The EuroGroups Register

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Abstract

Globalisation presents significant statistical challenges, particularly for small and open economies in terms of measuring statistical indicators and communicating the results to users. The European Statistical System allocated high priority to the better measuring of globalisation in the statistical processes and output, in business or macro-economic statistics.

Some concrete actions were already undertaken such as setting up of the EuroGroups Register of multinational enterprise groups and the putting in place of a so-called Early-warning System for monitoring restructurings of the groups.

This paper focuses on the EuroGroups Register (EGR), the central statistical business register of Eurostat and the EU and EFTA countries' statistical authorities. The EGR is part of the EU statistical infrastructure and has been built up to better capture globalisation effects as well as for improving the consistency of national data on enterprise groups.[4]

Keywords	JEL code
Globalisation, EGR, statistical business register, multinational enterprise groups	*F6*

INTRODUCTION

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This paper focuses on the EuroGroups Register (EGR), the central statistical business register of Eurostat and the EU and EFTA countries' statistical authorities. The EGR is part of the EU statistical infrastructure and has been built up to better capture globalisation effects as well as for improving the consistency of national data on enterprise groups.

The EGR covers multinational enterprise groups operating in Europe. It provides the statistical authorities of the EU and EFTA countries with yearly population frames of multinational groups. The Register's main function is to provide the statistical authorities with a harmonised picture of multinational groups for their national statistics. The EGR has been growing in terms of quality over

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years and now covers more than 110 000 multinational enterprise groups in the EU. When at least one legal unit of a multination enterprise group is registered in the EU or EFTA country, the group is in the scope of the EGR.

This paper will present the scope, the processes, the data sharing and use of the EGR, in particular how information is produced on the overall structure of multinational enterprise groups in the EU using the EGR.

1 SCOPE OF THE EGR

The fragmented picture that statistical authorities of EU and EFTA countries have of multinational enterprise groups operating on the EU market causes growing harmonisation problems for several types of statistics affected by globalisation.

The EGR is designed to provide a unique survey frame for these and other statistics and therefore to serve as the basic tool for improving them. National statistical institutes (NSIs) and national central banks can use EGR as consolidated and harmonized frame when producing national statistics related to globalization.

Figure 1 Compilation of the groups in EGR
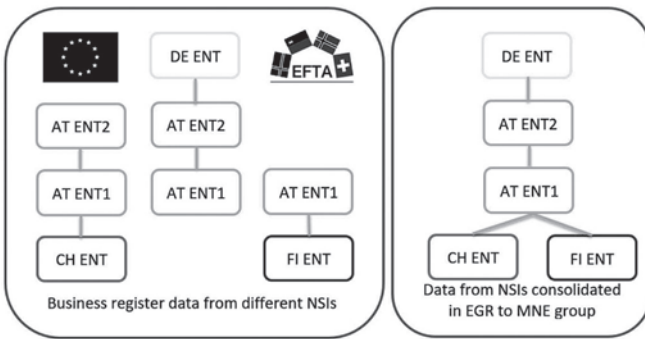
Source: Authors' own construction

Figure 2 Contributors to the EGR
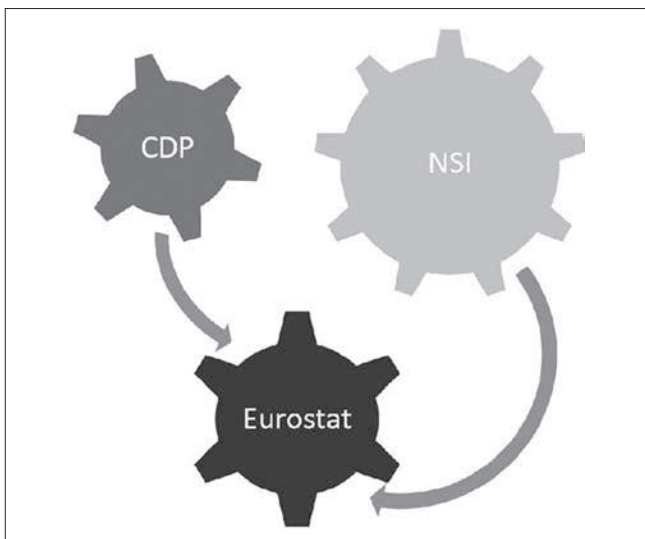
Source: Authors' own construction

2 PROCESSES OF THE EGR

The EGR produces annual data, reflecting the status of the registered gro ups as of 31st December of the reference year. The collection and validation of the EGR data are complex and long processes. The EGR final data for the reference years are currently available 15 months after the end of each reference year.

To create the EGR frames, Eurostat collects input information on enterprise groups from the national statistical business registers of EU and EFTA countries, and from one commercial data source. National statistical registers deliver micro data on the constituent units of the groups and on their relationships. The EGR also acquires data from one commercial data provider (CDP); this acquisition ensures coverage for units outside the EU and EFTA, and full consistency of the largest enterprise groups.

Figure 3 The annual data exchange cycle

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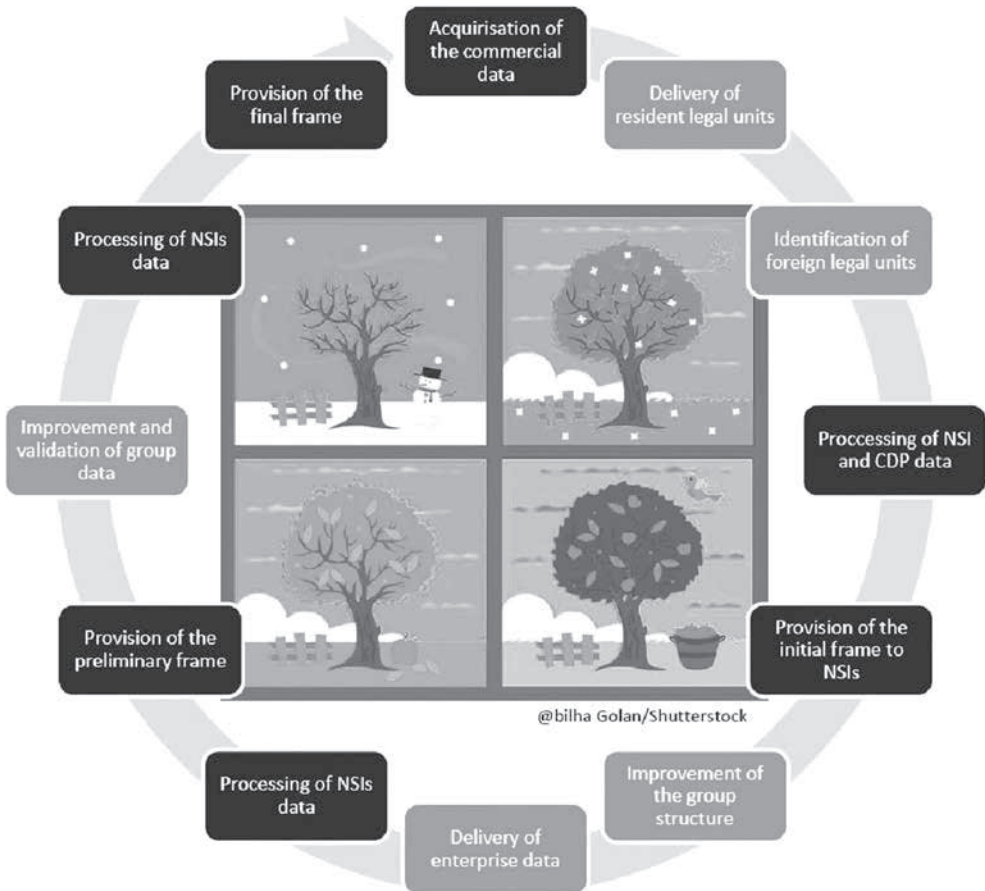
Source: Authors' own construction

After validation of input data from the different sources Eurostat via the EGR calculates the consolidated output on the legal units (companies), on their relationships and on their enterprises (the statistical representation of the legal units). Complementary and conflicting information from the sources are treated in the EGR process with predefined priority settings and business rules. In the EGR production, the highest priority data are the data from the country of the subsidiaries (bottom-up view), followed by the data from the country of the parent companies (top-down view), followed and complemented by data from commercial data provider.

Having final information on legal units and relationships for a reference year the EGR compiles the enterprise group structures. The enterprise groups are built on those legal units, which are linked together by control relationships, where the voting rights are above 50 per cent.

The following enterprise group characteristics are calculated in the EGR process for each group: EGR identification number, group main activity code, group employment, group turnover and country of global decision centre (country of the group).

Before publishing the final data on the groups, the calculated group structures and group characteristics are revised and validated by the participating countries and Eurostat.

The EGR 1.0 system was in production since 2009, data of multinational groups were processed with this system for reference years 2008 to 2011. In EGR 1.0 data of large multinational enterprise groups were acquired from two commercial sources and these data were validated by NSIs. As the initial data had only partial coverage, the EGR 1.0 output also had limitations. EGR 1.0 produced 4 yearly frames for reference years 2008 to 2011; the process was improved year by year.

The EGR process was redesigned to the EGR 2.0 from 2012, the new process was fully implemented in 2015. The switch to the EGR 2.0 improved both the EGR process and the IT system. Data for reference years 2014, 2015 and 2016 were produced completely with the EGR 2.0 system. EGR 2.0 aims to cover all relevant multinational enterprise groups present in the EU.

The current EGR 2.0 system has four modules:
- the EGR IS (Identification Service) that supports users in identifying legal units,
- the EGR CORE (Core application) that consolidated input data and generates the EGR frames,
- the EGR IM (Interactive Module) that provides users with interactive web interface for data repair and validation,
- the EGR FATS (output interface) that provides users with web interface to consult the EGR output.

The EGR data enable information to be produced on the overall structure of multinational enterprise groups in the EU, while preserving the confidentiality of micro-data.

3 THE EGR COVERAGE

The EGR provides harmonised information on:
- multinational enterprise groups, enterprises and their legal units (identification, demographic and economic characteristics),
- relationships and control of enterprises within the groups,
- shareholdings of at least 10 per cent.

The EGR coverage has increased over the years, due to the launching of EGR 2.0 system in 2015 and the on-going quality improvements. The coverage of the last available EGR 2016 frame enlarged compared to the 2015 reference year, especially for Europe. The coverage of outside Europe entities slightly decreased, as less complete groups were acquired from commercial sources.

The data acquisition policy of EGR targets to collect year by year more data from NSIs and publicly available sources and less data from commercial sources.

For reference year 2014 EGR produced data of 61 000 multinational enterprise groups, for 2015 data of 80 000 groups. For the last available reference year, 2016 EGR produced data on 111 000 groups covering 944 000 legal units (companies) and 779 000 enterprises (statistical representation of the companies).

The EGR has very broad coverage of large and medium-sized groups. However small groups and their constituent enterprises are covered to a lower extent. The analysis is based on micro-level comparisons of the EGR population with national data of EU countries on foreign controlled enterprises and enterprises with foreign subsidiaries. These comparisons show that EGR covers very well the large and medium sized multinational groups (groups having 250 or more employed persons). In contrary there


Figure 4 The EGR coverage over the reference years

2016
111 508
groups

2015
79 863
groups

2014
61 146
groups
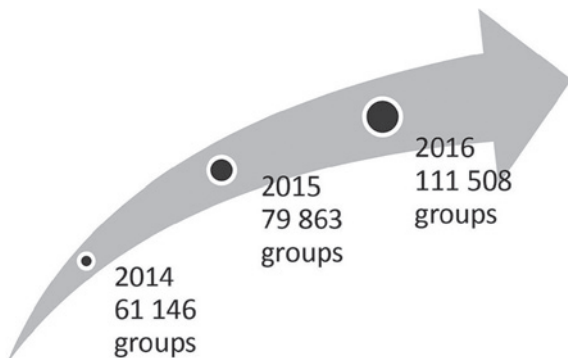
Source: Eurostat, EuroGroups Register data

are small groups, mostly present in two countries only, which are part of the national populations of foreign controlled enterprises and enterprises with foreign subsidiaries, but those are not yet present in the EGR. To reach the targeted full coverage, EGR should cover more small multinational groups.

Figure 5 Multinational enterprise groups in EGR by number of legal units
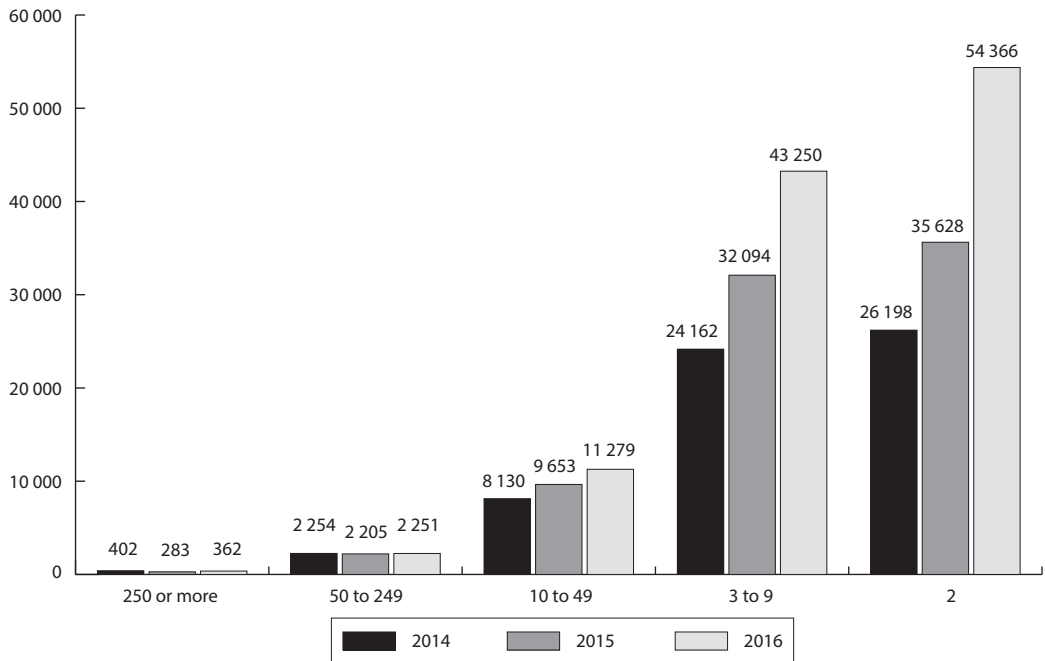
Source: Eurostat, EuroGroups Register data

4 DATA SHARING AND USE OF THE EGR

The EGR is a statistical register with restricted use. The EGR data with the harmonised the multinational groups are only accessible for statisticians producing national statistics in the EU and EFTA NSIs and national central banks.

The EGR provides harmonised information for the users on:

- enterprise groups, enterprises, legal units (identification, demographic and economic characteristics),
- relationships and control,
- shareholdings of at least 10 per cent.

Statistical data producers can use the EGR as:

- coordinated frame population,
- database to derive consistent statistical output,
- auxiliary source to improve quality of statistical output,
- input for measuring global activities,
- database of European enterprises who are part of multinational groups.

The EGR data serve only for statistical purposes, i.e. for the production of the official statistics related to globalisation in the EU Member States and EFTA countries, for example:

- Statistics on foreign affiliates (FATS);
- Foreign direct investment statistics (FDI);
- Statistics on small and medium sized enterprises (SBS);

- Statistics on trade by enterprise characteristics (TEC);
- National accounts – statistics on gross national income (GNI);
- Short term statistics (STS).

5 NEW DATA SOURCES FOR THE EGR

Additional sources of information such as crowdsourcing platforms, web crawling and different open data projects are seen as further opportunities to increase the quality of the EGR, its completeness and accuracy namely with the units outside of the EU and EFTA as well as the aggregate indicators on the whole group level.

Under the umbrella of Eurostat BIG DATA project, Eurostat EGR Team is investigating these additional data sources. Eurostat is collaborating with Leipzig University to explore the possibility of using DBpedia as new additional source of data of MNE groups. DBpedia is a project which extracts structured information from Wikipedia to make it publically available in a format that allows to ask sophisticated queries against Wikipedia and to link different data sets to Wikipedia data. The objective of this project is to set-up a mostly automatized at a large extend the collection of aggregated group figures using as input the names of the enterprise groups.

Eurostat also follows the works of the Global Legal Entity Identifier Foundation (GLEIF) on the globally unique legal entity identifiers as well as on the GLEIF level-2 data on relationships of legal units. Eurostat also collaborates with OECD that develops a project on ADIMA database. This cooperation can be mutually beneficial in the future, when ADIMA will reach certain level of maturity. This additional data source could benefit for the EGR when providing information on units for non EU and non EFTA countries that are related by control relationships to the European enterprises.

6 PUBLICLY AVAILABLE DATA DISSEMINATION FROM THE EGR

In an effort to better respond to users' needs Eurostat publishes experimental statistics on the related Eurostat website based on the EGR data.

The EGR experimental statistics article focuses on the population of the active multinational enterprise groups in the EU and EFTA countries.

The EGR defines an active multinational enterprise group a group that has employees in two or more countries, at least one of them in the EU or EFTA. According to the EGR, 47 621 active multinational groups were registered in the EU in 2016.

Of these groups, 40 081 were from EU Member States (their global decision centres were in the EU Member States) and the rest from other countries, mostly from Switzerland (2 843) the United States (2 200), Norway (441), followed by Japan (350) and Canada (200).

The EGR is a very rich data source, Eurostat and the NSIs are continuously working to improve its quality. Having sufficient quality level in the future, the EGR can be the source of very relevant and valuable European official statistics.

CONCLUSION – OUTLOOK FOR THE EGR PRODUCTION AND USE

Eurostat and NSIs are continuously working to improve the quality of EGR. Further improvements are planned on the EGR processes, improvement of the continuity algorithm, on the EGR coverage, accuracy and timeliness. Additional data sources will be analysed and used in the future.

The main goal of Eurostat is to enhance the use of EGR in official statistics. Statistical compilers of the EU and EFTA countries can use EGR as coordinated frame population of multinational enterprise groups and their units to derive consistent statistical output when measuring activities related to globalisation.

Figure 6 Infographics on multinational enterprise groups in the EU

Source: Eurostat, EuroGroups Register 2016 data

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