Regional Course on Statistical Business Registers: Making a Business Case for an Operational Statistical Business Register

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3.2 – Handling changes in identification & descriptive characteristics

UNITED NATIONS SIAP Statistical Institute for Asia and the Pacific

Structure

- Changes in identification characteristics
- Changes in descriptive characteristics
- Sources of changes:
  - Updates from surveys
- Resistance rules

Changes in identification characteristics

* Changes in contact characteristics should normally be reflected in SBRs as soon as they are detected
* Changes to one unit do not necessarily imply changes to other linked units
* Cross-checking can be helpful to avoid inconsistencies, e.g. name and legal form

Changes in descriptive characteristics

* These changes effect probability of units being included in survey samples, hence we can:
  * Update immediately and risk increased volatility in survey samples and populations;
  * Hold them until a certain point in the annual cycle of surveys; or
  * Subject them to resistance rules.

Changes in descriptive characteristics (cont'd)

* Changes to large units: Updates should be checked by comparing data from a range of sources to see there is consistency, by contacting the units concerned directly, of through profiling
* Changes to small units: automatic updating from administrative sources
* It is useful to record the date of change, source of the update and previous value – good for quality assurance

Changes in descriptive characteristics (cont'd)

* Changes to size characteristics – differentiated treatment of large and small units
* Changes to geographical location – take into consideration the corresponding continuity rules
* Change in economic activity – recommended to use resistance rules and different treatment between large and small units

Sources of changes in variables

* Updates to statistical units can be obtained from:
  * Changes in administrative units
  * Profiling
  * Surveys (SBR improvement survey or business survey feedback)
* Conflicting information – prioritized based on their reliability:
  * Information from an administrative source is considered less reliable than information from profiling or SBR improvement survey or other business surveys

Updating variables from surveys

* SBR improvement survey
  * Correct existing data
  * Obtain values for variables not available in other sources
* Feedback from business surveys
  * Each business survey should seek to verify the data items in the survey frame, such as name, address, contact information, and activity status
  * Business surveys may also seek to update information on economic activity and size measures

Resistance rules

* Rules on how to reflect changes in the business world, e.g. business expansion, change of production activities, change of location, etc.
* Resistance rules inhibit short-term changes and ensure that changes are permanent before updates are made
* These rules have to cover every possible type of change that can occur and the characteristics involved

Resistance rules (cont'd)

* Resistance rules need to take into account
  * how the changes can be detected;
  * the types of change (permanent, temporary, seasonal);
  * possible impacts on frames and published statistics.

Example 1

- Enterprise X is classified as large and is the main contributor for industry I. Due to temporary change in VAT data, the VAT contributions drop significantly, so X is no longer classified as large, and so not certainly selected for production survey.
- If X is not randomly selected for the production survey, it will have a huge effect on statistics for industry I.
- This can be avoided by resistance rule – SBR value not changed until such a change is permanent.

Example 2

- Enterprise Y has comparable size of activities in industries I and J, but it cannot on report value added separately. Suppose Y has slightly more activity in industry I, which is assigned to be its economic activity code.
- The following year the activity in industry J becomes a little larger and Y's economic activity code is changed to J.
- In published statistics this will result in a large shift from industry I to J, but in reality the change was very small.