



Extracting Insights from ABS Longitudinal Data

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Transformation



- We are committed to providing the right statistical solutions for effective policy development and program delivery.
- Longitudinal data is an important component in our suite of statistical solutions.



The ABS is committed to:

- Producing longitudinal datasets and analytical products to inform Australian policy
- Utilising ABS expertise and infrastructure to maximise the value of existing administrative data
- Partnering with universities, researchers and government to build capability to realise the full potential of existing longitudinal datasets.
- Partnering with stakeholders to conduct longitudinal studies



ABS longitudinal data

- 2009 • Business Longitudinal Database, 2004/05 – 2006/07
- 2012 • Longitudinal Labour Force, 2008 – 2010
- 2013 • Australian Census Longitudinal Dataset, 2006 – 2011





Current uses of the BLD

- How project management has a significant impact on small to medium business productivity
- The efficiency performance of exporting v non-exporting manufacturing SMEs
- Business survival and the number of employees
- EABLD going ahead – “HILDA for businesses”



Longitudinal Labour Force

- 1.8 million records
- 150,000 household observed monthly
- Covers the GFC
- Available as a CURF
- Australian Journal of Labour Economics
 - *What affects the probability that an individual who has just entered unemployment finds employment within a given timeframe?*



What is the ACLD?

2006 Census record → 2011 Census record
Linked to...



Studying in 2006

Doctor in 2011



Employed in 2006

Lone parent in 2011



5% random sample of 2006 Census records



ACLD Sample Size Enables Analysis of Small Populations

- 15,000 Aboriginal and Torres Strait Islander people
- 175,000 born overseas
- 40,000 with need for assistance in core activities
- 130,000 aged 65 years or over
- 250,000 individuals in couple families with children
- 46,000 lone parents with children
- 21,000 unemployed
- SA2 level geography





The future of the ACLD

- Third time point to be provided by 2016 Census
- Addition of administrative data
 - Upcoming release to include SDB variables

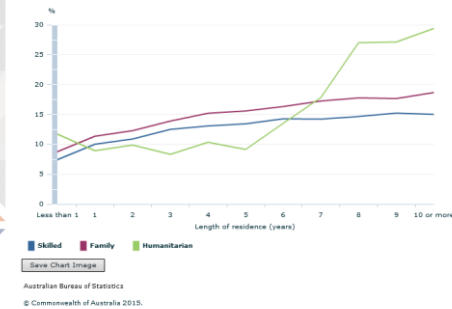


Linking to Create Longitudinal Data

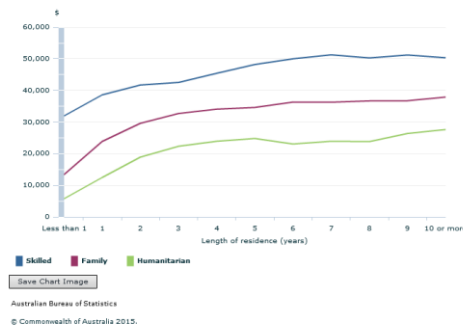
- Linking 'point in time' datasets from different time points enables analysis of transitions
 - 2006 VET in Schools to 2011 Census
 - Early Childhood – AEDC – NAPLAN
- Excellent population coverage



The Proportion of Migrants Reporting Own Unincorporated Business Income

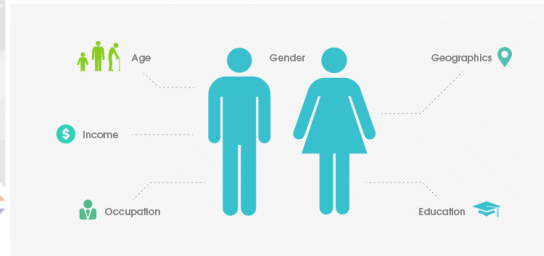


Personal Income of Migrants, 3418.0 Median Employee Income by Period of Residence and Visa Stream





Dynamic microsimulation



ABS partnerships



Longitudinal capability

- DSS NCLD – ABS is drawing on DSS experience
- Identify key research topics and issues well suited to longitudinal analysis
- Identify key stakeholders across government, NGO's and academia
- Inform high level data utilisation strategy
- In partnership with NCLD, continue to raise awareness of Australian longitudinal data holdings, both survey and administrative



LSAC

- DSS, AIFS and ABS
 - What factors influence child development?
 - How do these interact?
- Recent headlines:
 - Private schools 'perform no better'
 - Success at school begins at home
 - Links between child care and child behaviour





LSAC

- ABS expertise is used to:
 - Design, develop and test data Collection instruments
 - Maintain contact with respondents over time
 - Undertake nation wide data collection through the ABS National interviewer workforce as well as other modes of collection such as web forms
 - Transform collected data into accessible forms for analysis
 - Facilitate data linkage to other data holdings



Longitudinal data analysis

- Institute for Social Science Research, UQ
- Collaboration on a data training strategy to:
 - Increase the adoption and use of ABS longitudinal datasets
 - Provide training for existing and potential clients of ABS longitudinal datasets
 - Improve capability/capacity around longitudinal data analysis techniques
 - Maximise the use of TableBuilder for secondary analysis



2015-16 partnerships

- Linked Employer-Employee Dataset
- Longitudinal Personal Income Tax
- Continuing to partner to build longitudinal capabilities
- Seeking other opportunities...

