The Italian experience and collaboration ISTAT-BoI in the exchange of registers' data for statistical purposes: a focus on the LEI
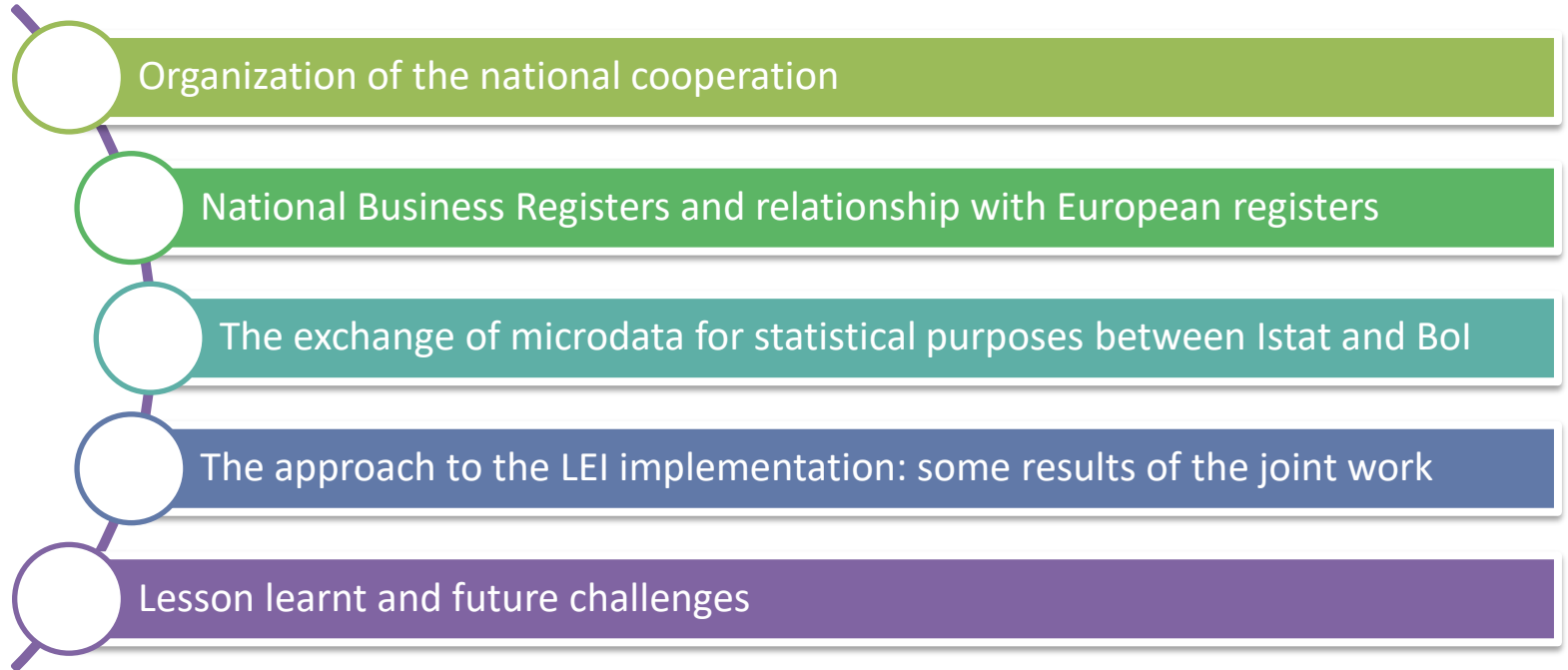
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Organization of the national cooperation

✓ The MoU between Istat and the Bank of Italy regulates the cooperation in the field of research and exchange of **statistical information** on topics of common interest in compliance with European and national regulations.

✓ The Coordination Committee approves the information exchanges and steers on the research areas.

✓ Currently, it is organized in **21 thematic subgroups** (WGs)

The mandate of the WG on «**Business Registers on enterprises and enterprise groups**»:
- increasing efficiency in the management of registers, considering that the two Institutions use partially overlapping sources and processes
- share information on the business registers of the two Institutions, taking into account the constraints and opportunities arising from national and European framework
- strengthening the coherence and the quality of the statistics produced by the two Institutions through the use of more complete and shared information
- Focus is mainly for the European statistics, but national statistical needs are also taken into account.

Goal ✖ One joint business register for the two Institutions   ✓ To reach the maximum coherence of the population of corporations and their classification

The exchange of microdata for statistical purposes between Istat and BoI

Formal and structured procedure agreed to exchange data

From BoI to Istat

Approval of data request: WG member proposes for approval the new data request to the Coordination Committee	**Data request form:** WG fills in the data request module that is signed by the responsible officer of the institution	**Sending of data request:** A Form is uploaded on Istat platform (Contact Centre)	**Provision of data:** Data upload on Istat platform (Contact Centre)

From Istat to BoI

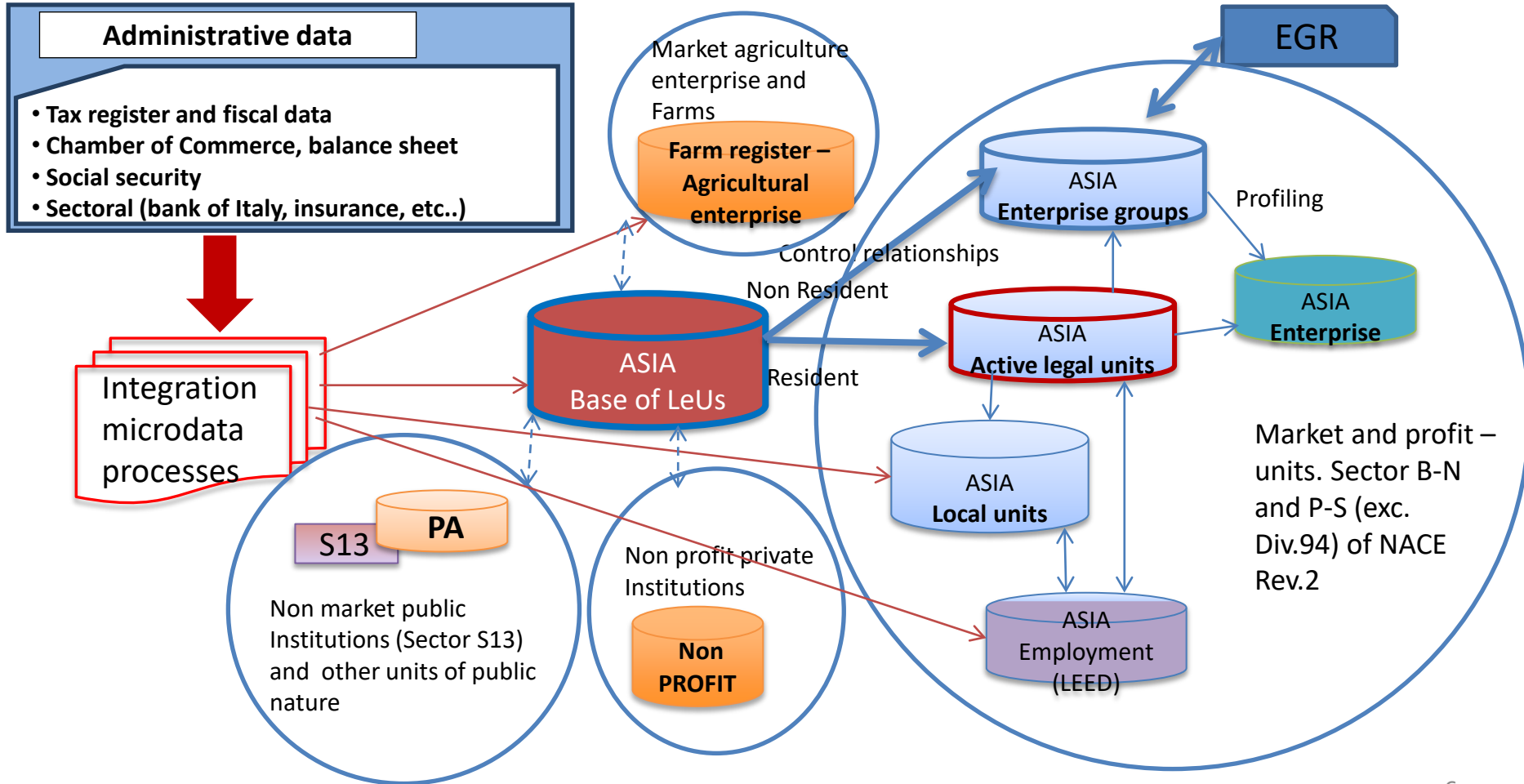| **Approval of data request:** WG member proposes for approval the new data request to the Coordination Committee	**Data request form:** WG fills in the data request module that is signed by the responsible officer of the institution	**Sending of data request:** A Form is sent to a functional email address of BoI	**Provision of data:** Data uploaded in MyDrive shared cloud

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➢ Regulation (EU) **2019/2152** of the European parliament and of the Council of 27 November 2019 on European Business Statistics (EBS), repealing the Council Regulation (EC) No 177/2008 *establishing a common framework for business registers for statistical purposes*

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

Coverage of Statistical Business Register (SBR)

The System of Statistical Register (called ASIA) is organized as a set of registers aiming at covering different units and sectors of activity in terms of:

▪ SECTORS (market, public administration, non profit institutions, agriculture)
▪ STATISTICAL UNITS (Legal unit, Enterprise, Enterprise Groups, Local units, Kau)

The System of statistical business registers

Administrative data

- **Tax register and fiscal data**
- **Chamber of Commerce, balance sheet**
- **Social security**
- **Sectoral (bank of Italy, insurance, etc..)**

Integration microdata processes

Market agriculture enterprise and Farms

Farm register – Agricultural enterprise

Control relationships
Non Resident

Resident

ASIA
Base of LeUs

EGR

ASIA
Enterprise groups

Profiling

ASIA
Enterprise

ASIA
Active legal units

ASIA
Local units

ASIA
Employment
(LEED)

Market and profit – units. Sector B-N and P-S (exc. Div.94) of NACE Rev.2

S13 **PA**

Non market public Institutions (Sector S13) and other units of public nature

Non profit private Institutions

Non PROFIT

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Updating strategy is based on the massive use and integration of <u>administrative and statistical sources</u>

Production of the **Frozen file** and **continuously updating of the running file or live register (DB)**

1) Integration of administrative sources; identification of legal units and statistical units (enterprises)	2) Assignment of attributes; identification of statistical units, active in year t	3) Integration with statistical sources information (mainly from the Business Portal)	4) Quality control and Edit and imputation procedures; final release of active enterprises (frozen register); internal and external dissemination; updating of "live register"

-**Tax Register**: legal and natural persons with VAT number; annual VAT; Sector studies; income tax
-**Chamber of Commerce**: register of Enterprises and Local Units; shareholders of non listed companies; company's owners; consolidated and separate financial statements
-**Consob** (supervisory Authority for the Italian financial products market): shareholders of listed companies
-**Social security Authority**: employment data
-**Italian Central Bank (Bank of Italy):** credit institutions; holding; financial intermediation

In summary, multiple techniques for updating:
➢ **Small units** (95% of the BR) are **<u>yearly/half-yearly</u>** updated using only Admin. sources
➢ **Medium units** (enterprises involved in surveys) are updated using the Business Portal
➢ **Large units** are **<u>continuously</u>** updated by internal SBR experts using all available information (mainly profiling activity)

The **frozen file** is produced at one fixed time as an "edition" of the SBR that does not change during a defined period long (generally one year)

contains all enterprises that have been active* during the year at least one month

*Activity status is estimated using **signals of activity** for the enterprise (mainly presence of employment/turnover)

The **running file/DB-ASIA** contains historical data
all the corrections and data updates will be at disposal of users (statistical surveys) before being put in the following edition of frozen file (to extract updated information for short term surveys)

Main Contents

✓ **Identification variables**: name, address, NUTS codes, Id. number of Leu, ENT, EG (national code) , EGR identity number (LEID), LEI Id.

✓ **Stratification variables:** i.e Nace, size, turnover
✓ **Demographic variables:** i.e. Dates, events
✓ **Control relationships:** i.e. parent-subsidiary, shares

4,4 million of active Legal Units
4,3 million of enterprises
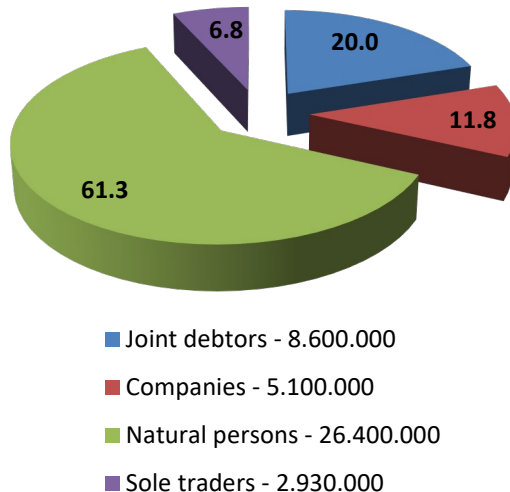160 thousand active enterprise
in 102 thousands EGs:
- 80% domestic
- 9% MNEs with foreign control
- 11% MNEs with italian control

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- The most extensive database of the Institute (more than 44 millions of subjects – natural persons, companies, joint debtors)

- A single database shared with all users:
  - ✓ External users (supervised reporting agents)
  - ✓ Internal users for multiple institutional functions (e. g. Supervision, Monetary policy, Statistics)

- A central pillar supporting the collection of granular data for all institutional purposes

- Identification strategy: BoI internal code - a unique and uniform ID code for all entities

- Joint debtors - 8.600.000
- Companies - 5.100.000
- Natural persons - 26.400.000
- Sole traders - 2.930.000

Feeding process

❑ Resident
❑ Supervised entities
❑ Daily

BI Supervisory Register

❑ Resident
❑ Insurance Companies & Pension funds
❑ Monthly

IC & PF NCAs Supervisory Registers

❑ Resident & Non Residents
❑ Other Institutions
❑ At event

❑ Resident
❑ Companies
❑ Daily

National Business Register

Reporting Institutions for CCR

Income revenue Authority

❑ Resident
❑ All institutions
❑ Quarterly

Cooperative

Legal

DWH

Entities Register

BS Register

Statistical reporting

CCR

BI Entities Database

BI Securities Database

❑ Not resident
❑ All Institutions
❑ Daily

NSI

Istat

General Government
Annual + daily updates

RIAD

❑ Non Resident
❑ All institutions
❑ Daily

CONSOB

❑ Resident
❑ Listed companies shareholders
❑ At event

GLEIF (LEI)

❑ Resident
❑ All institutions
❑ Daily

The entity register: attributes

Natural persons & sole traders

Companies & other entities (≠ from natural **persons)**

BdI internal code
Taxpayer code
Surname & Name
Gender
Place and date of birth
City of residence
Legal form
Economic activity (NACE)
Institutional sector (ESA)
Legal proceedings

BdI internal code
Taxpayer code
Name
Company number (Business register)
City (legal address)
Legal form
Economic activity (NACE)
Institutional sector (ESA)
Legal proceedings

Legal Entity Identifier (LEI)
National identifier
Head office undertaking identifier
Immediate parent undertaking identifier
Ultimate parent undertaking identifier
Enterprise size
Date of enterprise size
Number of employees
Balance sheet total
Annual turnover

Multiple data sources/procedures involved

SUPERVISION

SUPERVISION REGISTER

MFI, IF, FVC, PSRI attributes

GROUPS REGISTER

Banks shareholdings

SECURITIES DATABASE

ISIN codes (IF, FVC, MFIs)
Listed entities

ENTITIES REGISTER

RIAD unique code
Ref data of all entities

STATISTICAL DWH

NAV/Total balance sheet Total employment (fin inst)

STATISTICS

RIAD
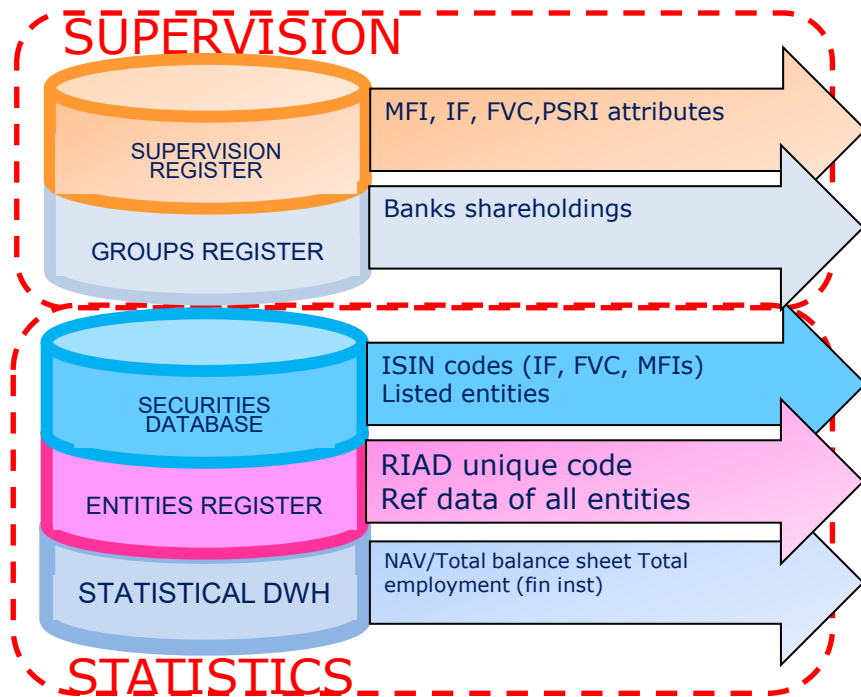
National Registers: a comparison between ISTAT and BoI

	ISTAT	BoI	Differences
Maintenance, update and dissemination strategy	• **Administrative sources are annual supplies** • **Current DB continuously updated by manual profiling activities and data collected by the Business Portal (medium-large units)** • **Access to DB only for statistical internal processes** • **Frozen file disseminated at T+15M**	• **Continuous or at event update from different administrative and statistical sources** • **Daily or at event internal data quality management** • **Access to DB on a need-to-know basis** • **No frozen file production**	Istat – frozen file (Ref. Year T) disseminated at T+15M using admin data (T+1) vs BoI - continuous update from various sources
Coverage and classification	• **Statistical units (LeU, ENT, REL, EG) and variables (NACE, Activity status, residence, HC/HO…)**	• **Legal entities and natural persons** • **Direct and ultimate parent relationships** • **Institutional sector, activity status, NACE, Legal form, residence**	Istat – statistical estimation procedures for classification variables. More types of entites vs BoI – country of residence and activity status defined upon administrative sources

Cooperation and exchange of microdata for statistical purposes

- Branches, SPE and corporations for joint comparison analysis between BoP and NA
- General Government sector and non profit institutions for coverage analysis
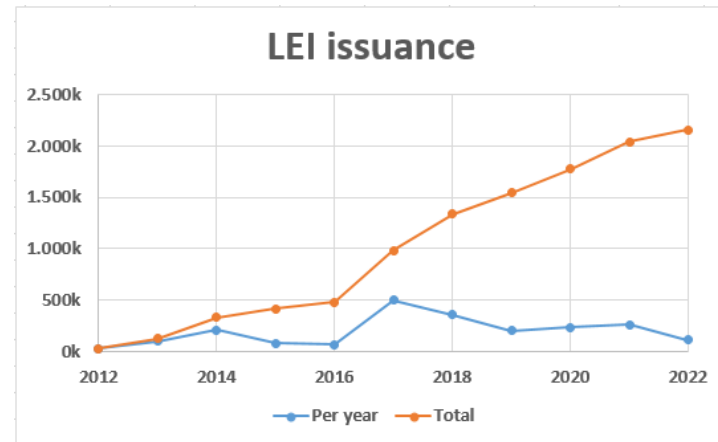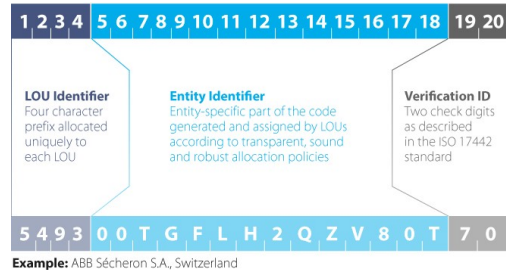- Corporations for company size classification

- Monetary intermediation and other financial service units (special purpose vehicles, funds and similar financial entities) for NACE 64 classification
- ESA2010 holding companies and head offices for NACE 64.2/70.1 classification
- Active and passive sharings by Foreign direct investment (FDI) for DQM on EGs and Relationships

One important area of mutual cooperation refers to LEI

- A high-quality identifier that is accessible **free of charge** as **a broad public good** for the benefit of the users of the public and private sector.

- **Unique** 20 digit alphanumeric code based on ISO 17442 standard assigned to legal entities

1 2 3 4	5 6 7 8 9 10 11 12 13 14 15 16 17 18	19 20
LOU Identifier Four character prefix allocated uniquely to each LOU	**Entity Identifier** Entity-specific part of the code generated and assigned by LOUs according to transparent, sound and robust allocation policies	**Verification ID** Two check digits as described in the ISO 17442 standard
5 4 9 3	0 0 T G F L H 2 Q Z V 8 0 T	7 0

Example: ABB Sécheron S.A., Switzerland

LEI issuance

Over 2.1 mln LEI assigned till now!!

LEI integration process

Banca d'Italia

- LEI is used as additional ID in Entities Register since 2015 and data is updated on a daily basis

- Sources: GLEIF, BoI securities Register, Anacredit reporting agents, RIAD

- Data is matched via Fiscal code/BoI fund code for resident entities and via national ID/RIAD code for foreign entities

Istat
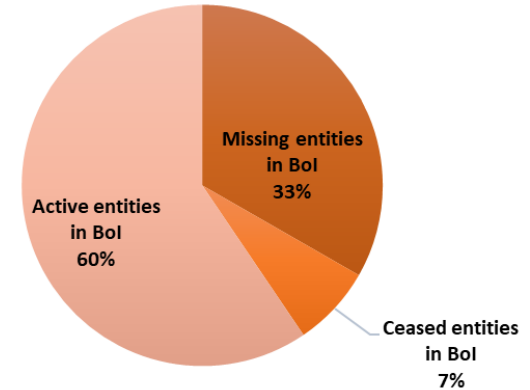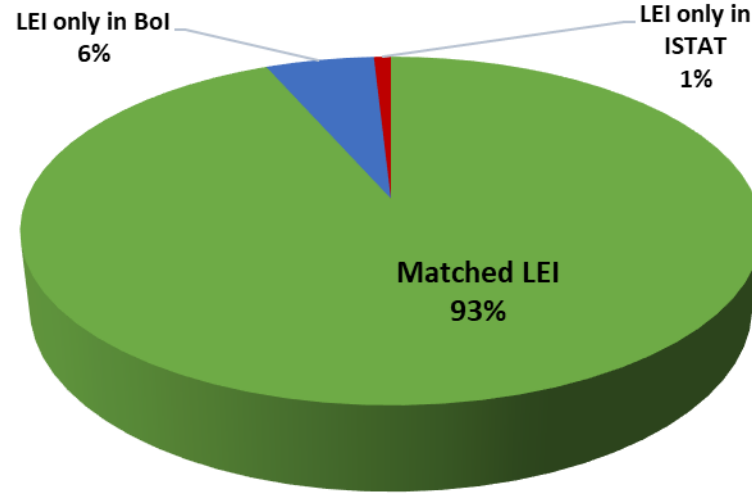
- LEI identifier is requested (conditional var.) by EGR
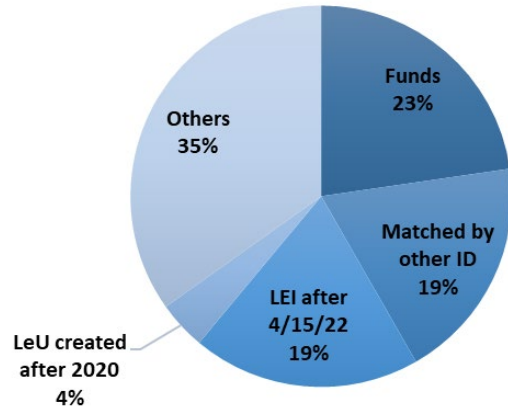
- Recently, LEI was introduced as an additional identifier in the national SBR by integrating GLEIF 'who is who' Level 1 data

- the XML file downloaded from GLEIF around mid April to map and feed LEI in DB-ASIA:
  - Italian units: the SBR is integrated with the LEI
  - Foreign units: the SBR is integrated with the LEI joining via LEID present in EGR (sent by each Country)

LEI results: Italian entities

LEI

BoI	**140.4 k**
Istat	**133.6 k**
Matched	**132.3 k**

LEI results: Foreign entities

Matched LEI
3%

LEI only in ISTAT
20%

LEI only in BoI
77%

Extra EU fin
14%

EU fin
16%

Extra EU non fin
24%

EU non fin
11%

Funds
35%

Extra EU fin
6%

EU fin
31%

Extra EU non fin
9%

EU non fin
54%

Others
35%

FR entities
42%

ES entities
23%

LEI
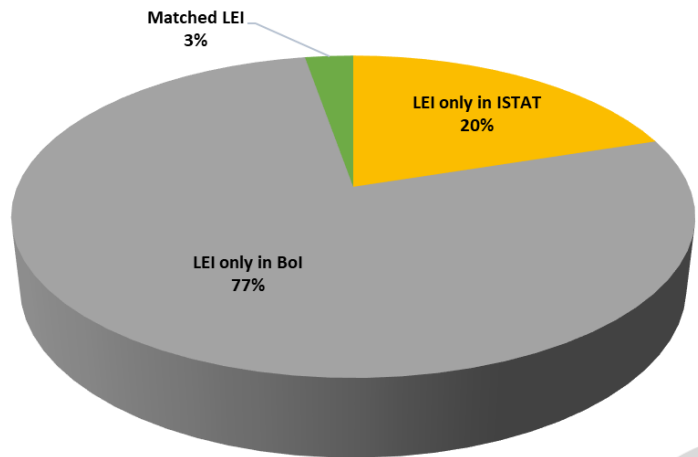
BoI	62.6 k
Istat	16.2 k
Matched	2.2 k

LEI Coverage

BoI	20.0%
Istat	4.6%

18
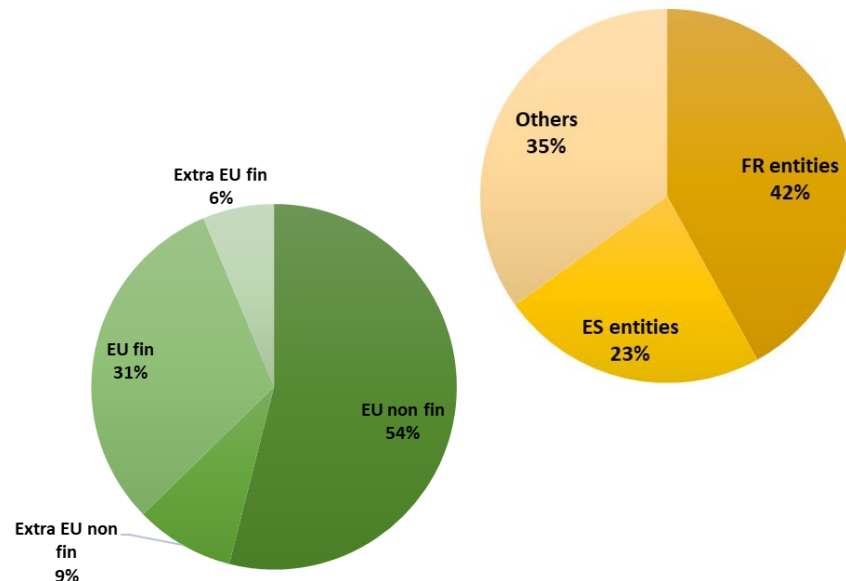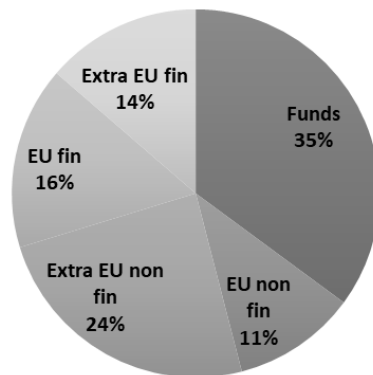
First LEI analysis in the two registers

LEI is a powerful key for **linking** proprietary entities registers, **easing** comparison among reference and structure variables and **improving** consistency among the SBR of Istat and the Entities register of BoI, which are used for compiling European statistics, especially with reference to foreign entities

➢ **Resident units:** very similar coverage between registers. Residual differences mainly due to structural reasons (different legal entities scope, frozen file and annual European provision policy) or technical issues to be solved soon.

➢ **Foreign units:** analysis ongoing, but data are scarcely overlapping even considering different scope and excluding extra-EU entities.

Lesson learnt and future challenges

Microdata file exchange and periodical joint analyses improve coherence for identification and classification of entities with a **general benefit for the statistics** built on **granular data**

Exchange of expertise helps to better understand **mutual work and perspective**, creates a synergy in the analysis of results (even when different!). How to further **enhance the use of common administrative sources?**

Different registers' maintenance strategy and update frequency – frozen file vs continuous updated file – **make comparisons and integration less effective** creating a systematic gap in consistency. Possible way forward: **annual vs more frequent exchange of data?**

National legislation leads to some **limitation in the exchange and use of data** due to different scope of the registers. **How to overcome that within the current legal framework?**

Future steps

✓ Share the methodology and the processes to exploit available sources

✓ Evaluate the setting up of an automated process for infra-annual cross-checking

✓ Review the scope of CSI definition

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