OECD, 2012a).

By contrast, women undertake a disproportionally high amount of unpaid work no matter what type of household they live in. In couples where both partners work, women spend more than two extra hours per day in unpaid work. And even in couples where only the woman works, the men only do as much housework as their partners. Gender gaps in child care provision are even wider—working
mothers devote about 50% more time to child care than non-working fathers (Miranda, 2011).

The gender gap in unpaid work decreases with the increase in the female employment rate. From a cross-country perspective, there is a strong negative correlation between a country’s female employment rate and women’s average unpaid working time. Also, there is some substitution between female paid work and male unpaid work—the higher the female employment rate the more men are engaged in unpaid work (OECD, 2012a).

Although some progress in reducing the gender wage gap has been made since 2000, among full-time employees in OECD countries, at the median, women earned on average 16% less than men in 2010 (Figure 1). Cross-country variation is substantial across the OECD—at the median in 2010, gender wage gaps were highest in Japan and Korea (at 29% and 39% respectively), and lowest in Hungary and New Zealand (at around 6%). Across the OECD, gender earnings differentials among entrepreneurs are often wider than among employees—self-employed women frequently earn 30 to 40% less than their male counterparts. In fact, in recent history, the number of woman entrepreneurs has changed little in OECD countries. And when women do start businesses, they do it on a smaller scale than men and in a limited range of sectors.

In many OECD countries, pay gaps at the top of the earnings distribution are wider than at the median. The top 10% of female earners make, on average, 21% less than their male counterparts (Figure 2). This discrepancy suggests the presence of the so-called “glass ceiling”, which prevents women from moving up the career ladder to top-level salaries (e.g., Arulampalam, Booth, & Bryan, 2007).

Indeed, there is a “leaky pipeline” in that there is a significant gap between the participation of women in the labour force and their presence in senior management functions. Women represent, on average, 45% of the labour force across the OECD countries but only about 30% of senior officials and managers. Women are also under-represented on the boards of publicly listed companies. In 2009, fewer than 5% of board positions in Germany, Japan and the Netherlands were held by women. At 8%, Australia was just below the OECD average of 10%, while Norway had by far the highest proportion of women on boards, at just below 40% (OECD, 2012a).

This leaky pipeline has contributed to a debate in many OECD countries on how to improve the gender balance at the top of companies.

Notes: Countries are shown in ascending order of growing gender gap for median earnings in 2010. Data refer to 2009 (instead of 2010) for Germany, Korea, and Sweden and to 2008 for Italy. The gender wage gap is defined as the difference between male and female wages divided by male wages at the median. Estimates of earnings used in the calculations refer to gross earnings of full-time wage and salary workers; however, this definition may slightly vary from one country to another. Also, data are not adjusted for parity of time worked among full-time employees. Further information on the national data sources and earnings concepts used in the calculations can be found at: <www.oecd.org/employment/outlook>. OECD unweighted average calculated for the 26 OECD countries for which data were available for each point in time.

In some countries, including Denmark and the United Kingdom, voluntary corporate governance codes are used to raise the issue. By contrast, since 2006, Norway has required public companies and those listed at the Stock exchange to appoint at least 40% of each gender on boards. Whether mandatory or voluntary, for these initiatives to be most effective, they should be part of a broader strategy to enhance female participation in economic activity. Since family commitments so often drive gender differences in career choice and pursuit, family policies that help reconcile work and care commitments are part and parcel of any such strategy.

**Family policy: Its objectives and policy tools**

Across the OECD, governments aim to support families by providing parents with choice in their work and family decisions (Adema, 2012). Interdependent family policy objectives include: (a) promoting conditions that help adults to have the number of children they desire at the time of their choosing (OECD, 2011e); (b) combating child and family poverty (Whiteford & Adema, 2007); (c) enhancing child development (OECD, 2009a); and (d) mobilising the female labour supply and promoting gender equality to foster economic growth and underpin the financial sustainability of social protection systems.

However, the relative weight attached to the different policy objectives varies across countries, as does the intensity in the use of different policy tools for the provision of family support, which include the provision of financial support through cash transfers (family allowances, child benefits, working family payments, and maternity, paternity and parental leave payments and birth grants); fiscal measures (e.g., child tax credits or family tax allowances); or the provision of in-kind benefits, including early childhood education and care services. Across the OECD in 2009, spending on family benefits was about 3% of gross domestic product (GDP) on average, just over half of which was cash benefits and just below 1% was in-kind benefits. Australia has a greater focus on cash benefits than most OECD countries, whereas in, for example, France and the Scandinavian countries, the provision of in-kind benefits plays a more important role (Figure 3).

Over the last decade, public spending on family benefits has been highest on average in France, but in 2009, Ireland and the United Kingdom spent the most, at over 4% of GDP. This relative increase is related to the global financial crisis that unfolded in 2007–08. Ireland in particular experienced a relative decline in GDP (the numerator in the international comparison of spending on family benefits), while at the same time real public spending in family benefits (adjusted for inflation) went up, as family benefits are largely income–tested in Ireland and the United Kingdom (OECD, 2012e). In the United Kingdom, for example, the rise in the number of low-income families increased both the take-up of benefits (both child tax credit and working tax credit) and the number of claimants with maximum payments. In Australia, there were also one-off increases in family tax benefits. Another reason for the increase in family spending trends in Australia and the United Kingdom was that it had become harder for single parents to find a job, which sustains the public spending on specific income support programs needed to help them.

**Female labour force participation: The role of child care policy**

Family policy measures play a key role in the labour market decision of parents, especially mothers, as they co-determine the financial incentives to work at all and/or work more hours. Parental leave facilitates the return to work, and access to good and affordable child care services is often essential to being in employment.
Econometric analysis for the OECD Gender Initiative helps illustrate the importance of policies and labour market characteristics vis-a-vis trends in female labour force participation (see Box 1 for details). The evidence suggests that the increase in female labour force participation has been driven by an increase in part-time work in some countries and the expansion of public employment in others. The results also confirm that gains

Box 1: The determinants of female labour force participation

Female labour force participation is influenced by different factors, and the econometric analyses of the OECD Gender Initiative considered two broad groups of indicators as explanatory variables:

- **Labour market characteristics**—variations in job and labour market characteristics include the share of employment in the services sector and the public sector, the proportion of part-time jobs, the OECD indicator on the strictness of employment protection legislation, and total unemployment rates. Information on the number of years spent by women in education is included to account for changes in the composition of the female workforce.

- **Family-friendly policies**—these aim to help parents reconcile work and family commitments and include paid leave (public spending and duration), child care services for children under the age of 3 (public spending and enrolment rates), public spending on other family benefits, and financial incentives to work (including tax incentives for couple families to have two earners instead of one).

The econometric analysis considers different model specifications. The first considers female workforce participation, but the endogeneity of part-time work affects the interpretation of results. Hence, two other model specifications separately consider full-time and part-time participation as dependent variables.

| Table 1: The determinants of female labour force participation, women aged 25–54, OECD countries, 1980–2007 |
|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|
| **Labour market characteristics**               | **Labour force participation**                  | **Full-time employment**                        | **Part-time employment** |
| Share of employment in services sector          | 0.0047 *** (0.000)                             | 0.00587 *** (0.00112)                         | 0.008 (0.005) |
| Share of employment in public sector            | –0.462 * (0.254)                              | –0.359 (0.249)                                | –3.097 *** (1.00) |
| Incidence of part-time employment               | 0.473 *** (0.151)                             | –                                       | –                                       |
| Employment protection legislation               | –0.0309 (0.029)                               | 0.0156 (0.0190)                             | –0.313 *** (0.115) |
| Average number of years of education            | 0.309 *** (0.029)                             | –0.346 *** (0.072)                         | 1.910 *** (0.280) |
| Unemployment rate                               | –0.0449 * (0.025)                             | –0.023 ** (0.011)                         | –0.342 *** (0.101) |

| **Family-friendly policies**                    | **Labour force participation**                  | **Full-time employment**                        | **Part-time employment** |
| Spending on leave and birth grants per childbirth| –0.010 (0.012)                                 | 0.062 *** (0.0160)                           | –0.192 *** (0.056) |
| Duration of paid leave                          | –0.0107 ** (0.005)                            | 0.011 (0.00770)                             | –0.0638 *** (0.024) |
| Spending on child care services per child < 3 years| 0.0006 (0.005)                              | 0.016 ** (0.00640)                         | –0.0958 *** (0.029) |
| Enrolment of children in formal child care       | 0.0377 *** (0.005)                            | 0.032 *** (0.009)                        | 0.167 *** (0.041) |
| Spending on family benefits per child < 20 years | 0.074 *** (0.019)                             | 0.028 (0.028)                               | 0.102 (0.120) |
| Tax rate of a second earner a                   | –0.0407 *** (0.012)                           | –0.081 *** (0.019)                         | –                                       |
| Tax incentive to work part-time b                | –                                       | –                                       | 0.0190 *** (0.006) |
| No. of observations                             | 156                                           | 159                                      | 152                                      |
| R²                                             | 0.997                                         | 0.993                                    | 0.980                                    |

Notes: All the estimated models include country-fixed effects so as to focus on the within-country and over-time variations between female labour force participation and its determinants. In addition, because the decision regarding care is to some extent simultaneous with the choice between work and inactivity, the use of child care enrolment rates as regressors introduces a risk of bias in the estimated coefficients, and therefore enrolment rates are instrumented by their lagged values. Because of endogeneity concerns, unemployment rates are also instrumented by their lagged values, and cover those aged 15–64 rather than 25–54 years. Country coverage: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, the United Kingdom and the United States. The tax rate of a second earner is measured by the ratio of the marginal tax rate on the second earner to the tax wedge for a single-earner couple with two children earning 100% of average earnings. The marginal tax rate on the second earner is in turn defined as the share of the second earner’s earnings that goes into paying additional household taxes. The tax incentive to work part-time is measured by the increase in household disposable income between a situation where one partner earns the entire household income (133% of average earnings), and a situation where two partners share earnings (100% and 33% of the average earnings respectively), for a couple with two children. Estimates by two-stage least squares, with robust heteroskedasticity-consistent standard errors shown in brackets. Statistically significant differences are noted: * p < .05; ** p < .01; *** p < .001.

Source: OECD (2012a)
in educational attainment are an important driver of female labour force participation, while also contributing to the rise in part-time employment.

In terms of family-friendly policies, the analysis considered various indicators on child care, parental leave and family benefits for their effect on female labour force behaviour and found the following:

- The growing enrolment of children in child care has enhanced female employment on a full-time and part-time basis. However, higher public spending on child care does not necessarily lead to more part-time employment, as it may facilitate moves into full-time work, or it may improve the quality of child care without affecting hours worked per week.

- Increasing public spending on paid maternal and/or parental leave tends to raise the incidence of full-time employment relative to part-time work, while extending the duration of paid maternal and/or parental leave decreases the probability of working part-time.

- Finally, higher tax rates on the second earner in a family reduces female labour force participation, but women are more likely to work part-time when two-earner households are taxed less than one-earner households with a similar income level.

The analysis suggests that policies fostering greater enrolment in formal child care have a small but significant effect on full-time and part-time labour force participation, and this effect is much more robust than the effect of paid leave or other family benefits. Thévenon and Solaz (2012) also have found that the extension of the length of paid leave has a positive, albeit small, influence on female employment rates and working hours relative to men, as long as the total period of paid leave is no longer than approximately two years. But the provision of paid leave widens the gender pay gap among full-time employees.

Not only does child care policy affect female labour supply and the associated reduction of family poverty risks, but good quality child care is also instrumental in fostering child development (e.g., Huerta et al., 2011). The literature also suggests that young children in vulnerable families benefit most from such interventions, and that therefore efficient early childhood care and education policies should include a focus on providing support for this group (OECD, 2011c).

**Designing parental leave policies towards greater gender equity**

Government policies for reconciling work and family life aim to support both parents, but they frequently and inadvertently reinforce the role of women as caregivers. This is because mothers generally make wider use than fathers of parental leave options, part-time employment opportunities, and other flexible working time arrangements, like teleworking. Often this is related to household income losses being smaller when mothers take leave or reduce their working hours, as they frequently have lower earnings than their partner. However, as long as women take more leave and/or are more likely to reduce their working hours, some employers will continue to perceive them as being less committed to their careers than men, and will be less likely to invest in their careers. The upshot from an economic perspective is that businesses do not make full, efficient use of potential labour resources, while stereotypes of gender roles in paid and unpaid work are perpetuated.

To increase take-up of parental leave among fathers, in some countries fathers are being granted exclusive rights to parts of the parental leave entitlement and/or associated income support. Iceland proportionally has the most gender-equal paid parental leave arrangement because one-third (13 weeks) of the parental leave period is reserved for men. The reform of parental leave in Iceland led to an increase in the proportion of parental leave days being taken by fathers, from 3% in 2001 to some 35% today (Eydal & Gislason, 2008). In 2007, Germany introduced bonus parental leave such that if the father took at least two months of parental leave, the entitlement for both parents become 14 months rather than the standard 12-month period. As a result, Germany saw the number of children whose father took parental leave rise from less than 9% in 2007 to 25% in the second half of 2010 (Statistisches Bundesamt, 2012).

Policies that reduce differences between mothers’ and fathers’ labour market behaviour—such as formal child care supports and designated leave periods for fathers—also have considerable potential for narrowing gender gaps in unpaid work. There is evidence to suggest that such policies are likely to be most effective if they intervene at those critical times when men are more open to changing their behaviour; that is, when they become fathers (Dex, 2010; Nepomnyaschy & Waldfogel, 2007). Men are more likely to bond with their children if they spend time caring for them from an early age. Fathers’
greater involvement in child care, in turn, has beneficial effects on their children’s cognitive and behavioural development (Baxter & Smart, 2011; Huerta et al., 2013).

Looking ahead

Demographic trends will play an important role in shaping public policy, and may well provide opportunities to obtain greater gender equality in work and care outcomes. Figure 4 (on page 14) illustrates these issues for Australia, Japan and the United States. In terms of age groupings within the population, US and Australian patterns are not dissimilar. The number of children is projected to continue to grow slightly, but the working-age population, and in particular the number of senior citizens, is growing at a higher rate. By contrast, in Japan, the proportion of children, and the working-age group in particular, is declining, while the elderly population is growing (Figure 4, graphs on left-hand side).

Among many other effects on government policies (e.g., pension policy), population ageing will have important consequences for future trends in paid and unpaid work. First of all, the growth in the proportion of the elderly in the population will increase demand for long-term care services and care workers. The OECD report Help Wanted (OECD, 2011d) illustrated that by 2050 the demand for nurses and personal care workers (in full-time equivalents) will at least double in most OECD countries. In Australia, demand was projected to increase from 1% to 3% of the total projected working-age population by 2050.

At the same time, limited growth or even a decline of the working age population, will require labour markets to make a more efficient use of both men and women labour supply. The graphs on the right-hand side of Figure 4 show the potential effects:

- If male and female labour force participation rates remain at the levels observed in 2010, then the Japanese labour force will shrink considerably, while Australian and US labour forces will continue to grow at a moderate pace, in line with population trends.
- Japan could avoid the looming labour force crisis if female participation rates were to converge over the next 20 years to the male participation levels of 2010.
- Figure 4 also illustrates that Australia could make significant gains in labour supply if both the participation rates and working hours of women were to converge to the full-time equivalent participation and hours of men in 2010.

Convergence of male and female participation rates will also contribute to economic growth. Thévenon, Ali, Adema, and Salvi del Pero (2012) suggested that full convergence in
female and male employment rates by 2030 may lead to an increase in the average annual growth rate in GDP per capita across the OECD of 0.6 percentage points (slightly lower for Australia and the United States at 0.5 percentage points). Given Japan’s looming labour supply concerns, potential gains are greatest there, at 0.8 percentage points increase of annual GDP growth per capita. These are projections, but it is likely that demographic trends will induce some degree of improvement in labour market chances of women, especially in Japan.

There is another reason to believe that the future will hold greater gender equality. With the considerable gains in female educational attainment across OECD countries, the likelihood that women will partner with men who have lower or the same level of educational attainment has increased. The OECD (2011b) showed that in 2008 women had obtained a higher level of educational attainment than their partner in 15% of couple families. Further work by the OECD (2011a) showed that since the mid-1980s, the percentage of women with a partner in the same income decile or quintile had increased in all but two OECD countries for which data were available. This effect is likely to become more pronounced in future, and as female earnings increase relative to their partners, so will household opportunity costs for women taking leave or working part-time. The partnering trend may well contribute to a more equal distribution of paid and unpaid work among partners in future.
Concluding remarks

A more efficient use of economic resources mobilises hitherto unused labour supply, advances the pursuit of individual aspirations, improves family resources (with its potential positive effect on child development), strengthens the tax base, and promotes economic growth. These are among the potential gains society can make from greater gender equality in economic participation.

The challenges associated with the reconciliation of work and care commitments can be a barrier to greater gender equality. In couple families, the partner with the least earnings is usually the one who reduces working hours and provides unpaid care work, and often this is the woman rather than man. The past gains in educational attainment, and thus earnings, among women may lead to some change in that pattern and generate greater financial incentives for men to engage in unpaid work and help their partner to pursue employment opportunities. However, further gains in reducing gender gaps in specific fields of study, labour market segregation and career opportunities are need in order to further redress gender imbalances in paid and unpaid work.

Governments and business have made efforts to help workers reconcile their family commitments, introducing parental and care leave policies as well as flexible workplace options, such as tele-working, part-time or temporary work. However, the fact remains that it is primarily women who take advantage of family-friendly policies like flexible working arrangements, thus perpetuating the idea that family responsibilities are a woman’s affair.

Business culture needs to change so that men and women who, for example, take their parental leave in full, or who work part-time for a limited period, are not considered as being uncommitted to their careers and passed over for promotion. Family policy can help too, by making it more (financially) attractive to families if men rather than women take parental or carers leave.

The most successful policies are those that facilitate male and female economic participation on an equal footing. In that sense, child care policies have so far turned out to be much more effective gender equality tools than parental leave or flexible workplace arrangements. However, child care policies are not in themselves sufficient, as proven by Nordic countries, where wide disparities in employment outcomes remain. A more equal use of parental leave entitlements and flexible workplace arrangements is also needed to reduce prevailing gender inequalities at home and at work.

Endnotes

1 The gender wage gap is defined here as the difference between male and female wages divided by male wages at the median.
2 For all the figures in this paper, for presentational reasons, the number of countries for which observations are included has been limited to around 10 (see OECD, 2012a, for information on other OECD and some non-OECD countries).
3 Two key differences between male and female entrepreneurs help explain the relatively low earnings of female entrepreneurs: (a) women start their enterprises with limited management experience; and (b) women devote much less time to their businesses than men.

References


The challenges associated with the reconciliation of work and care commitments can be a barrier to greater gender equality.


**Willem Adema** DPhil is a senior economist who works in the Social Policy Division of the OECD. He was closely involved in the OECD Gender Initiative and this paper draws extensively from its analytical work. This paper focuses on the role that family policy might play in improving gender equality, and thus only covers a small part of the work under the OECD Gender Initiative. For more information, interested readers are referred to Closing the Gender Gap: Act Now (OECD, 2012a), Gender Equality in Education, Employment and Entrepreneurship (OECD, 2012b) and <www.oecd.org/gender>. The author is grateful to Nabil Ali and Martina Portanti for their datawork for this paper and to Nabil Ali, Olivier Thévenon and Angelica Salvi del Pero for comments on a previous draft. The views expressed in this paper cannot be attributed to the OECD or its member governments; they are the responsibility of the author alone.

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