

## READ ME FILE

**Title:** Where's the Money? An Investigation into the Whereabouts and Uses of Australian Banknotes

**Authors:** Richard Finlay, Andrew Staib and Max Wakefield

### Description

This 'read me' file contains details of the code and data used in RDP 2018-12

The Stata code was run on Stata 13.0.

### Data Security

The 2016 Consumer Payments Survey and the Card Features Database are held in the Payments Policy Department of the Reserve Bank of Australia. The Consumer Payments Survey dataset contains unit record data. Survey participants were given assurances that their data would be kept confidential. It is therefore not possible to provide data to the public.

Some of the other datasets used in the paper are also confidential. They relate to:

- Lost banknote estimates
- Financial institution cash holdings; tourist cash holdings
- The cash cycle and the cash distribution system (transactional stock of cash estimates: Banknote Life, Banknote Processing, Velocity and Seasonality)
- Domestic and overseas hoarding estimates.

### Data

The following data sources were used:

- **Australian population data (Counting method)– 'Australian population data.xls':**
  - Taken from the ABS.
- **Drug data – 'Drug related data.xlsx':**
  - These are our estimates of drug spending and cash hoarded by illicit drug suppliers. Underlying data comes from the ACIC.
- **Eftpos machines (Counting method) – 'Eftpos Machines.xlsx':**
  - Data from APCA (Australian Payments Clearing Association).
- **Cash payments – 'Estimates of Cash Spending.xlsx':**
  - In this table we estimate cash spending using the cash-to-card ratio from the CPSs and card spending from the RBA statistical tables C1 Credit and Charge Card Statistics and C5 Debit Card Statistics.
- **Gaming machines (Counting method) – 'Gaming machines.xlsx':**
  - Data sourced from Queensland Treasury.
- **Figure 1 data – 'GDP and Currency - Figure 1.xlsx':**
  - Data sourced from IMF International Financial Statistics. We use 2017 numbers where available.

- **Seasonality – ‘Seasonality related data series.xlsx’:**
  - We are unable to include lodgements data due to its confidential nature. We compute seasonal factors using the ‘seasonal’ package in R. The code was run on R version 3.4.1 (64 bit) with Rstudio Desktop version 1.0.143.
- **Self-service checkouts (Counting method) – ‘Self service checkouts.xlsx’ :**
  - Data sourced from annual reports
- **Consumer Payment Survey data – ‘Supplementary-statistics-from-the-consumer-payments-survey-2016.xlsx’ :**
  - Sourced from RDP 2017-04
- **Unbanked business takings (Counting method) – ‘Unbanked business takings.xlsx’ :**
  - Based on our estimates of cash payments
- **Wallet holdings estimates (Counting method) – ‘Wallet Holdings.xlsx’ :**
  - Underlying data based on CPSs

‘rdp-2018-12-graph-data.xls’ contains the publically available data used to plot the figures in this RDP. Only the data for Figures 1, 2, 3 (except the gender panel data), 11, 16, 17, 18, 19 (except the USD per AUD series due to 3rd party provider agreement) and A1 are available for public distribution.

#### **Stata Code**

3 of the 4 panels included in Figure 3 use data published in RDP 2017-04: How Australians Pay: Evidence from the 2016 Consumer Payments Survey. To generate the gender panel, we use the code in ‘Cash Payments - Demographics.do’. As stated in the Data Security section, we cannot release the underlying data as it is confidential.