

## APPENDIX A: PARAMETERS AND FURTHER INFORMATION

This appendix provides information on the parameters used in producing this Budget Paper.

Budget Paper No. 1, *Budget Strategy and Outlook 2016-17, Statement 2: Economic Outlook*, provides information on the forecasting approach used in the 2016-17 Budget.

### POPULATION

Population data are used to distribute funding between the States and in the calculation of annual growth factors.

#### Estimates of State populations

Table A.1 sets out the State population series used in this Budget Paper.

**Table A.1: Population by State, at 31 December**

| million | NSW   | VIC   | QLD   | WA    | SA    | TAS   | ACT   | NT    | Total  |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 2015    | 7.674 | 5.992 | 4.807 | 2.608 | 1.704 | 0.518 | 0.393 | 0.244 | 23.940 |
| 2016    | 7.786 | 6.096 | 4.876 | 2.659 | 1.720 | 0.519 | 0.399 | 0.247 | 24.300 |
| 2017    | 7.900 | 6.203 | 4.946 | 2.711 | 1.735 | 0.519 | 0.404 | 0.249 | 24.668 |
| 2018    | 8.021 | 6.315 | 5.019 | 2.766 | 1.752 | 0.520 | 0.409 | 0.251 | 25.054 |
| 2019    | 8.147 | 6.431 | 5.095 | 2.824 | 1.769 | 0.522 | 0.415 | 0.254 | 25.456 |

The State populations for 2015 to 2019 are Treasury estimates as at 31 December in the respective year. They are constructed using the latest demographic data available from the Australian Bureau of Statistics (ABS) and Treasury assumptions on fertility, mortality, net overseas migration and interstate migration.

#### Fertility

For the 2016-17 Budget, the Treasury fertility assumption is that the Total Fertility Rate will equal 1.900 babies per woman in 2015 and remain stable for the remainder of the projection period. This assumption is unchanged from the 2015-16 MYEFO and the 2015 *Intergenerational Report*.

#### Mortality

The mortality assumptions are based on the medium assumptions used in the ABS *Population Projections, 2012-2101* (cat. no. 3222.0). In these assumptions, a continuing decline in mortality rates across Australia, with State differentials persisting, is assumed. Overall, life expectancy is assumed to improve to the year 2019 at the rate observed over the period 1982 to 2011.

### Net overseas migration

Table A.2 shows the net overseas migration assumptions used in this Budget Paper.

**Table A.2: Net overseas migration**

|                                   | 2015    | 2016    | 2017    | 2018    | 2019    |
|-----------------------------------|---------|---------|---------|---------|---------|
| Net overseas migration, Australia | 177,659 | 203,216 | 208,522 | 225,251 | 238,881 |

State shares of net overseas migration are estimated by using a weighted average of the three most recent observed years – 2012, 2013 and 2014 – with weights of one, two and four respectively.

### Interstate migration

Table A.3 shows the net interstate migration assumptions used in this Budget Paper.

**Table A.3: Net interstate migration**

|      | NSW    | VIC   | QLD   | WA    | SA     | TAS    | ACT    | NT     | Total |
|------|--------|-------|-------|-------|--------|--------|--------|--------|-------|
| 2016 | -8,800 | 7,800 | 6,600 | 2,700 | -3,100 | -1,500 | -1,000 | -2,700 | -     |
| 2017 | -8,800 | 7,800 | 6,600 | 2,700 | -3,100 | -1,500 | -1,000 | -2,700 | -     |
| 2018 | -8,800 | 7,800 | 6,600 | 2,700 | -3,100 | -1,500 | -1,000 | -2,700 | -     |
| 2019 | -8,800 | 7,800 | 6,600 | 2,700 | -3,100 | -1,500 | -1,000 | -2,700 | -     |

Similar to State shares of net overseas migration, the Treasury's estimates of net interstate migration are based on a weighted average of the three most recent observed years – 2012, 2013 and 2014 – with weights of one, two and four respectively. Due to data lags, the 2014 observation includes an assumption for the December quarter based on weighted averages of arrivals and departures for December quarters 2011 to 2013.

## WAGE COST INDICES

Table A.4 shows the wage cost indices used in this Budget Paper, rounded to the nearest quarter of a per cent.

**Table A.4: Wage cost indices**

| per cent            | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
|---------------------|---------|---------|---------|---------|---------|
| Wage cost index - 1 | 1 1/2   | 1 1/2   | 1 1/2   | 1 1/2   | 1 1/2   |
| Wage cost index - 6 | 1 1/2   | 1 1/2   | 2       | 2       | 2       |

## DATA SOURCES

The information in Part 4, Appendix B and Appendix C of this Budget Paper is consistent with the ABS Government Finance Statistics reporting framework for the public sector.

Commonwealth data are sourced from the Commonwealth Government Final Budget Outcomes, ABS, and Commonwealth Government Consolidated Financial Statements.

See Budget Paper No. 1, *Budget Strategy and Outlook 2016-17, Statement 10: Historical Australian Government Data*, for more information.

State data for 2015-16 onwards are sourced from States' 2015-16 mid-year financial reports, with the exception of Victoria which is sourced from its 2016-17 Budget.

The 2016-17 Budget also includes revisions to Commonwealth Government budget aggregates that improve the accuracy and comparability of the data through time. See Budget Paper No. 1, *Budget Strategy and Outlook 2016-17, Statement 10: Historical Australian Government Data*, for more information on these revisions.

## **FURTHER INFORMATION**

Several publications of the ABS also provide information that is relevant to analysing federal financial relations data, including:

- *Australian Demographic Statistics* (cat. no. 3101.0);
- *Population Projections, 2012-2101* (cat. no. 3222.0);
- *Taxation Revenue, Australia* (cat. no. 5506.0);
- *Government Finance Statistics, Australia* (cat. no. 5512. 0);
- *Australian System of Government Finance Statistics – Concepts, Sources and Methods* (cat. no. 5514.0);
- Information Paper: *Developments in Government Finance Statistics* (cat. no. 5516.0);  
and
- Information Paper: *Accruals Based Government Finance Statistics* (cat. no. 5517.0).

Commonwealth Grants Commission publications also provide information relevant to the analysis of federal financial relations relating to the distribution of GST revenue. In relation to the 2016-17 financial year, the relevant publication is the *Report on GST Revenue Sharing Relativities – 2016 Update*.