



# PARLIAMENTARY LIBRARY

INFORMATION ANALYSIS ADVICE

QUICK GUIDE

RESEARCH PAPER SERIES, 2018–19

UPDATED 4 APRIL 2019

## Australian earnings data: a quick guide

Penny Vandenbroek  
Statistics and Mapping

This quick guide provides information on sources available for Australian earnings data, it outlines a definition of earnings, and aims to respond to frequently asked questions (FAQs). It draws on a range of data published by the Australian Bureau of Statistics (ABS), as well as other sources. This guide updates the 2018 version of the same name, as well as the earlier Parliamentary Library publication, *Earnings in Australia: a quick guide* (A Hall, 15 April 2015).

### What are earnings?

The International Labour Organization (ILO) describes earnings as:

‘...remuneration in cash and in kind paid to employees, as a rule at regular intervals, for time worked or work done together with remuneration for time not worked such as for annual vacation, other paid leave or holidays. Earnings exclude employers’ contributions in respect of their employees paid to social security and pension schemes and also the benefits received by employees under these schemes. Earnings also exclude severance and termination pay’ (ABS, [Labour statistics: concepts sources and methods, Feb 2018](#), cat . no. 6102.0.55.001).

Earnings generally refer to gross wages or salary, that is, the calculated amount prior to tax.

### Earnings or income?

‘Earnings’ is a narrower concept than ‘income’, as income includes remuneration from all sources, not just wages or salary received from employers. Examples of other income sources include dividend payments from shares or rental income from housing. Whether to use earnings or income data depends on the question to be answered. Earnings data is useful for analysis of wage differences between industries, occupations or gender. Income data is generally used when examining equality or distribution, as it encompasses amounts received from all sources, including government pensions, business income and investment income. The effect of these differences between the two is illustrated in the following table.

## Comparison of earnings and income using ABS data

Earnings or income	Applicable group	Amount (\$)	Source
Median weekly total cash earnings	All employees	1,110.00	ABS, <i>Employee Earnings and Hours, May 2018</i> , cat. no. 6306.0 (see Datacube 3)
Median weekly total cash earnings	Full-time non-managerial employees paid at the adult rate	1,460.00	ABS, <i>Employee Earnings and Hours, May 2018</i> , cat. no. 6306.0 (see Datacube 8)
Median equivalised disposable household weekly income	By person (all households)	853.00	ABS, <i>Household income and wealth, 2015–16</i> , cat. no. 6523.0 (see table 'Main source of gross household income')
Median equivalised disposable household weekly income	By person (in households whose main source of gross income was 'employee income')	999.00	As above

## Key source of conceptual information

The ABS release, [Labour statistics: concepts, sources and methods, Feb 2018](#) (cat. no. 6102.0.55.001) provides a chapter on the concepts, definitions and application of '[Employee remuneration](#)', as well as chapters for surveys of earnings and the wage price index.

## FAQs

This section aims to address commonly asked questions about earnings data.

### ***What data can be used to determine average earnings at a particular point in time?***

The ABS [Average weekly earnings](#) (cat. no. 6302.0) publication provides twice-yearly estimates of the average gross (i.e. pre-tax) weekly earnings for wage and salary earners. The key data series are briefly summarised below.

- *Average weekly ordinary time earnings (AWOTE) for full-time adult employees*

This is considered the most stable of the series, due to the exclusion of overtime, part-time employees and those on junior rates of pay.

- *Average weekly total earnings (ordinary time plus overtime) for full-time adult employees*

This series contains the highest estimates of earnings as it includes overtime, but excludes part-time employees and those aged less than 21 years who are not paid at the adult rate of pay.

- *Average weekly total earnings for all employees*

This series includes overtime, employees paid junior or apprentice rates and part-time employees.

- *Average weekly cash earnings*

This series was introduced in May 2010. It differs to the average weekly earnings series as it includes amounts salary sacrificed. The series is available by sector (private/public) and by industry.

### *Notes on the data*

- The estimates of average weekly earnings are calculated by dividing the estimates of gross weekly earnings by estimates of the number of employees. The survey is designed to provide snapshots of earnings at particular time points, rather than to compare changes in earnings over time.

- The information is supplied to the ABS by a representative sample of employers. The employer survey data is considered to provide more robust estimates of earnings, when compared to a household sample survey.
- The survey data does not include all employed, as it is based on the earnings of employees. Excluded are the self-employed, owners of unincorporated businesses and permanent members of the Australian defence force.
- Due to the way in which the data is compiled, it does not provide total wages and salaries received by an employee from all of their jobs. It is also not possible to calculate median wages as the underlying data is collected at the aggregated employee level, rather than for individuals. It does not provide any information on families, households or couples.
- Users should be aware that a number of factors can change the estimates produced by the survey. For example, changes in the distribution of occupations across or within industries, the composition of part-time workers in the employment mix, or an upsurge in the number of apprentices can change the mix of employees included in a series and the resulting wage rates for that series.
- The ABS generally encourages the use of **trend data** for time series comparisons, rather than the original or seasonally adjusted figures. However, the Average Weekly Earnings trend series is only available from 2012, whereas the original series is available from 1994. This discrepancy is due to a change in the timing of the survey (from quarterly to twice per year). While the collection of data commenced in 1941, the ABS website only provides historical data from June 1967 onwards.

### ***What earnings data is used for legislative purposes?***

The ABS [Average weekly earnings](#) (cat. no. 6302.0) publication is referenced in a range of Commonwealth legislation. Some examples are listed below.

- The [Child Support \(Assessment\) Act 1989](#) (Part 1 Section 5A) uses the annualised Male Total Average Weekly Earnings figure to calculate assessable parental income for child support.
- The [Higher Education Funding Act 1988](#) (Chapter 5A1, Section 106PC) uses Average weekly earnings figures as part of the calculation of voluntary payments in respect of accumulated HEC debt.
- The [Social Security Act 1991](#) (Section 16A(1)) refers to the AWOTE in the definition of 'Seasonal work' and the calculation of a preclusion period for intermittent work.
- The [Income Tax Assessment Act 1997](#) (Subsection 960-280(4)) refers to the full-time adult AWOTE for a particular time frame to create an index number for genuine redundancy, early retirement schemes or pre-1 July 1988 funding credits.

The Aged Pension also relies on an annualised Male Total Average Weekly Earnings (MTAWE) figure as a wages benchmark for indexation. The Pension is indexed in March and September of each year. It is increased to reflect growth in the Consumer Price Index (CPI) and the Pensioner and Beneficiary Living Cost Index (PBLCI), whichever is higher. However, when wages grow more quickly than prices, the pension is increased to the wages benchmark. The benchmark sets the combined couple rate as a proportion of the MTAWE (the single rate is a proportion of the couple rate). For more information see 'After 20 September 2009' in 5.1.8.50 Common provisions affecting indexation of Pensions, [Guide to Social Security Law](#) (Department of Social Services, 20 March 2019).

## **What data sources are available to analyse median earnings?**

The ABS [Employee Earnings and Hours](#) (cat. no. 6306.0) publication provides estimates of employee earnings (pre-tax) every two years. The survey is designed to provide detailed information on the composition and distribution of earnings, hours paid for and methods used to set pay. The deciles and quartiles tables provide median earnings.

The key series are based on types of employees and their personal and/or employment characteristics, these include: all employees; non-managerial employees; and full-time non-managerial employees paid at the adult rate. Characteristics include: age; sex; method of setting pay (e.g. award, collective agreement); employment status (full-time/part-time); type of employee (e.g. permanent, casual); occupation; industry; and sector (public/private).

### *Notes on the data*

Although generally similar to the Average Weekly Earnings survey, there are a couple of key differences. These are summarised below.

- All estimates from this survey include amounts salary sacrificed (i.e. weekly cash earnings).
- The information supplied by employers covers both their details and those of their employees. The data relates to a sample of individual employees rather than employees at the aggregate level. This allows for greater flexibility in what estimates can be produced from the survey (e.g. distributions, **median earnings**).
- While this survey provides estimates of the number of employees, these are produced to add context to the figures on pay setting methods, rather than to provide a definitive estimate of employees. The ABS advises using the [Labour Force Survey](#) (cat. no. 6202.0) for estimates of employment.
- There have been a number of conceptual and methodological changes to the survey since it was first run in 1974. The ABS provides historical data from May 1993 onwards. However, the comparability of survey content varies over time and analysis of earnings across long time periods should be undertaken with caution.

### **Other sources of median earnings data**

- The ABS [Wage and Salary Earner Statistics for Small Areas](#) (cat. no. 5673.0.55.003) publication provides average and median wages and salary income (see p. 5).
- The ABS [Characteristics of Employment](#) (cat. no. 6333.0) publication provides estimates of **median** weekly and hourly earnings for employees in their main job by a range of personal and employment characteristics (e.g. sex, full-time/part-time status, industry, occupation, level of highest non-school qualification). The main release includes some data by state/territory, while the microdata release also provides smaller geographic areas.

## **What data can be used to analyse total earnings (all jobs) for individuals?**

The ABS [Microdata: Characteristics of Employment](#) (cat. no. 6333.0.00.001) release provides estimates of weekly earnings for people in all jobs (ranges), as well as weekly and hourly earnings (ranges) in main job and second job. Also included are the hours paid for in main job and second job. Data is available via TableBuilder, which the Statistics and Mapping Section of the Parliamentary Library can access on behalf of clients.

## **What data can be used to analyse earnings in specific industries, occupations or sectors?**

- The ABS [Average weekly earnings](#) (cat. no. 6302.0) publication includes the three key series by sex and industry division (broadest level, excludes Agriculture), and by public/private sector (and state).
- The ABS [Employee Earnings and Hours](#) (cat. no. 6306.0) publication includes earnings estimates by industry, occupation and sector.
- The ABS [Characteristics of Employment](#) (cat. no. 6333.0) publication includes earnings estimates by industry and occupation.
- The ABS [Employment and Earnings, Public Sector](#) (cat. no. 6248.0.55.002) publication provides annual information on the number of civilian employees (Commonwealth, state and local government) and the total cash wages and salaries.
- The ABS quarterly publication, [Business Indicators](#) (cat. no. 5676.0), includes wages and salary data for the private sector. Note: very small non-employing businesses are excluded.

## **What data can be used to analyse wage growth within and across industries?**

The ABS [Wage Price Index](#) (WPI, cat. no. 6345.0) publication provides quarterly indexes that measure changes in the price of labour in the Australian labour market. The WPI is constructed similarly to the [CPI](#), in that it follows a fixed 'basket' of jobs and is therefore not affected by changes in quality and quantity of work. The [WPI FAQs](#) page provides helpful information about the sample, collection, calculation, interpretation and comparisons of employer costs between states, industries and sectors.

## **What data can be used to analyse geographic differences in earnings?**

- The ABS [Wage and Salary Earner Statistics for Small Areas](#) (cat. no. 5673.0.55.003) publication provides small area data based on Australian Taxation Office (ATO) individual income tax returns. The data covers Australians who lodged tax forms with the ATO and who reported income from wages and salaries. Data is available by the following regions: Statistical Area Level 2 (SA2s); Statistical Area Level 3 (SA3s); Statistical Area Level 4 (SA4s); Local Government Area (LGAs); Greater Capital City Statistical Area (GCCSAs); and State/Territory.
- The ABS [Characteristics of Employment](#) (cat. no. 6333.0) publication provides estimates of median weekly and hourly earnings for employees in their main job by State/Territory. The [Microdata: Characteristics of Employment](#) (cat. no. 6333.0.00.001) release provides estimates of weekly and hourly earnings in main and second job, and weekly earnings in all jobs, by SA4s, Metro/Non-Metro Area groupings and GCCSAs.

## **What data can be used to analyse gender differences in earnings (i.e. 'wage gap')?**

- Three key ABS publications include earnings estimates by males and females, [Average weekly earnings](#), [Employee Earnings and Hours](#) and [Characteristics of Employment](#). Care should be taken when comparing estimates for full-time workers, as approximately only half of all female workers are represented in the data (due to the remainder being part-time workers). The distribution of males and females across industries and/or occupations can also impact on estimates at the aggregate level.
- The Parliamentary Library quick guide: [Gender wage gap statistics](#) provides a range of resources for analysing the gender gap.
- The Workplace Gender Equality Agency (WGEA) publishes [annual earnings data](#) on employees representing about 40% of the total labour force. A key strength of the data is that all people employed by a business are included. However, the data set is limited to private sector employers with 100 or more employees. The data set includes industry profiles and comparison tools.
- The [APS Remuneration Report](#) provides an annual summary of remuneration across the whole of the Australian Public Service (APS), excluding some groups of temporary employees and those on leave without pay.
- The ABS also publishes a range of estimates in the [Gender Indicators](#) (cat. no. 4125.0) publication, including economic security, health, education, work and family balance, and safety and justice.

## **What data is available on apprentice earnings?**

The ABS [Employee Earnings and Hours](#) (cat. no. 6306.0) publication includes earnings estimates by rates of pay, including apprentices/trainees. Earnings are available by a range of characteristics.

## **Where can you find the minimum wage data?**

National minimum wage information is available from the Fair Work Ombudsman's [website](#).

## **Where can you find Chief Executive Officer salaries and wages?**

- The *Australian Financial Review* (AFR) provides annual data on the [salaries of the ASX300 Chief Executive Officers](#) (CEOs), with a full breakdown of remuneration and percentage change in their pay from the previous reporting period. Only CEOs who held the role for the entire annual reporting period are included.
- ASCI provide [CEO pay in ASX200 companies](#) through an annual remuneration survey.

## **Where can you find Parliamentary salaries and entitlements?**

Current rates are set out in the Remuneration Tribunal's [Members of Parliament Determination](#) available from the Tribunal's [website](#). The Determination also includes Travel Allowance, the framework for parliamentary work expenses, Annual Review Statements, MP Entitlements and Parliamentary Retirement Travel.

## Where can you find taxation statistics for wage and salary earners?

The ATO provides a range of statistics based on [individuals' tax returns](#), including the number of wage and salary earners who have lodged a return and the total amount these individuals have recorded as income. Wage and salary earner data is provided by a range of characteristics, such as sex, age ranges, taxable status, state/territory, taxable income range, industry and occupation. The ATO's annual publication, [Taxation statistics](#), also provides information on the income tax returns of companies, super funds, partnerships and trusts.

## Historical data on earnings

- D Hutchinson (revised by F Ploeckl, June 2016), [Australian Wages Series—Sources, Methods and Uses](#), MeasuringWorth.com website, accessed 24 April 2018.
- G Withers, T Endres and L Perry, 'No 7: Australian Historical Statistics: Labour Statistics' in [Source papers in economic history](#), The Australian National University, Centre for Economic History website, accessed 24 April 2018.
- ABS, [Employee Earnings, Benefits and Trade Union Membership](#) (cat. no. 6310.0) contains median and mean earnings for 'main job' and 'all jobs' for employees from 1975 to 2013.
- J Rob Bray, '[Reflections on the evolution of the minimum wage in Australia: Options for the future](#)', commissioned as part of the *HC Coombs Policy Forum's Visioning Australia's Future Initiative*, The Australian National University, Research School of Economics, May 2013, accessed 24 April 2018. (Contains a minimum wage series from 1907 to 2012).
- JR Bray, '[100 years of the minimum wage and the Australian tax and transfer system: what has happened, what have we learnt and what are the challenges?](#)', *Australian Tax Forum*, v.30, 2015, pp. 819-844.

© Commonwealth of Australia



Creative Commons

With the exception of the Commonwealth Coat of Arms, and to the extent that copyright subsists in a third party, this publication, its logo and front page design are licensed under a [Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Australia](#) licence.