

Use of microdata linking techniques (MDL) for getting insights into enterprises belonging to multinational enterprise groups

Producing statistics with innovative methods





The project

In official statistics, adopting a strategic approach has become increasingly essential for addressing new informational needs such as globalisation, innovation and the green transition, while minimising the statistical burden on respondents.

Microdata linking (MDL) is one such approach to meet these new needs and challenges. MDL is a method used to create new statistics and indicators by combining existing data. This approach helps uncover valuable insights and information.

Contributing to the European Statistical System (ESS) Innovation Agenda, the aim of this project is to produce new data on enterprises belonging to multinational enterprise (MNE) groups and to enhance the use of national business registers (SBR) and the EuroGroups Register (EGR) for statistical purposes. In this way, MDL can be used to replace or complement methods to produce statistics.



The motivation

Globalisation and the growing complexity of multinational enterprise group activities present ongoing challenges for accurately capturing and analysing enterprise groups within European statistics.

This project aims to develop new statistical indicators that offer deeper insights into the performance and characteristics of enterprises that belong either to a domestic or to a multinational enterprise group, be them domestically or foreign controlled.

Central to this approach is MDL, which relies on unique identification numbers across statistical domains to enable microdata linkages.

In business statistics, the national business registers as well as EGR form the foundation of most MDL initiatives, supporting a cohesive view of enterprise activities across borders.

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Parent Company
  - Subsidiary 1 (North America)
      - Branch A

Branch B

    Subsidiary 2 (Europe)
      └─ Branch C
    Subsidiary 3 (Asia)
      Branch D
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The project focuses on two main outcomes:

- Enhancing microdata linking capabilities: This involves building capacity of participating countries to use MDL effectively. The key results include better methodologies, infrastructure and skills for MDL.
- Integrating EuroGroups Register (EGR) with Structural Business Statistics (SBS): This integration will enable EU Member States to make use of EGR data as an authoritative source for globalisation statistics. They can potentially use it for the direct production of Foreign Affiliates Statistics (FATS) from the EGR, reducing asymmetries and providing new insights into multinational enterprise groups.





The methodology

The EGR-SBS MDL project focuses on linking the available statistical information from the following data sources:

- Structural Business Statistics (SBS)
- EuroGroup Register (EGR)
- National Structural Business Registers (National SBR)

The project provides information on the most significant SBS variables broken down by control over the enterprises using the information available in the national SBR and EGR. The interconnected link between the databases is illustrated below.

Structural Business Statistics key variables

- Number of enterprises
- · Number of employees and self-employed
- Wages and salaries
- Value added
- Net turnover
- Gross operating surplus

National Statistical Business Registers

- · Independent enterprise
- · All-resident enterprise group

Enterprise Type in EuroGroup Register

- Multinational enterprise group (domestic
- Multinational enterprise group (foreign control)



Common element: Unique identifier of an enterprise

The results were published as experimental statistics and in the form of a Statistics explained article.



The team

- Project owner: Eurostat unit G1 and unit G2
- Countries involved: EU and EFTA Member States

• Contact: ESTAT-G1@ec.europa.eu



The timeline

- Project initiation: 2022
- Milestone: Publication of experimental statistics in December 2023
- Project end: Open



More information

- Eurostat Glossary: Micro Data Linking (MDL)
- Experimental statistics: Microdata linking Eurogroup registers
- Statistics explained: Economic indicators of enterprises belonging to multinational enterprise groups

