Better informing OECD data users about the quality of underlying national income data

Data quality assessment by OECD

- OECD recently published a quality review of its databases on *Household Income Distribution and Poverty* and *Earnings Distribution* (20 Dec 2012)

- Provides evaluation of:
  - different quality dimensions of the OECD databases
  - assessment of the cross-country comparability
  - reviews of country data sources
Key messages for data providers

- The OECD quality assessments strengthen the usefulness of the database and resulting analysis.

- One of a number of recommendations is “…to improve the exhaustiveness and availability of documentation and metadata.”

- As data providers, we have a responsibility to undertake quality assessments of the data we provide to help inform the OECD and users of their fitness for purpose.

Data quality assessment in Canberra Group Handbook (CGH)

- Chapter 5 of CGH provides guidelines on best practice for assessing quality of income.

- Based on Statistics Canada’s Quality Assurance Framework.

- Several countries have adopted this framework or a very similar approach, including Australia.
Data quality statements (DQS) in Australia

- ABS publishes a DQS for all survey output published on its web site.
- DQS are also published for inter-jurisdictional performance indicators for several social policy areas (housing, homelessness, education, etc) by the Council of Australian Government.
- DQS assist users by synthesising the metadata about the collection or product and advising on its fitness for purpose.
DQS for the Survey of Income and Housing (SIH)

- See Handout

  - Provides an example of key quality issues relevant to the use of SIH data for national reporting
  - Produced by the data custodians
  - Template is used for all data collections / data custodians

DQS for SIH: key points

- Relevance
  - Survey scope excludes very remote regions of Australia and non-private dwellings (3% of total population)

- Interpretability
  - Provides link to SIH User Guide which provides detailed survey information

- Coherence
  - Changes affecting time series analysis and their impact are provided to users, e.g. SIH 2007-08 implementation of ICLS household income standards

- Accuracy
  - Sample size: 18,071
  - Response rate: 81%
  - RSEs are provided for all published output
Key quality issues relevant to using OECD database

- **Institutional environment**
  - who has collected and compiled the statistics?
  - Under what legislation or authority?
  - Revisions / errors policy?

- **Accessibility**
  - Are official national analysis publically available - aggregate level, e.g. publications or micro level data (unit record files)?
  - Contact details for supplementary information?

- **Timeliness**
  - time between reference period and publication of output / provision to OECD

- **Interpretability**
  - Availability of supplementary information and metadata to aid interpretation of data
  - Are there any particular analytical issues relevant only for Country A?
  - Any real world events that have impacted on comparability with previous years e.g. significant changes to tax – transfer systems

---

Key quality issues relevant to using OECD database cont.

- **Coherence**
  - comparability of data for different time periods
  - comparability with other data sources, e.g. national accounts household data (but noting that these are revised)

- **Comparability**
  - Are there any particular definitional or data differences that will affect comparability across countries e.g. missing populations? Missing income components? missing levels of geography?

- **Accuracy**
  - sample design and size – aggregates with high standard errors? Sufficient reliability to inform on small changes over time or small differences between groups?
  - measures of sampling and non-sampling error
  - Assessment of impact of total non-response including for key items e.g. self employment income
Possible future processes

- Data providers to provide a DQS with data

- Develop a formal review and sign-off process that includes:
  - seeking timely input from data providers and other relevant stakeholders such as key policy agencies on the draft publications and an opportunity to review the DQS