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Globalisation and profiling

Developing a Global Statistical Register for Multi-National Enterprise Groups Lessons learned from the Euro Groups Register

1. Introduction

Globalisation of the production of goods and services can have a significant influence on the national economy. Measuring globalisation is a challenge for all national statistical institutes (NSIs), as NSIs tend to only capture national activities or bilateral transactions and encounter problems in measuring flows beyond the national boundaries. With the fragmentation of production in regional or global value chains, the contributions of non-resident firms in value-added activities are difficult to track or compare with those of the resident firms. These production networks are often organized through multi-national enterprises. Therefore, understanding the structures of multinational enterprise groups will be a big step forward in understanding some of the value-adding activities beyond the national borders.

Global value chains consist of the full range of activities that firms and workers perform to bring a product from its conception to end use. This chain includes activities such as design, production, marketing, distribution and support to the final consumer. The activities that comprise a value chain can be contained within a single firm, but are most often distributed among different firms located in different countries¹. The methodology of analysing global value chains explores four basic dimensions: (1) an input-output structure, which describes the process of transforming raw materials into final products; (2) a geographical consideration; (3) a governance structure, which explains how the value chain is controlled; and (4) an institutional context in which the industry value chain is embedded. One of the main governance structures is the multinational enterprise group.

The fragmentation of production across a number of countries results in final goods, to which

¹ See Gereffi, G. & K. Fernandez-Stark, (2011), *Global Value Chain Analysis: A Primer*. Center for Globalization, Governance and Competitiveness, Duke University, Durham, NC, USA.

countries add value in varying degrees. A famous example was the production of the iPad, which was finalized in China, but to which China contributed only 5% of the overall value. In terms of export statistics, China is seen as the major trader of iPads, whereas in economic reality it gains relatively little from these exports.

These questions on the validity of trade statistics were brought to the attention of the United Nations Statistical Commission, which thereupon officially requested the drafting of a Handbook on the measurement of international trade and economic globalization statistics at its 46th session in March 2015. This handbook will describe the growth in globalization and the resulting need for an extended set of business statistics and economic accounts that can provide accurate, timely, and relevant data on global value chains and the resulting interdependencies across countries.

Specifically, the UN Statistical Commission also requested – in its Decision $46/107^2$ – the creation of a global enterprise group register, building on and taking into account lessons learned from the ongoing EuroGroups Register project. The handbook will also address this request to create a global register of multinational enterprise groups, which should be helpful for harmonizing statistics of foreign affiliates and for the analysis of regional and global value chains.

The European Statistical System (ESS) has made already considerable progress towards the creation of a register of multinational enterprise groups by constructing the EuroGroups Register (EGR) and by developing the framework for European Profiling. In its first part, this paper will briefly describe the European System of Business Registers (ESBRs) and in particular the EGR. The second part will discuss how to build a Global Groups Register (GGR), focusing on the lessons learned from the ESS experience and on the possible use of public sources. The third part of the paper will put forth why the GGR cannot be merely an extension of the EGR and expected resultant consequences. The final part of the paper focuses on profiling, describing the European experience and its potential use at the global level. In general the paper will take into account the initial outcomes of the discussions and cooperation between Eurostat and the UNSD on this matter.

2. The EuroGroups Register (EGR)

Eurostat and the ESS partners are developing a consistent and interoperable system of statistical business registers at the European level. The ESBRs is made up of the national Statistical Business Registers (SBRs) and the EGR. The objective of ESBRs is the improvement of the quality of both the national SBRs and the EGR. The interoperability of ESBRs will provide the ESS statisticians with adequate statistical frames for producing consistent business statistics at the national and European level.

EGR is the centre of the ESBRs and is a special SBR with unique features. While SBRs are

² See "Statistical Commission, Report on the forty-sixth session", E/2015/24.

maintained at the national level and cover only statistical units resident in the national economic territory, the scope of the EGR consists of all statistical units which are related to multinational enterprise groups, which have at least one unit present in one of the ESS member states. In order to create the EGR, Eurostat collects information on all statistical units belonging to multinational enterprise groups from the NSIs in the ESS. After a thorough and complicated consolidation and validation process, the EGR contains the global structure of all multinational enterprise groups with at least one unit in the EU, presents harmonized information on the statistical units which are resident in the national economic territories of the ESS member states and includes the following statistical units and their characteristics:

- <u>Legal units</u>: identity, demographic, control and ownership characteristics;
- <u>Enterprises</u>³: identity and demographic characteristics, activity code (NACE), number of persons employed, turnover, institutional sector;
- <u>Multinational enterprise groups</u>⁴: identity, demographic characteristics, the structure of the group, the group head, the country of the global decision centre, activity code (NACE), consolidated employment and turnover of the group.

The EGR is created for statistical purposes only, in order to improve the quality of information on multinational enterprise groups available to the statistical institutes in the ESS member states. The EGR makes the coordinated frame populations accessible to ESS statisticians (in NSIs or Central Banks). Only official statisticians, who are maintaining SBR or using them for the production of globalisation statistics, have access to the EGR confidential micro-data.

The main EGR figures for the most recent reference year (2014) are as follows:

- <u>Identified legal units</u> about 20 million (of which 19.5 million inside Europe); note in this regard that EGR aims at identifying all incorporated legal units that may potentially be part of multinational enterprise groups
- <u>Multinational enterprise groups (partially or fully active in the EU)</u> 61 thousand
- <u>Legal units in the multinational groups</u> 781 thousand.

Based on comparison with FATS, the EGR covers at present nearly all units that are part of multinational enterprise groups which are active in the European Union. In addition, the EGR stores

³ According to the ISIC definition "an enterprise is a legal unit (or the smallest set of legal units) producing economic goods and services with autonomy in respect of financial and investment decision-making, as well as authority and responsibility for allocating resources for the production of goods and services". http://unstats.un.org/unsd/cr/registry/isic-4.asp.

⁴ A multinational enterprise group is an enterprise group which has at least two enterprises or legal units located in different countries. European Commission, Eurostat, "Business Registers Recommendations Manual", <u>http://ec.europa.eu/eurostat/ramon/statmanuals/files/KS-32-10-216-EN-C-EN.pdf</u>.

information on some statistical units that are resident outside the EU, but are part of a multinational enterprise group with some presence in Europe. These 'non-EU' units can be either a headquarters unit or a subsidiary. Information on 'non-EU' units are obtained from ESS NSIs through their outward FATS information or from other sources.

The EGR is reaching maturity, after a long period of improving the process and its organization and of developing the IT tools making possible the on-line access to confidential micro-data with the necessary level of security. Now it is possible to focus more on other aspects and in particular:

- <u>The EGR quality</u> The quality and completeness of the EGR micro-data are improving year by year. Further improvement is expected as a result of Eurostat's data quality program (DQP) launched in 2016. As the national SBRs are the main sources for compiling the EGR, the quality management of the EGR is highly dependent on the quality of the national SBRs. The DQP targets improving consistency, accuracy and comparability of national and international processes and outputs in the European network of SBRs by:
 - o recommending good practices in the short run;
 - harmonizing methodologies and processes in the production and dissemination of national SBRs and the EGR as far as necessary and possible;
 - o *identifying best practices and promoting the use of common tools (in the longer run);*
 - o continuously monitoring and assessing the quality of NBRs against targets.
- <u>The promotion of EGR as the tool to use for all statistics linked to globalization</u> EGR can go further than just being a tool for statisticians. The EGR can itself become the source of valuable statistical information. For example, future plans include using EGR to compile aggregate non-confidential statistics on:
 - o enterprises being part of multinational enterprise groups;
 - multinational enterprise groups themselves (e.g. demography of multinational enterprise groups)

3. Towards a Global Groups Register

As indicated in the introduction, large corporations strategically choose to organize their production over a number of enterprises across countries to basically minimize production costs and maximize profit. At each stage of the chain these enterprises create value-added, generate employment and use natural resources. Traditional statistics of international trade are not able to directly measure the foreign value-added of exports or the domestic value-added of imports. Efforts are ongoing to capture this trade in value-added through the use of global supply-use tables. Besides data at macro-level, some micro-level statistics are necessary to adequately describe contributions of firms to the various industries in relation to their size, ownership and export intensity.

From a national perspective, policy makers would also want to know where the suppliers of the

national economy (earlier in the chain) are located and which countries are ultimately consuming the nation's products (later in the chain), and how much employment and income is generated through the value additions. For example, the textile industry may have designers in Paris or Milan, cotton farmers in Sudan, and weaving, cutting and sewing factories in India and China. Automotive corporations in North America and Europe have moved the assembly lines to Mexico, Morocco and China. The computer electronics industry is very diversified and fragmented, as is – for instance – the medical equipment industry⁵.

A high-quality business register is essential for establishing the link between the enterprises and the data on international trade and investment. Moreover, statistics on large multinational enterprises are particularly important given their central and leading role in global value chains and thus economic globalization. Those statistics will help in answering questions such as how much employment and domestic value-added is created by foreign-owned firms relative to domesticallyowned firms, or how much foreign value-added is generated by resident multinational enterprises. Better understanding the role and structure of multinational enterprise groups is crucial in this regard. A Global Groups Register would significantly help in showing the structures and links among enterprises in different countries and would indicate how control is exercised throughout the global value chain.

3.1 Lessons learned from the ESS experience in dealing with the EGR

In general, NSIs are not allowed to share any confidential micro-data. In the member states of the ESS the launch of the EGR was only made possible by the entry into force of a renewed Regulation⁶ on SBRs. This opened the door for sharing some micro-data on bilateral basis and under certain conditions. From the beginning EGR incorporated some public information bought from Commercial Data Providers (CDP), which could be accessed by all NSIs participating in the EGR.

A legal framework on data sharing, as it exists in the ESS, is not possible at global level. While recommendations for national and international sharing of micro-data are being developed,⁷ the sharing of confidential micro-data will remain very difficult, which implies that the Global Groups Register should be built initially on information available in the public domain.

In the first phase of EGR development, the so-called EGR 1.0 version, the process was mainly

⁵ See *Measurement of international trade and economic globalization*, Report of the Friends of the Chair group, E/CN.3/2015/12, New York.

⁶ European Parliament and Council Regulation 177/2008 established a common framework for business registers for statistical purposes, together with Commission Regulation 192/2009 and Commission Regulation 1097/2010. In particular article 10 of Regulation 177/2008 regulated the exchange of confidential data in the ESS.

⁷ See presentation of Ville Tolkki, Statistics Finland, "In-depth review on exchange of economic data and data sharing", Meeting of the Group of Experts on National Accounts, second Module, 17-20 May 2016. <u>https://www.unece.org/fileadmin/DAM/stats/documents/ece/ces/ge.20/2016/Item 4d Finland In depth review</u> <u>on exchange of data.pdf</u>.

based on CDP information, involving several iterations of Eurostat elaborations and validations by NSIs. This process had several disadvantages, in terms of burden on NSIs, poor quality and the need to start the process again from scratch each year, as newly available CDP information (which did not take into account the intensive EGR work) was used as the starting point for a new EGR cycle. The GGR development could follow this EGR 1.0 approach, taking on board the lessons learned and allowing for sensitivities in the checking of the detailed enterprise information by NSIs.

The EGR 2.0 version solved most of these problems and improved the EGR quality and coverage by giving a higher priority to the NSI information and introducing the unique identification of legal units. This process also decreased the burden on NSIs, in particular concerning their validation tasks. However, the EGR 2.0 approach would likely pose difficulties at the global level in the absence of a global legal framework allowing the exchange of confidential micro-data.

3.2 Public sources for the GGR

On one hand the use of public information as a main source for the GGR would avoid many complicated issues generated by confidentiality management, such as:

- Restricting access to national confidential information to only authorized staff;
- Providing adequate security for the whole IT system, including on-line access for authorized staff;
- Producing different views of the GGR data according to the user. For example, in the case of a German group owning some units in Italy, statisticians from a country other than Germany and Italy would not have access.

On the other hand, the use of public information as a main source for the GGR could have a negative impact on quality, as it could hinder:

- Use of a unique identifier, except for the GLEIS information, as explained below;
- Asking NSIs for validation NSIs may be reluctant to use national micro-data to check and correct the GGR, which would be in violation of the use of confidential data. Therefore, creative solutions need to be found by which NSIs can indicate that certain information in the GGR is incorrect without having to replace it with national data.

Moreover, data from several potential providers of public information will need to be evaluated and considered for use on an individual basis or possibly merged. In any case, the post-validation by official statisticians would be a critical issue.

3.2.1. The Global Legal Entity Identifier System (GLEIS)

One potential public source for the GGR is the 'Global Legal Entity Identifier System' (GLEIS), an initiative launched in 2011 by the Financial Stability Board (FSB), mandated by the Group of 20 (G-20). Its purpose is to facilitate coordination within the regulatory community through the creation

of a global Legal Entity Identifier (LEI) in the form of a reference code that uniquely identifies legally distinct entities engaged in financial transactions. The information on identifiers (and forthcoming work on relationships) that could be made available in the framework of the GLEIS initiative is potentially very interesting from the perspective of building a GGR on the basis of public information.

The GLEIS governance is through the Regulatory Oversight Committee (ROC), composed of about 90 financial authorities worldwide, including the European Commission as a member and the IMF and World Bank as observers. The ROC set up an operational system composed of a Central Operating Unit (COU) represented by the Global LEI Foundation (GLEIF)⁸ and a federation of Local Operating Units (LOUs)⁹ providing registration and maintenance of the LEIs.

The GLEIS is expanding its coverage with a total of more than 460.000 LEIs (as of September 2016), mainly but not only in the financial sector, in some 195 jurisdictions. Daily files are provided to the public free of charge on the GLEIF website (www.gleif.org). GLEIF indicates that non-financial entities are regularly also identified, as non-financial entities also engage in different types of financial transactions requiring LEI reporting.

On the basis of the original FSB mandate and following a public consultation¹⁰ launched in November 2015, the ROC decided in February 2016 to further expand the GLEIS with 'level 2' information; i.e., data on direct and ultimate parents of legal entities. GLEIF plans to collect this information by the end 2017, using an incremental approach, starting with the International Financial Reporting Standards (IFRS) accounting definition of relationships, and expects to make such information available free of charge as well.

The main risks linked to the use of GLEIS information are as follows:

• <u>Coverage</u> – At present less than 500,000 entities have been identified worldwide, compared to about 20 million (of which 19.5 million in Europe) in the EGR. Few entities outside of the financial sector. Unequal coverage from country to country.

<u>Quality of the relationships</u> – In SBRs maintained by NSIs, relationships of direct and indirect control are expressed as the shares or voting rights a legal unit holds of another legal unit. For foreign direct investment statistics (FDI), NSIs use an ownership threshold of 10 percent or more of the

⁸ The GLEIF is an association under Swiss law, acting as the contracting and operational body of the system, supporting the application around the world of uniform operational standards and protocols and maintaining a "logically" centralised database of LEI identifiers and associated reference data.

⁹ The LOUs are the bodies endorsed by the ROC to provide LEI registrations, maintenance and other services provided to registrants and/or users. The LOUs may have a variety of status (public or private) and may be e.g. administrative business registries, stock exchanges, trade repositories, custodians of financial instruments and other agencies issuing national numbers (as some NSIs). Currently, the GLEIS is in the transition process to the organization structure described. The existing LOUs are Pre-LOUs until they are accredited by the GLEIF and sign the 'Master Agreement'.

http://www.leiroc.org/publications/gls/lou_20150907-1.pdf.

voting power and therefore collect all relationships based on that threshold.¹¹ While the GLEIS accounting concepts should be similar to those used by the statistical community, it is not clear at this point whether the GLEIS will collect all the relevant kinds of relationships and whether the relationship concepts used will be fully consistent with the current statistical practice.

When relationships become available in GLEIS (in principle in the second half of 2017), a test could be conducted by using GLEIS to reproduce some relevant multinational enterprise groups already recorded in the EGR using:

- The EGR procedures;
- The GLEIS relationships instead of the relationships provided to EGR by the NSIs in the ESS and then to analyse the differences with the EGR results.
- Another test could consist of building some multinational enterprise groups from GLEIS which do not have the Global Decision Centre (GDC) in Europe.

The main advantages of the GLEIS information would be the use of unique identification of the entities and the availability at no cost. As explained previously, NSIs are not likely to accept validating multinational enterprise groups in the framework of a GGR not based on confidential micro-data information, and creative solutions will be necessary to secure the contributions from the NSIs.

3.2.2. Commercial Data Providers (CDP)

Several commercial companies actively sell information on legal entities, including relationships. Eurostat and several NSIs and Central Banks in the ESS buy and make use of this information for their respective SBRs. In general, several existing entity identifiers are present in the CDP data bases. The use of CDP information for the construction of the GGR would be an option. The advantages of using CDP information would be good coverage (based on Eurostat experience) and short-term data availability. The drawbacks of using CDP information would be the absence of unique identification of entities, the cost of buying the information and the possibility that NSIs are not willing to validate the information.

3.2.3. Other possible sources

The use of other potential sources for the GGR should be explored further. A couple of examples are mentioned below. Additional sources could be used as well in order of priority, such as data from industry associations or from investment administrations.

¹¹ Concepts are comprehensively explained in the recommendation manual for statistical business registers: European Commission, Eurostat, "Business Registers Recommendations Manual", Methodologies and Working papers, Publication Office of the European Union, Luxembourg, 2010. Link: http://ec.europa.eu/eurostat/ramon/statmanuals/files/KS-32-10-216-EN-C-EN.pdf.

<u>EDGAR (USA)</u> - <u>https://www.sec.gov/edgar/quickedgar.htm</u> - The Electronic Data Gathering, Analysis, and Retrieval system, performs automated collection, validation, indexing, acceptance, and forwarding of submissions by companies and others who are required by law to file forms with the U.S. Securities and Exchange Commission (SEC). Its primary purpose is to increase the efficiency and fairness of the securities market for the benefit of investors, corporations, and the economy by accelerating the receipt, acceptance, dissemination, and analysis of time-sensitive corporate information filed with the agency.

<u>EBR (Europe)</u> - <u>https://www.ebr.lv/en/</u> - The European Business Register is a network of administrative business registers kept by the registration authorities in most of the European countries. EBR makes it possible for everybody to obtain comparable, official company information from the countries connected to the network. EBR makes official information on European companies available online. Administrative registries in the Member Countries provide access to the data stored in their business registers. Data from across Europe is then made available through EBR in a standardized way.

4. GGR vs EGR – similarities and differences

The GGR should not be considered a mere extension of the EGR. The main driver for creating the EGR was to increase the consistency, coherence, and therefore the quality of the national SBRs of the members of the ESS. Consistency and coherence would especially be achieved with respect to the statistics on multinational enterprises and their foreign affiliates, as it was not clear and certainly not consistent the way in which the various EU countries attributed a resident foreign affiliate to a mother country, or attributed the host countries of the foreign affiliates to the head office. The goal was that EGR would serve as the European population frame from which the member countries could consistently draw their samples. The main driver to establish the GGR is to get a better handle on the relationships among enterprises in global value chains (or global production networks). If the governance structures of those chains become clearer, the decision center, the ownership of the created intellectual property products and the direction of the corresponding income flows become more apparent as well.

To achieve the goal of harmonization, consistency and coherence, as is strived for by the EGR, you need high quality micro-data. Every enterprise, every head office, and every affiliate will be verified and vetted by the NSIs of the concerned ESS member states. In that way the EGR can become the quality population frame for all ESS member states to draw their samples from.

Whereas the long-term aspiration of the GGR should be to become the high-quality population frame of all multi-national enterprise groups around the world, which can be used by all national

statistical offices to draw consistent samples for enterprise surveys on MNEs and foreign affiliates, the initial goal for the GGR, say GGR 1.0, is more to get a decent picture of at least the main multinational enterprise groups globally. The quality criteria for GGR 1.0 are therefore not set as high as for the current EGR.

In order to explain better the possible flows and synergies between EGR and GGR we can divide the world population of multinational enterprise groups into three subsets:

- 1. The multinational enterprise groups which only have units inside the European borders;
- 2. The multinational enterprise groups which have units both inside and outside the European borders;
- 3. The multinational enterprise groups which only have units outside the European borders;

The present EGR has reached a good quality and coverage for the multinational enterprise groups in the first subset (fully in Europe). Concerning the second subset (partially in Europe), quality can change a lot depending on the size of the parts in Europe compared to the size outside Europe: for a multinational enterprise group mainly in Europe with few affiliates outside Europe the quality will be still quite good; in the opposite case of a non-European group with few affiliates in Europe the quality is likely to be poor. EGR does not contain any information about the third subset (fully outside Europe). The possible synergies are represented graphically hereafter.



Figure 1 – Possible synergies between EGR and GGR

The quality of GGR 1.0 only based on public information can be expected to be more or less the same for the three subsets and not of very high quality. However relevant synergies are expected between the two supranational registers. EGR quality improvements are expected mainly concerning the second subset. At present the EGR information is based on few public sources and the access to the other sources used for the GGR would be beneficial.

The GGR cannot directly draw from the strictly confidential information in EGR of subset 1 (in the above graph), and also not from some of the multinational enterprise groups in subset 2. However, it should be possible and efforts should be made to find solutions to improve the GGR quality in these two subsets, based on the EGR information, without breaching any confidentiality rule.

5. Profiling of multinational enterprise groups

In simple terms profiling consists of determining the structure of statistical observation of the group which seems best suited for monitoring the economic activities of the enterprises belonging to the group. This provides valuable information on the larger and more complex enterprises that individually make a significant contribution to the country's GDP. When applied to multinational groups, profiling implies cooperation between NSIs of at least two different countries, in order to define the cross border activities.

Profiling is defined in the UNECE Guidelines on Statistical Business Registers as "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."

The first step in profiling is to determine the criteria by which to identify the enterprises to be profiled. Profiling is usually focussed on large complex enterprise groups with multiple activities for which survey reporting is difficult. The next step is to perform the desk activity that consists of analysing all the available information on the group (including publicly available information and statistical data available in the NSI). In simpler cases it may be possible to conduct a profile simply on the basis of the desk activity, but for complex cases it is necessary to meet with representatives from the enterprise. During the meeting it will be possible to identify the main active enterprises within the enterprise group and to agree a mutually acceptable reporting structure covering these enterprises. Specially trained staff is required to negotiate with the enterprise as the counterpart will typically be top management in the enterprise.

5.1 Lessons learned from the ESS experience in Profiling

The correct delineation of statistical units over time is one of the key concerns in the ESS, especially when it concerns large complex multinational groups. In such cases, profiling is considered by a wide majority of European statistical offices as the best method to achieve significant quality improvements in delineating them. In order to allow NSIs in the ESS to share statistical confidential micro-data and gain synergies for the delineation of the statistical units, Eurostat has been working in the last years toward the development of a common framework for European profiling.

Since 2013, Eurostat has provided grants to NSIs in the ESS wishing to test the European

profiling framework. Altogether, about 240 enterprise groups were profiled (a number of them several times). The European profiling process is an iterative process that starts in the country of the GDC. The profiling team in the GDC's NSI performs the desk activity and makes a first delineation of the enterprises. This first phase should already involve the statistical data compilers in order to check how the economic structure of the national enterprises fits with the group's global economic organisation.

In a second step, the profilers of the GDC's NSI contact and visit the group to confirm the delineation and to collect detailed data on the enterprises. This visit gives the NSI the opportunity to establish a long-term cooperation with the group.

In a third step, the GDC's NSI proposes its delineation of the enterprises and the group structure to the partnering countries. In this phase, both profiling teams and statistical users should be involved. The result of this step could be acceptance or a proposal for amendment.

The fourth step consists of a round of discussions between the GDC's NSI profilers and the profilers from the NSIs of partnering countries that concludes when all the parties agree on the delineation of the enterprises.

The EGR 2.0 approach, with its higher priority on NSI information, implies that finding appropriate solutions for the integration of the European profiling framework and the EGR may become quite complex.

5.2 Global Profiling

Global profiling could result in benefits for the GGR in terms of quality, consistency and stability similar to those experienced in the ESS, both by national SBRs and the EGR. As GGR 1.0 is likely to be based primarily on public data, some of the difficulties encountered in the ESS, particularly in integrating profiling results, will not be encountered for the GGR.

Going back to the methodology of analysing global value chains, profiling of a multinational enterprise group could be translated as the organization of the production network within a multinational enterprise group. In its simplest form, a value chain can be said to consist of four steps: (1) research, design, and product development; (2) inputs; (3) production; and (4) marketing, sales, distribution, and after-sales service¹². Most trade occurs (generally) in the "supply chain" portion consisting of intermediate inputs and the production of final goods, and most value is (generally) created in the first and last steps of R&D and sales. The implication for business strategy in terms of organization and location is that each value chain stage allows for a number of distinct sourcing options, one of which is the internal international sourcing from within the multinational enterprise group (i.e., using foreign affiliates).

Therefore, one way of profiling a multinational enterprise group is through the classification of

¹² See Sturgeon, T. (2013), *Global Value Chains and Economic Globalization - Towards a New Measurement Framework*, Report prepared on behalf of Eurostat.

the economic activities of its foreign affiliates. For instance, a large automaker may keep its R&D at headquarters, but may set up its assembling plants, parts manufacturing firms, accounting firms, advertisement firms and financial services companies in different foreign affiliates across a number of different countries. These foreign affiliates will be classified according to their main economic activity in their country of residence, whereas the multinational enterprise group as a whole would belong to the automotive industry.

Obtaining the micro-level or even firm-level data on the structure of the multinational enterprise group is of course the challenge. Outward FATS statistics would give some general information on outward activities at the country level, but may miss the firm-level links necessary to construct the enterprise group. Whereas identification of individual firms may not be strictly necessary, the goal would be to capture the links between resident firms (classified by economic activity) and the associated foreign affiliates (classified by economic activity) with a breakdown by partner countries.

Another source of information on profiling (to be used in combination with the FATS information) could possibly be obtained from the surveys on the international sourcing of Business Functions. The core revenue generating activities of a multinational enterprise (or enterprise group) – as reported on the survey – would be a reflection of the profile of that company. Some of the outsourced support functions of the multinational enterprise, such as IT services, accounting or legal services, could merely be cost to the overall corporation and should therefore not be considered a main economic activity in the profiling.

Finally, an attempt will be made – as part of the joint Eurostat-UNSD project – to directly obtain the information on the structure of the multinational enterprise group from the head offices of a number of large corporations.

6. The joint Eurostat/UNSD project

In 2016, Eurostat and UNSD started discussing their collaboration on a joint project to create a global statistical register on multinational enterprise groups, the so-called Global Groups Register. A project initiation report was established, containing high level views on the outcomes, the impact, the success criteria, the assumptions, the constraint and the risks. The scope of the GGR is to cover all multinational enterprise groups, including those which do not have any unit in Europe. However, the GGR cannot be seen merely as an expansion of the EGR, due to the absence of a global legal framework for the exchange or sharing of micro-data.

The first phase of the project will mainly consist of feasibility tests to prove the possibility of establishing a GGR. Various potential public sources should be evaluated and tested against the EGR. Further, the structure of the GGR database should be well defined and informational needs identified, such as identifying what information we want and need to maintain, and which statistics we want to

compile from GGR. An attempt will also be made to consult with NSIs to improve synergies and to explore some possible kinds of data exchange or validation that do not conflict with NSIs' confidentiality rules.

It is also planned to conduct some profiling tests on relevant multinational enterprise groups with activities in several regions of the world and to analyse further how the results of profiling can contribute to improve the GGR quality. During the test phase some time and effort should also be dedicated to on how to use information from EGR to GGR, with the aim of maximizing the harmonisation and the synergies between the two enterprise groups registers.

Progress on the project will be reported through the UN Expert Group on international trade and economic globalization statistics, which reports to the UN Statistical Commission every year. In the meantime it can be expected that the understanding and the awareness of the GGR project inside the statistical community will increase through discussions in relevant international fora.

7. Concluding remarks

This paper described first of all the development of the Euro Groups Register into a system that can now serve as the European population frame of multinational enterprise groups from which the member countries can consistently draw their samples for FATS surveys. It took about 10 years to move from the initial EGR 1.0 to the current EGR 2.0. The lessons learned are that public sources can be used to set up the register, but that active involvement of the NSIs is necessary to maintain the register in the longer term. The consequences of the NSI involvement were that legal agreements had to be in place for sharing of micro-data and that the maintenance system needed to be rather sophisticated regarding security precautions in access and update authorizations.

In other words, the updating of the EGR 2.0 is very much dependent on the sharing of microdata among the NSIs, which is regulated in Europe via a legal framework. In the absence of such a legal framework at the global level, the creation and maintenance of the Global Groups Register will need to rely more on the availability of information in the public domain. The newly-developed GLEIS may turn out to be a useful instrument to build at least part of the GGR. Other public sources will need to be used in addition. Moreover, UNSD and Eurostat will actively explore the possibility of directly engaging with the head offices of some multinational enterprise groups to obtain information for GGR.

In Decision 46/107 of 2015, the UN Statistical Commission requested promoting and advancing the creation of a global enterprise group register, building on and taking into account lessons learned from the ongoing EuroGroups Register project. This paper is a first response to that request. It shows in general terms the direction to be taken to set up the GGR. The joint Eurostat-UNSD project will more concretely determine if and how GGR can be built as a long-term solution, and will demonstrate how EGR and GGR can complement and benefit from each other.