Regional workshop on Business Registers

Eurostat’s manual on business registers

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European Commission
DG Eurostat
Outline

• Background
• Manual contents
• Roles of statistical business registers
• Coverage, units and variables
• Data sources
• Demographic events
• Quality management
• Profiling of large and complex businesses
• Frame population methodology
Background

- Eurostat’s manual on business registers
  - Covers new developments and initiatives related to the European statistical business registers in the recent years
  - Provides guidance for the implementation of the European legal requirements regarding statistical business registers and their harmonisation
  - Gives guidance on practical implementation by means of additional explanations, such as operational rules for the implementation of statistical units
Manual contents

- Eurostat’s manual on BR is structured in 10 chapters, covering the following topics:
  - Chapter 1: Introduction
  - Chapter 2: Roles of statistical business registers
  - Chapter 3: Coverage of statistical business registers
  - Chapter 4: Units in statistical business registers
  - Chapter 5: Variables in statistical business registers
  - Chapter 6: Data sources
  - Chapter 7: Demographic events
  - Chapter 8: SBRs quality management
  - Chapter 9: Profiling of large and complex businesses
  - Chapter 10: Frame population methodology
  - Glossary
Roles of statistical business registers

• SBR play a central role in the production of economic statistics
  • European SBR shall be the authoritative source for deriving high quality and harmonised statistical business register populations (Regulation (EU) 2019/2152 on European business statistics)
  • Referred to as the ‘backbone’ providing the core infrastructure to ensure data consistency between various statistical outputs
    • Main tool for establishing a link to administrative data sources and for the use of administrative data
    • Main tool for the identification and construction of statistical units
    • Main source of information for statistical analysis of the business population and its demography
    • Main source for definition of the survey population, preparation and coordination of surveys.
Coverage

- **European framework for statistical business registers** covers
  - national statistical business registers and the EuroGroups Register, as well as the data exchanges between them

- National statistical business registers comprise:
  - **all enterprises** carrying out economic activities contributing to the gross domestic product (GDP), and their **local units**;
  - the **legal units** of which those enterprises consist;
  - **kind-of-activity units** (KAUs) for those enterprises which due to their size have a significant influence and whose KAUs have a significant influence on the aggregated (national) data
  - **enterprise groups** to which those enterprises belong.
Coverage (2)

- Households not fall within the scope of the European framework for statistical business registers
  - as the goods and services they produce are destined for their own consumption, or involve letting out of own property

- For the purposes of the European framework for statistical business registers, the following is considered to be an economic activity:
  - any activity comprising the offer of goods and services on a given market;
  - non-market services contributing to the GDP;
  - direct and indirect holdings of active legal units.
  - Holding assets and/or liabilities may also be considered to be an economic activity
SBRs includes units classified in the following institutional sectors (ESA 2010):

- S.11 Non-financial corporations,
- S.12 Financial corporations,
- S.13 General government,
- S.141 and S.142 Households as employers and own-account workers,
- S.15 Non-profit institutions serving households.

**Coverage (3)**

- Summary of the required coverage for SBR

<table>
<thead>
<tr>
<th>Activity type</th>
<th>Enterprise type</th>
<th>Required coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal</td>
<td>Non-financial corporations and quasi-corporations</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Financial corporations and quasi-corporations</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Unincorporated household enterprises</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Government</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Non-profit institutions serving households</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Household as employers of domestic personnel</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Household production for own consumption</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Letting of own property by households</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Extraterritorial organisations and bodies</td>
<td>Recommended</td>
</tr>
<tr>
<td>Informal</td>
<td>Non-registered unincorporated household enterprises</td>
<td>No</td>
</tr>
<tr>
<td>Illegal</td>
<td>Corporations and household enterprises</td>
<td>No</td>
</tr>
<tr>
<td>Underground</td>
<td>Corporations and household enterprises</td>
<td>No</td>
</tr>
</tbody>
</table>
Coverage (4)

- EuroGroups Register (EGR) comprises:
  - all enterprises carrying out economic activities contributing to the GDP which form part of a multinational enterprise group;
  - the legal units of which those enterprises consist;
  - multinational enterprise groups to which those enterprises belong.

- EGR is the authoritative source for the ESS as a register population for business statistics requiring the coordination of cross-border information related to multinational enterprise groups.
Coverage (5)

- EGR is the statistical business register of multinational enterprise groups in the EU and EFTA countries
  - Scope: Multinational enterprise (MNE) groups having at least one legal unit in EU or EFTA country
- Data sources: NSBRs and Commercial data provider
- EGR microdata on MNE groups are only accessible to NSAs for MNE groups having at least one legal unit resident in its territory
  - EGR is for statistical use only and it is restricted to users of national statistical offices, Eurostat, national central banks and the ECB.
- EGR provides the NSAs with a harmonized picture of MNE groups for the production and quality assessment of their national statistics
Example: MNEs group data before and after processing in the EGR

EGR is created for statistical purposes only, to improve the quality of information on MNE groups in the ESS.

EGR mission is to provide an overall view of the MNE groups in the EU with consistent cross-border information:

- coordinated frame populations,
- coordinated data quality.
Units and variables

- Legal and statistical units
  - **Harmonised definitions** (Council Regulation (EEC) No 696/1993 on the statistical units for the observation and analysis of the production system in the Community)
  
  
Units and variables (2)

- **Legal unit variables:**
  - identification, demographic events, stratification parameters, links with enterprise, links with other registers, link with enterprise group, control and ownership of units.

- **Enterprise variables:**
  - identification, link to other units, demographic events, stratification parameters and economic variables;

- **Local unit variables:**
  - identification, demographic events, stratification parameters and economic variables, and links to other units and registers;

- **Kind-of-activity unit variables:**
  - identification, demographic events, stratification parameters and economic variables, and links to other units and registers

- **Enterprise group variables:**
  - identification, demographic events, stratification parameters and economic variables.
Units and variables (3)

• Eurostat’s methodological manual on business registers
  • Describes all variables per unit using the following structure (Chapter 5)
    • Purpose
    • Definition
    • Proxies
    • Sources
    • Comments

Example:

3.5 Identity number(s) of the legal unit(s) of which the enterprise consists

Purpose. The enterprise must be linked with the legal units it comprises.

Definition. This is simple for enterprises consisting of one legal unit only. In the case of complex enterprises, the identity numbers of all legal units must be recorded.

Proxies. None.

Sources. Created in business register procedures, profiling.

Comments. It is recommended that the dates when the links are created and dissolved be also recorded.
Data sources

- Administrative data sources
  - sources containing information that is not primarily collected for statistical purposes
  - using data from administrative sources helps to reduce the response burden on businesses
  - increase the quality of the statistical business registers by allowing access to more up-to-date information
  - give complete or almost complete coverage of the target population
  - improve the timeliness of statistics that are derived from business register data either directly or via samples
Data sources (2)

• Statistical data sources
  • data collected by statistical processes carried out by NSIs and other producers of statistics
  • feedback from economic surveys
  • statistical business register quality or improvement surveys
  • profiling as a method of analysing the legal, operational and accounting structures of large and complex enterprise groups, in order to establish the statistical units, their links and the most efficient structures for the collection of statistical data

• Other data sources
  • Web scraping
  • Professional organisations
  • Commercial data providers
Demographic events

- Demographic events can be defined for all types of statistical units (enterprise group, enterprise, kind-of activity unit and local unit)
  - Typology of demographic events (birth, death, merger, takeover, break-up, split-off, restructuring within an enterprise or enterprise group, etc.)
  - Continuity rules (conditions for keeping or changing a unit identity number in the business register).
- SBR provider of input for the process of producing the business demography
- Central in this role is securing continuity of statistical units
  - An enterprise is considered to be continued if its production factors are continued
Quality management

- Eurostat’s mission is to provide high-quality European statistics
- SBRs quality management is implemented based on the European Statistics Code of Practice and the Quality Assurance Framework of the European Statistical System
- European business statistics quality framework (EBS QF)
  - Introduces a harmonised quality framework for the business and trade statistics
  - Complete package of instruments, allowing evaluating the quality and measuring the compliance to the EBS regulation
  - Ensures a transparent monitoring mechanism for reporting the progresses on the implementation of the EBS regulation.
Quality management (2)

• Data quality programme (DQP) for statistical business registers
  • Annual work plan prepared by Eurostat
  • Reporting system: quality and metadata reporting
  • Monitoring system: validation reports, national quality and metadata reports, plausibility checks, etc.
  • Assessment system: compliance assessment, quality assessment, user feedback
  • Quality improvement – continuously.
Chapter 9 – describes definition and scope of profiling

- **Profiling** is a method of analysing the legal, operational and accounting structure of an EG, in order to establish the statistical units within that group, their links and the most efficient structures for the collection of statistical data.

- **European profiling** – NSI (GDC country) delineates the global enterprise in cooperation with NSIs of the countries in which a GEG has operations.

- **National profiling** - NSI defines the national statistical units’ structure within a group reflecting the national needs.

- BR Manual describes European profiling workflow and gives some considerations regarding the timing of profiling processes
  
  - more extended description of the profiling process is given in the *European Business Profiling — Recommendations manual (Eurostat, 2020)*
Chapter 10 – Frame population methodology describes definition of an annual master frame and procedures for defining and using frame populations in statistical production processes.

The annual master frame consists of the populations of statistical units and their relationships active at the end of the reference year (year t) according to the state of information in the SBR.

The master frames can be produced at different moments optimised for each statistical domain, considering the quality level of a register.

Coordination of annual and sub annual master frames
  • monthly or quarterly master frames must be coherent with annual master frames,
  • ensures coherence between short-term and annual indicators.
Example: enterprise variables in the annual master frame

<table>
<thead>
<tr>
<th>Unit type</th>
<th>Variable</th>
<th>Backbone role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identity number</td>
<td></td>
<td>Identification variable</td>
</tr>
<tr>
<td>Name</td>
<td></td>
<td>Identification variable</td>
</tr>
<tr>
<td>Identity number of the national enterprise group to which the enterprise belongs</td>
<td></td>
<td>Facilitating integration</td>
</tr>
<tr>
<td>Principal activity code at NACE 4-digit level</td>
<td></td>
<td>Economic/stratification variable</td>
</tr>
<tr>
<td>Size class</td>
<td></td>
<td>Economic/stratification variable</td>
</tr>
<tr>
<td>Institutional (sub)sector according to European System of Accounts</td>
<td></td>
<td>Economic/stratification variable</td>
</tr>
<tr>
<td>Country code</td>
<td></td>
<td>Economic/stratification variable</td>
</tr>
<tr>
<td>Identity number of the global group to which the enterprise belongs</td>
<td></td>
<td>Facilitating integration</td>
</tr>
</tbody>
</table>

Source: national master frame

Source: global master frame
Timing of creation and use of an annual master frame

• Timeliness
  • Creation of an annual master frame population depends on the requirements of statistical production processes
  • Statistical domains have different requirements regarding the moment a frame population is needed
  • Statistical production processes based on surveys and direct or primary data collection may need a population right at the end (or close after the end) of a reference year

• Tradeoff between timeliness and accuracy
  • SBR updating process should be as timely as possible whilst at the same time providing the as good coverage and accuracy as possible
  • Timeliness and linkage issues can pose problems when using multiple sources, but their use in combination allows an NSAs to derive all relevant statistical information and hence to reduce response burden and create new and more detailed outputs.
• Statistical business registers - Eurostat (europa.eu)
• Methodology – Statistical business registers - Eurostat (europa.eu)
• European profiling - Statistical business registers – Eurostat (europa.eu)
• EuroGroups register – Statistical business registers – Eurostat (europa.eu)
• Publications – Statistical business registers – Eurostat (europa.eu)
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Thank you!