

## READ ME FILE

**Title:** Is Declining Union Membership Contributing to Low Wages Growth?

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### Description

This 'read me' file contains details of the code and data included in this archive that were used to generate the results reported in RDP 2019-02. Publically available plotting data for figures appearing in the RDP can be found in the spreadsheet 'rdp-2019-02-graph-data.xls'.

If you make use of any of these files you should clearly attribute the authors in any derivative work.

### Data

The following data sources were used:

- Federally registered enterprise agreements unit-record data:
  - Obtained from the Department of Jobs and Small Business Workplace Agreements Database – access can be applied for at <<https://www.jobs.gov.au/workplace-agreements-database>>
- Trade union membership rate data for Australia:
  - Data for 1986 and 1988 obtained from Australian Bureau of Statistics (ABS) Trade Union Members, Australia, Cat No 6325.0 (August 1996), 'Summary of Findings'
  - Data from 1990 to 2003 obtained from ABS, Employee Earnings, Benefits and Trade Union Membership, Australia, Cat No 6310.0 (August 2013), 'Trade Union Membership Time Series', Table 1
  - Data from 2004 onwards obtained from ABS, Characteristics of Employment, Australia, Cat No 6333.0 (August 2018), Table 1d.3
- Union membership and collective bargaining coverage in Organisation for Economic Co-operation and Development (OECD) countries:
  - Obtained from the OECD at <<https://stats.oecd.org/Index.aspx?DataSetCode=CBC>> and <<https://stats.oecd.org/Index.aspx?DataSetCode=TUD>>
- Methods of setting pay for Australia:
  - Data on the split between award, individual arrangement and collective agreement obtained from ABS, Employee Earnings and Hours, Cat No 6306.0 (May 2018, May 2014, May 2012, May 2010, May 2008, May 2006, May 2004, May 2002, May 2000)
  - Data on the state/federal registered/unregistered split within collective agreements:
    - Data from 2000 to 2006 obtained from ABS, Employee Earnings and Hours, Cat No 6306.0 (May 2000, May 2002, May 2004, May 2006)
    - Data for 2010 onwards obtained from Department of Jobs and Small Business Workplace (2018), 'Trends in Federal Enterprise Bargaining Report', September Quarter, 'Technical Notes Table - Instrument providing rate of pay for all employees, 2010-2016' and ABS, Employee Earnings and Hours, Cat No 6306.0 (May 2010, May 2012, May 2014, May 2016)
- Employees on enterprise agreements who are union members:
  - Obtained from Department of Social Services; Melbourne Institute of Applied Economic and Social Research (2018), 'The Household, Income and Labour Dynamics in Australia (HILDA) Survey, RESTRICTED RELEASE 17 (Waves 1-17)', [doi:10.26193/OFRRRH](https://doi.org/10.26193/OFRRRH), ADA Dataverse, V2.

## *Figure data*

Data for all figures are publically available.

The underlying data files as used by the code referenced in the first 12 files below (1\_import\_WAD.do to 12\_HILDA.do) are not included in this archive due to the terms of our access; as such, the code for those files will not run. The data files for the other three files are from publicly available sources and are provided in the archive.

## **Code**

The results reported in this RDP were generated using Stata 13.1.

Included in this archive are the following programs:

- 1\_import\_WAD.do
- 2\_clean.do
- 3\_create\_panel.do
- 4\_firm\_level.do
- 5\_panel\_setup.do
- 6\_AAWI.do
- 7\_final\_sample.do
- 8\_graphs.do
- 9\_descriptives.do
- 10\_regressions\_FE.do
- 11\_regressions\_DD.do
- 12\_HILDA.do
- 13\_unionmem.do
- 14\_paysetting.do
- 15\_oecd\_memcov.do

These programs should be run in the order indicated by the numerical prefix of each file.

The first seven programs extract the relevant data from the Department of Jobs and Small Business Workplace Agreements Database (database not provided in this documentation) to create a longitudinal agreement-level file. 4\_firm\_level.do also uses firm-level data from Dun & Bradstreet (data not provided in this documentation) and a mapping from ACN to ABN codes.

The data for Figure 8 are generated in 7\_final\_sample.do. The data for Figures 3 and 6 and Tables B1, B2 and C1 are constructed in 8\_graphs.do and 9\_descriptives.do, respectively.

10\_regressions\_FE.do uses the longitudinal file to estimate the baseline results and robustness checks in Section 4 (including Tables 1–4 and Figures 9–11) and the spillover effects model in Section 5 of the RDP (Table 7 and Figure 16).

11\_regressions\_DD.do estimates the models in Section 4.7 of the RDP (including Table 6, and Figures 13 and 15).

12\_HILDA.do uses HILDA Survey Release 17.0 (data not provided in this documentation) to produce the data for Figure 5.

13\_unionmem.do uses ABS data (an extract of which is provided in abs\_unionmem.xlsx) to construct the data used in Figure 1. 14\_paysetting.do uses ABS and Department of Jobs and Small Business data (provided in abs\_paysetting.xlsx and dojsb\_fedstatecov.xlsx) to produce the data for Figure 2. 15\_oecd\_memcov.do uses OECD data (provided in oecd\_collectivecov.csv and oecd\_uniandensity.csv) to produce the data for Figure 4.