Part 3

The Italian Statistical Business Register

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The Business Register

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A Statistical Business Register (SBR) is a vital component of the core statistical infrastructure supporting collection of economic data and production of economic statistics.

SBR has a central role in the system of business statistics:
• backbone for the production of all business statistics
• Detention and construction of statistical units
• «live entity» and tool for the mobilisation of administrative data
• To supply sample and population data necessary for conducting surveys
• Source of information for the statistical analysis

Produce statistics directly based on the register data on:
  - Population structure by Economic Sectors, Size, Territory
  - Population evolution: demographic analysis, Survival and Growth analysis
• Promote the coherence for global statistics
In year 2011 in Italy Istat carried out its first Economic Census (CIS 2011) entirely based on the system of business registers (ASIA).

Purpose:
reproducing census data entirely from administrative sources

CIS 2011 aiming at the enumeration of businesses, related persons employed and other typologies of employment, classified by activity code, size, juridical status and other structural information about the system of enterprises.

Feasible because:
- the existence of a consolidated BR (ASIA)
- degree of enhancement done in the statistical use of administrative sources and, on the other hand, on the quality improvements of each administrative body
The Italian BR: main characteristics

the Italian economic structure is characterised by small units (and small EGs)

- 2,8 million of enterprises without employees
- 4,4 million of enterprises with less 20 employees
- 90% of the EGs with less 100 employees

Small enterprises cover 40% of the total employment
Small enterprises have a big social and political impact

➢ the structure and evolution analysis of small units is a fundamental aim of the BR
The Italian BR: main characteristics

the number of “large” enterprises and EGs is quite small

11,000 enterprises with more than 100 employees
110 EGs with more than 5,000 employees

in some sectors the large enterprises have a big impact on the whole GDP

- The data quality of the large enterprises must be very accurate
The Italian BR is mainly based on the use of administrative sources

• easy access of administrative sources
  – *legal basis not ambiguous*
  – *good formal and informal relationship with administrative bodies*

• easy integration of the administrative sources
  – *all sources use a common key-code (the fiscal code)*

• possibility to develop probabilistic methodologies for the estimation of the characters
  – *each sources could be considered as an independent “view” (partial or total) of the same universe*

➢ Need of in depth analysis of the sources and their quality evaluation, and the development and updating of statistical methodologies
The Business Register Regulation was set into effect in 1993:

- Council Regulation (EEC) No 696/93 of 15 March 1993 *(on the statistical units for the observation and analysis of the production system in the Community)*


The European definition of enterprise

**Enterprise**

- *is the smallest combination of legal units* - *is an organisational unit producing goods or services* - *benefits from a certain degree of autonomy in decision-making, especially for the allocation of its current resources* - *carries out one or more activities in one or more location*

An enterprise combines factors of production, and this combination has to be complete in order to enable it to produce.

The enterprise corresponds either to a legal unit or to a combination of legal units.

Business activity cannot exist without the legal basis of legal units.

*According to this definition sole-proprietorships and free professions are also included*
In 1996 Istat started the project of setting up the Italian Business Register named Statistical Register of Active Enterprises – ASIA.

After some years the BR role became more central inside ISTAT:

- To enrich the information contained
- To become a System of registers

To enlarge the COVERAGE:

- **In terms of sectors** of economic activity: all enterprises carrying on economic activities contributing to gross domestic product, all their local units and corresponding legal units (some sectors previously optional must be covered such as the Public Administration, agriculture and fishing).

- **In terms of units**: information on financial links among legal units and on the Enterprise Groups.

Moreover BR has to allow the exchange among European Countries and Eurostat with regards to the Multinational Enterprise Groups and its constituting units (*EuroGroupRegister*)
Current situation: Towards FRIBS

**BR package in FRIBS** the Framework Regulation Integrating Business Statistics (FRIBS)

For the purpose of FRIBS a **network of national statistical business registers and the EGR** is required

To reinforce infrastructural role to the BRs to make them **the backbone** for the production of European businesses statistics, both at national and at European level, by delivering consistent frame populations across statistical domains and across countries to improve consistency and coherence, and to reduce production costs.

The further preparation of an interoperability framework is subject of the Vision Infrastructure Project **ESS.VIP.ESBRs**, endorsed by the ESS Committee for 2013-2017
Coverage, units and contents in the system of Business Register

The System of Business Registers ASIA is organized as a set of registers aiming at covering different units and sectors of activity.

In the System there belong different kind of units and links:

**Legal unit** – this entity is recognised by law or society independently of the persons or institutions that own them (either legal person or natural person).

**Administrative unit** – this entity is defined for administrative purposes and is usually the same as the legal unit.

**Statistical unit**– this entity is defined according to the definition

In the System Registers are linked each other by relationships and updating processes are developed by using different statistical methods

The core is the **Asia – enterprise Business Register**. Other registers such as The Public Administration Register (Sector S.13), the Non Profit Institution register (Sector S.15) (not yet fully implemented) and the Farm register (not yet fully implemented ) are not showed in this presentation
BR Contents – units relationship

- Administrative Records
- Enterprise Group
- Legal units
  - Local units
  - KAU
- Active Enterprise
The Business Register production and updating process

1. INPUT: Administrative sources and identification of legal units and statistical units (enterprises)

2. UPDATING PROCESS:
   1. Integration of administrative sources
   2. Assignment of attributes to units and identification of statistical unit active in year t
   3. Integration of statistical sources information

3. OUTPUT:
   1. Data consistency (running / frozen file)
   2. Dissemination to internal and external users
Use of administrative sources: advantages and problems

Advantages
• the enlargement of the dataset of information
• lower costs
• reduction of response burdens

Problems:
• the need to deal and assess definitions, content, coverage and classification
• the timeliness in receiving the data
• the quality procedure put in place by the administrative process
• the treatment and the exploitation of new administrative data due to changes into legislation
• to deal with huge amounts of data linked at the individual level
• the need to develop new statistical instruments to face all the previous problems
Main administrative sources

From Fiscal Authority (MF)
- Tax Register
- VAT declaration
- Business Income

From Chamber of Commerce (CCIAA)
- Register of enterprises
- Register of company’s owners (partners and positions, shareholders)

From Social Security Authority (INPS)
- Employer declarations on each employee
- Employer declarations on outworkers
- Self employed persons in agriculture, handicraft and trade data

Telephone Business customers Archive (SEAT)
Secondary administrative sources

- **Public sources**
  - Archive of banking and financial institutions (Central Bank of Italy – Banca d’Italia)
  - Archive of insurance companies (Authority for the control of Insurance enterprises – IVASS)
  - Data on trade’s units (Ministry of Industry)
  - Work Accident Insurance Register (INAIL)
- **Private sources**
  - Data on trade’s units (Nielsen Company)
  - Balance Sheet Data
Structural Business Surveys (collect economic data):
- Total survey on large enterprises (more than 100 employees)
- Sample survey on small-medium enterprises

PRODCOM Survey

Short term surveys
- Monthly survey on manufacturing turnover
- Quarterly survey on services turnover
- Monthly survey on domestic trade
- Survey on external trade

During 2004 Istat launched the IULGI survey with the aim to
- collect information on local units of large enterprises (more 50 employees (main source for ASIA-Local Units)
- update information on characters of enterprises
Administrative sources used for the identification of statistical units in the register are only those 4:

1 – Tax Register (MF)
2 - Register of enterprises (CCIAA)
3 – the social security registers (INPS)
4 – Telephone archive (SEAT)

Other administrative sources are used for:

- Estimation of specific characters
  (i.e. Annual VAT declarations → turnover)

- Checks of specific subset of units
  (i.e. Register of Central Bank of Italy → check rules for the coverage of financial activities)

The starting point is that the first act that a legal unit carries out to start its activity is the acquisition of the Fiscal Code at the Fiscal Authority.

A legal unit cannot exist without having a fiscal code.
Updating process

In general:

- The logical and physical integration of administrative sources - and their treatment with statistical techniques - are the basis for setting up and update the BR.

- **Small units** (95% of the BR) are *yearly* update using only Administrative sources

- **Medium units** are updated using also data collected by statistical survey

- **Large units** are *continuously* updated by internal experts using all available information

*profiling* of larger enterprise groups is an activity aiming at a better reconstruction of the Group, the identification of the enterprises and measuring of their relevant characteristics
Integration of different administrative sources is done by using the unique identifier existing at National level and available in each administrative source: the **fiscal code**

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**The Italian Fiscal Code**

- **Physical Person**
  - I, III, IV Name
  - Consonants (vocals)
  - Municipality code
  - First three Surn.
  - Consonants (vocals)
  - Birth date
    - the month is a letter
    - for the female the birth day is + 40
  - Check digit

- **Legal Person**
  - Progressive code
  - Code digit
  - VAT office
  - Check digit
Estimation of identification and structural variables:

Identify or estimate a statistical attribute for each enterprise starting from the information available into different administrative sources using deterministic rules, estimation methodologies

- Some characters are estimated for ALL UNITS every year (activity status, employment)

- Some other attributes are estimated only when a change in the information structure is recognized in terms of input sources (economic activity code, legal status, identification variables)
The consistence of statistical information of different surveys needs a common basis of reference.

The Statistical Register is constantly updated and, if necessary, it must correct the possible enclosed mistakes.

However the constant register updating may cause misalignments into reference population of surveys if they are carried out in different periods.

- **Consistency of output data**
  
  A **frozen file** is produced at one fixed time as an “edition” of the BR that does not change during a defined period long (generally one year)
The **frozen file** will be the reference population for all surveys

The **frozen file** contains all enterprises that have been active
- during the year at least one month (*population for business demography*)
- At least six months (to produce **business statistics**)
- At a specific date (December 31 for **Censuses**)

A **running file/DB-ASIA** where corrections and data updating of register will be at disposal of users (statistical surveys) only in the following edition of frozen file or to extract more updated information for short term surveys
**BR Contents**

- **Identification variables:**
  - enterprise name, address and other territorial char.

- **Stratification variables:**
  - economic activity code (Nace classification), legal status, size in terms of number of persons employed – employment details are distributed using the ASIA-Employment Register-, n. of self employed, n of employees, Turnover

- **Demographic variables:**
  - Date of start of activity, date of cessation, date of event of transformation (merger/demerger), bankruptcy, liquidation status.

- **Other useful variables:**
  - a set of “flags” informing users about quality of the variables
Dissemination of data:

Internal users:
- Access to database DBASIA and software for the punctual identification of single units
- Microdata Frames – ORACLE system

External users
- microdata files for the National Statistical System partners
- ad hoc elaborations (for university, private companies, etc)
- data warehouse - I.Stat website - free aggregated data)

Istat is obliged by law to respect the principle of statistical secrecy (Article 9 of Legislative Decree no. 322/89).
Data are used exclusively for statistical purposes and may not be divulged to any party - public or private - outside the National Statistical System, or otherwise published or divulged, except in aggregate form and in such a way that it is impossible to identify the person to whom the data apply.

http://dati.istat.it
next:

PART 3 – Business demography