

Agreed statistical tables for loss of financial dependency in Australia

BACKGROUND

In 2001 a paper was prepared by Messrs Cumpston and Sarjeant titled “*Dependency percentages for two-parent families*”.

That paper subsequently became the basis for the dependency percentages outlined at Table 9.1 in Professor Emeritus Harold Luntz’s 4th edition of “*Assessment of Damages for Personal Injury and Death*” which was published in 2002.

In 2008, Messrs Sarjeant and Thomson prepared a further paper based on updated statistical data from the Australian Bureau of Statistics (“ABS”) titled “[*Dependency percentages for two-parent and one-parent families*](#)”.

At the time of publication of those papers the authors were reliant on household expenditure compiled by the ABS. The data contained within that survey were generalised household expenditure based on 16 broad expenditure groups.

In 2012, Lee and Bossert prepared a paper entitled “[*Dependency Percentages in Australia Revisited – Estimating Personal Consumption using Statistical Data*](#)”. That paper used a similar methodology to the Cumpston Sarjeant approach but incorporated more recent statistical data with specific household expenditure based on 586 expenditure items and also five (5) different levels of household income. The additional data allowed Lee and Bossert to estimate more precise levels of dependency percentages.

In 2015, Lee and Bossert prepared a subsequent paper entitled “[*Personal Consumption Percentages in Australia – Current Tables for 2015*](#)”.

That paper contained a foreword by Professor Emeritus Luntz and used a similar methodology to the Cumpston Sarjeant approach and Lee and Bossert’s 2012 paper but incorporated more recent statistical data with specific household expenditure based on 586 expenditure items and also ten (10) different levels of household income.

Further, whilst previous papers had expressed the statistical data as dependency percentages, the latest Lee and Bossert paper focussed on personal consumption as a percentage of household income. This approach was preferred on the basis that it used a more simple formula and did not require practitioners to attempt to extrapolate percentages using various tables.

PEER REVIEW

In acknowledging Cumpston Sarjeant’s history in publishing dependency tables which became the basis for the dependency percentages outlined at Table 9.1 in Professor Emeritus Harold Luntz’s 4th edition of “*Assessment of Damages for Personal Injury and Death*”, Lee and Bossert invited one of the current principals of Cumpston Sarjeant, Mr Corey Plover, to undertake a peer review of the underlying methodology and calculations contained in Lee and Bossert’s 2015 paper.

Mr Plover has formed the following opinion in relation to the amounts contained in Lee and Bossert's 2015 paper:

1. All numerical calculations are correct and were independently replicated from ABS expenditure data.
2. The personal consumption percentages, which are the inverse of dependency percentages, follow a similar methodology as to previous papers. This approach is preferred as it does not require additional tables for multiple income households.
3. Because of ABS survey limitations, a difference exists between a household's net weekly income and total expenditure. While it may be misleading to regard the difference as a measure of savings there is merit in treating this component as an asset accumulating, or non-divisible, item. This leads to declining personal consumption at increasing income levels that is consistent with other international studies.
4. The finer level of detail in expenditure items allows for a more accurate representation of variable expenditure (i.e. personal consumption) and should be preferred to previously published tables.
5. The finer level of subdivision in household income is also appropriate, with the following qualifications noted for low deciles:
 - (i) The 1st and 2nd deciles predominantly comprise single persons and unemployed households, which significantly reduces their relevance in loss of dependency cases; and
 - (ii) The 3rd decile predominantly comprises households without dependent children. Caution should be exercised when using these figures where dependent children are present.

AGREED TABLES

At the request of Professor Emeritus Luntz, Lee, Bossert and Plover have jointly contributed the below tables and associated explanation of application for publication in the upcoming 5th edition of "Assessment of Damages for Personal Injury and Death".

2 PARENT FAMILIES – PERSONAL CONSUMPTION EXPRESSED AS PERCENTAGE OF AFTER-TAX HOUSEHOLD INCOME

Weekly Income (before tax)	Number of Children				
	0	1	2	3	
1 st Decile	\$ 251	44.3%	36.7%	31.7%	28.1%
2 nd Decile	\$ 480	27.9%	23.2%	20.0%	17.7%
3 rd Decile	\$ 668	24.7%	20.4%	17.6%	15.6%
4 th Decile	\$ 896	22.3%	18.5%	16.0%	14.2%
5 th Decile	\$1,177	21.8%	18.1%	15.7%	14.0%
6 th Decile	\$1,475	20.6%	17.2%	14.8%	13.2%
7 th Decile	\$1,807	19.0%	15.7%	13.6%	12.0%
8 th Decile	\$2,241	18.3%	15.2%	13.1%	11.6%
9 th Decile	\$2,870	16.6%	13.8%	11.9%	10.6%
10 th Decile	\$5,003	13.4%	11.1%	9.5%	8.4%
All Households	\$1,688	18.6%	15.4%	13.3%	11.8%

Table 1

1 PARENT FAMILIES – PERSONAL CONSUMPTION EXPRESSED AS PERCENTAGE OF AFTER-TAX HOUSEHOLD INCOME

	Weekly Income (before tax)	Number of Children		
		1	2	3
1 st Decile	\$ 251	63.4%	50.8%	43.2%
2 nd Decile	\$ 480	40.0%	32.1%	27.3%
3 rd Decile	\$ 668	35.2%	28.1%	23.9%
4 th Decile	\$ 896	32.1%	25.8%	22.0%
5 th Decile	\$1,177	31.4%	25.3%	21.7%
6 th Decile	\$1,475	29.7%	23.9%	20.4%
7 th Decile	\$1,807	27.2%	21.8%	18.5%
8 th Decile	\$2,241	26.2%	20.9%	17.8%
9 th Decile	\$2,870	23.9%	19.3%	16.5%
10 th Decile	\$5,003	19.0%	15.1%	12.7%
All Households	\$1,688	26.6%	21.3%	18.2%

Table 2

For the method to apply the above tables please refer to [“Personal Consumption Percentages in Australia – Current Tables for 2015”](#).

REFERENCES

The papers referred to in this publication can be accessed from the following locations:

Dependency percentages for two-parent and one-parent families

<http://cumsar.com.au/docs/dependency2003-04.pdf>

Dependency Percentages in Australia Revisited – Estimating Personal Consumption using Statistical Data

<http://www.vincent.com.au/u/lib/cms/dependency-percentages-revisited-2012.pdf>

Personal Consumption Percentages in Australia – Current Tables for 2015

<http://www.vincent.com.au/personal-consumption-rates.pdf>

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