READ ME FILE

Title: The Determinants of Mortgage Defaults in Australia – Evidence for the Double-trigger Hypothesis

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Description

This 'read me' file contains details of the data and code used to generate the results reported in RDP 2020-03

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

Data

The following data sources were used:

Loan-level data:

Obtained from the Securitisation Dataset – not available for release. For information on permitted data users, see https://www.rba.gov.au/securitisations/reporting-guidelines/index.html. For more information on the dataset, see K Fernandes and D Jones (2018), 'The Reserve Bank's Securitisation Dataset', RBA Bulletin, December, available at https://www.rba.gov.au/publications/bulletin/2018/dec/the-reserve-banks-securitisation-dataset.html>.

Regional data:

- SA3-level housing price indices and turnover ratios: obtained from CoreLogic not available for release.
- SA3-level unemployment rate: calculated using Australian Bureau of Statistics (ABS) Census of Population and Housing data, obtained through TableBuilder, 2016 – not available for release. The data can be accessed by logging in to TableBuilder Basic on the ABS website.
- SA3-level employment by industry: obtained from the ABS Census of Population and Housing –
 DataPacks General Community Profile, 2016 (SA3 mining.csv).
- Postcode-level SEIFA indices: obtained from ABS Census of Population and Housing: Socio-Economic Indexes for Areas (SEIFA), ABS Cat No 2033.0.55.001, 2016 (SEIFA_IRSAD.csv).
- State-level average weekly earnings: obtained from Average Weekly Earnings, ABS Cat No 6302.0, May 2019 (AWE.csv).
- Operating mine locations: obtained from GeoScience Australia at the Australian Atlas of Minerals Resources, Mines, and Processing Centres downloads, February 2015 (operating mines.csv).

Data for figures are not publically available due to confidentiality reasons.

Code

The results reported in this RDP were generated using R 3.5.1 (64 bit), RStudio v1.1.453 and Stata 13.0.

The code is run in two parts:

• Part 1 analyses entries to 90+ day arrears over the period 2015:M7–2019:M6 for loans originated since 2013. This includes the stage 1 Cox model.

• Part 2 analyses transitions of loans from 90+ day arrears over the period 2015:M7–2019:M6. This includes the stage 2 Cox model.

The code used for data cleaning and transformations are not included in this archive due to confidentiality reasons.

The code used to estimate the first- and second-stage Cox models, as well as the multinomial logit models as robustness checks, are included in this archive and are as follows:

- first_stage_hazard_models.R
- first_stage_baseline_hazard.R
- first_stage_MNL.do
- second_stage_hazard_models.R
- second_stage_MNL.do

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