International guidelines for statistical business registers

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Outline of presentation

- What is a statistical business register (SBR)?
- Roles of the SBR
- Coverage of SBR
- Units in the SBR
- Characteristics of units
- Data sources for the SBR
- Maintenance of the SBR
- Key reference
What is a statistical business register (SBR)?

- Is a regularly updated, structured database of economic units in a territorial area, maintained by a national statistical office, and used for statistical purposes.
Roles of the SBR

- SBR live register
- SBR register snapshot and frozen frame
- SBR survey frame
- SBR survey support
- SBR statistics
- SBR information source
- SBR international data exchange
- SBR in modernization of statistical production and services
Roles of the SBR

SBR live register
- Maintains a set of statistical units as the foundation for creating frames for economic surveys
- Functionality of continuously creating, updating and deactivating of the corresponding units is referred to as the “live register”

SBR register snapshot and frozen frame
- Produces register snapshots and frozen frames from the live register as the basis for subsequent generation of survey frames
Roles of the SBR

SBR survey frame

- For each survey the SBR provides the set of statistical units in scope for the survey (typically a subset of the frozen frame) together with the characteristics required for stratification and sampling, and, for the selected units, the information required to contact and communicate with them.

SBR survey support

- Concerns survey registration and survey control
- Involves tracking the reporting statuses of enterprises and the response burden on enterprises imposed by surveys
Roles of the SBR

SBR statistics
- Provides comparable and consistent data on the structure and demography of the population of enterprises at less cost for economic analysis

SBR information source
- Provides micro data (enterprise names, address and characteristics) as open data to users
Roles of the SBR

SBR international data exchange

- Facilitates exchange of data and metadata across countries in order to improving coherence and international comparability of economic statistics
  - Particularly important to ensure coherence of cross border economic statistics and for the measurement of activities of multinational enterprises
Roles of the SBR

SBR in modernization of statistical production and services

- Coordinates, links and connects units that occur in all kinds of sources relevant for statistics
  - Facilitates use of administrative registers
  - Is a potential gateway for combining data from traditional sources and new media
  - May serve as a data warehouse
  - Facilitates standardized production of statistics
Coverage of SBR

- In principle, SBR should cover as much production as possible by including all types of institutional units that are engaged in productive activities as defined in the SNA production boundary.
- In reality, complete coverage is not possible.
- A more realistic aim is for coverage to meet agreed standards.
- SBRs should aim to record, at a minimum, all active economic units in the formal economy that are engaged in economic activities contributing to the gross domestic product (GDP).
- Economic units in the informal economy can be included only if a suitable administrative source is available.
Coverage of SBR

Formal economy – to include in SBR

- Comprises
  - Government units
    - Inclusion in the SBR is preferable but having links in the SBR to data for government units held in an administrative source is acceptable
  - Financial corporations and quasi-financial corporations (including those controlled by government)
  - Non-financial corporations and quasi-corporations
  - Non-profit institutions serving households
  - Registered household enterprises (including agricultural)
Coverage of SBR

Informal economy

- Comprises
  - Own account, non-registered nonagricultural household market enterprises excluding self-employed professionals
  - Own account, non-registered nonagricultural household market enterprises that are self-employed professionals
  - Own account, non-registered agricultural household market enterprises
  - Non-registered, non-agricultural household market enterprises with employees
  - Non-registered, agricultural household market enterprises with employees
  - Household non-market enterprises – do not include in SBR

To include only if suitable administrative source available.
Units in the SBR

- The main statistical units in the SBR are
  - Enterprise group
  - Enterprise
  - Establishment (local kind-of-activity unit)
Units in the SBR

- Other units that can be included are:
  - Kind-of-activity unit
  - Local unit
  - Legal unit
  - Administrative unit
Units in the SBR

- The statistical units are linked forming a statistical unit model with embedded relations
- Most important relations include:
  - Each enterprise consists of one or more legal units
  - Where an enterprise consists only of one legal unit, this legal unit corresponds to the enterprise
  - Each enterprise has one or more local units (locations). Each local unit is attributed to only one enterprise
  - Where an enterprise has only one local unit, this local unit corresponds to the enterprise
  - Each enterprise has one or more establishments (local kind-of-activity units). Each establishment is attributed to only one enterprise
  - Where an enterprise has only one establishment, this establishment corresponds to the enterprise
Characteristics of units

Classification of characteristics

- Identification and contact characteristics, including not only names, addresses and communication means (telephone numbers, mail addresses, websites etc.) but also specific and unique identifiers (even internal identification numbers that enterprises use in monitoring their affiliates and that are not intended for the general public)
- Demographic characteristics, including unit activity start and end dates, current status and continuity markers
- Economic/stratification characteristics, i.e. economic variables and classifications, used for sampling survey frames, grossing up sample data and/or presenting results
Characteristics of units

Classification of characteristics

- Relationships (links) between units of different types within the SBR
- Relationships (links) with units in other registers and data sources, including their specific identification numbers
Characteristics of units

Identification and contact characteristics

- Type of unit
  - Enterprise group
  - Enterprise
  - Establishment
  - Kind-of-activity-unit
  - Local unit
  - Legal unit
  - Administrative unit

- Type of enterprise group
  - All-resident
  - Multinational domestically controlled
  - Multinational foreign controlled
Characteristics of units

Identification and contact characteristics

- Role of enterprise within enterprise group
  - Management/control unit
  - Global group head (controlling unit)
  - Global decision centre (managing unit)
  - Highest level consolidation unit
  - Other

- Identification number(s)

- Name(s)

- Address

- Communication characteristics
Characteristics of units

Demographic characteristics

- Date of incorporation of unit (for units that are legal persons)
- Date of official recognition as an economic operator (for units that are natural persons)
- Date of commencement of economic activity
- Date of final cessation of economic activity
- Date on which a legal unit ceased to exist
- Date of merger, take-over, split or break
- Identifier of unit (if any) that is continuing the economic activity after the concerned unit has ceased to exist
Characteristics of units

Economic/stratification characteristics

- Legal form/legal status
- Institutional sector and sub-sector of economic activity
- Principal economic activity
- Secondary economic activity (activities)
- Ancillary unit
- Market orientation (market, non-market)
- Turnover
- Number of persons employed
- Number of employees
Characteristics of units

Relationships and links between units in the SBR

- Reasons
  - For management and the direct use in the SBR itself and by surveys using frames derived from the SBR
  - For statistical and economic studies that depend upon bringing data from different sources together

- Each link should include the date when the relationship started and (if applicable) the date when it stopped
Characteristics of units

Relationships and links with other registers

- Such links are important given emerging role of the SBR in connecting various data sources and thus integrating statistics
- Links are expressed in terms of identification numbers for the external sources and the identification numbers of the corresponding units in the SBR
Data sources for the SBR

Three categories

- Administrative sources
- Statistical sources
- Other sources, for example data from private data suppliers, telephone directories and the Internet
Data sources for the SBR

Administrative sources

- Business registration/license register
- Tax registers
- Company/trade associations and chambers of commerce registers.
- Social security registers
- Labour and employment registers
- Government units registers
- Non-profit unit registers (for example, charities)
- Industry association registers
- Agricultural administrative registers
- Water supply and electric association registers
Data sources for the SBR

Administrative sources

- Sector specific sources
  - Lists of schools from the education ministry
  - Lists of hospitals from the health ministry
  - Lists of charities from regulators
- Central banks
- Published business accounts halt
Data sources for the SBR

Statistical sources

- Feedback from enterprise and establishment surveys
  - Provides information on changes in contact address, changes in the economic stratification characteristics, deaths, etc.
  - Is available at statistical unit level, that is, for establishments or enterprises
Data sources for the SBR

Statistical sources

- SBR improvements surveys
  - Are also known as
    - Nature-of-business surveys
    - Proving surveys
    - SBR control surveys
  - Are conducted when SBR updating information cannot be obtained from surveys, or from the administrative sources on which the SBR is based
  - Require resources
Data sources for the SBR

Statistical sources

- Profiling
  - Is the practice of using company accounts, often accompanied by interviews with senior enterprise officials, to build and define the structure of enterprises, mainly those involved in large complex enterprise groups
  - The resulting profiles are used to produce a reporting structure appropriate for surveys
  - Provides valuable information on larger and more complex enterprises
Data sources for the SBR

Combination

- A data source should not be used in isolation
- To build a comprehensive SBR, a combination of administrative and statistical sources is recommended
- Administrative sources identify enterprises, but may not include all of the required characteristics
- Statistical sources do not identify new units but provide additional or more accurate characteristics
- A strategy of using administrative and statistical sources in combination should be developed and employed
Data sources for the SBR

Other data sources

- Telephone directories
- Payroll, taxation and accounting service providers
- Internet search
- Commercial data providers
- Big data
Maintenance of the SBR

Key objective

- To update the coverage and content of the SBR, taking into account continuity and stability rules, according to a well-defined calendar, and in as timely a fashion as the information sources allow to provide economic surveys with sampling frames that are accurate and as up to date as possible
Sources of information - administrative sources, feedback from surveys and SBR improvement surveys - and rules for dealing with conflicting information

Maintenance groups into which statistical units in the SBR are divided for efficiency and cost effectiveness of maintenance procedures

Time dimension - timing of the updates, the need for continuity and stability rules, and use of the historical register
Maintenance of the SBR

Sources of information

- Different sources of information may provide values for the same unit and characteristic
- Rules are needed to determine which source to use
- Most reliable method is to record the source and date of recording of the value of a characteristic and to ensure that the updating algorithms specify what combinations of source and date can result in the value being overwritten subsequently
Maintenance of the SBR

Maintenance groups

- Amount of maintenance effort devoted to a statistical unit should correspond to
  - Its size and potential impact upon published statistics
  - Its propensity to change
  - Sources of updating information

- Statistical units should be divided by size and potential impact and propensity to change into maintenance groups, each of which is subject to a particular set of updating procedures
Maintenance of the SBR

Time dimension

- The SBR should be updated on a daily basis given the different sources of input information.
- The maintenance schedule should be coordinated with:
  - Supplies of administrative and statistical sources
  - Production of sampling frames
  - Publication of data directly from the SBR
- Dates of all demographic events and changes in values of characteristics should be recorded.
Key reference

- UNECE’s Guidelines on Statistical Business Registers
Thank you