Session 2:

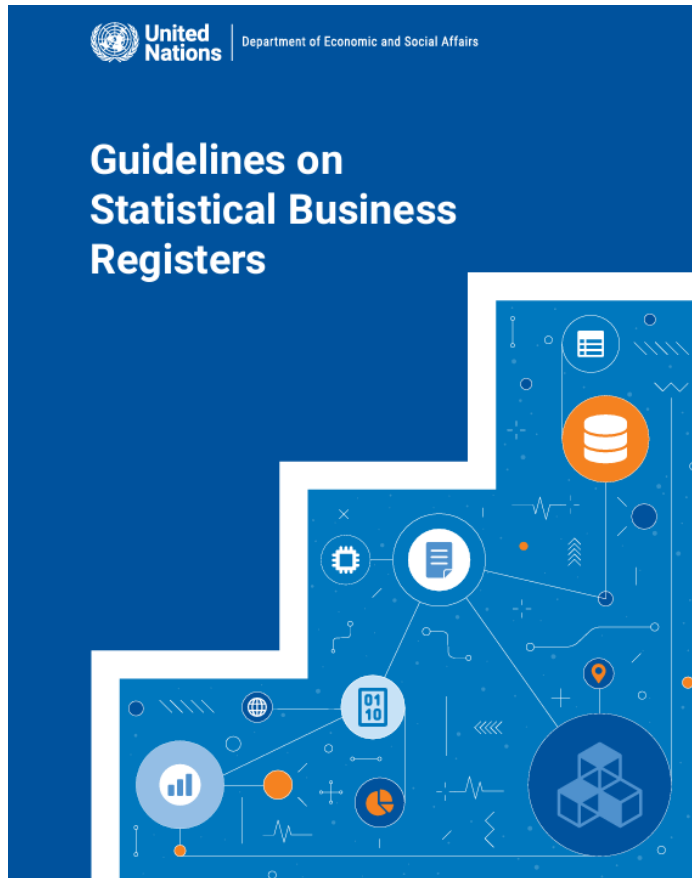# Introduction to Statistical Business Registers

Outline

- What is a Statistical Business Register (SBR)?

- Roles of the SBRs

- Coverage of the SBR

- Data Sources for the SBR

What is an SBR?

What is a Statistical Business Register?

Guidelines on Statistical Business Registers

UN, 2024

- An SBR is a regularly[1] updated, structured database of economic units (legal, administrative, statistical) in a territorial area, maintained continuously by a National Statistical Office, and used for statistical purposes

- SBRs are an essential element of the statistical infrastructure to support the coherence and consistency of the statistics produced

- They play a central role in the production of economic statistics, both in terms of the way statistical units are defined, and in terms of the content and quality of the statistical data

1. The frequency of SBR updating depends on data availability, including the availability of administrative data.

What is a Statistical Business Register

Consistency

Coherence and comparability

Cost-efficient

Integration

- They enable statisticians to retrieve a common set of units, across different subject areas, and referencing a specific date

- This results in data that are timely, coherent, and comparable, and in a data collection process that is facilitated in a cost-efficient manner

- They also provide a rich source of statistics directly derived from SBRs and they facilitate the integration of databases thus increasing the analytical value of data

Roles of the SBR

Roles of SBR

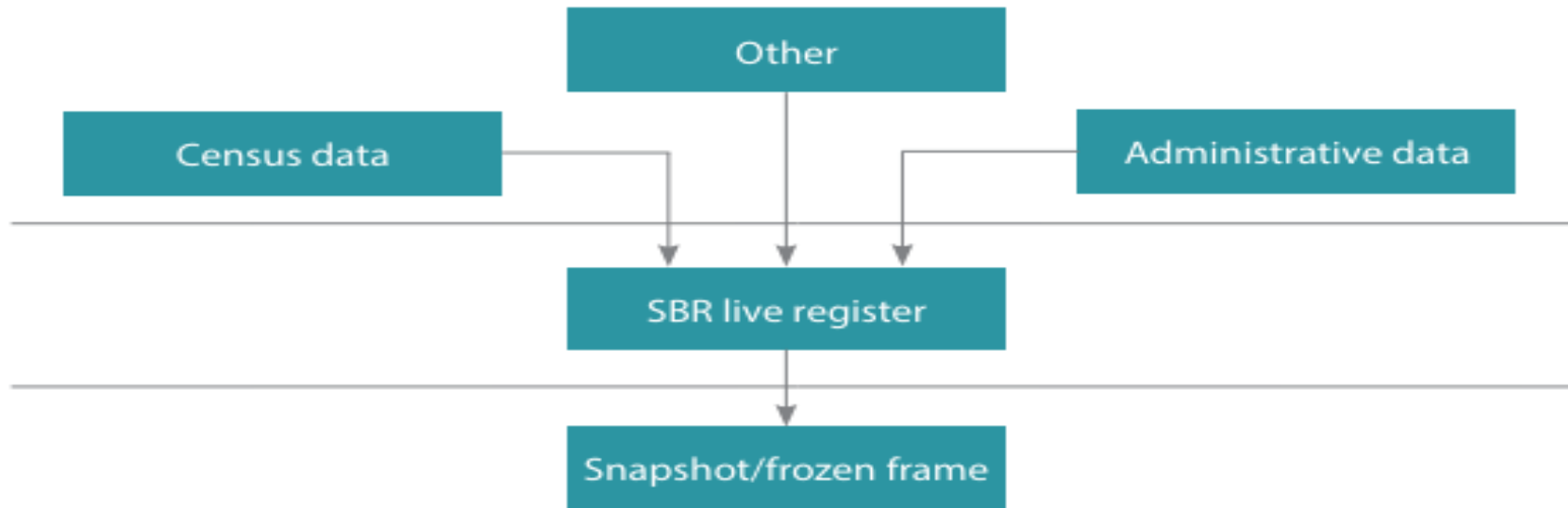| 1 | Live Register | Maintain a set of statistical units by using new information from various sources |
2	Register snapshot and frozen frames	Produce register snapshots and frozen frames, at fixed points in time from the live register as the basis for subsequent generation of survey frames
3	Survey frame	Provide frames for business surveys, considering the set of statistical units in scope for the survey, together with the characteristics required for stratification and sampling
4	Survey support	Monitor survey response and measure, and control response burden
5	SBR Statistics	Produce statistics based on the SBR (e.g., business demography statistics)
6	Information source	Provide macrodata and microdata (lists of enterprises and their locations) and possibly other characteristics to users
7	International data exchange	Facilitate the exchange of data and metadata across countries to improve coherence and international comparability
8	Modernization of statistical production	Promote the role of the SBR in coordinating, linking and connecting units from different data sources, supporting the production process for economic statistics

Role: Live Register

- Live register refers to the ability to extract subsets of data from the SBR. It serves as a foundation for creating frames for surveys aimed at the production of business and economic statistics

- A live register is dynamic and is constantly updated

SBR live register

Role: Live Register

- The live register is a vehicle for bringing together data from various sources providing the basis for derivation of statistical units. It is the starting point for communications with the owners of the sources

- Legal units are usually the building blocks for creating statistical units. In some countries, the SBR is the only environment in which legal units of all forms are brought together

- Statistical units are created in the live register. There are several types of statistical units. The most important of these units is the enterprise

- Maintenance is a continuous process in which the composition and characteristics of units continuously change over time
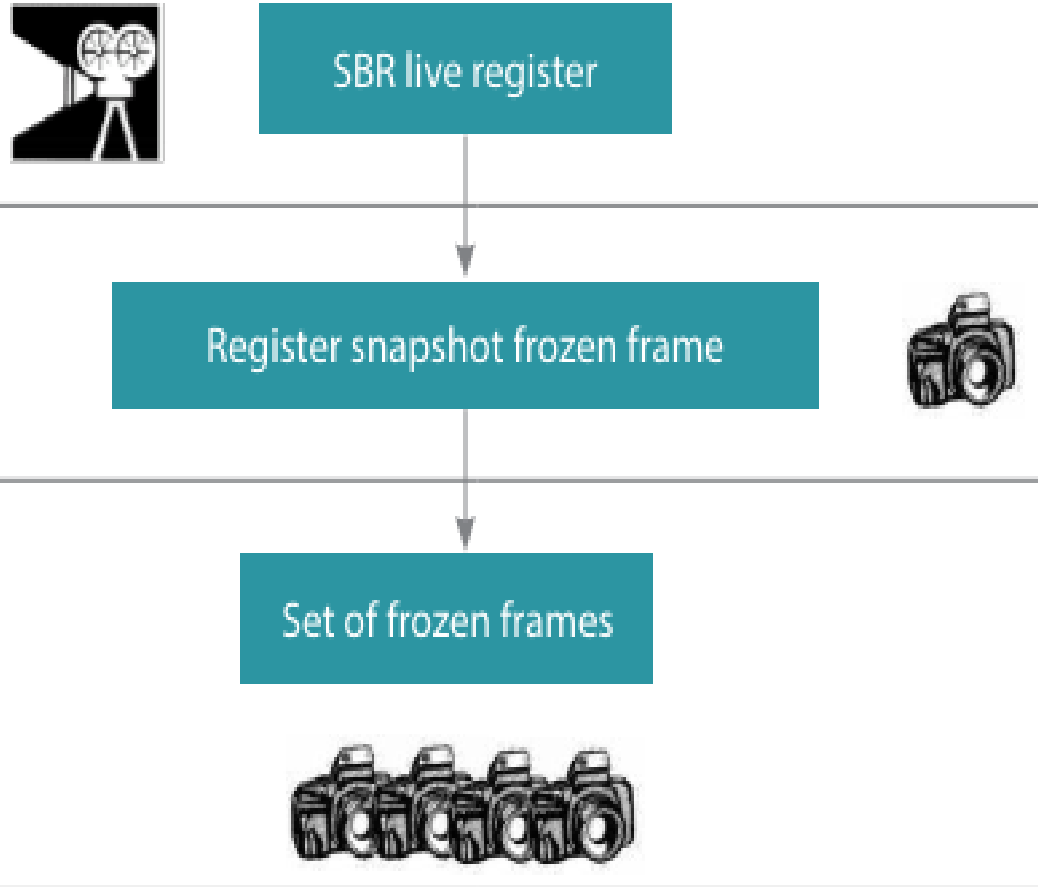
Role: Live Register

Essential functions

- Create and maintain statistical units (brought together data from multiple sources, identifying new statistical units, and update information in existing units)

- Harmonize concepts and definitions (to make data comparable across domains, and assist in the production of business and economic statistics)

- Assign unique SBR identifiers to track units throughout their lifecycle and across different data sources (helping to avoid double counting and support the integration of multiple sources)

Role: Snapshots and frozen frame

SBR live register

Register snapshot frozen frame

Set of frozen frames

- Since the SBR is a live register, by creating snapshots and frozen frames, it is possible to view and retrieve a common set of units from the SBR as of a specific reference date

- Each snapshot is extracted from the live register at a point in time. It is an intermediary step between live register and frozen frame

- A frozen frame is a subset of the snapshot that comprises all statistical units that are active, or potentially active, or active within the previous reference year. It also includes administrative units that are linked to these statistical units
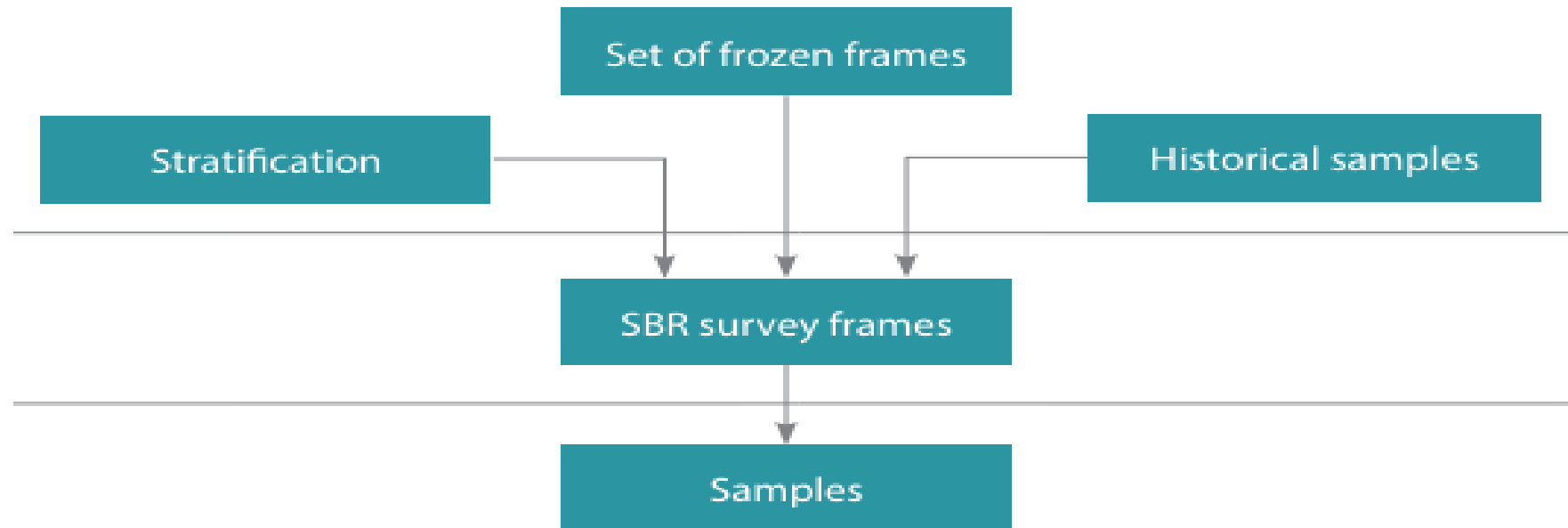
Role: Survey frames

Snapshots

- Comprise all statistical units that are active, or potentially active, or active within the previous reference year.

- Include administrative units that are linked to these statistical units.

Frozen Frames (master frame)

- Subsets of the snapshot which aims to include all units and all characteristics that are used by subsequent processes.

- Trimmed-down versions of the snapshot that are easier to manipulate.

- When an SBR produces sets of frozen frames at various reference periods, they constitute a historical register, which allows statisticians to reconstruct the history of the units contained within.

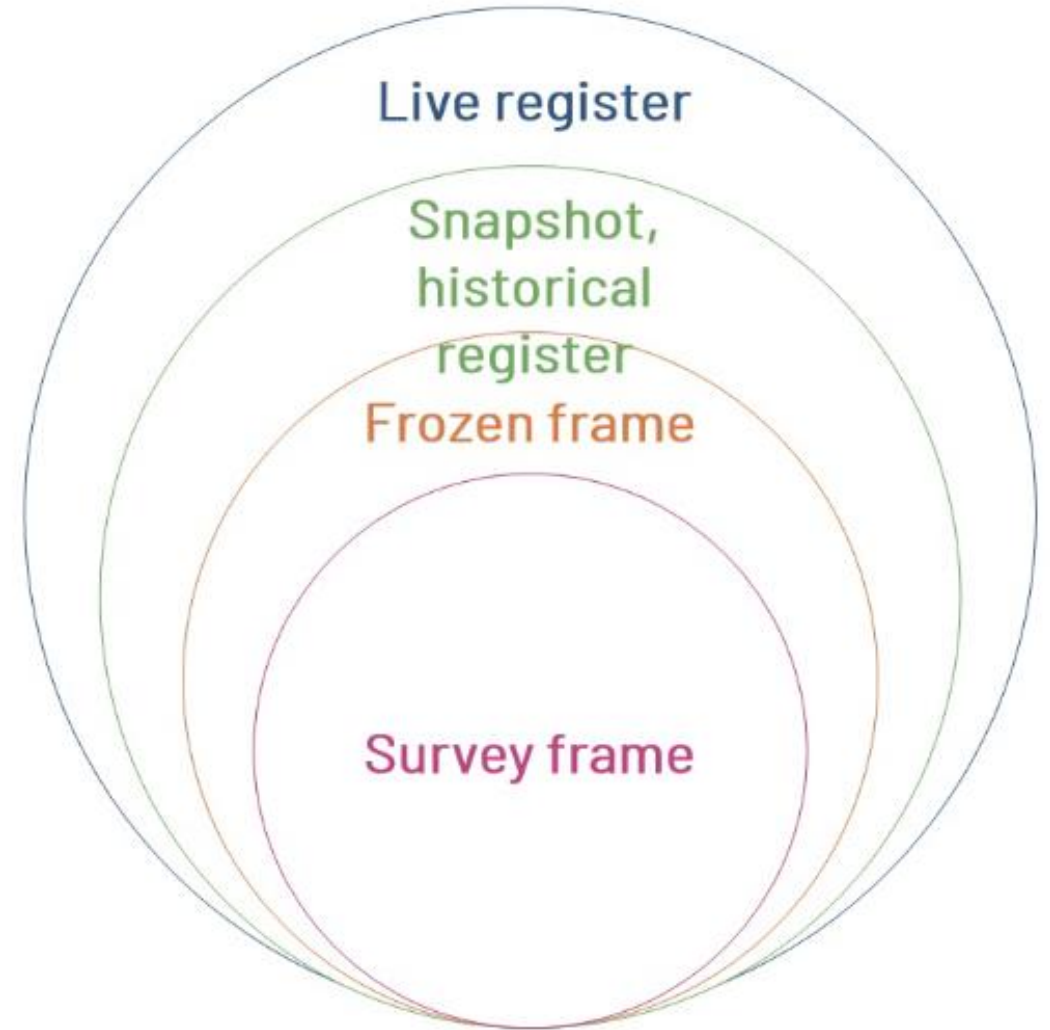# Role: Survey frames

- A set of frozen frames effectively constitutes a historical register which:

  o Coordinates populations of statistical units
  o Provides links between statistical and administrative units
  o Links the SBR to other sources (administrative registrations, survey samples) used for statistical outputs
  o Enables the reconstruction of the history of the units that it contains

Survey frames

- Survey frames are subsets of the frozen frame, comprising the set of statistical and linked administrative units that match the specification of the survey target population and are active during the survey reference period

- A survey frame is a listing of statistical units in scope of a particular survey

- It contains the characteristics of those units required for stratification and sampling, and, for the selected units, the information required to contact and communicate with them

Live register

Snapshot, historical register

Frozen frame

Survey frame

Role: Survey support

- It involves tracking the reporting statuses of enterprises and the response burden on enterprises imposed by surveys. The SBR supports this by storing information that can be used to optimize survey design, as well as to monitor reporting statuses and to compile overall response burden

Data collection- provide information about the observation unit.

Registration - keep track of units participating in surveys.

Ownership - monitor submission of reporting units and response rates, administration of reminders.

Response burden management - reduce or spread the burden and survey holidays.

Role: SBR statistics and information source

- The SBR can play a key role in providing more information at less cost through the direct use of SBR data. It can be a primary source of information on the structure and demographic characteristics of enterprises

- In addition, in combination with other administrative registers or statistical data sources, it can produce additional statistical information for economic analysis. If the SBR is used to integrate a range of data sources, it can also act as a spine for data integration

- Some examples of SBR statistics are:

  o Business demography statistics (data on births of enterprise and their survival rates)
  o Integration with external trade registers (e.g., TEC)
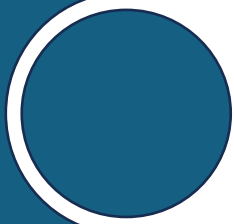
Role: SBR statistics and information source

- Additionally, an SBR provides individual (microdata) as open data with information of list of enterprises and ownership and control, and geostatistical information

- SBR data must be handled in accordance with the regulatory framework that governs the national statistical office. On the one hand, privacy and confidentiality provisions under the statistical legislation have to be observed

- In ideal circumstances a regulatory framework would allow dissemination of the following SBR data:

  o Identification and stratification characteristics: name of enterprise, denomination or corporate name, code and name of the economic activity class, size code based on number of personnel
  o Geographical location characteristics: street, external and internal number, neighborhood, postal or zip code, locality
  o Geographical coordinates of the location: latitude and longitude
  o Contact characteristics: phone, fax, email, and web page
  o Date of creation of the unit in the SBR

Role: International data exchange

- Key factors in improving the quality of international statistics are the exchange and coordination of microdata between countries and the central accessibility of these data

- National SBRs are potential data providers and a network of these could be established. Examples of data exchange between national SBRs include the EuroGroups Register (EGR) and the European System of Interoperable Business Registers (ESBRs)

Role: Modernization of statistical production

- Development of the SBR is a key to meeting user demands for better and more timely statistics. As a unifying tool, the SBR is pivotal in modernizing the statistical production process in line with an integrated statistical architecture

- The SBR fulfils a backbone role in this respect by integrating several data sources and supporting the collection of economic data. This backbone role can be strengthened when the use of the SBR is seen to support the business process as described in the Generic Statistical Business Process Model (GSBPM)

- GSBPM is a standard, but flexible tool for describing and defining the common set of business processes that typically constitute the statistical production. It comprises three levels: the statistical business process, the eight phases of the statistical business process, and the subprocesses within each phase

Coverage of the SBR
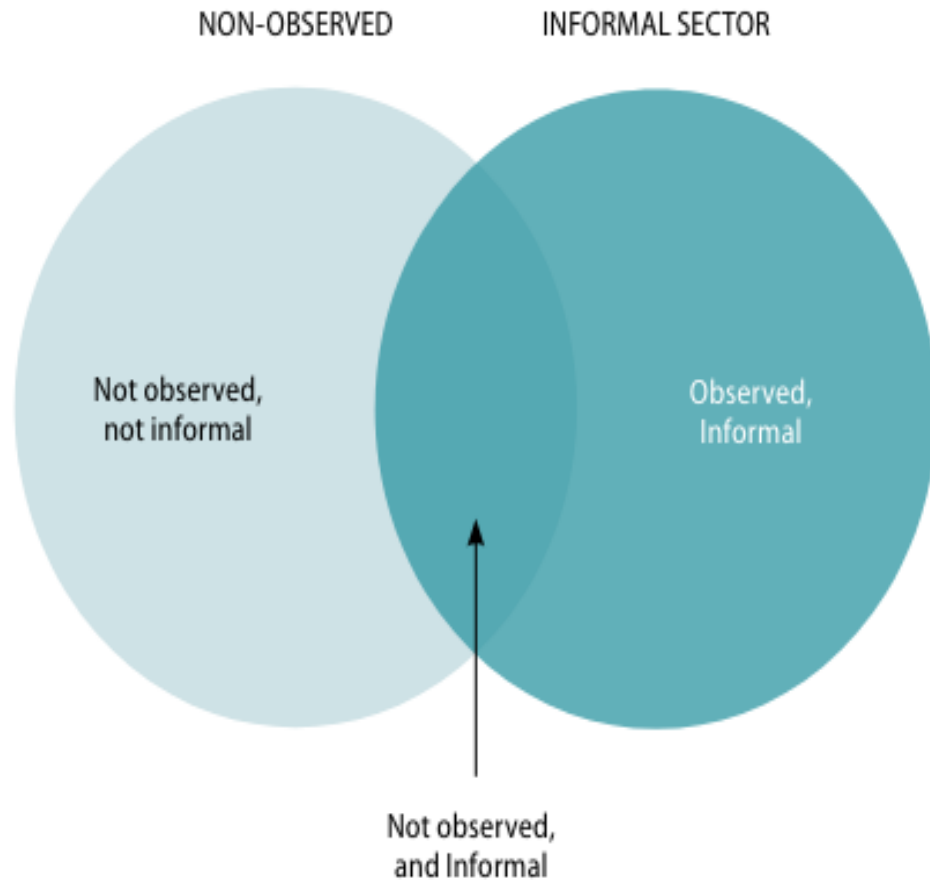
Coverage of the SBR

- In principle, an SBR should record all institutional units in the national economy that are engaged in productive activities

- Three of the key aspects of the SBR coverage are:

  o *Completeness* is the extent to which the SBR include all institutional units within the SNA production boundary, i.e., enterprises (exclude households' activities for production of services for own use; and include market and nonmarket produces such as Government)
  o *Coverage* is the proportion of total national economic production that the units represent
  o *Content* is the set of characteristics (e.g., institutional sector, size, location and registration status) of the units included in the SBR

- An SBR provides complete coverage and content if it includes all units producing goods and services, together with all their required characteristics

Challenges

Non-observed economy and informal sector

NON-OBSERVED   INFORMAL SECTOR

Not observed, not informal

Observed, Informal

Not observed, and Informal

- The core coverage of the SBR comprises units that are market producers and whose principal activity is the production of goods and services

- However, there are some challenges to include all the units that are part of the economic activity such as:

  o Inclusion of the non-observed economy (activities that, for one reason or another, are not captured in regular statistical enquiries)

  o Informal sector

Data Sources for the SBR

Data sources for the SBRs

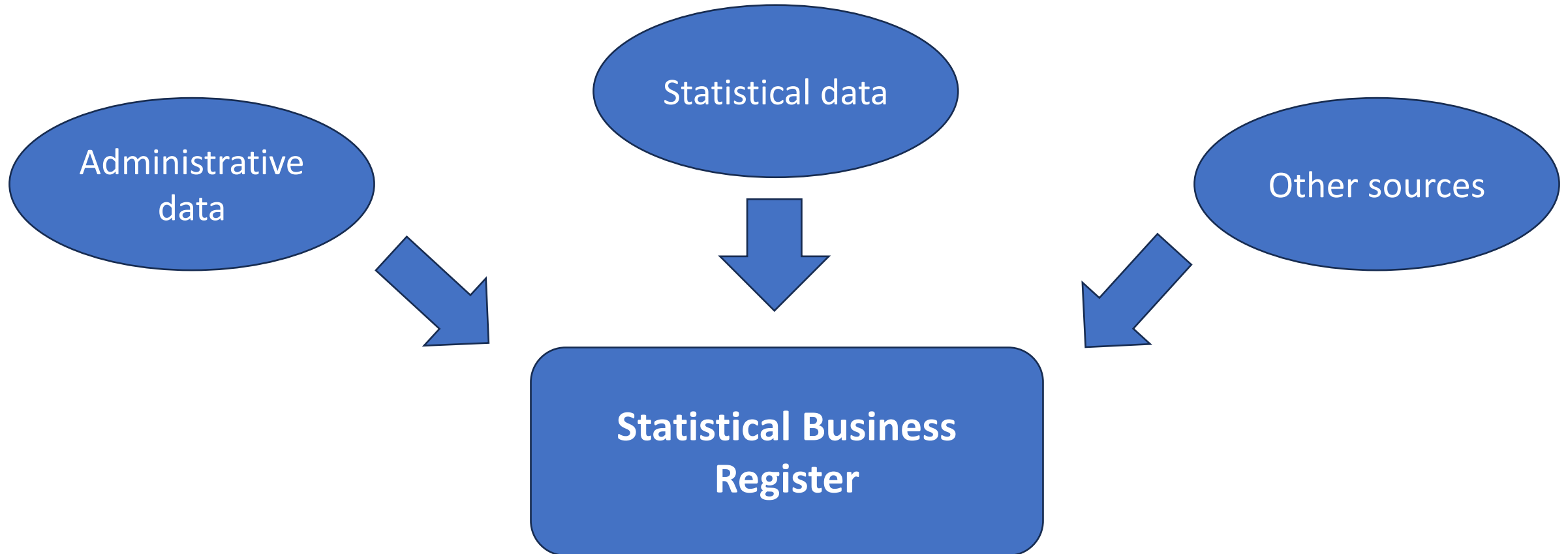- **Fundamental principles of Official Statistics**

  - *Principle 5: Sources of official statistics*

    Data for statistical purposes may be drawn from all types of sources, be they statistical surveys or administrative records. Statistical agencies are to choose the source with regard to quality, timeliness, costs and the burden on respondents.

- Different data sources may be used in combination to construct and maintain an SBR with good coverage and content. Data sources must provide information about changes in units to keep coverage and content up to date

Statistical data

Administrative data

Other sources

Statistical Business Register

Data sources for the SBRs

- Data sources may be grouped in three categories:

    o *Administrative sources* (e.g., business registration and license register, tax register, company and trade associations and chambers of commerce registers, social security registers and others)

    o *Statistical sources* (e.g., economic census and agricultural census, feedback from economic surveys, profiling and SBR improvement surveys, etc.)

    o *Other sources* (e.g., data from private data suppliers, telephone directories and the Internet)

- The UN Guidelines on SBR recommend that SBRs be created and maintained primarily using administrative sources

Administrative Sources

- Administrative sources are those that are not primarily collected for statistical sources. The data derived has not experimented any processing or validation by the National Statistical Office

- The advantages of using administrative data to supplement or replace survey data are:

  - o Coverage
  - o Costs

  - o Response burden
  - o Content and timeliness

- The following slide displays some administrative sources that contain names and contact information. Also, these sources may contain data that indicate whether or not a unit is active, its principal economic activity, its size and some other variables relevant for the SBR, such as employment and turnover

Administrative Sources

- Some of the commonly used administrative data sources are:

Business registration and license register	Tax registers	Company and trade associations and chambers	Social security registers
Labour and employment registers	Government unit registers	Industry association registers	Agricultural administrative registers
Water supply and electric registers	Sector-specific source	Central banks	Published business accounts

Administrative Sources

• However, there are some disadvantages to take into account such as:

   o Administrative and statistical definitions may differ (e.g., administrative unit are not the same than the statistical units, the classification systems may be different, etc)

   o Timeliness (data may not be available in time to meet statistical needs, lags in recording births and deaths of enterprises, etc.)

   o Changes to administrative regulations or procedures

   o Quality of administrative data

   o Legal issues to access to administrative data

Statistical sources

- Some examples of statistical sources are:

  - *Economic Census.* It can be conducted entirely independently of the SBR or SBR-assisted. It may be a very useful instrument when a country is initiating an economic statistic programme. However, it is a very resource-intensive exercise and intercensal updating of the SBR is required

  - *Business surveys*. Feedback from business surveys provides useful data for updating the SBR, as it displays information on changes in contact address, economic characteristics, deaths, etc. One limitation is that the update may be only for a traditional sample survey, and it lacks information on births

Statistical sources

- *SBR improvement surveys.* It is used when SBR updating information cannot be obtained from surveys or administrative data. One possible strategy for keeping the SBR up-to-date is to conduct SBR sample surveys every year with the biggest, medium-sized and smallest units sampled to the levels of 100, 50 and 10 percent, respectively

- *Profiling.* It 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. Profiling usually involves establishing contact with the enterprise being profiled to develop a good understanding of its structure

Combining administrative and statistical sources

- 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. For example, administrative sources can be used to identify legal units and transform their data to form enterprises, while local units or establishments can be identified by enterprises surveys, as some characteristics missing from administrative sources

Access to data and institutional arrangements

Access to data and institutional arrangements

- In many countries, administrative data are the main source for updating their SBR. However, some National Statistical Offices may have faced challenges to access to administrative data

- If there is not a legal framework in place to promote the access and sharing data for statistical purposes, it may be required to establish some institutional arrangements (data sharing agreements) between the data provider and the National Statistical Office

- These kinds of agreements should ideally complement the legal framework

Access to data and institutional arrangements

- The cooperation may lay in a less formal non-binding document such as the establishment of Memorandums of Cooperation (MoC) or Memorandums of Understanding (MoU) with different agencies, offices, and other stakeholders to facilitate the collaboration in exchanging data and assigning responsibilities with different agencies, offices and other stakeholders

- A Memorandum of Understanding aims to provide a collaborative environment to facilitate the cooperation, communication and coordination to exchange information needed for producing International Merchandise Trade Statistics and many times it becomes a tool to complement the current legal framework

Thank You!

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