Productivity Commission responses to request for supplementary information regarding 'Wealth transfers and their economic effects'

This document contains the Productivity Commission's responses to a request from the Treasury, received on 5 April 2022, for supplementary information about the Commission's December 2021 report *Wealth transfers and their economic effects* (WTEE).

Unless otherwise noted, all statistics reported in this document are based on unit record data from the Household Income and Labour Dynamics in Australia (HILDA) survey, conducted by the Australian Government Department of Social Services (DSS) (DOI: 10.26193/0LPD4U). The statistics were estimated by the Commission, and should not be attributed to the Australian Government, DSS, any of DSS' contractors or partners, or any other agencies.

Request 1: What is the total value and number of transfers (inheritances and gifts) above $25 000, $50 000 and $100 000?

The Commission has estimated these statistics using the 'inflow' approach (based on inheritances and gifts that HILDA respondents reported receiving; see chapter 1 of WTEE for a full explanation). They are subject to the limitations noted in chapter 1 and appendix A of WTEE — in particular, that there is non-reporting of both inheritances and gifts, meaning that these statistics likely understate the true value and number of transfers.

Tables 1–4 show the requested statistics for the period 2001-02 to 2018-19 (17 years). The value of the transfers is expressed in 2018 dollars.

Table 1 – Number of gifts[a]

Year range	Gifts over $25 000	Gifts over $50 000	Gifts over $100 000	All gifts
	Number (tens of thousands)	Number (tens of thousands)	Number (tens of thousands)	Number (tens of thousands)
2001-02 to 2018-19	86.5	40.8	17.1	2299.4

a. Column 5 (All gifts) is total gifts given. The number of gifts under $25 000 is equal to column 5 minus column 2. This logic applies to Table 2, 3 and 4.

Source: Productivity Commission estimates based on HILDA Restricted Release 19.

Table 2 – Value of gifts

Year range	Gifts over $25 000	Gifts over $50 000	Gifts over $100 000	All gifts
	Value (billions of 2018 dollars)	Value (billions of 2018 dollars)	Value (billions of 2018 dollars)	Value (billions of 2018 dollars)
2001-02 to 2018-19	95.6	76.0	53.6	163.1

Source: Productivity Commission estimates based on HILDA Restricted Release 19.

Table 3 – Number of inheritances

Year range	Inheritances over $25 000	Inheritances over $50 000	Inheritances over $100 000	All inheritances
	Number (tens of thousands)	Number (tens of thousands)	Number (tens of thousands)	Number (tens of thousands)
2001-02 to 2018-19	227.7	171.4	108.0	435.6

Source: Productivity Commission estimates based on HILDA Restricted Release 19.

Table 4 – Value of inheritances

Year range	Inheritances over $25 000	Inheritances over $50 000	Inheritances over $100 000	All inheritances
	Value (billions of 2018 dollars)	Value (billions of 2018 dollars)	Value (billions of 2018 dollars)	Value (billions of 2018 dollars)
2001-02 to 2018-19	461.7	435.9	378.5	483.1

Source: Productivity Commission estimates based on HILDA Restricted Release 19.

Request 2: What is the value of total inheritances excluding the primary residence

Chapter 1 of WTEE reported estimates of both total inheritances and total inheritances bequeathed to the next generation. The same disaggregation is reported below. The difference between the two estimates is largely attributable to inheritances bequeathed to surviving spouses. The estimates of inheritances transferred to the next generation are contingent on the assumption that inheritance distributions align with those observed in a sample of 526 probate files from 2016 collected by the Grattan Institute (see appendix A WTEE for more information).

For completeness, the Commission has also provided estimates of total inheritances *including* the primary residence.

Tables 5 and 6 show the requested statistics for 2002, 2006, 2010, 2014 and 2018.

Table 5 – Total inheritances

Estimates based on the 'outflow – expected deaths' method

Year	Inheritances	Inheritances excluding the primary residence
	Value (billions of 2018 dollars)	Value (billions of 2018 dollars)
2002	48.4	24.5
2006	68.1	35.7
2010	73.3	38.1
2014	86.1	49.0
2018	106.6	58.0

Source: Productivity Commission estimates based on HILDA Restricted Release 19.

Table 6 – Total inheritances bequeathed to the next generation

Estimates based on the 'outflow – expected deaths' method

Year	Inheritances	Inheritances excluding the primary residence
	Value (billions of 2018 dollars)	Value (billions of 2018 dollars)
2002	23.9	11.0
2006	33.7	16.5
2010	33.1	15.7
2014	41.3	22.5
2018	52.0	26.3

Source: Productivity Commission estimates based on HILDA Restricted Release 19.

These estimates use the 'outflow – expected deaths' approach (based on the wealth held by respondents who are expected to die in the following year; see chapter 1 and appendix A of WTEE for a full explanation). The estimates are subject to the limitations noted in chapter 1 and appendix A of WTEE — in particular:

- they are contingent on the assumption that wealth (in this case, excluding the primary residence), after controlling for age, gender and marital status, is not correlated with

forecasted probability of death. To the extent that there is a negative correlation (less wealthy people of a given age, gender and marital status are more likely to die in the following year than more wealthy people), wealth held at death, and therefore total inheritances, will be overestimated.

- they are contingent on the assumption that people who die do not decumulate their wealth (excluding the primary residence) in the few months prior to death at a rate different from that of people of the same gender, age and marital status who do not die. To the extent that people who die decumulate their wealth to a greater extent than people of the same gender, age and marital status who do not die, this method will overestimate total inheritances excluding the primary residence.
- 'death-related' expenses paid out of the deceased's estate (e.g. some funerals and probate fees) are not deducted. To the extent that death-related expenses are paid out of the deceased's estate, this method will overestimate total inheritances excluding the primary residence.

As robustness checks, the Commission has also estimated these statistics using the 'outflow – actual deaths' approach (based on the wealth held by respondents reported to the HILDA survey as having died in the following year; see WTEE for a full explanation). These statistics are subject to the limitations noted in appendix A of WTEE — in particular:

- they are based on fewer observations (about 100 observations per year) than the statistics calculated using the 'outflow – expected deaths' approach, which makes them more prone to sampling error (i.e. they are less precise)
- they are contingent on the assumption that wealth held by respondents reported as having died is representative of the wealth of respondents who actually died. This is of no concern for the 2003–2011 estimates (for which there was complete reporting of deaths), but is of concern for the 2015 estimate, which is based on incomplete reporting of deaths of respondents in that year
- they are contingent on the assumption that wealth does not change in the year prior to death.

Tables 7 and 8 and figure 1 show the robustness checks for 2003, 2007, 2011, 2015. These estimates differ substantially from the 'outflow – expected deaths' estimates in some instances, which reflects the inherent limitations of both methodologies.

Table 7 – Total inheritances

Estimates based on the 'outflow – actual deaths' method

Year	Inheritances	Inheritances excluding the primary residence
	Value (billions of 2018 dollars)	Value (billions of 2018 dollars)
2003	39.6	22.4
2007	69.0	37.9
2011	46.3	24.8
2015	64.4	39.2

Source: Productivity Commission estimates based on HILDA Restricted Release 19.

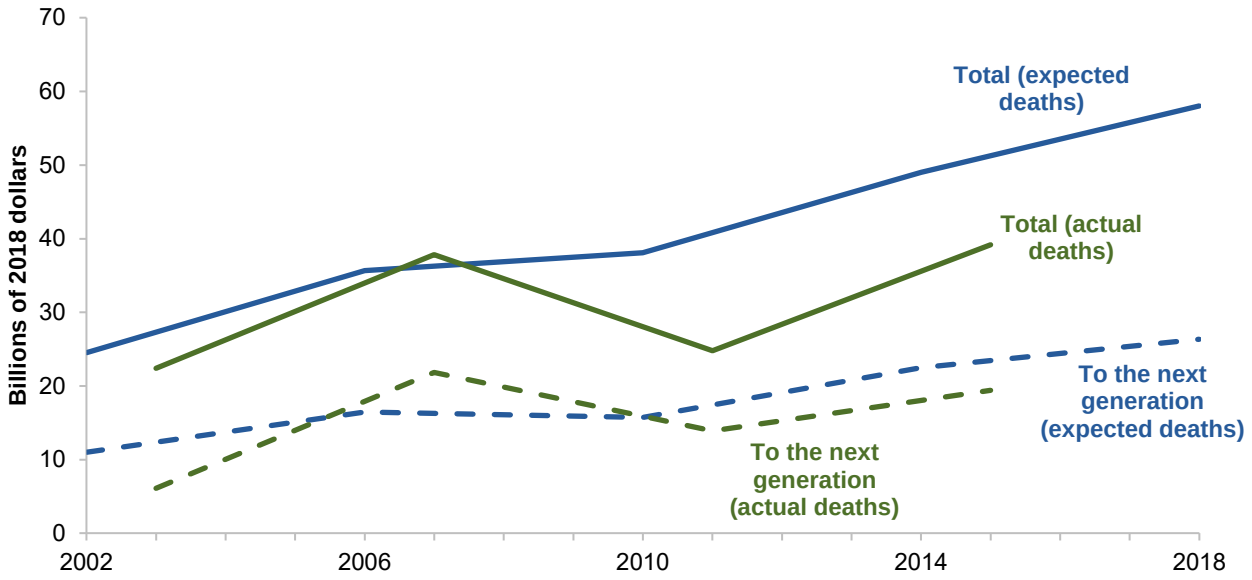
Table 8 – Total inheritances bequeathed to the next generation

Estimates based on the 'outflow – actual deaths' method

Year	Inheritances	Inheritances excluding the primary residence
	Value (billions of 2018 dollars)	Value (billions of 2018 dollars)
2003	19.1	6.1
2007	37.2	21.8
2011	26.3	13.9
2015	30.8	19.4

Source: Productivity Commission estimates based on HILDA Restricted Release 19.

Figure 1 – Comparison of 'expected deaths' and 'actual deaths' approaches for inheritances excluding the primary residence



Source: Productivity Commission estimates based on HILDA Restricted Release 19.

Request 3: How many households in each quintile of the wealth distribution left inheritances, and what was the value of the inheritances that they left?

The Commission has estimated these statistics using both the 'outflow – expected deaths' approach and the 'outflow – actual deaths' approach (see the response to request 2 for a brief explanation of these approaches, and chapter 1 and appendix A of WTEE for more information). **As such, the limitations of each approach outlined in the response to request 2 apply to this response as well.**

As in the response to request 2 (and in WTEE), estimates derived using the 'outflow – expected deaths' approach are the primary estimates, with those derived using the 'outflow – actual deaths' approach supplied as robustness checks. In this instance, the 'outflow – actual deaths' estimates are particularly imprecise relative to the 'outflow – expected deaths' estimates, because they are based on small numbers of observations (shown in the tables below).[1] (For the same reason, the 'outflow – expected deaths' estimates are also less precise than those of the response to request 2 and WTEE.)

As in chapter 2 of WTEE, the Commission has used an 'equivalised' measure of wealth to determine each household's position in the wealth distribution. Equivalised wealth is household wealth scaled to reflect differences in household size and composition. It is the Commission's preferred measure of wealth when the intention is to measure the consequences of wealth for economic wellbeing.

As in the response to request 2 (and in chapter 1 of WTEE), the Commission has produced estimates for i) all inheritances and ii) inheritances bequeathed to the next generation.[2] In both cases, some of these inheritances are bequeathed from one household member to another, and — as such — these estimates do not represent household-level outflows of inheritances. This is especially the case for the 'all inheritances' estimates, as many such inheritances are bequeathed to a surviving spouse.

These estimates differ from those of request 2 in that they do not include wealth held in refundable accommodation deposits (RADs) — lump sum payments made for aged care accommodation that are refunded when the accommodation recipient leaves the aged care home. The Commission estimates that, in 2018, about 10 per cent of all inheritances (by value) were derived from RADs, but wealth held in RADs is not generally recorded by the wealth module of the HILDA survey. The response to request 2, and the 'outflow' measures in WTEE, include additional amounts derived from administrative data to account for RADs not recorded in the HILDA dataset (see appendix A of WTEE for more information). However, the distribution of RADs over equivalised wealth quintiles is unknown, and so these estimates do not include these additional amounts. As a result, the total value of inheritances is lower in these estimates than in the corresponding estimates of request 2.

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[1] To a first-order approximation, and assuming (for simplicity) the recorded number of actual deaths is distributed equally over the wealth quintiles (such that one-fifth of households leaving an inheritance lie in each quintile), the standard error of both the 'outflow – expected deaths' and 'outflow – actual deaths' estimates would increase by a factor of $\sqrt{5}$ relative to the estimates in the response to request 2 and WTEE. As the standard error of the 'outflow – actual deaths' estimates in the response to request 2 and WTEE was already far greater than the standard error of the 'outflow – expected deaths' estimates, the difference between the two standard errors would be larger in this instance.

[2] The *number* of households leaving an inheritance is not defined for inheritances bequeathed to the next generation, as inheritances may be split between generations.

To provide additional context about the distribution of equivalised wealth, the Commission has estimated the share of wealth held by each quintile of the distribution (table 9).

Table 9 – Distribution of equivalised wealth[a]

Share of equivalised wealth held by each quintile of equivalised wealth distribution (per cent)

Year	1st quintile	2nd quintile	3rd quintile	4th quintile	5th quintile
2002	0.4	4.5	10.1	19.1	66.0
2006	0.4	4.2	9.8	18.8	66.8
2010	0.2	4.2	9.6	20.1	65.9
2014	0.2	3.4	9.1	19.8	67.5
2018	0.4	3.8	9.7	20.0	66.0

a. Some rows do not sum to 100 per cent due to rounding

Source: Productivity Commission estimates based on HILDA Restricted Release 19.

Tables 10–14 show the estimates based on the 'outflow – expected deaths' approach.

Table 10 – Inheritances bequeathed by households from the 1st quintile of the equivalised wealth distribution

Estimates based on the 'outflow – expected deaths' method

Year	All inheritances	All inheritances	Inheritances bequeathed to the next generation
	Number of households leaving an inheritance (tens of thousands)	Value (billions of 2018 dollars)	Value (billions of 2018 dollars)
2002	2.0	0.2	0.1
2006	2.6	0.3	0.2
2010	2.8	0.3	0.2
2014	2.3	0.3	0.2
2018	2.5	0.4	0.3

Source: Productivity Commission estimates based on HILDA Restricted Release 19.

Table 11 – Inheritances bequeathed by households from the 2nd quintile of the equivalised wealth distribution

Estimates based on the 'outflow – expected deaths' method

Year	All inheritances	All inheritances	Inheritances bequeathed to the next generation
	Number of households leaving an inheritance (tens of thousands)	Value (billions of 2018 dollars)	Value (billions of 2018 dollars)
2002	1.8	1.4	0.7
2006	1.6	1.4	0.6
2010	1.5	1.5	0.8
2014	2.0	1.6	1.0
2018	1.9	2.0	1.2

Source: Productivity Commission estimates based on HILDA Restricted Release 19.

Table 12 – Inheritances bequeathed by households from the 3rd quintile of the equivalised wealth distribution

Estimates based on the 'outflow – expected deaths' method

Year	All inheritances	All inheritances	Inheritances bequeathed to the next generation
	Number of households leaving an inheritance (tens of thousands)	Value (billions of 2018 dollars)	Value (billions of 2018 dollars)
2002	2.7	4.7	2.2
2006	2.5	6.2	3.2
2010	2.9	6.8	3.7
2014	2.9	6.1	3.0
2018	3.0	8.0	4.2

Source: Productivity Commission estimates based on HILDA Restricted Release 19.

Table 13 – Inheritances bequeathed by households from the 4th quintile of the equivalised wealth distribution

Estimates based on the 'outflow – expected deaths' method

Year	All inheritances	All inheritances	Inheritances bequeathed to the next generation
	Number of households leaving an inheritance (tens of thousands)	Value (billions of 2018 dollars)	Value (billions of 2018 dollars)
2002	3.2	9.0	4.6
2006	3.3	13.1	6.5
2010	3.5	14.8	7.7
2014	4.0	16.9	9.1
2018	4.1	20.5	10.3

Source: Productivity Commission estimates based on HILDA Restricted Release 19.

Table 14 – Inheritances bequeathed by households from the 5th quintile of the equivalised wealth distribution

Estimates based on the 'outflow – expected deaths' method

Year	All inheritances	All inheritances	Inheritances bequeathed to the next generation
	Number of households leaving an inheritance (tens of thousands)	Value (billions of 2018 dollars)	Value (billions of 2018 dollars)
2002	3.7	32.0	15.4
2006	3.3	44.8	21.5
2010	3.7	45.7	17.9
2014	4.2	55.4	24.2
2018	4.3	66.4	29.9

Source: Productivity Commission estimates based on HILDA Restricted Release 19.

Tables 15–19 show the estimates based on the 'outflow – actual deaths' approach, as robustness checks. Some estimates are highly variable year-on-year (clear evidence of imprecision), which due to the small numbers of observations on which they are based.

Table 15 – Inheritances bequeathed by households from the 1st quintile of the equivalised wealth distribution

Estimates based on the 'outflow – actual deaths' method

Year	All inheritances	All inheritances	Inheritances bequeathed to the next generation	Number of observations on which estimates are based
	Number of households leaving an inheritances (tens of thousands)	Value (billions of 2018 dollars)	Value (billions of 2018 dollars)	Number
2003	1.9	0.2	0.1	15
2007	4.0	0.2	0.1	15
2011	6.1	0.5	0.3	27
2015	3.5	0.7	0.5	25

Source: Productivity Commission estimates based on HILDA Restricted Release 19.

Table 16 – Inheritances bequeathed by households from the 2nd quintile of the equivalised wealth distribution

Estimates based on the 'outflow – actual deaths' method

Year	All inheritances	All inheritances	Inheritances bequeathed to the next generation	Number of observations on which estimates are based
	Number of households leaving an inheritances (tens of thousands)	Value (billions of 2018 dollars)	Value (billions of 2018 dollars)	Number
2003	1.5	1.3	0.8	14
2007	1.3	1.6	0.3	8
2011	1.3	0.7	0.4	8
2015	3.4	3.4	1.9	16

Source: Productivity Commission estimates based on HILDA Restricted Release 19.

Table 17 – Inheritances bequeathed by households from the 3rd quintile of the equivalised wealth distribution

Estimates based on the 'outflow – actual deaths' method

Year	All inheritances	All inheritances	Inheritances bequeathed to the next generation	Number of observations on which estimates are based
	Number of households leaving an inheritances (tens of thousands)	Value (billions of 2018 dollars)	Value (billions of 2018 dollars)	Number
2003	1.6	2.6	1.0	11
2007	1.4	3.3	1.6	12
2011	2.3	4.9	1.5	21
2015	3.3	5.9	2.8	21

Source: Productivity Commission estimates based on HILDA Restricted Release 19.

Table 18 – Inheritances bequeathed by households from the 4th quintile of the equivalised wealth distribution

Estimates based on the 'outflow – actual deaths' method

Year	All inheritances	All inheritances	Inheritances bequeathed to the next generation	Number of observations on which estimates are based
	Number of households leaving an inheritances (tens of thousands)	Value (billions of 2018 dollars)	Value (billions of 2018 dollars)	Number
2003	5.6	15.2	11.2	30
2007	4.0	15.4	7.4	22
2011	2.4	11.6	9.5	18
2015	2.9	12.4	8.3	22

Source: Productivity Commission estimates based on HILDA Restricted Release 19.

Table 19 – Inheritances bequeathed by households from the 5th quintile of the equivalised wealth distribution

Estimates based on the 'outflow – actual deaths' method

Year	All inheritances	All inheritances	Inheritances bequeathed to the next generation	Number of observations on which estimates are based
	Number of households leaving an inheritances (tens of thousands)	Value (billions of 2018 dollars)	Value (billions of 2018 dollars)	Number
2003	2.6	18.3	4.7	22
2007	3.1	44.6	25.2	19
2011	2.6	22.8	10.8	21
2015	2.8	33.9	12.0	26

Source: Productivity Commission estimates based on HILDA Restricted Release 19.