L   Distributional impact

Key points

- The Australian Government already provides generous payments to families with newborn or adopted children.
    - families with combined incomes below $50 000 typically receive over $30 000 in government benefits within the first two years of a child's birth or adoption.

- The proposed parental leave payment, excluding paternity payments, is expected to provide an average additional benefit of $1750 to families following the birth or adoption of a child. However, due to the interaction with the taxation and welfare system, the distribution of benefits differs substantially according to family income:
    - high income families who would not be eligible for the baby bonus would typically receive benefits in excess of $4000
    - families with a combined income below $40 000 tend to have benefits above $2000
    - high income women who are single or have lower paid partners tend to benefit the least
    - once account is taken of those families who would opt out of the scheme, the net benefit per family is estimated to be around $2040.

- The magnitude of the expected benefit will be a key determinant of whether parents choose to opt into the scheme.

- There are profound challenges involved in attempting to predict changes to leave behaviour. For this reason, the pattern of behavioural change amongst families with different incomes is highly uncertain.

If introduced, the proposed paid parental leave scheme would provide additional financial benefits to most eligible families. However, the amount of benefit each family would receive will be influenced by a range of factors, including the income that families already earn and the other government payments they are entitled to. This appendix examines how the expected financial benefits of the parental leave component of the proposed scheme will vary by parents' income. How the size of the net benefit differs according to family income is relevant when assessing the likely behavioural change that could reasonably be expected following the introduction of the scheme.

The Commission considers that financial assistance is a design feature of the scheme rather than an objective. Financial assistance is important because it is the mechanism through which parents will be encouraged to take more leave. As such, this appendix is not attempting to analyse how well the proposed scheme provides income support to low income families — rather, it attempts to or overly sufficient payments to achieve the objectives of the scheme and where they would not.

If income redistribution to low income families were an explicit objective, the scheme would have been designed very differently. (Chapter 1 explains how the objectives of the proposed paid parental leave scheme were selected.)

L.1   The basis for the income distribution data

In order to examine the impact of the proposed paid parental leave scheme on families with different income levels, information on several critical variables is required. The most important of these are:

- the initial distribution of income and how income is split between partners
- the initial value of government payments that families would be entitled to, and
- the initial length of leave that mothers are taking.

Only one of these variables relates directly to the objectives of the scheme — the length of leave taken by mothers. However, a good indication of how well targeted the proposed parental leave payment is could be provided by information on the change in financial assistance that families receive.

Two surveys were considered for this analysis –the *Pregnancy and Employment Transition* (PaETS) survey undertaken by the Australian Bureau of Statistics and the *Longitudinal Study of Australian Children* (LSAC) managed by the Australian Institute of Family Studies.

While the PaETS survey has several attractive features (it is slightly more current and provides greater detail on income and the length of workforce attachment), the LSAC survey was selected as it provided greater scope to interrogate and manipulate the unit record data. This, in turn, facilitated more rigorous testing of the estimated various government payments required for this analysis, as well as the ultimate distributional impacts.

Sample selection

For the purposes of this analysis, we wish to focus only on families where the mother would be eligible for the proposed paid parental leave scheme. A mother was deemed to be eligible if she met the following criteria

- the mother indicated that she had been working for the same firm for 12 months OR she had been working for a total of 12 months for more than one firm OR she was self employed[1] and

- the mother indicated that she was working 10 or more hours per week while pregnant.[2]

In addition to the families where mothers were deemed not eligible for the proposed paid parental leave scheme, two additional groups of mothers have also been excluded from this analysis:

- any family where no income information was supplied (either for the mother or for the partner – but only for mothers indicating they were partnered)

- any family where contradictory information was supplied that could influence the analysis

  – such as mothers who had not indicated a post-birth return to work date, but had indicated that they took leave and that they were working post-birth.

How incomes were calculated

When analysing income distribution around the birth of a baby, a decision must be made on how the mother's income will be represented. For a period around the birth of a child, there are potentially three ways to calculate the income for the mother

- using the mother's actual income earned in the year the child was born

- using the mother's pre-birth income or

- using the mother's post-birth income.

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[1] The LSAC database provides information on tenure for employees as being for either 12 months or more or less than 12 months. As such, it is not possible to accurately apply the 10-13 month tenure test. The LSAC survey does not ask for length of tenure for mothers who were self employed prior to birth. As such, all self employed mothers are assumed to meet the 10-13 month tenure test.

[2] Most mothers who only worked few hours per week while pregnant would be classified as working less than 10 hours per week in the LSAC database. As such, any mother indicating she worked less than 10 hours a week in the LSAC database is assumed not to meet the work hours test.

As the income earned in the birth year will be affected by arbitrary factors, such as birth timing and the amount of leave taken, it is an inadequate indicator of the actual financial position of the family. The mother's post-birth income (when she re-enters the labour market) is a better indicator but, as many women had not returned to work by the time of the LSAC survey, the data is incomplete for this item. As such, the estimate of the mothers' incomes has been based on the pre birth weekly wage.[3]

Mother's pre birth weekly wage range is recorded in terms of nine different income ranges. In order to predict what government payments families would be entitled to, the income ranges were evaluated at their midpoints. For ease of presentation and interpretation, the results for each midpoint are re-classified into income ranges that are consistent with the ranges for partner's income. One implication of this is that it creates a small number of income ranges where we do not have data points with which to analyse the effect of the proposed parental leave scheme.

If a partner was present in the household, the partner's annual income was calculated by taking 52 weeks of their pre birth income. Partners are less likely to take extended periods of leave or reduce their income after the birth, so the pre birth wage should provide a reasonable indication of the partner's income around the time of the birth.

The pre birth wage information from the LSAC sample relates to wage rates that were earned in the 2003-04 financial year. To make those incomes more consistent with those currently prevailing, all earnings have been increased to account for inflation. For the purposes of the analysis in this appendix and appendix G, all income measures were increased by 13.19 per cent.[4]

While a pre birth annual income has been calculated for mothers and partners, this has only been used to categorise what part of the income distribution each family falls into. When determining if families are eligible for various government payments and programs and determining what payments they may attract, the actual income earned in the relevant period has been calculated.

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[3] This is a reasonable approximation of the mother's potential wage. However, in practice, many mothers trade off salary in favour of more flexible hours and earn substantially less after returning to paid work. This representation of mother's income is only used to determine what part of the income distribution a family is in. To determine access to government payments and the potential benefit families could receive from the paid parental leave scheme, the actual income earned by the mother for the financial year of their child's birth and the subsequent financial year has been used.

[4] That amount is the change in CPI deflator between the 2003-04 and 2007-08 financial years. This CPI deflator is based on the ABS quarterly CPI index numbers from ABS 6401.0 Consumer Price Index Australia, Sep 2008 - series A2325846C.

L.2 Income distribution and length of leave before the introduction of the scheme

The initial income distribution of households

The income distribution of families where the mother is deemed to be eligible for paid parental leave is illustrated in table L.1. This data is drawn form the LSAC sample and comprises 1716 families we have identified as meeting the eligibility criteria for the proposed scheme. For each cell in the table, the number indicates the share of eligible families in the sample with that particular combination of mother's income and partner's income. For example 2.9 per cent of eligible families have a mother earning between $20 001 and $30 000 and a partner earning between $30 001 and $40 000.

The cross tabulations presented here effectively divide the 1716 families into 112 income categories. This means that estimates relating to less common combinations of income will be based on a very small sample. Any combination of incomes that accounts for 0.1 per cent of the sample is probably based on just one or two observations. Such a small number of observations does not provide sufficient variation in key variables such as birth timing or length of leave, and are unlikely to accurately indicate the impact for families with such incomes. While the tables presented in this appendix are useful as a rough indication of the distributional impacts of the proposed paid parental leave scheme, unexpected or unusual results for income combinations based on a small number of observations need to be interpreted with considerable prudence.

That said, many income combinations are based on sample sizes that are large enough to provide reasonable ground for inference. For example, over a third of households have a mother with pre birth income in the range of $20 001 to $50 000 and a partner with income in the range of $30 001 to $70 000. And 19 per cent of households have the partner income being zero or negative.[5] Given the larger sample size for these components of the income distribution, greater confidence can be placed in the accuracy of estimates for these income groups.

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[5] This group is evenly split between single parent families and two parent families.

Table L.1 **Income distribution of families where mother would be eligible for proposed paid parental leave[a]**

		Pre birth income of the mother (52 weeks of weekly pre birth wage)							
		no income or loss	$1 to $10 000	$10 001 to $20 000	$20 001 to $30 000	$30 001 to $40 000	$40 001 to $50 000	$70 001 to $80 000	$100 000 plus
Partner's annual income	no income or loss	0.1	0.1	2.4	4.1	3.2	3.9	4.1	0.9
	$1 to $10 000	0.0		0.3	0.3	0.3	0.4	0.2	0.2
	$10 001 to $20 000		0.0	0.6	0.4	0.4	0.4	0.1	0.2
	$20 001 to $30 000	0.1	0.1	0.8	1.6	1.6	0.8	0.5	0.3
	$30 001 to $40 000		0.2	2.0	2.9	3.2	2.1	1.0	0.2
	$40 001 to $50 000		0.3	1.5	3.1	2.8	3.0	1.6	0.5
	$50 001 to $60 000		0.1	1.7	3.0	2.8	4.8	1.9	0.6
	$60 001 to $70 000			0.7	1.7	1.8	2.0	2.0	0.4
	$70 001 to $80 000	0.1		0.7	1.3	1.1	1.7	1.3	0.5
	$80 001 to $90 000		0.1	0.2	0.5	0.9	0.8	1.1	0.4
	$90 001 to $100 000			0.4	0.8	0.2	0.9	1.2	0.1
	$100 001 to $1100 000			0.2	0.3	0.4	0.5	0.3	0.4
	$110 001 to $120 000			0.1	0.1	0.2	0.6	0.3	0.4
	$120 000 plus			0.3	0.6	0.6	1.3	1.2	1.5

[a] A blank cell indicates there were no observations for that particular combination of incomes. Cells with a reported percentage of 0.0 had observations in them, but after weighting, represented less than 0.05 of the population and were rounded down.

Initial value of family payments by income distribution

Australian families can be eligible for a wide range of government payments and benefits. Almost all of these payments are means tested, so the value of payments differ substantially by parents' income. The following payments are available to families with children and have been included in this analysis

- the baby bonus — a $5000 tax free payment available to families where the expected combined income in the six months after birth is less than $75 000

- parenting payment (single or partnered) — an income supplement to low income families that is subject to both an income and an asset test

- family tax benefit A — a supplementary payment that is subject to a test on the parents' combined income

- family tax benefit B — a supplementary payment that is subject to a test on the secondary earner's income. This payment is also restricted to families where the higher earner in a couple, or a sole parent, earns less than $150 000 per year.

The extent of these existing transfers to families with newborn children is illustrated in table L.2. The value of the payments includes the sum of the baby bonus, family tax benefit payments and parenting payments that families receive during the financial year of a child's birth and during the subsequent financial year. Among families who would be eligible for the proposed paid parental leave scheme, there is a large variation in other government benefits received — this occurs because different families are eligible for different rates of payment from various government schemes.

While mothers who did not work before the birth of their child will be ineligible for the proposed parental leave scheme, those families would be eligible for other existing government payments. Given the nature of the income tests on those payments, families where mothers did not work prior to the birth of a child are likely to receive substantially higher benefits from existing payments than families who would be eligible for the proposed paid parental leave scheme[6].

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[6] The benefits available to these families will be consistent with families where the mother is earning no income.

Table L.2 Gross government benefits received by families who would be eligible for the proposed paid parental leave scheme

Sum of benefits in the financial year of birth and the subsequent financial year. Includes family tax ebenfit A and B, baby bonus, parenting payment, pensioner tax offset and beneficiary tax offset (but does not include paid parental leave)

Partner's annual income	*Pre birth income of the mother (52 weeks of weekly pre birth wage)*							
	No income or loss	$1 to $10 000	$10 001 to $20 000	$20 001 to $30 000	$30 001 to $40 000	$40 001 to $50 000	$70 001 to $80 000	$100 000+
no income or loss	$58 228	$66 267	$47 255	$44 520	$39 396	$35 057	$30 510	$28 532
$1 to $10 000	$52 833		$36 891	$42 247	$28 610	$34 903	$41 631	$20 610
$10 001 to $20 000		$28 818	$44 979	$39 048	$38 964	$29 614	$23 692	$18 040
$20 001 to $30 000	$44 077	$52 302	$33 068	$29 153	$25 890	$18 184	$16 412	$17 768
$30 001 to $40 000		$33 737	$29 231	$23 639	$20 945	$18 227	$13 312	$15 088
$40 001 to $50 000		$31 131	$24 177	$22 054	$16 971	$15 003	$11 737	$12 792
$50 001 to $60 000		$23 776	$25 080	$18 084	$15 008	$15 513	$11 179	$6 926
$60 001 to $70 000			$22 926	$17 724	$15 431	$12 291	$10 370	$8 393
$70 001 to $80 000	$16 273		$19 108	$17 848	$14 109	$12 479	$9 603	$10 106
$80 001 to $90 000		$19 013	$17 499	$15 540	$14 583	$11 103	$9 435	$6 570
$90 001 to $100 000			$20 338	$13 109	$9 518	$8 898	$8 060	$5 331
$100 001 to $1100 000			$23 913	$9 493	$10 680	$9 370	$7 788	$6 150
$110 001 to $120 000			$14 249	$9 338	$11 522	$7 126	$3 683	$4 248
over $120 000			$5 038	$8 269	$3 349	$3 710	$3 737	$3 455

In addition to the payments covered in table L.2, families with newborn or adopted children can receive other government payments depending on their circumstances. The most common payments among these are the child care benefit and the child care tax rebate. At least 2 per cent of families from our sample who would be eligible for the paid parental leave scheme used formal child care arrangements before the child was six months old.

Depending on the period children are in care for, and the number of children each family has in care, the value of the child care related assistance that families would receive could be as high as $10 000.[7] While families are unlikely to have newborn babies in care for an entire year, the transfers to families indicated in table L.2 would be understated due to the absence of child care related government assistance.

In gross terms, most Australian families with newborn children already receive substantial amounts of government payments in the first two years of their child's life. In addition, most of these payments continue to be available for most of the childhood period. The greatest assistance is provided to low income families, with benefits declining markedly as the income of either partner increases. For example, families with combined incomes below $50 000 are, on average, estimated to receive benefits exceeding $30 000.

A useful way of describing the magnitude of the financial benefit that government payments represent is to express them in terms of a net transfer between government and families (table L.3). This approach takes into account the amount of tax that families pay, in addition to the financial benefits they are eligible for, and is summarised in table L.3. A negative number indicates that families with that combination of income pay an amount of tax that is greater on average than the value of government benefits they receive. Conversely, a positive number indicates that the value of government payments exceed the tax liability for that combination of income.

For example, a family where the mother earns between $30 001 and $40 000 and the partner earns between $40 001 and $50 000 on average pays $184 less in tax than they receive in government transfers. In effect, the average government transfers that flow to families in this income range just negate the income taxes that they pay.

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[7] Under the child care benefit, families can receive up to $9828 if a child is in full time care for an entire year, subject to a means test. In addition, under the child care tax rebate, families using some forms of care can be reimbursed up to half of the fees not covered by the child care benefit (up to $7000 per child per year). The child care tax rebate is not means tested.

In general, families with a combined household income below $60 000 still receive net benefits of $20 000 over the two years. In contrast, families begin to pay more tax than they receive in government benefits with combined household incomes as low as $70 000. While these higher income families are still paying tax in net terms, they would not pay as much net tax as a couple earning the same income who do not have children.

Initial length of leave by income distribution

One of the key objectives of the proposed scheme is to encourage people taking relatively short periods of leave after the birth or adoption of a child to extend their leave. Tables L.4 and L.5 provide an indication of how prevalent early returns to work are within a given income distribution. Each cell in table L.4 indicates the percent of families who return to work within six months, out of all families that have that combination of income. For example, out of all the eligible families where the mother was earning over $100 000 and the partner was earning between $1 and $10 000, 72 per cent returned by 6 months.

For some combinations of incomes, there is a relatively high rate of return both at the three and sixth month mark.[8] Notably, mothers with a pre birth wage exceeding $100 000 have a high rate of returning to work before three as well as before six months. Outside of this group, there is no strong association between income levels and the timing of the postnatal return to work of mothers.

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[8] As noted in section L.3, the LSAC data relates to births between July 2003 and June 2004. As such, none of the families were eligible for the $3000 maternity allowance (commonly called the baby bonus) that was introduced on 1 July 2004. The initial length of leave for each family has been adjusted to estimate the additional leave that families would take if they received the current baby bonus of $ 000. The basis for this approach is discussed in appendix G.

Table L.3   **Net government benefits received by families who would be eligible for the proposed paid parental leave scheme**

Sum of benefits and taxes in the financial year of birth and the subsequent year. Includes FTB A and B, baby bonus, parenting payment, pensioner tax offset and beneficiary tax offset (but not paid parental leave) less tax and medicare levy for mother and partner

		Pre birth income of the mother (52 weeks of weekly pre birth wage)						
		No income or loss	$1 to $10 000	$10 001 to $20 000	$20 001 to $30 000	$30 001 to $40 000	$40 001 to $50 000	$70 001 to $80 000	$100 000+
Partner's annual income	no income or loss	$58 228	$66 267	$47 255	$43 869	$37 596	$29 158	$15 949	-$6 892
	$1 to $10 000	$52 833		$36 835	$39 517	$23 776	$29 790	$36 093	-$33 035
	$10 001 to $20 000		$28 818	$44 600	$38 758	$37 776	$23 463	$7 740	-$21 445
	$20 001 to $30 000	$41 867	$50 231	$29 265	$23 623	$18 497	$7 075	-$6 799	-$17 624
	$30 001 to $40 000		$26 049	$20 947	$14 218	$10 641	$4 067	-$12 289	-$26 212
	$40 001 to $50 000		$18 510	$8 780	$6 495	$184	-$4 453	-$19 435	-$25 036
	$50 001 to $60 000		$2 955	$2 457	-$5 155	-$9 513	-$10 913	-$26 605	-$50 515
	$60 001 to $70 000			-$6 276	-$12 216	-$15 642	-$21 918	-$31 749	-$50 106
	$70 001 to $80 000	-$17 919		-$16 021	-$18 181	-$22 157	-$27 141	-$38 111	-$40 519
	$80 001 to $90 000		-$26 015	-$24 613	-$28 947	-$30 144	-$37 145	-$45 803	-$68 828
	$90 001 to $100 000			-$30 032	-$38 218	-$39 495	-$45 575	-$50 352	-$72 350
	$100 001 to $1100 000			-$32 396	-$49 674	-$48 901	-$54 115	-$60 699	-$80 062
	$110 001 to $120 000			-$51 376	-$58 539	-$57 706	-$65 616	-$83 431	-$87 741
	over $120 000			-$113 756	-$102 165	-$105 934	-$133 799	-$115 996	-$145 902

Source: Productivity Commission calculations using the LSAC database.

Table L.4 **Share of mothers who returned to work by six months after birth or adoption**

| | Return by six months | | *Pre birth income of the mother (52 weeks of weekly pre birth wage)* | | | | | | |
		No income or loss	$1 to $10 000	$10 001 to $20 000	$20 001 to $30 000	$30 001 to $40 000	$40 001 to $50 000	$70 001 to $80 000	$100 000+
Partner's annual income	no income or loss	100	100	34	13	28	11	12	51
	$1 to $10 000	0		71	29	64	12	0	72
	$10 001 to $20 000		0	43	22	12	8	0	64
	$20 001 to $30 000	100	46	27	39	34	26	30	35
	$30 001 to $40 000		51	35	23	15	14	18	28
	$40 001 to $50 000		68	42	26	25	16	24	39
	$50 001 to $60 000		0	43	25	24	20	31	25
	$60 001 to $70 000			23	19	18	26	15	38
	$70 001 to $80 000	0		22	25	25	23	15	0
	$80 001 to $90 000		0	20	42	22	15	4	58
	$90 001 to $100 000			28	31	29	23	20	0
	$100 001 to $1100 000			74	19	33	0	25	71
	$110 001 to $120 000			0	44	0	19	0	31
	over $120 000			0	32	28	23	11	36

Source: Productivity Commission calculations based on LSAC database.

Table L.5 **Share of mothers who returned to work by three months after birth or adoption**

	Return by 3 months	No income or loss	$1 to $10 000	$10 001 to $20 000	$20 001 to $30 000	$30 001 to $40 000	$40 001 to $50 000	$70 001 to $80 000	$100 000+
						Pre birth income of the mother (52 weeks of weekly pre birth wage)			
Partner's annual income	no income or loss	100	100	24	3	12	11	4	25
	$1 to $10 000	0		45	29	21	0	0	19
	$10 001 to $20 000		0	43	0	0	8	0	33
	$20 001 to $30 000	100	46	12	21	24	12	9	14
	$30 001 to $40 000		51	26	9	10	2	8	28
	$40 001 to $50 000		40	34	1	10	7	8	19
	$50 001 to $60 000		0	22	11	6	9	3	6
	$60 001 to $70 000			23	16	6	12	0	26
	$70 001 to $80 000	0		13	0	12	0	3	0
	$80 001 to $90 000		0	20	32	5	8	0	16
	$90 001 to $100 000			28	20	0	4	11	0
	$100 001 to $1100 000			23	19	11	0	0	32
	$110 001 to $120 000			0	0	0	8	0	15
	over $120 000			0	32	18	10	5	24

Source: Productivity Commission calculations based on LSAC database.

L.3 Distribution of benefits from proposed parental leave payment

The Commission has estimated that most families eligible for the proposed paid parental leave scheme would benefit from its introduction. The benefits considered here are realised in two ways:

- the direct financial benefit associated with the scheme

- the benefits that arise from being able to take additional leave.

This section analyses how these types of benefits are distributed amongst families with different incomes.

Income distribution of financial benefit from proposed parental leave payment

There is substantial disparity in the financial benefit that different families could obtain from the proposed parental leave payment. While the average benefit available to eligible families (excluding paternity leave) is around $1750, benefits to individual families range from zero or a few hundred dollars to many thousands of dollars, depending on their income (table L.6).

Some of this variation in benefit is strongly linked to the income of parents. In particular:

- high income women who are single or who have lower paid partners tend to benefit the least

  – a large proportion of these women are expected to return to work within 18 weeks. Many of these women are projected to take the untaxed baby bonus payment and to opt out of the paid parental leave scheme

  – because the loss of the baby bonus and family tax benefit B payments will typically be combined with the tax on the paid parental leave at higher marginal tax rates, a greater proportion of these mothers will not be financially better off opting into the proposed scheme

Table L.6   **Average benefits per family from proposed parental leave payment**

		Pre birth income of the mother (52 weeks of weekly pre birth wage)						
		no income or loss	$1 to $10 000	$10 001 to $20 000	$20 001 to $30 000	$30 001 to $40 000	$40 001 to $50 000	$70 001 to $80 000	$100 000 plus
Partner's annual income	no income or loss	$3229	$3236	$3133	$2363	$1353	$864	$411	$287
	$1 to $10 000	$4630		$3525	$1851	$1249	$885	$1551	$0
	$10 001 to $20 000		$3422	$2340	$2951	$2272	$987	$2251	$0
	$20 001 to $30 000	$2133	$1688	$2072	$1074	$1254	$1409	$976	$1221
	$30 001 to $40 000		$2568	$1109	$1105	$1316	$1183	$1112	$442
	$40 001 to $50 000		$1874	$1418	$1256	$1746	$1279	$1251	$1065
	$50 001 to $60 000		$2877	$1964	$1738	$1914	$1424	$1369	$2342
	$60 001 to $70 000			$2171	$1876	$1723	$1286	$900	$711
	$70 001 to $80 000	$3736		$2763	$1522	$1423	$1551	$1432	$2680
	$80 001 to $90 000		$2387	$2516	$1555	$1609	$1735	$2137	$1250
	$90 001 to $100 000			$1271	$1125	$2533	$1975	$2667	$2662
	$100 001 to $1100 000			$416	$2233	$2559	$1257	$1982	$724
	$110 001 to $120 000			$2236	$1997	$1901	$2757	$5831	$3172
	$120 000 plus			$6870	$4002	$6308	$5997	$5257	$4244

Source: Productivity Commission calculations based on LSAC database.

- the largest average benefits are received by families with very high combined incomes

    – these families typically have no government payments to lose (no baby bonus, no family tax benefit and no parenting payment)

- families with lower combined incomes also tend to receive above average benefits

    – this is evident where the pre birth income of the mother is below $30 000 and the income of the father is below $20 000

The average benefit received across most of the remaining income distribution ranges from $1500 to $2500, but there are numerous income combinations where the average is below $1300. Many recipients of below average benefits fall into parts of the income distribution where a high proportion of parents are projected to opt out of the scheme. As the average benefit includes these families, the average benefit to those families expected to opt in would be higher than indicated in table L.6.

Benefits arising from the change in leave behaviour

By reducing the financial constraint experienced around the birth or adoption of a child, many families will be able to extend their leave. The Commission has estimated that an average ten weeks additional leave would occur if the proposed parental leave payment were introduced (appendix G).[9] This increase in leave is an average across all eligible families, including those that already take very extended time off work around the birth of a child.

Of greater policy relevance is the response of the (relatively smaller) group of parents who tend to take shorter periods of leave. It is estimated that on average, mothers who initially took less than 26 weeks of leave would increase their leave by 6 weeks (see appendix G to interpret this estimate).

Table L.7 describes the estimated change in leave by mothers initially taking less than 26 weeks of leave for the different combinations of income. For each combination of parents' income, the table shows the initial average length of leave

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[9] The Commission's analysis of the change in leave behaviour has focused on leave taken by the mother. As outlined in chapter 4, the Commission recognises the benefits that could stem from parental care being provided by the father or partner. The leave data for fathers in LSAC is collected as a number of days. It is likely to be much more accurate than data on leave taken by mothers. However, as the potential discrepancy in the length of leave taken by each mother greatly exceeds the leave taken by most fathers, including the leave taken by fathers could imply a false sense of accuracy to the leave estimate.

(to the left of the arrow $\Rightarrow$) and the estimated average leave after the introduction of the proposed parental leave payment (to the right of the arrow $\Rightarrow$). For example, for a family where the mother has a pre birth income between $20 001 and $30 000 and the partner earned between $10 001 and $20 000, the average length of leave is estimated to increase from 20 weeks before the scheme, to 25 weeks after the introduction of a scheme ($20 \Rightarrow 25$).

Table L.7 shows that the intended goal of 26 weeks of leave is achieved by five income combinations (out of the subsample of women who initially took less than 26 weeks leave), which equates to around 13 per cent of mothers. Part of the reason that this number is less than what may have been expected is that around a quarter of mothers not taking 26 weeks of leave in our sample are not predicted to realise any financial gain from the scheme (due to their higher than average entitlements to other payments), and would therefore opt out of the scheme. As the group opting out is assigned zero weeks of additional leave, the average of the whole group is brought down — despite the fact that the women who opt *into* the scheme actually take considerably more leave than table L.7 suggests.

Moreover there are several reasons to suspect that the actual opt out rate may be lower than the estimate used for this analysis (discussed below). If this is the case, the actual number of women who extend their leave beyond the 26 weeks (who were previously not able to do so) will be higher than is estimated here. Nevertheless, the opt out rate used here was consciously constructed so that the bias is more likely to be upward than downward. This means that the reported estimate of the increase in leave behaviour will tend towards the lower bound of what could be expected. Wherever possible, this principle has guided the modelling decisions used for this analysis.

However, much of the uncertainty surrounding these estimates cannot be reduced. Despite the wealth of information available from the various surveys, there are serious limitations as to how well the complexities of parental leave decisions can be modelled. For this reason, the Commission suggests that a more accurate assessment of the effectiveness of the scheme should be included as part of the mooted three year review after implementation of the scheme.

Based on the available evidence, the provision of 18 weeks paid parental leave appears to be appropriate. While this will not guarantee that all women will actually take at least 26 weeks of maternity leave, it is expected to provide the vast majority with the financial capacity to do so. The relatively small group of women who may not take 26 weeks of leave would still benefit from an increase in the parental leave they do take.

Table L.7 **Estimated average leave before and after proposed parental leave payment**

Average leave in weeks (before ⇒ after) for families initially taking less than 26 weeks leave

		Pre birth income of the mother (52 weeks of weekly pre birth wage)						
		$1 to $10 000	$10 001 to $20 000	$20 001 to $30 000	$30 001 to $40 000	$40 001 to $50 000	$70 001 to $80 000	$100 001 plus
Partner's annual income	no income or loss	0⇒18	10⇒22	21⇒27	13⇒21	12⇒19	16⇒20	10⇒18
	$1 to $10 000		13⇒23	11⇒11	15⇒21	16⇒21		16⇒16
	$10 001 to $20 000		12⇒21	20⇒25	25⇒31	16⇒23		12⇒19
	$20 001 to $30 000	17⇒26	14⇒22	13⇒17	10⇒18	13⇒22	15⇒22	12⇒19
	$30 001 to $40 000	0⇒18	11⇒20	14⇒18	16⇒22	16⇒21	18⇒23	0⇒18
	$40 001 to $50 000	16⇒23	7⇒20	17⇒20	16⇒23	14⇒22	14⇒20	14⇒20
	$50 001 to $60 000		13⇒21	15⇒21	17⇒22	14⇒21	18⇒22	16⇒17
	$60 001 to $70 000		3⇒18	7⇒19	13⇒20	15⇒21	21⇒22	4⇒18
	$70 001 to $80 000		11⇒20	22⇒26	15⇒19	21⇒23	17⇒22	
	$80 001 to $90 000		10⇒19	6⇒17	18⇒23	17⇒23	20⇒22	19⇒21
	$90 001 to $100 000		5⇒19	9⇒16	20⇒22	21⇒24	10⇒21	
	$100 001 to $110 000		19⇒26	0⇒18	13⇒21		19⇒20	9⇒14
	$110 001 to $120 000			15⇒20		18⇒23		9⇒13
	$120 001 plus			6⇒19	11⇒20	12⇒20	15⇒17	9⇒18

Source: Productivity Commission estimates.

Of mothers estimated to initially take less than 26 weeks leave, 56 per cent are projected to reach 20 weeks of leave based on the Commission's conservative estimates. As such, if the projected increase in leave is slightly understated or the proportion of families who are expected to opt out is overstated (discussed below), the performance of the scheme could be superior than these projections indicate.

Further, as most women take at least eight weeks of leave under the current arrangements, the provision of an additional 18 weeks should be sufficient to allow nearly all mothers the opportunity to take a total of at least 26 weeks of leave. This is especially the case as any statutory paid leave would be in addition to the already generous support that families with young children receive from the government. As parental leave decisions are also informed by factors other than financial concerns, it may not be practically possible to get all mothers to take at least six months leave, and indeed, that may not be what all families want.

L.4   Caveats with these findings

While detailed analysis of the projected additional leave has been presented, there are compelling reasons why caution should be used before basing policy decisions on this analysis. Foremost amongst these is the issue related to small sample size (discussed in section L.2), which is compounded when looking at the *subset* of women who take less than 26 weeks of leave.

Beyond this, there are three other main reasons why the individual estimates of financial benefit and change to leave behaviour will not be accurate for all families. These are discussed below.

Because of the broad uncertainty over the estimated response of individual households to the proposed paid parental leave scheme, the Commission is being particularly cautious about recommending policy responses based solely on the estimated change in leave.

The original leave data is imprecise

As only the month that leave was started and ended is recorded in the LSAC database, the actual leave taken by each individual could be a month above or below the actual length of leave taken. This is not a problem for the average leave taken overall because as many families would have overstated leave as understated leave. However it is problematic when examining leave behaviour of individuals – particularly when dealing with short periods of leave. For example, if a mother is

listed as taking four months off work, she could have taken as few as three and as many as five months off work.

There is considerable uncertainty as to the responsiveness of families to the paid parental leave scheme

As discussed in appendix G, the overall responsiveness of parents to the paid parental leave scheme is sensitive to the assumed level of income elasticity. Moreover, responsiveness to the scheme will be affected by both the financial and non-financial benefits families receive from extending their leave. The combinations of income considered here belie a wide array of unmeasurable variables that arise from the different situations and priorities families face, and feed into the non-financial benefits in potentially non-uniform and unpredictable ways. If, for a given income combination, these unmeasurable variables are significantly different in the broader population than they are in the sample, the observed effect of introducing the proposed paid parental leave scheme could be very different from the predicted effect.

There is uncertainty over how many families will opt out

A change in leave behaviour can only be estimated if a family is expected to benefit from the proposed paid parental leave scheme. (An average family would need to be paid for 14 weeks of paid parental leave to recoup the loss of baby bonus and other government payments). Due to the methodology employed in appendix G, it is possible that the imprecision of the leave data may cause some families to be incorrectly categorised as not receiving a benefit. This is most likely to occur for families where the mother took a short period of leave.

If families are incorrectly deemed to have opted out of the proposed scheme, this reduces the estimated average benefit for families to below its true value (overall and at each income combination). This in turn will cause our estimate of the additional leave taken to be biased downwards. The proportion of eligible families who are predicted to opt out of the scheme is given in table L.8.

Unsurprisingly, income combinations where the estimated average increase in leave is small also tend to have a high rate of opting out. This is especially true for families where the mother's pre birth income is between $20 000 and $50 000 and the partner earns between $20 000 and $60 000. It is possible that the true benefit, both financial and in terms of additional leave, could be greater for these groups than is predicted here.

Table L.8 **Income distribution of families estimated to opt out of the proposed scheme**

Families by income estimated to opt out as a percentage of all eligible families[a]

		Pre birth income of the mother (52 weeks of weekly pre birth wage)						
		$1 to $10 000	$10 001 to $20 000	$20 001 to $30 000	$30 001 to $40 000	$40 001 to $50 000	$70 001 to $80 000	$100 001 plus
Partner's annual income	no income or loss	0	0	0	0.61	1.76	2.25	0.53
	$1 to $10 000		0	0.09	0	0.11	0	0.22
	$10 001 to $20 000	0	0.05	0	0	0.12	0	0.19
	$20 001 to $30 000	0	0	0.53	0.39	0	0.04	0.10
	$30 001 to $40 000	0	0.20	1.14	0.49	0.38	0.15	0
	$40 001 to $50 000	0	0	0.72	0.11	0.18	0.15	0.05
	$50 001 to $60 000	0	0	0.14	0.06	0.51	0.52	0.15
	$60 001 to $70 000		0	0	0.12	0.40	0.30	0
	$70 001 to $80 000		0	0.24	0.21	0.16	0.05	0.12
	$80 001 to $90 000	0	0	0.08	0.20	0.06	0.18	0.07
	$90 001 to $100 000		0	0.11	0	0	0	0
	$100 001 to $110 000		0.05	0.06	0	0	0	0.14
	$110 001 to $120 000		0	0	0	0	0	0
	$120 001 plus		0	0	0	0	0	0.11

a Overall, 14.6 per cent of eligible families are estimated to opt out of the scheme.

Source: Productivity Commission estimates based on LSAC sample data.