

## Chapter 9

# Labour Market Participation: Family and Work Challenges across the Life Course



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Over the past few decades, the labour market in Australia has changed drastically, as it has in many other countries (Thévenon, 2013). Figure 9.1 shows this clearly. Female labour force participation in 2021 was 1.5 times as high as in 1978: steadily increasing over this period from just over 50% to just over 75% for women of working age. Male labour force participation has not changed as much, except that it slightly decreased over four decades: from just over 87% to around 83% for working-age men. Employment rates followed a similar pattern to participation rates, except that it is more affected by the shocks of increased unemployment during recessions, especially in the early 1980s and early 1990s recessions. Small dips in employment are also observed in the Global Financial Crisis of 2008 and the COVID crisis of 2020, with the latest dip being a particularly sharp one. Women were affected to a lesser extent than men in most of these crises, except in the 2020 COVID-related crisis, but they had recovered largely by March 2021.

Hérault and Kalb (2020) examine the labour market outcomes of prime working-age individuals (25–55 years) from 1994/95 to 2015/16, using the Survey of Income and Housing (aka Income Distribution Survey) collected by the Australian Bureau

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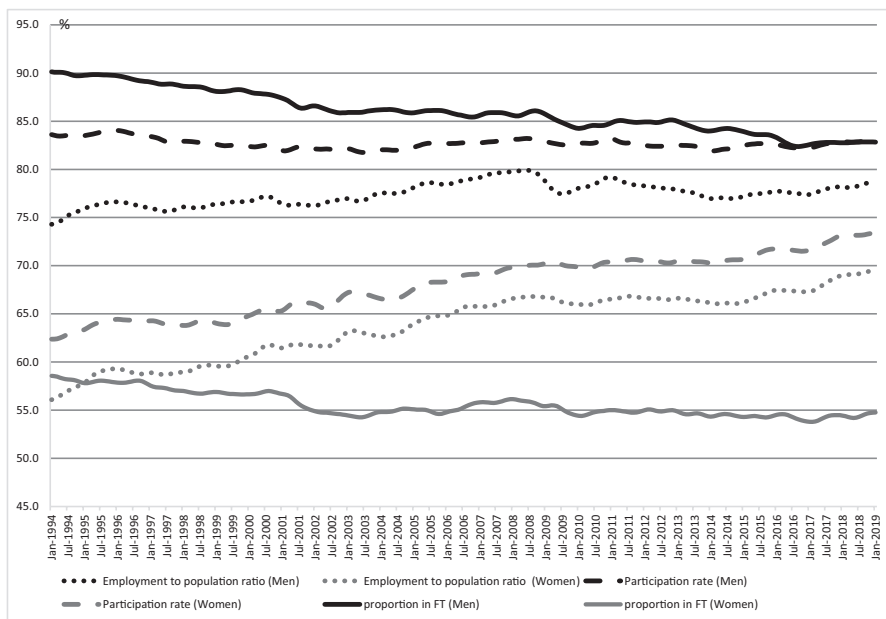
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**Fig. 9.1** Monthly labour force participation and employment of 15–64 year old men and women in Australia – February 1978 – March 2021 (in percentage). (Source: Trend numbers from the Labour Force, Australia, Australian Bureau of Statistics catalogue number 6202.0)

of Statistics. Their data show that employment has increased dramatically among partnered women and single parents (by 13 and 17 percentage points, respectively). Meanwhile, single men were the only group whose employment dropped, by 4 percentage points. These changes happened against a backdrop of slowly, but steadily increasing employment rates overall, including for partnered men and single women. Average hours worked changed in similar ways to these employment rate changes.

One aspect of employment that has changed substantially for men and women is the proportion of workers who are in a full-time job. A decrease of around 14 percentage points for men and 11 percentage points for women is observed in the over four decades that have passed since the late 1970s (see Fig. 9.1).<sup>1</sup> The larger decrease for men is from a 95% high compared to 66% for women; and it shows the change in the role of employment in people’s lives over the past few decades. Theoretically, this shift in the role of full-time employment should have allowed both men and women to obtain a better balance between family and work over the life course.

Increased employment among partnered women and single parents implies – more or less directly – increased employment of mothers. This brings with it the

<sup>1</sup>The larger decrease for men seems mostly due to a reduction for single men (Hérault & Kalb, 2020).

potential for increased conflict between one's working and home life, as competing responsibilities need to be fulfilled. The observed shift in the role of full-time employment may represent one tool used by families to obtain a better balance between family and working lives. Changes in workplace conditions could fulfil a similar function – including flexible start and finishing times, telecommuting or employer-provided parental leave. The *Household, Income and Labour Dynamics in Australia* (HILDA) survey is the perfect tool to assess this, as it asks all individuals in selected households a range of questions on their circumstances, including employment and labour force participation, in addition to a wide array of questions on their wellbeing and subjective views. The same households have now been interviewed for more than 20 years, starting in 2001.

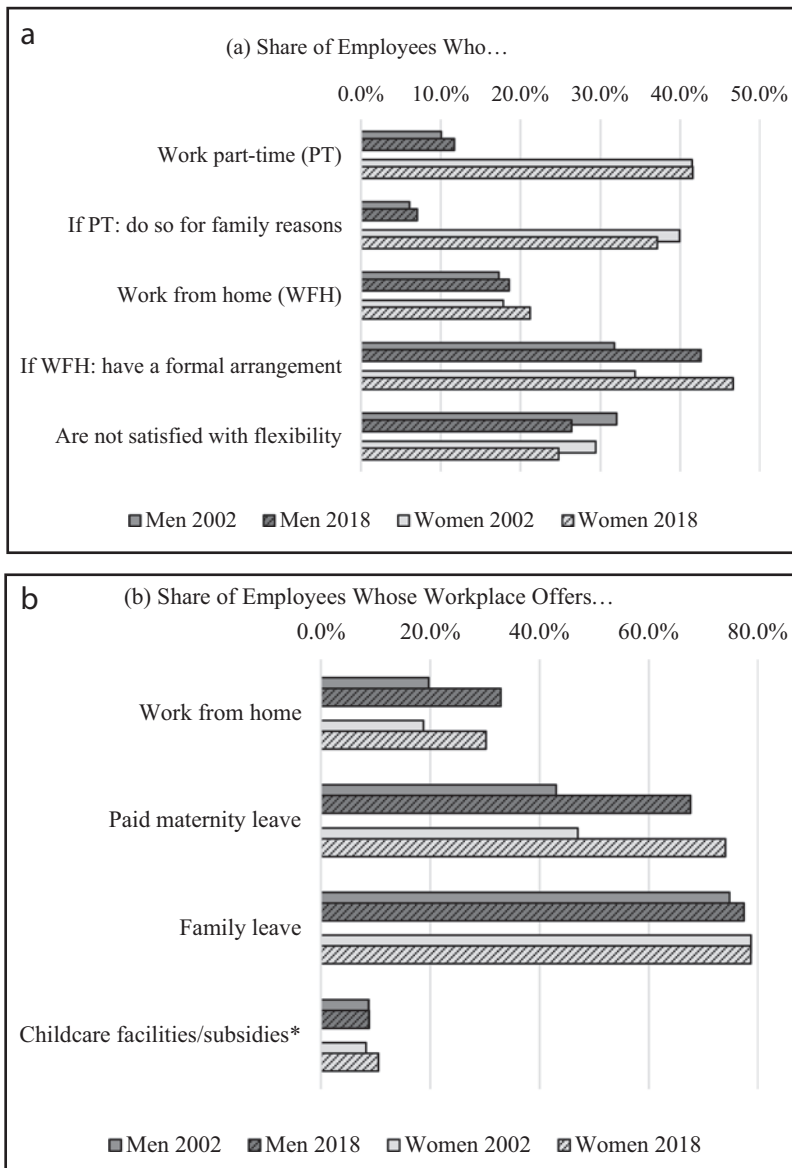
The majority of changes in the proportion of part-time employment have occurred in the 1980s and 1990s, and thus changes observed in HILDA are modest, especially for women. However, the HILDA data allow us to observe the reason for working part time: Fig. 9.2 (panel a) shows that men are now more likely to say that they work part time for family reasons than in 2002. It has increased by 1 percentage point (from 6.1% to 7.1%) and for women it decreased by 2.8 percentage point (from 39.9% to 37.1%). This suggests there may be a (slow) change in the division of paid work and caring roles at home.

There was a substantial increase in the proportion of employees (from 45% in 2002 to 71% in 2018), who indicate that their employer provides paid maternity leave (Fig. 9.2, panel b). This should further assist parents in achieving a better balance between family and work. However, there has been little change in employers providing childcare facilities or subsidies to assist with childcare expenditures, which has remained around (a low) 9% of respondents' employers.

Although there has not been that much change in the proportion of workers who do any work from home (increased by just over 2 percentage points) or in the hours worked from home on average (increased by just over 1 h), there are more likely to be formal arrangements in place for working from home (for nearly 45% of workers by the end of 2018 versus 33% in 2002) and the proportion of workplaces that allow their employees to do home-based work has increased from 19% to 32% between 2002 and 2018. It should now be easier for employees (who want this) to work from home as the infrastructure for this is in place. With the COVID-19 pandemic necessitating work-from-home for many employees in 2020, working from home may experience a larger increase in the next few years than appeared possible in 2019.

Putting all these (modest) changes together, we expect some improvements in parents' ability to balance work and family. This is confirmed in practice when examining the proportion of men and women who are not satisfied with the flexibility they have at the workplace to balance work and non-work commitments. This decreased from 32% to 26.4% for men and from 29.4% to 24.7% for women between 2002 and 2018. Nevertheless, combining family responsibilities and employment remains challenging.

In the next section, this chapter examines these challenges for different types of families and at different points in the life course, considering families with children first and then families without children, focussing on partnering and fertility



**Fig. 9.2** Family-friendly policies used by employees and offered at workplaces, 2002 versus 2018. Notes and definitions: The sample is restricted to male and female employees up to age 65, who are not in full-time education. Results are weighted using cross-sectional weights. Employees are considered to be working part-time, if they report less than 35 working hours per week in a usual week across all their jobs. Reason for working part-time is self-reported main reason for working part-time; respondents can choose between 13 response categories. Family reasons combines the response categories “caring for children”, “caring for disabled or elderly relatives (not children)” and “other family responsibilities”. Whether respondent is working from home and

decisions. This is followed by a consideration of the family and work interactions at different stages of the life course: early life, mid-life and later in life. The chapter concludes with a section discussing policy implications.

## Family-Work Challenges in Early Adulthood

Balancing family life and work life can be challenging as both academic and anecdotal evidence show. Particularly the impact of having children on employment is well documented in a large literature, but there may also be a reverse impact from employment (or lack thereof) on family formation decisions, and especially on fertility. This section first discusses how parenthood and resulting work-family-conflicts affect labour market outcomes. We focus on the role that skills, disadvantage, and policy and institutions can play in alleviating or exacerbating such conflicts, and hence in shaping labour market outcomes. In the second part of this section, we explore the reverse relation: how do job situation, skills and earnings potential affect the decision to have children?

### *The Effects of Parenthood on Labour Market Outcomes*

#### Direct Effects of Parenthood on Labour Market Outcomes

Although relatively recent developments in the labour market have substantially narrowed the gap between male and female labour force participation over the past decades, the difference between men and women is still large, and in Australia, the gap is still considerably wider than in, for example, the Nordic countries. Even in the Nordic countries women have slightly lower labour force participation than men once children arrive, but the drop in labour force participation is much smaller than in Australia (Kalb & Thoresen, 2010). OECD data show that in 2019, Australia's maternal employment rate was lower than the average across OECD

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**Fig. 9.2** (continued) whether a formal arrangement is in place, are self-reported variables. Satisfaction with workplace flexibility is self-reported on a scale from 0 [Totally dissatisfied] to 10 [Totally satisfied]; respondents are coded as not satisfied if they report a satisfaction level of 6 or lower. For workplace entitlements, respondents are asked if they, or other employees working at a similar level to them at their workplace, would be able to use these if needed. "Family leave" combines employer-funded paid maternity leave, employer-funded paid paternity leave and Special leave for caring for family members. Childcare facilities/subsidies refers to childcare services provided by the employer, or childcare subsidies provided by the employer to purchase childcare services in the market. (\*) This question was not asked in wave 2002, the reported numbers for this category are calculated using HILDA wave 2006 and wave 2018. (Source: Household, Income and Labour Dynamics in Australia (HILDA) Survey, waves 2002, 2006 and 2018)

countries, and it ranked about one third from the back compared with around 40 other countries.<sup>2</sup> This ranking was similar to that in 2014 (Kalb, 2018), although the gap between Australia and the countries with the highest maternal employment rates is getting smaller, as Australia's maternal employment rates continue to increase, and increased by more on average than those in the highest performing countries. In 2019, Australia's maternal employment rate was 69% compared to 87% in Iceland and Slovenia, and 86% in Sweden (vs 62% for Australia and 82% for Sweden in 2014).

There is a large literature on how children affect their parents' labour supply, and how it differs for mothers and fathers. Disentangling the true effect of parenthood from pre-existing differences between parents and non-parents is no trivial task. The ground-breaking study by Angrist and Evans (1998) was the first to confirm that the pattern we observe around the world is indeed a causal relationship: the presence of preschool children substantially reduces labour force participation and hours worked for women, while in most cases, men are hardly (if at all) affected by the presence of preschool children. Although the impacts are smaller than for lower-educated mothers, even when the mother is highly educated, the presence of young children affects her labour supply much more than for similar fathers. An analysis of general practitioners' and medical specialists' labour supply shows that female medical doctors (general practitioners and specialists) reduce their labour supply substantially when preschool children are present, while male specialists are not affected at all and male general practitioners are affected to a much smaller extent and only for preschool children (Kalb et al., 2018). Female general practitioners, on the other hand, reduce labour supply at least to some extent when any child under age 15 is present. This shows that even very high education – as in the case of medical doctors – does not completely eliminate the difference between fathers' and mothers' labour supply.

Although many researchers estimate the impact of children on labour supply, it is difficult to separate pre-existing differences between parents and non-parents from the causal impact of having children: that is individuals who have children may already be different from people who do not have children before the children were born. Moschion (2013) quantifies the impact of an additional child for women who already have one child or two children, using an approach aimed at estimating the causal effect. She finds that impacts are relatively large in Australia: going from one child to two children or going from two children to three children decreases labour force participation by 12 percentage points, and it decreases labour supply by 4 h and 3 h respectively. A wage penalty of 5% for the first child and 9% for two children is estimated for Australia by Livermore et al. (2011). This impact of children grows over time through slower wage growth for mothers than for other workers rather than immediately lower wages after childbirth. A first child reduces annual wage growth by 1.2 percentage points on average, while no further impact is

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<sup>2</sup>See <https://www.oecd.org/els/family/database.htm>: the labour market position of families (LMF1.2 Maternal employment).

observed for a second child. Not surprisingly these impacts are most apparent when the child is still an infant. No differences are observed by occupational, marital or part-time work status.

Most studies investigate the immediate impact of having children, but Kahn et al. (2014) extend such research to investigate the impact of career penalties over the life course in the US. In addition to the impact of having children on mothers' wages, they examine the impact on labour force participation and occupation of mothers up to their early 50s. The impacts on all three outcomes lessen as women enter their 40s and 50s, with only mothers of three or more children facing persisting wage penalties. The Livermore et al. (2011) study only covers 8 years of data so that such a long-term view could not be taken in their analysis. A recent meta-analysis (including the Livermore et al. study) finds an average motherhood wage penalty of 3.8% for having one child and 3.6% per child for the total number of children (Cukrowska-Torzewska & Matysiak, 2020). The authors of this study distinguish impacts for different groups of countries (including Australia in the Anglo-Saxon group), finding that mothers in Anglo-Saxon countries experience relatively high wage penalties of around 4.6%. The study also explores the causes of the wage gaps and finds that in the studies focussing on wage gaps for the total number of children, the gap is largely explained by human capital loss. However, in the studies on the wage gap arising from having one child (i.e., the first child), the choice of job and occupation appears to be the main driver of the gap, with new mothers tending to choose lower paying jobs and occupations, presumably to gain better (more flexible) non-pecuniary work conditions.

Evidence from the US shows that these motherhood wage penalties have not improved much in recent decades despite women investing considerably more in their human capital now than a few decades ago. Jee et al. (2019) use panel data to estimate separate wage penalties for three periods of time: 1986–1995, 1996–2005 and 2006–2014. They find that the motherhood penalty did not change much over time, except for a slight decline for women with two or more children. This latter decline appears completely due to women's increased human capital investments. When controlling for these investments, mothers experience a larger wage gap now than they did two to three decades ago.

In addition to the immediate or direct "shock" of having children and the impact this has on labour supply, the presence of children also means that other, additional shocks may affect parents differently from non-parents. For example, when experiencing job loss due to firm bankruptcy, Meekes and Hassink (2020) show that pregnant women spend more time unemployed and if they are re-employed, they are more likely to reduce their hours worked and commuting distance. Men who are expecting a baby have higher re-employment rates. Similarly, women who already worked part-time or had a short commute before their dismissal (possibly because of childcaring responsibilities) hold on to these job characteristics after their dismissal at the cost of taking longer to find another job.

These different impacts arising from other shocks have also become quite clear when observing the impact that the COVID-19 pandemic has had on different people. COVID-19 has for example affected parents (and especially mothers) quite

differently from non-parents (or fathers) in many countries. For the UK, Andrew et al. (2020) show that mothers are more likely than fathers to lose their job, spending less hours on paid work and more hours on unpaid work such as on childcare activities. Mothers who are no longer in paid employment do more additional domestic work than fathers who are no longer in paid employment. For the US and Spain, a similar conclusion is reached, leading to an increase in gender inequality (Collins et al., 2021; Farré et al., 2020). The pattern of impacts for parents was not the same in all countries: for example, in the Netherlands the impact for partnered parents (mothers and fathers) was not worse than for others, but the impact for single parents (both mothers and fathers) was more severe than for singles or for partnered parents, indicating relative gender equality of the impact and the importance of a supporting co-parent to absorb shocks (Meekes et al., 2020).

### **The Role of Skills and Disadvantage**

When young (pre-school) children are present in the household, care needs to be provided by one of the parents or through formal or informal care by a third person. Informal care requires the presence of trusted family or friends in the neighbourhood while formal care usually is expensive and thus requires sufficient income. Families thus need either time, a social network or money to fulfil the care needs of their children. Choices can be limited if a reliable social network is not available locally (which is the case for many migrant families), leaving parents the choice between working part-time or full-time and outsourcing part of their childcare, or become a full-time stay-at-home parent. However, due to high childcare costs, even this choice is not always available (or feasible) as parents with low earning capacity may not earn enough to make labour force participation worthwhile. Although the presence of children is likely to affect the labour supply of all parents in some way, fathers and mothers who have attained higher education levels are more likely to remain in the workforce even when preschool children are present as they are better able to afford the cost of childcare (Doiron & Kalb, 2005). Single parents are even more at a disadvantage than partnered parents, as they usually need more childcare to facilitate their employment than partnered parents. For example, partnered parents may be able to organise their work hours so that one parent starts work early and finishes early while the other parent starts work late and finishes late thus reducing the total amount of childcare needed. As a result, employment may be less financially viable for single parents, especially if they have more than one preschool child.

Employers are also more likely to be supportive of high-skilled (usually high-paid) employees, and are more likely to accommodate their needs in trying to balance family and work. This was clearly evident, for example, before the introduction of universal paid parental leave in Australia in 2011. Broadway et al. (2020a) used data from the HILDA survey to show that an estimated 56.8% of 20–45 year old women in employment in Australia had access to employer-provided paid parental leave. This was concentrated among women on above-median wages (71.3% compared to 37.8% for those on below-median wages), women with higher education



(77.5% for those with a university degree compared to 39.8% for those with less than a high school certificate), and women in professional occupations (76.5% compared to 32.9% for labourers). Overall, more-advantaged women were more likely to have access to employer-funded paid parental leave than less-advantaged women. Examining current family-friendly work entitlements in 2018 HILDA data shows that more-advantaged women still have access to better work conditions than less-advantaged women.<sup>3</sup> As a result, it is likely to be easier for these women to have higher work hours while balancing family and work. Comparing 2002 with 2018 HILDA data, the gap between advantaged and disadvantaged women has been growing for most entitlements (except for paid maternity leave), and policy reforms (like the introduction of universal paid parental leave) may be needed to achieve more equitable conditions.

These advantages for higher-educated more-advantaged parents are compounded by the fact that highly educated men tend to partner highly educated women, and similarly men and women with low levels of education are more likely to partner each other. As a result, the increased female labour force participation has created a widening divide between two-earner families where both parents earn a high income and one-earner families where one parent earns a low to medium income, but high childcare costs may preclude the other parent from re-entering the labour market. Although this may be the best choice for the latter family in the short-term (due to a secondary earner not being financially worthwhile if the additional income would mostly go towards paying for childcare), in the long run, this absence from the labour market can have major implications for the primary carer. Re-entry in the labour market at a later point in time may be difficult, leading to continued low income for the primary carer and lower household income for her/his family.

### Effects of Policy

Well-designed family policies can mitigate some of the impacts of having children and the resulting difficulties in balancing family and work. Such policies are especially important for low-skill and/or low-wage parents to avoid disadvantage being reinforced in the child-rearing years and being transmitted from one generation to the next.

The previous sections already mentioned the importance of childcare in enabling (both) parents to return to employment, and the often high costs associated with formal childcare. Policies that subsidise these costs, particularly for low-income

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<sup>3</sup>For example, using HILDA wave 18 data and distinguishing between women with and without a tertiary education, we find that women with tertiary-level qualifications are more likely to have access to carer's leave (85.2% vs 75.4%), paid (employer-provided) maternity leave (80.8% vs 68.2%), parental and/or paternity leave (76.2% vs 58.5%), or any of these leave types (85.9% vs 72.0%). Smaller differences are observed for access to flexible start/finish time (55.9% vs 53.4%), home-based work (36.2% vs 25.3%) and childcare facilities or employer-provided childcare subsidies (12.7% vs 8.7%).

families, are an important tool to encourage a full return to employment. However, the targeted nature of the Australian social security system means that subsidies are withdrawn once household income reaches a certain threshold. As a result, secondary earners who are partnered to a high-income primary earner may not be eligible for much childcare subsidy. If the secondary earner is not a high-wage worker, the family may not gain much by their labour force participation and/or increase in hours. This could discourage their return to the labour force, especially when they still have pre-school children at home.

In addition, in Australia, withdrawal of income-tested family payments occurs at low- to medium-level household income as it does in many other countries. When the withdrawal occurs within the household income range where the secondary earner has to decide whether or not to enter the labour force again or whether to increase hours of work, this can provide a disincentive to participate or to increase hours. This is due to the cumulative effect of the withdrawal of family payments, which may combine with income tax rates, with childcare costs and other costs of working (such as commuting costs) to create a very high effective marginal tax rate for the secondary earner in specific household income ranges. The primary earner's income is likely to be taken as a given, so that the decision by the secondary earner is made conditional on the primary earner's income, and this may mean that the financial return to an additional hour of work is very low, while reducing the time that can be spent at home in productive activities like childcare.

To ensure secondary earners have a real choice regarding whether they want to return to employment or not after having children, childcare subsidies, family payments and other family and income support policies need to be carefully designed to avoid such disincentives as much as is possible. In addition, workplace flexibility and support can play a major role to assist employees (men and women) in achieving work-family balance. There is a large literature investigating the impacts of different policy settings, and this chapter does not aim to provide a full (or even extensive) review. Instead, we briefly discuss a few larger cross-country studies and some Australian studies which are representative of the broader literature.

Uunk et al. (2005) use micro data on households for 13 European countries combined with macro-level information on institutional structures to assess the impact of institutions on female labour supply. They focus on childcare provision. In addition they take into account two other macro-level factors: the economic need to work and gender-role values in society. They find that more generous provision of childcare (measured as the number of public childcare places per child under age three) and lower economic welfare (measured as gross domestic product per capita) both decrease the negative impact of childbirth on women's labour supply and thus increase female labour supply. When economic welfare increases, the institutional impact decreases. Female labour supply is also higher in countries with more egalitarian gender-role values (measured by attitudes to employed mothers), but these values do not change the impact of institutional factors, and once institutional factors are included the gender-role-value variable becomes insignificant. The authors interpret this as the importance of institutional support for female employment, but

they conjecture that the institutional support may be an intermediate factor and may be the result of the gender-role values in society.

Such findings are consistent with the results reported in Morrissey (2017). Although high childcare costs are expected to decrease childcare usage and (mostly female) labour force participation, the estimated impact of a 10% decrease in childcare costs varies considerably across countries and studies. Morrissey conducts an extensive review of the recent literature (from 2001 onwards) and finds estimates ranging from 0.25% to 11% increase in labour force participation, with a concentration of estimates indicating a likely increase between 0.5% and 2.5%. The estimated impacts tend to be higher for single mothers, low-income families and families with high childcare costs.

For Australia, Breunig et al. (2012) estimate the elasticity of working hours with respect to the gross childcare price for an “average” partnered mother with one child under age 13 of  $-0.65$  (implying a 6.5% decrease in labour supply for a 10% increase in childcare costs). Employment rates are expected to decrease by 2.9% for a 10% increase in childcare costs. Again, focussing on partnered mothers, Breunig et al. (2014) estimated lower hours of work elasticities with regard to net and gross childcare prices of  $-0.10$  and  $-0.14$  (on average across the sample of analysis) respectively; that is a decrease of 1% and 1.4% for a 10% increase in net and gross childcare prices respectively. Similar elasticities for the employment rate were estimated at  $-0.06$  and  $-0.09$  respectively. Earlier Australian estimates of a 10% increase in gross childcare prices by Doiron and Kalb (2005) showed a relatively modest average of 0.5% expected decrease in hours for single parents and an average of 0.2% decrease for partnered women. However, specific subpopulations are shown to have much higher elasticities. For instance, single parents with a pre-school child are expected to have a 1.8% decrease in hours worked for a 10% increase in gross costs, while partnered mothers with a preschool child are expected to have a 0.5% decrease in hours worked. The impact of a 10% increase in gross costs is highest for single parents who have a pre-school child and earn below the median wage.

An effective childcare policy would also entail that adequate childcare is available to cover those who want to enter/re-enter the labour market. Therefore, besides the cost of childcare, the availability of childcare close to home or work is extremely important in making labour supply for families with young children feasible. Relatively little data is available on this in Australia, but Breunig et al. (2011) use information by location as reported by parents in a survey and Yamauchi (2010) complements this with information on estimated available childcare places per 100 pre-school children at the Statistical Local Area level.<sup>4</sup> Yamauchi establishes a clear relationship between the number of childcare places in the community where a family lives, and the difficulty in finding good-quality care and mothers’ satisfaction with the amount of free time she has available. Having at least 15 places per 100 children decreases the difficulty in finding good-quality care by a third and increases

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<sup>4</sup>There were 1353 SLAs in Australia at the time of the study.

satisfaction levels by 16%. The benefits are larger for lower-educated women (who finished high school or less). Breunig et al. (2011) use survey data on families reporting a lack of childcare, low-quality childcare or childcare that is too costly and aggregate this information at the local level (excluding the family's own response). They find that this aggregate information explains hours worked and employment rates, but due to the correlation of the three types of difficulty, the impacts cannot be apportioned more to one difficulty than another. Women living in areas with fewer reported childcare difficulties are more likely to be employed and work more hours. Breunig et al. use Yamauchi's estimates for additional computations to derive some policy implications: they link the number of childcare places per 100 pre-school children to the estimated decrease in the difficulty of finding good-quality care which can then be used to predict the impact on labour supply. They compute that a local change in the number of childcare places from zero to 15–25 per 100 children could potentially increase the employment rate by 1.8 percentage points and the hours of work by 1.5 h per week on average which would be substantial increases.

Paid parental leave is another important family policy. Thévenon and Solaz (2013) examine the impact of length of leave on female and male employment rates, hours of work and earnings using data on 30 OECD countries over 40 years (1970–2010). They find that up to about 2 years, increased leave duration has a small positive impact on female employment rates, but beyond 2 years the impact turns negative. Similar impacts are found for hours worked, while any increase in leave widens the earnings gender gap.

To illustrate the importance of family policies in Australia, we report on the impact of the Australian universal Paid Parental Leave scheme introduced in 2011 providing 18 weeks of paid leave at the minimum wage. Broadway et al. (2020a, b) evaluate the impact on mothers' labour market outcomes in the first year after birth using data which were collected for the purpose of this evaluation. Consistent with other literature, they find a positive impact on leave taking in the first half year (thus reducing labour force participation in that period). This is complemented by a higher overall probability of returning to work in the first year. They also provide evidence of a positive impact on continuing in the same job and under the same conditions. Perhaps most importantly, they show that the impact of the PPL scheme in terms of taking leave and returning to work was largest for disadvantaged mothers – low income, less educated, without access to employer-funded leave. This new policy had a substantial impact on this group's financial and mental wellbeing just after childbirth (as indicated in qualitative interviews), and it also ensured a substantial increase in the probability of returning to paid employment within a year of childbirth.

This is perhaps one of the few successful examples of social policy in Australia encouraging mothers' labour supply. Hérault and Kalb (2020) examine data for Australia from 1994 to 2016 to determine the factors influencing female labour force participation. They find that the large rise in female labour force participation since the mid-1990s is nearly completely explained by (i) changes in real wages, (ii) population composition changes, and (iii) changes in labour supply preference parameters, with only a relatively small role remaining for tax and transfer policy

reforms. Despite the ongoing emphasis of public policy on improved work incentives for women in Australia and elsewhere— changes in financial incentives due to tax and transfer policy reforms have contributed relatively little to achieve these large increases in participation. Despite a 20 and 14 percentage point increase in employment rate over the two-decade period, for single parents (85% single mothers) and partnered mothers respectively, the role of tax and transfer reforms is even smaller for these two groups than for partnered women without children.

### ***The Effect of Labour Market Circumstances on Family Formation***

In the beginning of this chapter, we outlined various pathways by which family situation, and in particular parenthood, influence a person's labour market outcomes. However, the reverse is also true: a person's labour market situation has a strong influence on partnering decisions and fertility decisions, including total number of births and timing of first and subsequent births.

Standard economics would predict that, all else equal, an increase in *family income* should drive up fertility, as it improves the family's ability to cover the cost associated with having children. At the same time, an increase in *wages* increases the opportunity cost of having children – an effect especially relevant for women – which should lower total fertility. To the extent that a family's income is generated from wages, these two mechanisms work in opposite directions, and it is unclear whether they add up to a positive or negative relationship between (women's) labour market activity and the family's likelihood of having a child. The competing forces could work out differently for families: with different preferences or at different points in life (with ambiguous effects on the total number of births over a woman's lifetime), in different institutional contexts, or under different macroeconomic conditions.

Turning to the role of institutions and macro-economic conditions, Adsera (2004) first examined a puzzling finding in much of the developed world. The relationship between fertility and female labour force participation across countries had changed over time. We used to find that countries with the lowest female labour market activity, had the highest fertility rate, and vice versa. However, since the 1980s, we find a positive relationship. Adsera (2004) shows this is driven by labour market institutions. There is always an underlying trade-off between women's labour market activity and fertility in the short run. But this trade-off is amplified where high female unemployment or rigid labour market institutions geared towards sole breadwinners, make re-entry after temporary joblessness difficult and turn the short-run trade-off into a quasi-permanent life choice. This trade-off is, however, eased where low unemployment or flexible markets keep the future cost of temporary career breaks, to a minimum. Some countries – for example, much of Southern Europe – have maintained institutions that forced women into a rigid choice of either raising a family or engaging in paid work – resulting in overall low levels of engagement in

both spheres of life, as women were forced to 'pick one'. Others, such as the Nordic countries, have adopted institutions that eased the long-term trade-off faced by women, such as parental leave provisions and high public sector employment. This resulted in higher fertility and higher labour market activity at the same time, in places where women could have both.

Women's labour market activity and earnings prospects can thus be a barrier to or an enabler of fertility, depending on available institutions and context. This heterogeneity in the relationship between work and fertility, can also be observed within countries at the micro-level. For example, Kreyenfeld (2010) analyses longitudinal survey data for Germany finding that women's unemployment and perceived job insecurity accelerates the decision to have a child in the overall population. In the context of a relatively generous welfare state and strong social norms in favour of mothers' primary role as caregivers, insecure female employment presented as an accelerator of family formation. However, Kreyenfeld (2010) found the opposite for the subset of university-educated women, for whom social norms in favour of exclusive caregiving are arguably weaker and welfare payments are a less generous replacement of potential lifetime income: they postponed first births in response to economic uncertainty, suggesting that stable employment is not a barrier but a prerequisite for family formation for this subgroup. Pailhe and Solaz (2012) analyse a similar question in France – a country with very different norms, where strong public investment in affordable childcare encourages maternal employment. They indeed find that periods of economic uncertainty for French women have the opposite effect of that found for German women. French women do not accelerate childbirth in response to own unemployment, and significantly delay it in response to overall unemployment or own precarious employment. These results lend some weight to the theory that in countries where combining motherhood with employment is institutionally encouraged, positive labour market outcomes go hand in hand with high fertility. But in countries with norms and institutions that encourage mothers to focus on caregiving, the two outcomes are in competition.

The highly context-dependent nature of the effect of labour market outcomes on fertility, leaves the question: how does this play out in Australia? Kingsley (2018) uses data from the HILDA survey to estimate the effects of current weekly working hours and hourly wages on Australian women's likelihood of giving birth to their first child in the following year. She finds that Australian women delay childbirth if they have higher earnings potential. Laß (2020) extends this analysis by examining the uncertainty of labour market income, in the form of non-standard work contracts. She shows that securing a permanent contract is an important prerequisite to having a child for Australian women, with part-time hours further increasing the likelihood of a first birth. Full-time employment is especially important for Australian men. These findings are consistent with Australia as a liberal welfare state, where the male-breadwinner/female-caregiver model dominates social norms, and work-family-conflict is seen as the individual's responsibility to solve (Pocock et al., 2013). Women are assumed to be the primary caregiver and secondary earner, who will temporarily exit the labour market after childbirth, and thus need a permanent contract to facilitate re-entry into the labour market later on; men are assumed

to be the primary breadwinners whose full-time employment is crucial for family income during the period when the mother does not earn a wage, and government-provided parental leave is paid only at a low rate and for a short time. Nevertheless, a small impact of the government-provided paid parental leave on intended fertility is estimated by Bassford and Fisher (2020), increasing the number of children by 0.34 conditional on at least wanting one child. This impact is seen mostly for highly educated women. Consistent with this, McDonald and Moyle (2019) show that between 2006 and 2016, fertility in Australia has been falling – but only for women without post-school qualifications. They argue this is because this group is disproportionately affected by a considerable reduction in income support payments in the course of the Welfare to Work reforms beginning in 2008. Furthermore, they are more likely to lose employment, in which case they lose access to the new paid parental leave and a large portion of their subsidised childcare. These differences across countries, within countries and over time, illustrate the large role governments and institutions can play in mitigating or exacerbating the conflicts between fertility and labour market participation.

## **Family and Work Interactions at Other Life Stages**

The previous section of this chapter has focused on the relationship between family life and work life in a particular phase of life – early adulthood, when many people make crucial decisions about future career paths and family structure, and when the tension between family and work life tends to be strong and immediate. However, we find cross-effects from one sphere of life to the other across the whole life course. In what follows, we discuss the interaction of family and work life over the life course, beyond the mechanisms discussed in the previous section. Each subsection introduces a different field of research, all of which have a vast and rapidly developing literature. We do not aspire to give a complete overview of the state of research in any of these fields, but rather to briefly introduce some of the important questions studied, and to provide examples of studies in these fields.

### ***Early Life – The Impact of Parents***

In the early stages, lives are shaped by parental labour market situations and decisions. A parent's labour market situation – their employment status, working hours, wage and the stability of their job – determines how much money they can spend on their children, where the family lives, where the child goes to school, whether a child attends early education and care and of what quality, their access to health care, what food or entertainment they consume, and what educational resources are available in the home. A parent's job situation also affects how much time they can spend with their children, and how they spend that time together – their parenting

style, how often they are actively engaged in education, play, or supervising multiple children while simultaneously performing other work. Moreover, parental employment and occupation can shape a child's values and aspirations. It is through this multitude of channels, that we see intergenerational transmission of labour market outcomes (such as earnings and joblessness) and other life outcomes (such as health, education, welfare dependency, or parenting style), which in turn can affect the next generation through the same channels.

This transmission begins very early in life. Currie (2009) shows in her seminal paper how parents' socioeconomic status (including their labour market situation) affects children's education and labour market outcomes later in life, through health in infancy and even before they are born. For Australia, using data from the *Longitudinal Study of Australian Children (LSAC)*, Broadway et al. (2017) show that provision of paid parental leave – one aspect of job quality – improves the health of disadvantaged children. Paid leave alleviates the trade-off faced by mothers between securing their pre-birth job and spending time with their infant, which appears to be beneficial for their children's health.

As children grow up, the ways in which parents' job quality can affect their children's life trajectory, only grow more diverse, and many aspects of a parent's job are found to be connected to their children's development. Using LSAC data, Strazdins et al. (2010) show that poor job quality – measured by low control over how the work gets done, inflexible working times, low job security and no access to paid family leave – leads to increased parental distress among parents in Australia, which in turn puts children at risk of emotional and behavioural difficulties. Li et al. (2014) review empirical studies from around the world spanning 30 years, that examine the effects of parental non-standard working hours on children. They find that non-standard work hours negatively affect pre-school children's cognitive and behavioural development. Johnson et al. (2012) show that job instability among parents, as well as long working hours, negatively affects their children's behaviour and academic outcomes, but stable, high-quality employment does not.

While low-quality jobs are frequently linked to undesirable child outcomes, so are joblessness and unemployment. Mooi-Reci et al. (2019) use rich survey data linked to detailed administrative data on Dutch parents, who experienced unemployment during the economic crisis in the 1980s, and their children. They show that fathers' unemployment has a lasting negative effect on their children's education, partly reflecting a loss of family income and deterioration of children's learning environments, and partly reflecting that parents tended to experience a reduction in the intrinsic value placed on work.

There is a vast literature on the effect of the parent's labour market situation on children's development *and* education – which we know to partially determine children's labour market outcomes in adulthood. Other studies directly assess the adult offspring's labour market outcomes: for example, Cobb-Clark et al. (2020) show that reduced unemployment among fathers of adolescents causes a drop in unemployment among their offspring in early adulthood. They exploit the introduction of Mutual Obligation for recipients of unemployment benefits in Australia in 1999. The policy affected recipients of unemployment benefits up to age 34, and the study



compares the children of unemployed fathers just below and just above the age threshold in a regression discontinuity design.

Starting from birth, parents' employment status, wages, job quality, or joblessness affect a young person's development, values, and educational choices. As a result, the choices available to different young adults are already vastly different, by the time they embark on their working lives and begin to shape their own families.

### *Mid-Life – Past Decisions Compound*

The previous section discussed various ways in which decisions regarding family formation – especially when to have children and how many – interact with labour market decisions: for example, what occupations men and women sort into, what skills they acquire, how many hours they work, and what wages they earn. Due to the constraints that young children impose on parents' time use, it is during the early child-rearing years that gaps between parents and childless individuals, and between men and women, first appear and then solidify. As children age, their caring needs decrease and once children reach school age and beyond, one might expect those gaps to close again.

But past decisions can cast a long shadow. Occupational choices made with fertility intentions in mind will affect earnings across the entire life course. Skills lost or not accumulated, due to reduced employment or lower working hours during early childhood years, could take a long time to recover, and women whose career progression was halted, may only fully catch up many years after they have fully re-entered the workforce, or never at all. There could be a parenthood penalty in the labour market, and especially a motherhood penalty, long after the immediate care needs have disappeared or been drastically reduced.

Some early studies directly compare the labour market outcomes of women who never had children with those of mothers, to examine how such a motherhood penalty evolves as the women age. Davies et al. (2000) construct synthetic employment and earnings biographies, using data from the British Household Panel Study, and find that mothers earn less than childless women well into their 40s and 50s and even beyond, especially if they have more than one child, or are low- to medium-skilled. Sigle-Rushton and Waldfogel (2007) follow a similar approach using data from a range of industrialised countries. They find great variation by country: while mothers in the United States lost between 11% and 19% of their earnings by age 45, mothers in Germany and the Netherlands lost between 42% and 63%.

As mentioned in the section on “Direct effects of parenthood on labour market outcomes”, Kahn et al. (2014) find that while mothers have mostly caught up to childless women in terms of employment, hourly wages and occupational prestige, some gap remains even by age 50, and it increases with the number of children. We cannot be certain that this difference is completely due to motherhood changing a woman's employment prospects or earnings potential – instead, some women might decide to become mothers or remain childless, in part because of their labour

market outlook (see the section on “The effect of labour market circumstances on family formation”). To deal with this issue, Lundborg et al. (2017) study a group of women who all received fertility treatment, but only some of them were successful. Then they compare both groups’ labour market biographies following treatment. Their results confirm what other researchers found before, which they summarise as follows “*the labor market consequences of having children are large for women. When children are young, women earn less because they work less. When children are older, women earn less because they get lower wages.*” (Lundborg et al., 2017, p. 1627).

### ***Later in Life – New Caring Responsibilities Emerge***

We have caring responsibilities not only towards children, but also towards family members who need help due to illness, disability or old-age. These caring responsibilities tend to manifest somewhat later in life than those towards one’s children, but when they do, they pose similar challenges for the carer’s labour market activity, because this type of caregiving is time-consuming, mentally stressful and physically exhausting. Caregiving for elderly or disabled family members is predominantly supplied by women, and the gender patterns observed while a couple raises small children, are largely mirrored in this later life stage. There were more than 2.6 million carers in Australia in 2018, and around 860,000 primary carers – those who provide the most assistance to another person. Among primary carers, seven in ten were women, and the majority was 45–64 years old (Australian Bureau of Statistics, 2019).

Estimating the effect of caregiving on labour market outcomes is no trivial task. Caregiving should reduce working hours in the paid market because hours spent providing care, cannot be used for formal employment. At the same time, if several adults could potentially provide care to a family member in need, individuals who are unemployed or working part-time are more likely to become these caregivers. It is difficult to disentangle the effect of working hours on care provision, from the effect of care provision on working hours. Longitudinal data can help with this, for example by accounting for individual fixed effects, and by analysing the timing of caregiving uptake and changes in employment status and working hours.

Bauer and Sousa-Poza (2015) provide an extensive review of the international literature on this issue. Overall, they conclude that most studies find informal caregiving to have a small or no causal effect on participation, but a somewhat larger effect on working hours at the intensive margin and wages – with large variation by country and institutional environment, as well as by estimation method and data set used.

This large variation in results is also found in studies specific for Australia. Berecki-Gisolf et al. (2008) use two waves of the Australian Longitudinal Study on Women’s Health, to examine to what extent care provision is determined by previous labour market outcomes. They compare employment and wages of *future*

caregivers (women aged 45–50) before care provision starts, with those of non-carers. They find no reason to suspect that the caregiving decision is determined by previous outcomes, but that it is followed by a strong reduction in labour force participation. In contrast, Leigh (2010) used seven waves of the HILDA survey to estimate the effect of informal caregiving on employment, working hours and wages, among men and women of working age. He finds that individual heterogeneity explains almost all the difference in labour market outcomes between carers and non-carers, and that informal caregiving reduces labour force participation by 4–6 percentage points, while having no effect at all on wages, working hours and life satisfaction. Meanwhile, Nguyen and Connelly (2014) also use a HILDA sample of working-age men and women, but find that informal caregiving can reduce labour force participation by as much as 12 percentage points. Nguyen and Connelly (2014) analyse caregiving by *main* carers, while Leigh (2010) uses several broader definitions of being a caregiver. This difference in caregiving intensity – together with different estimation approaches – likely explains the different estimated effects.

The variation in estimated effects means that the true effect of caregiving in later life on labour market outcomes is ambiguous and more research is needed. However, a clearer picture emerges, if we restrict our view to carers near retirement age. It appears that employment outcomes and in particular the retirement decision of informal carers near retirement age, is quite strongly affected by caring responsibilities, as shown by Ciccarelli and Van Soest (2018) and Heger and Korfhage (2020) for 15 European countries, Jacobs et al. (2014) for Canada, and Jacobs et al. (2017) for the US. Similar studies for Australia, focussing on mature-aged workers only, are not available.

## Policy Implications

The evidence presented in this chapter shows the large impact of parenthood on labour market outcomes across all life stages. It also highlights the large differences by gender as it is still mostly women who adopt the responsibility of primary carer. This has substantial impacts on their ability to participate in the labour force in the short and medium term, and on their ability to continue in high-level, demanding occupations, and hence impact on their pay. The consequences go beyond those experienced by the individual; conflicts between parenthood and labour force participation have far-reaching implications for society more broadly.

First, there are fiscal implications: where parents can continue to work while caring for young children, they continue to pay taxes. Moreover, having two incomes in a family works as a safeguard against financial shocks, including those caused by disability or unemployment; families with two earners are less likely to have to rely on income support if one income is lost or reduced. This ‘insurance effect’ appears to also be keenly felt on a personal level. In the immediate aftermath of job losses caused by the COVID-19 pandemic in early 2020, many men experienced mental distress if their partner was no longer employed (Broadway et al., 2020b).

Second, low labour force participation among women puts their economic security at risk, and the consequences are felt long after the child-rearing years, as shown earlier in this chapter. This becomes particularly important in old-age, when lack of retirement savings poses a significant poverty risk. In Australia in 2016, just under a quarter of all women approaching retirement age (55–64 years) had no funds in the primary, government-mandated retirement savings scheme ('superannuation'), and women's median savings in this age group were \$96,000, while the equivalent figure for men was 73% higher (Australian Bureau of Statistics, 2018). Not only does this put women at risk of poverty, especially if they do not own a home, it also leads to higher public expenditure on the means-tested Age Pension. Jefferson (2009) studies the literature on this problematic link between women's caring roles across their working lives and the funding from public pension schemes they have available to them in retirement for much of the English-speaking world (the United States, the UK, Canada, Australia and New Zealand). She also finds that policies that facilitate and encourage women's workforce participation are crucial for poverty prevention in old age among women in all studied countries.

Third, conflicts between workforce participation and parenthood are also relevant because they pose a threat to an equitable society. The severity of family-work conflicts differs not only along gender lines. Women living in disadvantaged households and those who have low skill levels, and thus low earning power, are often experiencing the largest impacts – which poses the immediate risk of exacerbating inequality in society, and most importantly, intergenerational transmission of inequality and disadvantage. As discussed before, if the policy environment makes it hard for low-skilled mothers with low earnings potential to make a decent living, this can lead to poverty as well as a high-stress family environment, which in turn jeopardises children's health, education, career aspirations and future earnings prospects. A change in direction is needed if a lack of family-friendly policies deepens a cycle of entrenched disadvantage and intergenerational transmission of poverty.

And fourth, this chapter discussed the negative impact of family-work conflict on fertility. Demographic ageing threatens the sustainability of retirement funding in many countries around the world, while simultaneously posing challenges for the training and recruitment of an adequately-sized health care and aged care workforce. Easing work-family conflicts can help bringing fertility rates closer to replacement levels, and is thus of immediate societal interest, above and beyond its impact on the individual.

What can be done? In a nutshell: policy focus should be on (i) adequate provision of paid parental leave after birth or adoption, (ii) access to high-quality, affordable childcare for preschool children, and (iii) a tax and transfer system that rewards men and women for sharing paid work and caring responsibilities.

When deciding on the optimal length of paid parental leave, two counteracting effects need to be considered: if leave is too short, work-family conflict remains high and forces many women into pursuing one at the expense of the other, resulting in overall low levels of both fertility and labour force participation. If leave is too long, women are effectively being provided with a strong incentive to stay out of the workforce by being paid for *not* returning to their job. A review of the international

literature by Kalb (2018) showed the ‘sweet spot’ between these conflicting mechanisms to be somewhere between 6 and 12 months of paid absence from work after birth, with a return-to-job guarantee.

The most important feature of a childcare system – when looked at it purely as a means to facilitate mother’s workforce participation – is that it needs to effectively reduce families’ out-of-pocket expenses, especially for single parent families and secondary earners with low earnings potential. This can be achieved through many different systems: from public provision of childcare to public subsidies of services provided by private markets under various levels of public regulation, or a mix of both.<sup>5</sup>

Finally, the tax and transfer system should be set up in a way so that it does not discourage secondary earners’ workforce participation. The exact policy settings necessary to achieve this goal, will vary as widely from jurisdiction to jurisdiction as their tax and transfer systems do. However, one policy parameter that is important in any progressive tax system, is that taxing the individual rather than the household, is more likely to leave a secondary earner with a reasonable take-home pay that makes market work worth their while. Likewise, slow withdrawal of means-tested income support payments makes it less likely that government transfer income effectively locks recipients out of employment.

While such policies come at a price – and in many institutional contexts, that price could be hefty – this should be seen as an investment, not just an expenditure. It is important that policymakers are aware of the multitude of societal benefits that arise from easing work-family conflict. These include higher fertility; lower poverty risks among women and the elderly; and a fairer, more equitable world for children to grow up in and develop their full potential.

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<sup>5</sup> Different funding models have different implications for the quality of care and equitable access to care that are beyond the scope of this chapter. Lloyd and Penn (2012) provide an overview and discussion of various models.

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