Supporting paper 2: Costs and benefits of an entitlement

This supporting paper catalogues the costs and benefits of the entitlement to extended unpaid carer leave proposed in position paper (hereafter 'the entitlement').

It looks at the costs and benefits to employees (section 1), care recipients (section 2), employers (section 3) and taxpayers (section 4). The paper also looks at whether the overall costs of an entitlement of unpaid carer leave are expected to exceed the benefits and whether the entitlement is in the interest of the Australian community (section 5).

The first four sections of the paper attribute the costs and benefits to who would *nominally* incur them, which may not be who would *ultimately* incur it.

Section 6 discusses the distributional effects of the entitlement.

1. Costs and benefits to employees

This section looks at the costs and benefits of the entitlement to employees. It describes how the entitlement would benefit different types of users and presents an upper-bound quantitative estimate of these benefits. It then discusses wider costs and benefits to employees.

Entitlement users

The entitlement would benefit those who would use it. (Put simply: if it didn't, why would they use it?)

There are two factors to consider when thinking about the benefit of extended unpaid carer leave to the entitlement user.

- 1. Whether, in the absence of the entitlement, users would continue in paid work or quit their job.¹
- Whether users would exercise their right to return to work.

Applying these factors results in four groups of entitlement users (figure 1).

Group 1 (expected to make up just over 10 per cent of entitlement users) is made up of people who would have quit their job in the absence of the entitlement and would exercise their right to return. For these carers, an entitlement would mean a more seamless return to paid work. They would be saved the effort of searching for a new job, be insured against the risk of not being able to find another job, and prevented from taking an inferior job.²

Group 2 (expected to make up almost 40 per cent of entitlement users) is made up of people who, like those in group 1, would stop paid work regardless of whether the entitlement was available. But, unlike those in group 1, they would not exercise their right to return. For carers who were uncertain about whether they were ready to give up work, the entitlement provides insurance that they can return to work seamlessly. For those who were not planning to return, they would have nothing to lose by taking extended unpaid carer leave rather than quitting their job, but the entitlement would be of little benefit to them.

¹ A third possibility is that the user would have been able to take extended unpaid carer leave in the absence of the entitlement. As these users would not be affected by the entitlement, they are not discussed in this supporting paper.

² While more marginal, the entitlement would also preserve some of the users' accrued workplace benefits, such as personal leave and long service leave (that has not yet matured).

Would have quit paid work in the Would have continued in paid work in absence of the entitlement the absence of the entitlement Group 1 **Group 3** Just over 10 per cent of all entitlement Nearly half of all entitlement users Would exercise The benefit from the entitlement is right to return The benefit from the entitlement is an large, but less than the benefit of an easier path back to paid work easier path back to paid work **Group 2 Group 4** Wouldn't Almost 40 per cent of all entitlement Small share of entitlement users (not exercise right users quantified) to return The benefit from the entitlement is likely The benefit from the entitlement is likely to be small to be small

Figure 1 - The benefits of an entitlement would vary by user type

Source: Productivity Commission estimates.

Group 3 (also expected to make up nearly half of all entitlement users) is made up of people who would continue working in the absence of the entitlement but would be induced to temporarily cease paid work to provide more informal care. People in this group would temporarily sacrifice their income and any non-pecuniary benefits from their job to provide full-time informal care to a household or family member. Depending on their circumstances, they may be able to access income support via the Carer Payment and/or Carer Allowance.

People in this group would typically benefit from the entitlement because they would voluntarily choose to take leave (noting that some may say the choice was because of societal or familial expectations rather than personal desire). Some participants expressed concern about the effects that the entitlement would have on this group (Lived Experience Australia, sub. 1; Health Services Union, sub. 19; Australian Services Union Victorian and Tasmanian Branch, sub. 30). Section 6 looks at these issues in more detail.

People in group 3 would typically benefit less from the entitlement than people in group 1. The entitlement would help people have a more seamless return to the workforce than if they had otherwise guit their job to provide care, but in the absence of the entitlement they would not have quit their job to provide care (suggesting that they would prefer to continue, rather than quit, paid work).

To summarise, over half (almost two-thirds) of all entitlement users (from groups 1 and 3) would benefit by, at most, the value they would place on a more seamless return to paid work. The remaining entitlement users comprising mostly of members from group 2, would benefit by much less.

This raises the question: how much more seamless would this return to paid work be?

In the context of looking at the expected effects of the entitlement on paid work, supporting paper 1 looked at the extent to which the entitlement would facilitate a return back to work. To further understand how quickly carers

who have been out of work return to the labour force, the Commission analysed data from the Household Income and Labour Dynamics in Australia (HILDA) survey³ to estimate how quickly people (with similar characteristics to entitlement users) would otherwise have returned to work in the absence of an entitlement. Between 2005 and 2020 (this period covers a diverse set of labour market conditions), 50 per cent (60 per cent) of people with similar characteristics to entitlement users (people who provided care to an older person and who had worked at some point in the preceding two years) who were out of the workforce and who wanted a job, found a suitable job within one year (two years). The probability of finding work was higher 75 per cent (90 per cent) among only those who persistently searched for one. (It is however possible that some of those who stated that they no longer wanted to work had searched for work but become discouraged.)

Those employees who returned to work did not necessarily return to the same job, at the same pay or weekly hours. But those who found jobs were typically no less satisfied with them. The median employee who found a suitable job reported the same level of overall job satisfaction (on a scale from 1–10) as their previous job. Or put another way, about the same number of people ended up in a better job as ended up in a worse job (Productivity Commission estimate based on HILDA Release 20).

We did not put a dollar value on the benefits of the entitlement to employees. To do so required making assumptions about entitlement users' preferences about work, care, leisure and job search. However, one study that did so, estimated that an entitlement to two years of unpaid carer leave would have benefited the median user in the United States between 1994 and 2008 by \$US 28 000 (or about 28 per cent per year of 2008 average annual full time weekly earnings (Productivity Commission estimate based on OECD (2022)). We expect the benefit of the entitlement to be lower (but still positive), as some of the assumptions this study made are too strong (box 1). This estimate can be thought of as an upper-bound estimate of the benefit of the entitlement to employees in Australia.

Box 1 - Estimating the benefit of an entitlement to users

Using a sophisticated model of work and care decisions of female informal carers between 1994 and 2008 in the United States, Skira (2015) estimated that a two-year unpaid carer leave entitlement was valued by the median user at \$US 28 000, or \$US 14 000 each year for two years.

The model allowed each carer to have different preferences for work and care, and was calibrated by inferring these preferences (using econometric techniques) from past behaviour. The model was then altered to 'allow' all working carers to take two years of unpaid carer leave. The benefit of this leave to each user was measured as the lump sum payment that would make the carer indifferent between: (a) using the entitlement and receiving no lump sum payment and (b) not having an entitlement and instead receiving the lump sum payment. This method, known as willingness-to-accept, is often used to place a monetary value on things with no market price.

In practice, an entitlement to extended unpaid carer leave is likely to yield lower benefits to users than Skira's estimate. People who step out of the labour force to care often do not return to work when their

³ This report uses unit record data from the Household, Income and Labour Dynamics in Australia (HILDA) Survey. The HILDA project was initiated and is funded by the Australian Government Department of Social Services (DSS), and is managed by the Melbourne Institute of Applied Economic and Social Research (the Melbourne Institute). The finding and views in this report, however, are those of the Commission and should not be attributed to either DSS or the Melbourne Institute. Further information on the design of HILDA can be found in Watson and Wooden (2012).

Box 1 - Estimating the benefit of an entitlement to users

caring responsibilities are reduced or ended. They are much more likely to take early retirement than non-carers. There are two possible reasons: either it is difficult to find an acceptable new job; or the person finds that she or he prefers not working, or enjoys retirement. Some carers will fit into this first category, and others into the second. Skira rules the second explanation out. Therefore, if carers return to work in very low numbers, she concludes that it is difficult to find work. Based on that assumption, she estimates that carers have a probability of finding a job of 10 per cent over the next two years, whereas we found that over a half (almost two-thirds) of carers who wanted a job were able to find a suitable job. And we find that over a third of carers will choose not to return to work.

All employees

The entitlement could also affect employees who do not use it. It could impose costs on entitlement users' co-workers (including managers). For example, co-workers could be required to work more intensively to cover for an entitlement user. Some employees, especially those paid a salary, might be required to work additional unremunerated hours. These costs are difficult to measure as administrative records do not usually capture actual hours of work or work intensity by salaried employees. One study did not find evidence that parental leave increased the number of days of sick leave taken by co-workers, although the authors noted that the number of sick days is only a partial indicator of co-worker wellbeing (Brenøe et al. 2020).

Summing up

Employees would benefit from the entitlement. The benefit would come from it facilitating an easier return to paid work (and the peace of mind this entails). We expect that about two thirds of all entitlement users would actually exercise their right to return to work. And most of those who would exercise their right to return would not have left paid work to provide care in the absence of the entitlement.

2. Costs and benefits to care recipients

The recipients of the care provided by entitlement users who would otherwise have remained in paid work would benefit from the entitlement. However, recipients of the care provided by entitlement users who would otherwise have ceased paid work would not benefit: moreover, 25 per cent of these recipients might be made worse off because their carers would otherwise not have returned to work were it not for the entitlement.

There are a number of ways care recipients could benefit from more informal care.

- Syse et al. (2022) found that increased resources available to informal carers, including access to work arrangements, improved the outcomes of care recipients — as evidenced in reduced mortality of care recipients.
- Fan et al. (2022) observed that increased informal hours of care had the effect of improving the life satisfaction of older care recipients.
- And Pristavec and Luth (2020) found that increased carer resources (including those provided by improved access to working arrangements) reduced the burden on carers and improved their life satisfaction, and as a result improved the life satisfaction and health outcomes of carer recipients.

While there is a paucity of evidence that connects the effect of informal care with the health-related quality of life measures of older persons (measures that allow objective measures of health and wellbeing), there are studies that have used contingent valuation techniques to estimate care recipients' willingness-to-pay for an additional hour of informal care or their willingness-to-accept compensation for losing an hour of informal care.

- Van den Berg, Bleichrodt and Eeckhoudt (2005) found that care recipients (with a mean age of 67 years) in the Netherlands in 2001 were willing to pay up to €6.72 for one additional hour of informal care, and to accept a minimum of €8.62 as compensation for receiving one less hour of informal care. In a separate study (published in the same paper), care recipients (mean age of 62 years) in the Netherlands in 2001 with rheumatoid arthritis, were willing to pay up to €7.84 for one additional hour of informal care, and to accept a minimum of €8.22 to compensate for receiving one less hour of informal care.
- De Meijer et al. (2010) found that care recipients in the Netherlands in 2001 (with a mean age of 68 years) were willing to pay up to €6.85 for one additional hour of informal care, and to accept a minimum of €8.88 to compensate for receiving one less hour of informal care. (The findings of the 2005 study are drawn from a subset of the survey responses used for this study.)

When translated to the Australian context⁴, care recipients would have valued informal care at about \$15–20 per hour in 2018⁵. Assuming that group 3 carers would provide on average upwards of 30 hours of care per week for a period 3 months or 13 weeks, the entitlement would contribute to an additional 390 hours per informal carer or 1.17 million hours of care.

This suggests that the benefit to care recipients of entitlement users who would otherwise have remained in paid work of between \$6000 and \$7800, which is equivalent to between \$3000 and \$3900 for each entitlement user across all entitlement users. It is worth bearing in mind that this is quite a significant sum relative to the income and assets of some older care recipients, and so it could still be an important benefit to them.

3. Costs and benefits to employers

The entitlement would impose costs on employers. Employers would incur one-off costs from changing their human resources processes for granting leave. But the more substantial ongoing costs would be from the disruption caused by the use of the entitlement itself.

To understand these ongoing costs, consider the options available to an employer if an employee informs them that they will use the entitlement.⁶

They could replace the entitlement user, either by hiring a new employee (possibly on a temporary basis)
or getting existing employees to work harder or for additional hours. Both options could be worse for the
employer than if the entitlement user continued working. Replacing employees involves hiring and training
costs, and replacement employees could be less productive (at least in the short term) than the

 $^{^4}$ The amounts were rescaled to 2018 AUD by converting to 2001 AUD (on a purchasing power parity basis) and then scaling by the change in the CPI between 2001 and 2018. The 2001 PPP exchange rate for Australia to the Netherlands was 1.328/0.905 = 1.47 (OECD 2022). The change in the CPI from June 2001 to June 2018 was 113/74.5 = 1.52. And the scaling factor (1.328/0.905)*(113/74.5) = 2.23.

⁵ This is in the ballpark of other estimates of the hourly value of informal care (usually from the perspective of the carer and so less relevant to our purposes). For example, Engel et al (2021) report the mean estimate of the hourly value of informal care to be \$US16.78 in 2018, which was about \$A24 in 2018 when converted on purchasing power parity terms.

⁶ Employer groups highlighted these costs in their submission but did not provide information on their magnitude (Chamber of Commerce and Industry Queensland; sub. 16; Australian Industry Group, sub. 34).

entitlement user because of disruption and inexperience. And getting existing staff to work additional hours might involve paying overtime and could lead to burnout.

 They could decide to not replace the entitlement user and accept a saving in wages and a reduction in output. This would also usually make the employer worse off than if the employee had continued working, because the value of employees' output usually exceeds their wages (this is why they were employed in the first place).

Experience with leave entitlements overseas suggests that employer responses would vary with the industry, labour market, and characteristics of the employee taking leave (box 2).

Box 2 – Employer responses to leave-taking vary

Studies of leave entitlements in other countries find that employer responses depend on some key employer and employee characteristics.

- Employers are more likely to hire new staff if candidate hires have similar skillsets to that of the leave-taker (Ginja, Karimi and Xiao 2023), and if existing employees do not have similar skillsets to that of the leave-taker (Brenøe et al. 2020; Ginja, Karimi and Xiao 2023).
- Employers make greater efforts to cover the leave-taker's absence in occupations where work cannot be
 delayed (for example, people working in hospitals and for manufacturers) than in occupations where work
 can be delayed (such as some research roles) (Bedard and Rossin-Slater 2016).
- In low-skill/high-turnover industries (such as some retail and agricultural jobs), leave-taking is typically managed by proportionate increases to permanent hires (Bedard and Rossin-Slater 2016).

Another factor that would drive employer responses (and the associated costs) is their perception about whether the entitlement user is likely to exercise their right to return and their ability to manage the uncertainty surrounding this — noting that we estimate that about one third of all entitlement users would not exercise their right to return (figure 1).

Incorrectly assuming an entitlement user will not return could be costly, because a new position would need to be found for them when they return (unexpectedly). Likewise, incorrectly assuming an entitlement user will return could be costly because the employer might find themselves short-staffed when they unexpectedly do not return. With experience, employers are likely to develop strategies, such as keeping in contact with entitlement users while on leave, to help them better gauge whether or not entitlement users will return to their jobs.

That said, this discussion overstates the costs that employers would bear, for several reasons:

- In about half of all cases (figure 1), the entitlement user would instead quit their job if the entitlement was not available to them. Their employer would still need to either replace them or reduce output. The difference is that, in the absence of the entitlement, the employer would not need to provide for a right to return to work. This would make it easier for the employer to replace them with a permanent employee.
- Employers could also benefit from the entitlement. If valued employee who wanted to take leave to care would have otherwise quit their job, access to the entitlement might induce them to return. These cases would probably be rare, however, as we estimate that only about one quarter of entitlement users who would otherwise have quit their job would return to work (supporting paper 1). And because employers can voluntarily grant extended unpaid carer leave (and can publicise this to current and prospective employees), many probably already do so where there is clear mutual benefit.

Cost estimates

The costs of the entitlement to employers are difficult to estimate.

Building up an estimate of the costs from surveys about each component (such as the cost of placing a job advertisement) could be inaccurate and important factors (such as reductions in productivity) would likely be missed.

In principle, a better way is to estimate the costs of a similar entitlement in another country, either by comparing the performance of employers who were exposed to leave-taking to those who were not or by examining the before—and—after effects of the introduction of the entitlement. Several studies have estimated employer costs of parental leave entitlements (paid leave, but taxpayer-funded so unpaid from the employer's perspective) (table 1).

This approach has some limitations — the entitlements in other countries are not identical to the entitlement proposed in this report and some studies do not measure all the relevant components of employer performance. But it is valuable evidence provided it is interpreted with these limitations in mind.

- Two studies found that unexpected (from the employer's perspective) increases to of parental leave of 1–3 months' duration imposed sizeable costs on employers. Ginja et al. (2023) found each leave taken increased wage costs by about 20 months of the salary of a full-time-equivalent employee, as employers typically replaced the leave taker with multiple employees (but with no apparent boost to output). This estimate of wage costs does not include related administrative costs, such as payments to recruitment firms. Gallen (2018) found that firms with at least one leave taker were 2 percentage points (7 per cent) more likely to shut down in following 5 years. These studies are probably the most representative of the costs to employers of the entitlement. They capture leave taken at relatively short notice and for a duration similar to that expected for the entitlement.
- Studies of the costs of parental leave itself (usually taken with much more notice and for a much longer duration, except in the United States) did not find any evidence of costs to employers. Only one study (Brenøe et al. 2020) measured profitability and survival, the best indicators of costs to employers. These results of these studies on wage bills are uninformative.

While far from conclusive, this evidence suggests that the costs of extended unpaid carer leave for employers could be sizeable when they are unexpected and impose significant uncertainty on the employer, such as the Swedish reforms considered by Ginja et al. (2023).

Table 1 – Studies of direct costs to employers of non-employer-funded leave entitlements

Study	Details	Quality	Findings		
			Wage costs	Output	Combined
Ginja, Karimi and Xiao (2023); Sweden, 1989	Extension to existing parental leave; median length 2.5	High	Wage costs increased by equivalent of 20 months of a full time equivalent	Suggestive evidence of decline to sales (measured only for manufacturing firms; 23 per cent of	Suggestive evidence of decline to value added (measured only for manufacturing firms:
	months		salary.	sample).	23 per cent of sample).

⁷ While more speculative, it is possible that the cost of the entitlement may be higher than the cost of an unexpected extension to parental leave because in many cases a replacement employee will already be available if parental leave is extended.

Study	Details	Quality	Findings		
			Wage costs	Output	Combined
Gallen (2018); Denmark, 2002	Extension to existing parental leave; mean length 1 month	High	No measurable effect on co-worker wages. Wage costs not otherwise measured.	-	Firms with at least one leave taker were 2 percentage points (7 per cent) more likely to shut down in the next 5 years.
Brenøe et al. (2020); Denmark, 2001–2013	Parental leave, mean length 10 months.	High	No measurable effects on wage costs.	No measurable effects on output.	No measurable effects on profitability or survival.
Bedard and Rossin-Slater (2016); California, 2004–2014	Mostly parental leave, mean length 4-12 weeks.	Moderate	Small decrease to wage costs.	-	-
Appelbaum and Milkman (2011); California, 2009	As per Bedard and Rossin-Slater (2016)	Low	₋a	89 per cent of firms reported productivity not worse	₋a

a Study included findings about wage costs and profitability, but these are not reported here because up to 60 per cent of employers used the program to substitute for employer-funded paid leave and benefits which may have substantially confounded the effects of leave-taking.

Summing up

The entitlement would impose costs on employers. Employers would either replace employees on leave and incur additional wage, hiring and training costs or not replace them and lose output. Disruption and replacements' inexperience could also lead to decreased productivity, at least temporarily. The costs would be lower for employers of entitlement users who would instead have quit their job if the entitlement were not available (about half of all users), as they would still incur hiring and training costs replacing the employee in the absence of the entitlement.

Evidence on these costs is patchy because employers respond in different ways and measures of profitability are usually incomplete. The findings from studies looking at the costs of parental leave entitlements overseas are mixed, but those that are more applicable to the present context find evidence of material costs for employers.

A further proviso is that the evidence summarised in table 1 is mostly relative to a counterfactual scenario of the leave taker continuing in their job, whereas we expect that about half of entitlement users would quit their job if the entitlement were not available (supporting paper 1).8 As such, on a per-entitlement-user basis, the

⁸ This is unambiguously the case for the studies in which the counterfactual is a scenario where employees are entitled to take leave but none choose to do so (Appelbaum and Milkman 2011; Bedard and Rossin-Slater 2016; Brenøe et al. 2020). In principle, the two studies in which the counterfactual is that employees are entitled only to a shorter period of

costs to employers would be — on average — reduced by half of the cost of hiring and training an additional ongoing employee (mostly upfront costs) to around 85 per cent of a full time employee's annual pay for two years. In contrast, a literature survey by Manning (2010, p. 62) reported the cost of hiring and training an additional ongoing employee to be 3–13 per cent of annual pay.

4. Fiscal effects (the costs and benefits to taxpayers)

The entitlement to extended unpaid carer leave would also impose costs and benefits on taxpayers. These impacts would differ between those who would, in the absence of the entitlement, remain in paid work and those who would cease paid work (figure 2).

Entitlement users who would remain in paid work in the absence of the entitlement would temporarily cease paid work to provide more informal care. This would:

- · reduce income tax receipts (a fiscal cost), as they would undertake less paid work
- increase social security spending (a fiscal cost), as some would become eligible for the Carer Payment
- reduce the pressure on subsidised formal aged care and health care (a fiscal benefit), as informal care slightly substitutes for these services.

And some entitlement users who would quit their job in the absence of the entitlement would exercise their right to return and return to work faster than they otherwise would (if at all). This would:

- · increase income tax receipts (a fiscal benefit), as they would undertake more paid work
- reduce social security spending (a fiscal benefit), as they would spend less time on the Carer Payment, Carer Allowance, JobSeeker payment and associated supplements
- possibly slightly increase the pressure on subsidised formal aged care and health care (a fiscal cost), as some would be induced to reduce their caring load if they had the option of returning to work. This effect is more speculative and we have not estimated its size.

leave (Gallen 2018; Ginja, Karimi and Xiao 2023) might capture both types of entitlement users, but it appears that most are entitlement users who would otherwise have remained in paid work. Both studies find that the longer leave entitlement made leave-takers more likely to quit their job, whereas — by definition — a longer leave entitlement would be more likely to prevent an entitlement user who would otherwise have quit their job from leaving it.

Those who would have otherwise remained in paid work

Those who would have otherwise ceased paid work

Those who would have otherwise ceased paid work

Fiscal impact of leave taking

Fewer income tax receipts

More social security payments

Savings on health care and aged care subsidies

Fiscal impact of leave taking

Fewer income tax receipts

Regligible effect on health care and aged care subsidies

Figure 2 - The fiscal effects of an entitlement

Using 2018-19 incomes, income tax scales, social security payment rates and aged care and healthcare subsidies,⁹ we estimated the size of each of these effects assuming that the entitlement had existed at that time (table 2).¹⁰ The calculations giving rise to these estimates are explained in detail, below.

Table 2 – Components of fiscal effect of an entitlement to extended unpaid carer leave 2018-19

	Component	Estimate
Entitlement users who would otherwise have continued in	Decreased income tax receipts per entitlement user who would otherwise have continued in paid work per year of leave taken	-\$18 000
paid work	Increased social security payments per entitlement user who would otherwise have continued in paid work per year of leave taken	-\$6900
	Decreased aged care subsidies per entitlement user who would otherwise have continued in paid work per year of leave taken	\$1700
	Decreased healthcare subsidies per entitlement user who would otherwise have continued in paid work per year of leave taken	\$1000
Entitlement users who would otherwise have quit their job	Increased income tax receipts per entitlement user who would otherwise have quit their job	\$1300
	Decreased income social security payments per entitlement user who would otherwise have quit their job	\$900

⁹ 2018-19 is the year data were most readily available.

¹⁰ The estimates can be interpreted as components of the estimated fiscal impact of the entitlement had it existed during 2018-19, with the exception that the behavioural responses of employers and employees are assumed to reflect long term average responses. This means that the estimates assume that average labour market conditions apply; they are not specific to a particularly weak or strong labour market.

And using the estimates from table 2, we estimated the overall fiscal effect under 12 plausible sets of assumptions (table 3). The assumptions relate to:

- The average duration of the leave that would have been taken by those who remained in paid work but
 would have used the entitlement if it were available. Experience from countries with extended unpaid carer
 leave entitlements suggests 2–3 months. We have modelled the effect of a 3 month average duration (an
 underestimate, as this is minimum allowed) and a 6 month average duration (probably an overestimate,
 given the evidence from abroad).
- Among those who would have used the entitlement if it were available, the ratio of the number of people
 who continued in their job to the number of people who quit their job. Our central estimate is that there
 would have been similar numbers of each, but this is subject to substantial error.
- The average foregone income tax receipts per entitlement user who would otherwise have continued in paid work per year of leave taken. This is discussed further in the following section.

The overall fiscal effect ranges from -\$6600 to \$600 per entitlement user and the fiscal effect was found to be negative in 11 of the 12 cases. And as highlighted throughout the following section, the estimates of the fiscal costs are generally more conservative than the estimates of the fiscal benefits, which adds credence to the finding of a negative overall fiscal effect.

Table 3 – Fiscal effects of an entitlement to extended unpaid carer leave 2018-19

	Average leave taken by those who would otherwise have continued in paid work ^a	Number of continuing workers in to job quitters b	Average foregone ncome tax receipts per continuing worker ^C	Modelled fiscal impact per entitlement user
Scenario 1	3 months	0.5	\$18 000	-\$400
Scenario 2	6 months	0.5	\$18 000	-\$2200
Scenario 3	3 months	1.0	\$18 000	-\$1600
Scenario 4	6 months	1.0	\$18 000	-\$4400
Scenario 5	3 months	2.0	\$18 000	-\$2900
Scenario 6	6 months	2.0	\$18 000	-\$6600
Scenario 7	3 months	0.5	\$7 000	\$600
Scenario 8	6 months	0.5	\$7 000	-\$200
Scenario 9	3 months	1.0	\$7 000	-\$200
Scenario 10	6 months	1.0	\$7 000	-\$1400
Scenario 11	3 months	2.0	\$7 000	-\$1000
Scenario 12	6 months	2.0	\$7 000	-\$2700

<sup>a. Average amount of leave taken by entitlement users who would otherwise have continued in paid work.
b. Number of entitlement users who otherwise would have continued in paid work per entitlement user who would have quit their job.
c. Average foregone income tax receipts per entitlement user who would otherwise have continued in paid work per year of leave taken.</sup>

Source: Productivity Commission estimates.

The remainder of this section outlines the basis for the estimates summarised in table 2.

Fiscal effects of leave taken by entitlement users who would otherwise have continued in paid work

Effect on income tax receipts

Had the proposed entitlement been in place in 2018-19, the leave that would have been taken by users who continued in paid work would have reduced income tax receipts (because there would be less paid work).

We conservatively estimated the reduction in income tax receipts to be 85 per cent of the income tax paid on the income actually earned by those people while they would have been on leave (box 3).

The average (mean) actual personal income tax paid by people in this group in 2018-19 was about \$21 000, which suggests a decrease of about \$18 000 per person per year of leave taken. We also produced an alternative estimate based on the *median* actual personal income tax paid by members of this group in 2018-19 (about \$7 000) of \$6 000. While the mean is the more relevant statistic, the distribution is highly skewed and the sample size is small so the median is a more robust measure.

Box 3 – Effect of leave taken by entitlement users who would otherwise continued in paid work on income tax receipts

What effect would leave taken by entitlement users who would otherwise continue in paid work have on income tax receipts? The answer depends on how employers respond.

- If the entitlement user is not replaced, or is replaced by existing employees working additional hours
 without being remunerated, then there will be a reduction in economywide income tax receipts
 approximately equal to the reduction in income taxes paid by the entitlement user.
- If the entitlement user is replaced by a new employee who is pulled away from other sectors of the economy, there will be a reduction in economywide income tax receipts because the leave taking constitutes a temporary overall reduction in employment.
- If the employee is replaced existing employees working additional hours for which they are remunerated, there would be a negligible economywide effect on income tax receipts.

We have assumed that 15 per cent of the paid work that entitlement users would have undertaken while on leave would have been replaced by existing employees working additional remunerated hours. This is based on the results of the studies of parental leave entitlements surveyed in section 3, but is on the conservative side (meaning that the actual share is probably somewhat lower, leading to a larger decrease to income tax receipts than found here). Gallen (2018) found that existing employees worked very few additional (remunerated) hours in response to leave-taking, while Brenøe et al. (2020) found that they performed about 14 per cent of the additional paid work.^a

¹¹ This is the average 2018-19 income tax paid by members of this cohort identified in the 2018 ABS Survey of Disability, Ageing and Carers (which has been linked to income tax return data via the Multi-Agency Data Integration Project). The cohort includes carers of people of any age, not just older people, as the age of the care recipient cannot be identified in all cases (supporting paper 1). In those cases where it is possible to separate the cohorts, the median income of each cohort is very similar, which suggests that this shortcoming probably does not affect the results by much.

Box 3 – Effect of leave taken by entitlement users who would otherwise continued in paid work on income tax receipts

This means that about 85 per cent of the income taxes that would be paid by entitlement users continuing in paid work in the absence of the entitlement are foregone.

There are other reasons why this is a conservative estimate of the reduction to income taxes.

- It assumes that all of these entitlement users would exercise their right to return.
- It does not account for any entitlement-induced reductions to productivity, which would reduce profits and company income tax receipts.
- **a.** Ginja, Karimi and Xiao (2023) found that existing employees performed 33 per cent of the additional paid work, but this was in a context in which employers, on average, replaced entitlement users by more than one additional employee *and* by existing employees working additional remunerated hours (and with no evidence that output was subsequently higher than it would have been had entitlement user instead worked). The discussion in this box assumes that replacement is one—for—one in terms of hours worked and output. Generalising this to Ginja, Karimi and Xiao's findings would suggest a larger reduction to economywide paid work on income tax receipts than modelled here.

Effect on social security payments

The leave that would have been taken by users who continued in paid work would have increased social security spending. As with income tax receipts, we assumed this increase to be the social security payments that this group would have received for the period of their leave, scaled by 85 per cent (box 3).

We assumed that one third of this group would have received the Carer Payment while on leave. This is the share of carers of older people who received either the Carer Payment or Jobseeker Payment (known as the Newstart Allowance in 2018-19) when interviewed approximately 6 months after quitting work (discussed later). In 2018-19, the Carer Payment was about \$22 000 per year, and the Carer Allowance was \$3300 per year, so the increase in social security payments would have been approximately \$6900 per person per year of leave taken.

Effect on subsidies for aged care services

The leave that would have been taken by users who continued in paid work would have reduced their care recipients' use of subsidised formal aged care services. Although the aged care funding arrangements make it unlikely that an entitlement would have had *any* effect on total government spending on aged care, this would (counterintuitively) still have amounted to a fiscal benefit (box 4).

¹² People on unpaid leave are not eligible to receive the Jobseeker Payment unless they want to return to work prior to the agreed period of leave but their employer will not allow it, making it unlikely that entitlement users would qualify for the Jobseeker Payment while on leave (DSS 2022).

¹³ Ninety-five per cent of Carer Payment recipients also received the Carer Allowance in 2018-19. This excludes the Carer Supplement (Commonwealth Department of Social Security, pers. comm. 13 February 2023).

Box 4 – Even with a fixed aged care budget, reducing use of subsidised aged care would yield fiscal benefits

Under the current funding arrangements for aged care services, subsidies would be unresponsive to the changes in demand for services that an entitlement could induce. This is because the number of people who can access the Home Care Packages Program and the Residential Aged Care Program grows in proportion to the number of people aged 70 and over, and the Commonwealth Home Support Program is funded via grants to service providers that do not vary with demand (RCACQS 2021, p. 191).

What this means is that entitlement-induced reductions in the use of subsidised aged care services will result in more subsidised aged care services for other users. The benefit is not a saving but rather money to support other users of subsidised aged care.

Aged care funding arrangements could be changed so subsidies for formal aged care services are issued to any older person who meets the criteria (this is often called 'demand-driven', 'uncapped' or 'entitlement-based' funding). This was recommended by the Aged Care Royal Commission and the Australian Government accepted the recommendation in-principle (Department of Health 2021). Such a change would mean that any fiscal benefit would be realised as a saving.

While there are no studies of the effects of informal care receipt on formal aged care services in Australia, there are a number of studies of these effects in Europe and the United States (table 4).¹⁴ Nearly all found that receiving informal care reduces the use of formal aged care services (both home-based and residential care).

Table 4 - Studies of the effect of informal care on use of formal aged care^a

Study	Country and cohort of interest	Effect on home-based formal care	Effect on residential care
Lo Sasso and Johnson (2002)	United States; informal care provided to people aged 70 and older by their children, 1993-1995.	-	Receiving informal care 'all or most of the time' reduced the probability of entering a nursing home in a two year period by 6 percentage points.
Van Houtven and Norton (2004) ^b	United States; informal care provided to people aged 70 and older by their children, 1995-1998.	On average, a 10 per cent increase in informal care hours led to a 0.87 percentage point decrease in the probability of using home-based care. An increase in informal care from 20 hours per month (0 hours per month) to 160 hours per month reduced the probability of using home-based care by 2 percentage points (6 percentage points).	On average, a 10 per cent increase in informal care hours reduced time spent in a nursing home by 1.9 days over two years. An increase in informal care from 20 hours per month (0 hours per month) to 160 hours per month reduced time spent in a nursing home by 8 days

¹⁴ We attempted to study the effects of informal care receipt on use of formal aged care services in Australia using methods similar to those used by Van Houtven and Norton (2004) and Bolin, Lindgren and Lundborg (2008) applied to the HILDA dataset, but this was unsuccessful as the sample size was too small.

Study	Country and cohort of interest	Effect on home-based formal care	Effect on residential care
•			over two years (24 days over two years).
Charles and Sevak (2005)	United States, informal care provided to people aged 70 and older by their children, 1993-2000		Receiving informal care with an activity of daily living led to a 39-49 percentage point decrease in the probability of entering a nursing home in the following seven years.
Bolin, Lindgren and Lundborg (2008)	Eleven European countries; informal care provided to people aged 50 and older by their children, 2004.	On average, a 10 per cent increase in informal care hours led to a 0.6 percentage point decrease in the probability of using home-based care.	
Bonsang (2009)	Twelve European countries; informal care provided to people aged 65 and older by their children, 2004.	On average, a 10 per cent increase in informal care hours led to a 6.8 per cent decrease in hours of domestic help among those who used domestic help and a 2 per cent increase in hours of nursing care among those who used nursing care.	-
Bergeot and Tenand (2021)	The Netherlands; informal care provided to people aged 65 and older by their children, 2016-2019	Receiving informal care reduced the probability of using skilled home care in the following two years by 13 percentage points among people with severe limitations and 7 percentage points among people with mild limitations. Receiving informal care reduced the probability of using social care in the following two years by 6 percentage points among people with severe limitations and 3 percentage points among people with mild limitations.	Receiving informal care had a negligible effect on the probability of nursing home admission in the following three years.

a. There were 11 other studies that we looked at but did not include because they either focussed on a narrow cohort of care recipients (for example, only people receiving end-of-life care) or because their methodology did not adequately account for the endogeneity of informal care provision. **b.** The effect of an increase in monthly informal care hours from 0 to 160 has been approximated from the claim that 'increasing [informal care] hours per month from zero to [120 hours] reduces formal care nearly three times as much as going from 20 [hours] per month to [120 hours]' (Van Houtven and Norton 2004, p. 1177).

Drawing on these studies, we estimated that — on average — each leave that would have been taken by those who continued in paid work would have reduced the time that their care recipient spent in residential aged care by 3–12 nights per year of leave taken and the probability that their care recipient used home-based care (whether via Home Care Package Program or the Commonwealth Home Support Program) while they were on leave by 2 percentage points. Box 5 explains these estimates in more detail. In

2018-19, this would have meant a saving of \$800–\$2 300 of residential care subsidies and \$100 of home-based care subsidies — so about \$1700 per person.¹⁵

For shorter periods of leave (a few months), these are probably overestimates of the fiscal savings. There are substantial wait times for formal aged care — in 2018-19, the median elapsed time between receiving an assessment and entering aged care was 5 months for residential care, and 7–34 months for a Home Care Package depending on package level (SCRGSP 2020, table 14A.26). If leave was taken to provide care during this waiting period, it would have no direct effect on the care recipients' use of formal aged care, and so would not result in reduced subsidies for formal aged care. Put differently, the studies listed in table 4 capture the effects of *ongoing* informal care provision on formal care use, whereas our interest is in the effects of the *temporary* informal care provision that the entitlement would induce on formal care use. ¹⁶

Box 5 – Estimated effect of the entitlement on aged care subsidies — assumptions and detailed explanation

We estimated that — on average — each leave that would have been taken by those who continued in paid work would have reduced the time that their care recipient spent in residential aged care by 3–12 days, or about one day per month of unpaid leave and the probability that their care recipient used home-based care (whether via Home Care Package Program or the Commonwealth Home Support Program) while they were on leave by 2 percentage points.

These estimates are drawn from Lo Sasso and Johnson (2002) and Van Houtven and Norton (2004), because the other studies either use unsuitable measures of informal care receipt (Bergeot and Tenand 2021; Charles and Sevak 2005) or report only average marginal effects derived from a non-linear model, from which an effect size cannot be inferred (Bolin, Lindgren and Lundborg 2008; Bonsang 2009).

There are several reasons why the results of these two studies translate reasonably well to the present context.

- Van Houtven and Norton (2004) used their findings to undertake a similar exercise (they assessed the fiscal effects of working carers leaving the workforce to provide full time informal care).
- The Australian subsidised residential aged care sector is similar to that of the United States in the 1990s by some key measures. Van Houtven and Norton (2004) report that 8.6 per cent of people in the United States aged 70 and over used residential aged care in a two-year window, with an average stay of 289 days within that window and subsidies covering approximately 50 per cent of the cost. In Australia, 7.3 per cent of people aged 65 and over received residential aged care in 2018-19 (SCRGSP 2020, table 14A.2), with an equivalent measure of average stay of 224 days and subsidies

¹⁵ Based on an average annual government subsidy of \$69 114 per occupied residential aged care place per year (SCRGSP 2020, table 14A.12) and an average annual government subsidy of \$5 114 per recipient per year for Home Care Packages and the Commonwealth Home Support Program (Productivity Commission estimate based on SCRGSP (2020, tables 14A.2 and 14A.3)).

¹⁶ We know of only one study that has measured the effects of *leave-induced* informal care on formal aged care use, which found that paid family leave in California reduced use of residential aged care (Arora and Wolf 2018). However, its findings imply that each leave-taker prevented, on average, more than one person from entering residential aged care in the year in which they took leave, which is implausible (Productivity Commission estimate based on Arora and Wolf (2018) and Bedard and Rossin-Slater (2016)).

Box 5 – Estimated effect of the entitlement on aged care subsidies — assumptions and detailed explanation

covering 73 per cent of the cost (AIHW 2022). That said, there are some larger differences for home-based care — Van Houtven and Norton (2004) report that only 8.3 per cent of their sample aged 70 and over received home-based care in a two-year window, whereas in Australia 3.7 per cent of people aged 65 and over received a Home Care Package in 2018-19 and 20 per cent of people received support under the Commonwealth Home Support Program (SCRGSP 2020, table 14A.2).

- The two studies report similar effect sizes to each other and to the studies of other countries (where comparison is possible). Lo Sasso and Johnson (2002) implies that increasing informal care from 0 hours per month to 160 hours per month reduced time spent in residential care by about 22 days over two years, whereas Van Houtven and Norton found 24 days. And Van Houtven and Norton (2004) report a similar average marginal effect for home-based care (for the United States) as Bolin, Lindgren and Lundborg (2008) (for Europe).
- The effect on home-based care at the intensive margin (the extent of use of home-based care among
 those who used home-based care) has been found to be positive for some types of care and negative
 for others (Bonsang 2009), which justifies assuming that the entitlement would affect the probability of
 home-based care being used but not the intensity of that care.
- **a.** To see why average marginal effects are unsuitable to estimating the effect of the entitlement on aged care subsidies, consider Van Houtven and Norton (2004) which reports both the average marginal effect of a percentage change to hours of informal care supplied and the effect of increasing informal care hours from 20 hours per month to 160 hours per month. Extrapolating from the average marginal effect would suggest that increasing informal care from 20 to 160 hours per month (a 700 per cent increase) would lead to an average reduction of residential aged care use of 133 days over two years, but the correct average reduction is only 8 days over two years. **b.** This measure is the average length of stay among those who left residential care in 2018-19, with people whose stay was over 2 years in length set at 2 years exactly (Productivity Commission estimate based on AIHW (nd)). **c.** This assumes: 1) that receiving informal care 'all or most of the time' amounts to 160 hours of care per month; considered to be full time care by Van Houtven and Norton (2004), and 2) that people who enter residential aged care remain there for at least two years.

Effects on subsidies for health care

The leave that would have been taken by users who continued in paid work may have affected both their care recipients' use of subsidised health care and their own use of subsidised health care. This is an empirical question because theory does not make clear the direction of the effect.

- Care recipients: The additional informal care might have reduced care recipients' need for health care and the speed at which they could be discharged from hospital. However, it might also have facilitated better access to health care.
- Carers: There is evidence that informal carers have worse physical and mental health than non-carers
 with similar demographic characteristics (Pinquart and Sörensen 2003), which might suggest a negative
 causal effect of informal care on mental and physical health and that more intensive caring would lead to
 greater health care use. However, the time away from paid work could also make providing informal care
 easier, improve physical and mental health and reduce health care use.

Health care used by care recipients

We have assumed that the leave that would have been taken by those who continued in paid work would have slightly reduced the time care recipients spend in hospital. Studies from abroad have found that informal care has no or a negligibly small impact on the likelihood of care recipients being hospitalised (table 5). But there is some

evidence that informal care reduces the time that care recipients spend in hospital by allowing for earlier discharge than would otherwise be possible. Weaver and Weaver (2014) found that, in Switzerland, living with an informal carer reduced annual time spent in hospital by those who went to hospital by 2 days, on average. However, Van Houtven and Norton (2004) found a negligible effect in the United States, but this may reflect that the out–of–pocket costs of hospital care in the United States incentivise care recipients and their families to reduce time spent in hospital even when inadequate informal support is available.

Just as the previous section noted that the substantial wait times for formal aged care reduced the prospect that informal carer would reduce aged care subsidies, one might hypothesise that these wait times would increase the prospect of informal care reducing hospital care subsidies as older people waiting for residential aged care might be hospitalised instead. If true, a larger effect of informal care on hospital utilisation might be expected. But this seems unlikely to be the case. On average, people waiting for residential care spent about 3 per cent of their time in hospital in 2018-19 (about 5 days per person) — much more than the average person, but not enough to suggest widespread use of hospital care in lieu of residential care.¹⁷

For these reasons, we have assumed the results of Weaver and Weaver (2014) apply in the Australian context. As we expect that about half of the recipients of the care provided by people who continued working but would have used the entitlement if it were available would be hospitalised in a given year, ¹⁸ this suggests an average reduction of time spent in hospital of about 1 day per carer per year of leave taken. This is equivalent to about \$1000 per carer per year of leave taken; the average cost of one day of care in a non-acute unit in a public hospital in 2018-19.¹⁹

Informal care appears not to have substantial effects on care recipients' use of outpatient health care. One study found that informal care provision slightly increased the number of doctor visits made by care recipients (Bolin, Lindgren and Lundborg 2008), while another did not find evidence of an effect on doctor visits (Van Houtven and Norton 2004). And Van Houtven and Norton (2004) found that informal care slightly decreased the probability of care recipients having outpatient surgery. As such, we assumed that the care provided by people who continued working but would have used the entitlement if it were available would have had no effect on the use of outpatient health care by the recipients of their care.

Health care used by entitlement users

We assumed that use of the entitlement by those who continued working would have had no effect on their use of health care, as studies find no clear evidence of this (table 5). One study did not find sufficient evidence of an effect of informal care provision on doctor visits (Bremer et al. 2015), while another found that carers had substantially higher health care use than non-carers but its authors do not interpret this to be a causal effect of informal care provision on health care use (Chan et al. 2013). The only study we are aware of that studied the effect of carer leave on carers' physical and mental health did not find evidence of an effect (Gimm and Yang 2016).

¹⁷ This estimate is derived from the following: in 2018-19, people eligible and waiting for residential aged care spent 291 021 days in hospital (SCRGSP 2022b, table 14A.32). The median wait time was 152 days and there were 60 657 admissions (SCRGSP 2022b, table 14A.25), suggesting about 152*60 657 = 9 219 864 days spent waiting for residential aged care, and 291 021 is approximately 3 per cent of 9 219 864.

¹⁸ Among older people who received informal care at least several times a day in 2018, about half had been hospitalised in the preceding year (Productivity Commission estimate based on SDAC).

¹⁹ This is the average recurrent cost per inpatient bed day of for psychiatric care in non-acute unit in a general acute hospital (SCRGSP 2022a, table 13A.37), used because 1) no data are available for non-psychiatric care, and 2) the cost psychiatric care in non-acute unit is probably more indicative of the cost of the low level of care that would be needed for a patient who could be discharged if an informal carer were available to them.

Table 5 – Studies looking at the effect of informal care on the use of health care

Study	Country and cohort of interest	Effect on outpatient care	Effect on inpatient care		
Care recipients					
Van Houtven and Norton (2004)	United States; informal care provided to people aged 70 and older by their children, 1995-1998.	On average, a 10 per cent increase in informal care hours led to a 0.16 percentage point decrease in the probability of having outpatient surgery On average, a 10 per cent increase in informal care hours led to a 0.003 more doctor visits in two years (not statistically significant).	On average, a 10 per cent increase in informal care hours reduced time spent in hospital by 0.1 days over two years.		
Bolin, Lindgren and Lundborg (2008)	Eleven European countries; informal care provided to people aged 50 and older by their children, 2004.	On average, a 10 per cent increase in informal care hours led to a 0.3 per cent increase in doctor visits among those who visited the doctor.	On average, a 10 per cent increase in informal care hours increased the probability of having an overnight stay in hospital in a year by 0.1 percentage points.		
Weaver and Weaver (2014)	Switzerland; informal care provided by a co-resident, 2004-2007.		On average, living with an informal carer had no effect on probability of hospitalisation but reduced time spent in hospital among those who were hospitalised by 1.9 days per year.		
Informal carers					
Bremer et al. (2015)	Eight European countries; informal care provided to people with dementia.	On average, one extra hour of informal care provided per day increased the probability to an additional monthly doctor visit by 0.011 percentage points (not statistically significant).			
Chan et al. (2013)	Singapore; informal care provided to people aged 75 and over.	On average, informal carers had 1.27 times as many outpatient visits as non-carers.	-		

Fiscal effects of leave taken by entitlement users who would otherwise have quit their job

Had the entitlement existed in 2018-19, the leave that would have been taken by those who quit their job would have increased income tax receipts and reduced social security payments as it would have facilitated an easier return to paid work.

These effects would probably have been quite small. We expect that only about one quarter of this group would have exercised their right to return and most who would have exercised their right to return found another job within a year. This means that the entitlement would only have induced about 1.5 months of additional work per person (supporting paper I). However, this potentially understates the effect of the entitlement on income tax receipts. It is possible that some workers preferred to leave the labour force than to search for work, or become discouraged after searching; in that case, the entitlement would keep more workers in the labour force. And those who returned to paid work in the absence of the entitlement typically returned to a less well-paying job than the one that they quit.

Effect on income tax receipts

We estimated the effect on income tax receipts that the additional paid work undertaken by those who otherwise quit their job would have had by subtracting the income tax actually paid by those carers in the 4.5 years after they quit their job from a modelled amount of income tax that they would have paid had they used the entitlement, and scaling this by 85 per cent (for the same reason as with the other cohort of entitlement users, box 3).²⁰

Using this method, we estimate that the additional income tax that would have been paid by those who quit their job in 2018-19 had they used the entitlement to be about \$1300 per person (Productivity Commission based on HILDA Release 20).

However, our method for modelling the amount of income tax that would have been paid by those who would have exercised their right to return to work assumes that they did not transfer to a less demanding role or reduce their working hours on return, as some may well have done.

Effects on social security payments

We estimated the effect on social security payments that the additional paid work undertaken by those who quit their job but would have used the entitlement if it were available as the product of:

- the share of these carers who received an employment-contingent social security payment (the Carer Payment and Jobseeker Payment/Newstart Allowance) after quitting paid work (about one third)
- the additional paid work among this cohort induced by the entitlement (about 1 month per person)
- the rate of the Carer Payment (about \$22 000 per year) and Carer Allowance (\$3300) in 2018-19
- the same 85 per cent scaling factor applied in previous treatments of income tax receipts and social security payments, for the reasons outlined in box 3.

Using this method, we estimate that the reduction to the social security payments paid to those who quit their job in 2018-19 had they used the entitlement to be about \$900 per person (Productivity Commission based on HILDA Release 20).

Summing up

Overall, the fiscal impact of the entitlement is likely to be negative and in the order of several hundreds to thousands of dollars per entitlement user.

Entitlement users who would remain in paid work in the absence of the entitlement would temporarily cease paid work to provide more informal care. This would reduce income tax receipts, increase social security spending, and slightly lessen the pressure on subsidised formal aged care and health care. And some

²⁰ Throughout this subsection and the next, we have inflated/deflated income tax receipts by the average per-person change in income tax receipts to allow for comparability between time periods.

entitlement users who would quit their job in the absence of the entitlement would exercise their right to return and return to work faster than they otherwise would (if at all). This would increase income tax receipts and reduce social security spending.

5. Total costs and benefits

It is difficult to say whether the total benefits of the entitlement (to employees, care recipients, employers and taxpayers) would exceed the total costs.

Evidence from quantified costs and benefits

Some of the best estimates available (however imperfect) suggest that the costs to employers are material and that there are benefits to employees.

- On the employee side, Skira (2015) found that the median user of an entitlement to two year of unpaid carer leave would benefit by an amount equivalent to about 28 per cent of two years' full time equivalent salary. However, this is likely to be a substantial overestimate of the benefits to employees of the entitlement considered here (section 1).
- A review of contingent valuations of the value of informal care to care recipients indicates that group 3
 entitlement users would benefit between \$6000 to \$7800 each, which is equivalent to \$3000 to \$3900 per
 entitlement user (section 2).
- Although employers are expected to face costs, there too few studies to reliably estimate the costs to
 employers. The estimate of Ginja, Karimi and Xiao (2023) may not be directly comparable and most likely
 over-estimate the costs that would be incurred with the proposed entitlement (section 3).
- On the taxpayer side, we found that the entitlement was likely to have a negative fiscal effect within a range of benefits between -\$6600 to \$600 per entitlement user (section 4).

Care must be exercised when comparing across these estimates. Changes to tax receipts (while construing costs and benefits to taxpayers) are also implicitly included in employee wages and so are counted in employee benefits and employer costs.

It is also important to bear in mind that, while benefits and costs to parties are quantified in dollar terms, one cannot determine whether the total benefits of the policy outweigh the total costs simply by summing up. A benefit that a low-income care recipient is willing to pay \$6000 for implies very large benefits for them, when we consider what that person would have to give up to pay for it; it implies significantly more benefit than a \$6000 benefit for a firm or a high-income earner. However, the benefits measured above are averaged across low and high income carers and across low and high income care recipients, and the measured values indicate that the average benefit is not large.

Evidence from preferences revealed via enterprise bargaining

Another argument that could be mounted for the total costs exceeding the total benefits is that the entitlement appears in few enterprise agreements, and this could be an indication that the costs to the directly affected parties (employers, employees and care recipients) outweigh the benefits. The Commission randomly sampled 500 enterprise agreements and found that the entitlement (or a provision similar to it) did not appear in any of them. This suggests a 99 per cent confidence interval for the share of agreements containing the entitlement is 0–1 per cent. As the entitlement would have a negative fiscal impact, this might suggest that the total costs would exceed the total benefits.

As enterprise agreements are negotiated between employers and employees, the outcomes of negotiation partly reflect the relative costs and benefits that each party ascribes to a workplace entitlement. If an entitlement conferred larger benefits on employees than the costs it imposed on employers, and if these benefits were shared amongst employees, then — in principle — the parties should be able to negotiate it into an enterprise agreement in exchange for reductions in pay and/or other workplace entitlements. In practice, frictions might prevent this. Enterprise bargaining is time-consuming, which limits the scope of negotiations. Employers and employees both have imperfect information about the costs and benefits of entitlements. And in cases where the enterprise agreement is near to award-level pay and conditions, the better off overall test may prevent an entitlement from being negotiated in, because a *potential* employee could conceivably gain no benefit from it.

A further complication is that enterprise bargaining is probably less responsive to the benefits that employees would obtain from a workplace entitlement when those benefits are concentrated among a small minority of employees (as would likely be the case for the entitlement being considered here). Enterprise agreements must be agreed by the majority of employees. That said, some negotiations might reflect the preferences of employees who are relatively more concerned about their entitlements as they would be more engaged with the bargaining process. Above-NES and above-award entitlements that would probably benefit only a minority of employees have been negotiated into enterprise agreements, such as extra compassionate leave (22 per cent of agreements in 2014–2017), extra paid sick leave (10 per cent of agreements), paid domestic violence leave (7 per cent of agreements) and unpaid domestic violence leave (3 per cent of agreements). And, shortly prior to the introduction of government-funded paid parental leave in Australia, 15 per cent of enterprise agreements had paid maternity leave provisions (although we are unsure what share (if any) reflected an underlying award condition rather than the outcome of negotiation) (PC 2009).

Due to the limitations of the enterprise bargaining process and the fact that most employees are not covered by an enterprise agreement, we are aware that some employers offer a *de facto* entitlement to extended unpaid carer leave via their workplace policies (supporting paper [I]). While we have no concrete evidence of how common this practice is, it seems unlikely to be widespread as we estimate that less than 30 per cent of people (possibly much less than 30 per cent) who wanted to take extended unpaid carer leave in 2018 actually did so.²²

To summarise, the entitlement not appearing in a particular enterprise agreement is not a good indication that the benefits it would offer to the employees covered by that agreement would be smaller than the costs it would impose on their employer. But the fact that the entitlement appears in — at most — a small minority of enterprise agreements might provide some indication that its benefits to *all* employees are less than its costs to *all* employers.

What about the benefits of the entitlement to care recipients? Care recipients get no vote in enterprise agreements. Yet at least some of the benefits to them would be internalised by their carer. Caregiving is motived by a concern for care recipients' interests, and care recipients have the option of financially supporting their carer (although it appears that few do).

²¹ This excludes all agreements for which corresponding award entitlement was above NES level of unable to be determined, which leaves 40–50 per cent of agreements depending on the entitlement. In the case of domestic violence leave entitlements, it includes only includes agreements that took effect prior to the Fair Work Commission first indicating that it would add an unpaid domestic violence leave clause to all awards on 3 July 2017, as this may have influenced negotiations. All statistics are Productivity Commission estimates based on the Workplace Entitlements Database Dataset.

²² Supporting paper 1 found that 7000–17 000 people would have used the entitlement if it were available in 2018 in addition to the up to 3000 people who took extended unpaid carer leave in that year.

6. Distributional effects

The entitlement to extended unpaid carer leave would also have distributional effects.

While in the short term the costs of the entitlement will fall on employers, over time it is expected that employers will pass the additional costs on to employees (through hiring practices and lower wage growth) and consumers (by raising prices). Over the long term, the costs of the entitlements are likely to fall on employees in industries where use of the entitlement is more common, particularly on groups of people perceived to be likely users of the entitlement. As such, there is a risk that an entitlement could give rise to adverse consequences for the same people that it is intended to benefit.

That said, the response from business is likely to be small, given the small number of employees who are expected to use the entitlement.

The potential effect of the entitlement on hiring practices

Concerns were raised by participants about stigma and discrimination because of caring responsibilities and the effects of an entitlement on hiring practices (Carers NSW, sub. 20, Women Lawyers Association of Queensland, sub. 4). Merri Health, for example, said:

Carers worry about hiring discrimination and highlight the need for carers to know their employment rights. Merri Health staff suggest hiring discrimination against carers may be more likely to occur in industries which have demonstrated hiring discrimination against parents, due to carers appearing to be needing more time off work and flexibility versus employees without caring responsibilities. (sub. 18, pp. 9–10)

The Fair Work Act prohibits discrimination against employees on the basis of their family or carer's responsibilities (s. 351(1)) and provides the Fair Work Ombudsman with the authority to investigate allegations of unlawful workplace discrimination and to initiate litigation against a national system employer for contravening the Act (s. 682(1)).²³ However, some employers could feel pressure to find ways to minimise the costs of the entitlement by modifying their recruitment, training, promotion and retention practices. Not only could such practices come at the expense of the people who are most likely to take the entitlement, it could eventually lead to a concentration of carers in industries that are more amenable to supporting carer entitlements — including flexible work arrangements.

While there is little evidence on the consequences of an entitlements to unpaid carer leave on hiring practices, there is some evidence that maternity benefits and parental leave affect the employment, salary and promotion opportunities for potential young mothers. For example:

- Ginja, Karima and Xiao (2023) estimated the costs associated with staff turnover following the extension
 of a 3-month parental leave program in Sweden and found that private sector firms increased their
 permanent and temporary staff by hiring new permanent workers and by increasing the work hours of
 existing staff. These reforms were, however, correlated with fewer hires and lower starting salaries of
 young women compared with men and older women.
- Gruber (1994) looked at incorporating maternity benefits into health insurance in the United States in 1978 (the cost of which was incurred by employers) and found that the increased costs had the unintended consequence of reducing the likelihood of married women being hired by private firms.

²³ Carers are also included in several discrimination focused Acts: the NSW *Anti-Discrimination Act 1977*, the Sex Discrimination Act 1984 (Cwth) and the Disability Discrimination Act 1992 (Cwth), (Carers NSW, sub, 20, p. 12).

- Thomas (2020) explored some of the factors underpinning the gender pay gap in the United States by
 examining the effect of the Family and Medical Leave Act 1993 (US Federal) and found that women who
 were hired after the enactment were more likely to remain employed, but were less likely to be promoted.
- Xiao (2019) explored some of the factors contributing to the persistent gender wage gap in Finland and
 found that a large proportion of the gender wage in early career women was attributed to employer
 behaviour based on perceived fertility concerns. Xiao suggested that women could choose to take on jobs
 that offer lower wages and more workplace flexibility.

The negative effects, however, are likely to be small given the small proportion of employees expected to take up an entitlement to extended unpaid leave, although this could change with population ageing and increased demand for formal carers.

The potential effect of the entitlement on wage growth

The costs to businesses of employing a worker will be indirectly increased by the costs of implementing the entitlement and the costs incurred when an employee uses the entitlement. Depending on the environment in which they are operating, businesses are likely to pass the additional costs on in the long run either to employees through lower wage growth (Summers 1989) or to consumers through higher prices.

The effect on wage growth occurs over the long term, as employers take time to recoup increased costs through reduced wage growth (minimum wages may act to maintain wage growth in the short term).

The extent to which costs are passed on to employees is likely to vary depending on the extent to which employees value the entitlement (if the entitlement provides a pecuniary value for employees they may be willing to work for less money). There is some evidence of a positive correlation between a benefit provided to an employee and how much of the cost is passed on to them. Programs providing clear direct benefits to employees (such as Japanese Health Insurance, U.S. mandated maternity benefits and French pension contributions) have been shown to have passthrough rates of 100 per cent and beyond, while programs with more opaque direct benefits (such as payroll taxes) show substantially less passthrough (Coates, Mackey and Cowgill 2020, p. 14).

This also accords with economic theory, assuming workers place a higher value on measures that more directly benefit them.

If the cost of the entitlement is fully passed on to workers, the impact on workers who use the entitlement is positive and the impact on workers who don't use the entitlement is negative. There is little to suggest that employees would place a higher value on an unpaid carer leave entitlement (which they will not necessarily use) than the wage loss. As such, the long run costs of the entitlement are most likely to fall on other workers in the industries where unpaid leave entitlement users work (for example, female-dominated sectors), rather than being shared equally across the economy. This means that the decision to provide care could have spill-over effects on others, and this could exacerbate existing inequality.

There were some concerns raised about the effect of an entitlement to extended unpaid leave on wages in heavily-feminised aged care workforce. For example, Ai Group argued that 'the costs are [also] most likely to be disproportionately experienced by those sectors with a higher prevalence of employed primary carers ... An extended leave entitlement is likely to further reduce earnings for working women' (sub. 34, p. 14).

Workers in low paid industries or workers in occupations with a high proportion of older women could be made worse off by paying for an entitlement to extended unpaid carer leave that many would not use. The size of this long run effect will depend on factors such as the size of the costs to businesses, the extent to which costs are passed on, and the number of entitlement users in a firm or industry.

The sharing of long-run costs in this way compares unfavourably to other policies to support carers (like financial support and government-funded services) where the costs are supported by general government revenue and shared more evenly across the economy.

The potential effects of the entitlement on women

Many participants also raised concerns about the consequences of an entitlement that encourages more women to take unpaid leave. Many pointed to the potential negative effects on the recruitment and career progression of women, the gender pay gap and gender equality (box 6).

Box 6 - Participants raised concerns about the effects of an entitlement on women

Anglicare Australia:

Encouraging more women to take unpaid leave to care for loved ones may have an unintended impact of widening the gender pay gap, as they miss opportunities for career advancement and salary increases available to male counterparts. Extended unpaid leave can also reduce women's superannuation balances, leaving them at risk of poverty as they age. (sub. 6, p. 1)

Carers NSW said it was concerned that:

... women may be disproportionately represented in those taking carer leave due to entrenched gender ideologies and power structures within romantic and familial relationships, and in so doing further disadvantage women in other, less apparent ways such as hindering career advancement and promotion and further limiting the accumulation of superannuation. (sub. 20, p. 8)

Australian Nursing and Midwifery Federation:

Women will be overrepresented when it comes to accessing this type of leave and providing unpaid care. As a consequence, women will experience a reduction in future income, retirement income, workforce participation and opportunities for career progression. These outcomes are counterproductive to the objective of gender equality. (sub. 39, p. 4)

Australian Services Union, Victorian and Tasmanian Branch:

Given caring responsibilities in Australia fall largely on the shoulders of women, creating greater expectations on unpaid carers will see more women taking time out of the paid workforce to care for their parents or family members, increase gender inequality, and exacerbate the pay equity and retirement savings gaps. Extending unpaid carers leave would be counterproductive to the broader policy goal of gender equality. (sub. 30, pp. 6–7)

Ai Group:

It has been well established that time out of the workforce to attend to unpaid caring responsibilities is one of the key reasons contributing to the gender pay gap. ... a legislative entitlement to take extended leave may provide a signal that women should take the leave entitlement to attend to unpaid family responsibilities, notwithstanding that the [Fair Work] Act's flexible work arrangements and the role of Home Care Packages to enable carers to continue working without withdrawing from paid employment. The gendered impact of an

Box 6 - Participants raised concerns about the effects of an entitlement on women

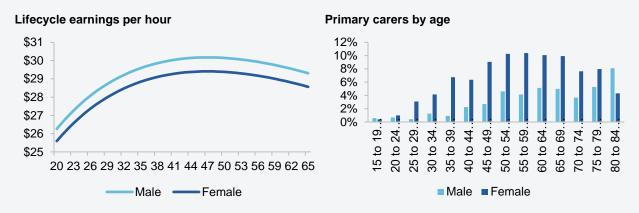
extended entitlement should be further reason to reconsider this as the appropriate means to support employed carers. (sub. 34, pp. 14–15)

Given most primary carers of older people are women, the additional informal care induced by the entitlement to extended unpaid leave will largely fall on women, and as such, it will be women who will largely bear the costs of any foregone income. And caring already affects women's lifetime earnings and retirement savings. Caring can cut into their most productive working years and the financial and career impacts of caring can persist after they finish caring (box 7).

Box 7 – For women, caring cuts into their most productive years

Earning capacity follows a fairly set path over time. Wages start low when people are young and rise steadily with the accumulation of human capital and greater personal productivity (usually peaking somewhere in a person's 50s) before tracking downwards towards retirement (Borjas 2016, p. 65). Based on HILDA and SDAC data, the Commission estimates (allowing for gender, educational attainment, cohort effects over time) peak earnings to be at about 47 years of age.

The earning period lost to care coincides with the most valuable earning opportunities in the lifecycle. Peak caring plateaus around 45-49 years of age roughly coinciding when a woman's earnings potential is likely to be at its maximum.



Sources: Commission estimates based on HILDA (release 20, waves 15-20) and Survey of Disability, Ageing and Carers, 2018, TableBuilder.

The Women, Work and Policy Research Group said:

Carers are already much more likely than non-carers to experience financial hardship and to have low retirement savings, and unpaid leave is likely to exacerbate these unequal financial outcomes. As women are more likely than men to have care responsibilities, it is women who are likely to be affected the most by the reduction in income and retirement income associated with taking extended unpaid leave. (sub. 28, p. 6)

There is a risk that increased access to unpaid carers leave could reinforce these effects.

That said, with the entitlement designed to help carers better manage their work and caring responsibilities, it is also likely to disproportionately benefit women (because they are more likely to take on caring responsibilities). As discussed earlier, entitlement users could benefit from less stress with more time to care (and this could have flow-on effects for their health and wellbeing and those they are caring for). They could also experience greater satisfaction from being able to provide better quality care and to spend time with their loved ones. And employees who would otherwise have quit their job to care will have the benefit of an easier route back into the workforce (and a reduced likelihood of being forced to drop out of the workforce).

However, for carers who would be induced to change their behaviour as a result of the entitlement (employees who otherwise would have continued working), the benefits are less clear. And as discussed in the position paper (box 4), decisions to care can be because of societal or familial expectations, which means that a person has their options constrained and they take on a caring role they would otherwise not have undertaken (Al-Janabi, Carmichael and Oyebode 2018).

According to Carers Australia's Carer Wellbeing Survey,²⁴ only 12.5 per cent of surveyed female carers said that they actively chose to take on a caring role and could have chosen not to be a carer. For surveyed male carers it was 23.3 per cent (Schirmer, Mylek and Miranti 2022, p. 31). Having a choice was also was associated with better wellbeing — 25.5 per cent of all carers surveyed who actively chose to take on the caring role reported high wellbeing, compared with 7.8–10.6 per cent of those reporting little or no choice. (Schirmer, Mylek and Miranti 2022, p. 34).

Participants suggested a range of policies to address the potential negative effects of caring and an entitlement to extended unpaid leave on women (box 8). An OECD report also recently commented that 'making informal care a choice without constraints requires a full set of policies, starting from a carer's need assessment, access to information and advice, respite, training, financial support and flexible working arrangements' (Rocard and Llena-Nozal 2022, p. 4).

The position paper looks in more detail at other policies to support informal carers.

Box 8 - Participants highlight ways to address negative effects of caring on women

Australian Nursing and Midwifery Federation:

The ANMF recommends that any statutory entitlement to paid or unpaid carers leave should attract the payment of superannuation contributions for the duration of the leave. (sub. 39, p. 7)

Australian Longitudinal Study on Women's Health:

Increasing access to affordable child care will also decrease the burden on caregivers and allow more women to return to work. (sub. 31, p. 7)

SDA:

To counter the impact, a review of government payments that subsidise periods of unpaid care should be conducted, including the level of payment, which should be closer to the

²⁴ The 2022 Carer Wellbeing Survey contains responses from 5992 Australian carers, with findings statistically weighted permanent to be representative of Australia's carers based on information from the SDAC.

Box 8 – Participants highlight ways to address negative effects of caring on women

national minimum wage, and the payment of superannuation guarantee on carers payments. (sub. 38, p. 12)

Carers NSW:

Ensuring that financial support is offered alongside carer leave will be particularly crucial in ensuring that women are not further disadvantaged. (sub. 20, p. 8)

Merri Health:

In principle, informal carers support efforts to assist them in remaining connected to employment while providing care. The right to return to work may be an effective support, however, community education and awareness raising about informal carers and carer issues is also required. Any supports for carers need to be adaptive and flexible to respond to the changing needs of carers, recipients of care, and their families. (sub. 18, p. 15)

Anglicare Australia:

Extended unpaid leave can also reduce women's superannuation balances, leaving them at risk of poverty as they age. To address these and other issues, we suggest the Productivity Commission explore the option of a, basic and universal income for all Australians. (sub. 6, pp. 1-2)

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