



Issues in Administrative Data

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Introduction

1. Issues with admin data
2. Quality Assurance
3. Solutions
4. Coverage (ABS)
5. Resources



Common Issues

- Collection Issues – compliance
- Legislation
- Differences in definitions of variables
- Stability of Data
- Metadata availability
- System
- Timeliness
- Political issues
- Large Volumes of Data
- Linking of records
- Confidentiality and consent



SBR Admin data issues

- Births and Deaths
 - Duplicates on the Register
 - Units are not updated or deceased
- Data Items and Metadata
 - Conceptual differences in the administrative collection to statistical concepts.
 - Definitions are not the same across the collections or not readily available
- Database Systems and Business Rules
 - Systems and business rules for derived items are calculated differently



SBR Admin data issues

- Clerical Processing and Maintenance
 - Industry coding might be clerical or system based/ auto-coded.
 - Update of stock information is irregular
- Extracts and Reports
 - Understanding the conceptual basis eg Output specifications may exclude some units eg cancelled units or inactive units.
 - Consistent time based snapshots vs ad-hoc generation of outputs.
 - Admin data is a complex process



SBR Admin data issues

- These impacts can be seen;
- Admin record data errors
 - Missing information
 - Incorrect information
 - Clerical coding/processing quality
 - Validation of data entry/updates
 - Quality of business process logic for derivations



Quality Assurance

1. Know the data

- Understand the administrative process of the data supplier.
- Collection forms / process
- Purpose of collection
- Collection cycle (tax, billing etc)
- Engage with the provider



Quality Assurance

2. Analyse Unit Record Changes

- All data should be reviewed in detail
- Focus on units with changes
- Check errors
- Detailed management information
- Validate data
- Micro level
- Macro level



Quality Assurance

3. Clearance Processes

- Quality gates
- Quality measures
- Times series
- Counts
- Aggregates
- Clearance meetings



Quality Assurance

- 4. Profiling
 - Is a quality assurance process
 - Focus on the important units
 - Collect your own data (Forms / Calls)
 - Resource intensive



Possible Solutions

- Editing and transformation
- Collect your own data
- Outlier the results
- Data imputation
- Data integration
- **Influencing the collection**



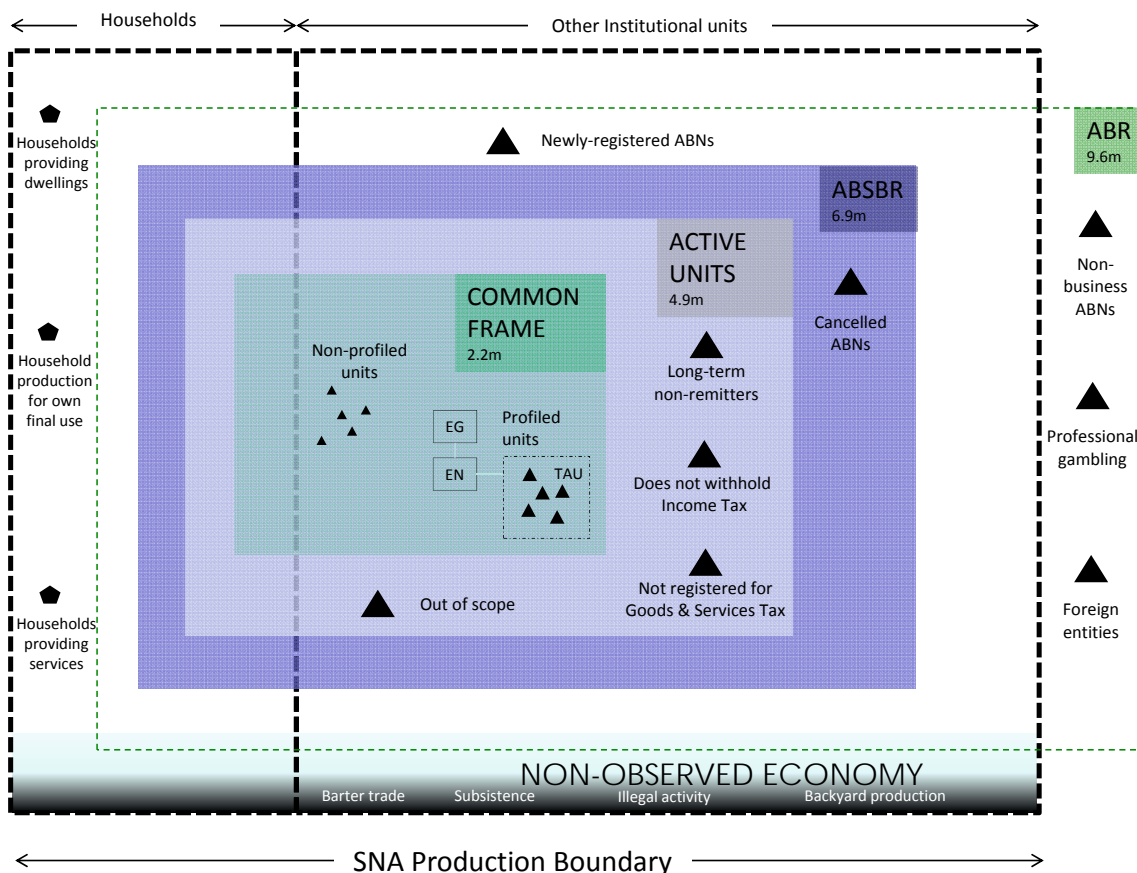
Long term solutions

- The number one solution is to influence the collection process
 - Political support
 - Collaboration
 - Justify and convince
- Influence the key maintenance statistical priorities and updating of that information.
 - Priorities around stratification variables



Coverage

- What you want to measure?
- The economy
- Many solutions:
 - Cover all establishments
 - Cover all Legal Entities
 - Household surveys
- ABS example



Resources

- Using Administrative and Secondary Sources for Official Statistics: A Handbook of Principles and Practices (UN ECE)
- [ABS Cat No 1522.0 Quality Management of Statistical Outputs Produced from Administrative Data](#)



Q&A

- Thank you!

