Economic and Social Council

Economic Commission for Europe

Conference of European Statisticians

Group of Experts on Business Registers

Seventeenth session
Online, 26 – 29 September 2022

Report of the Experts on Business Registers on its seventeenth session

Summary

The document presents the key outcomes of the meeting of the Group of Experts on Business Registers, which was held online on 26 – 29 September 2022. This report is provided to inform the Conference of European Statisticians of the organization and outcomes of the meeting.

The meeting was organised following a decision of the Conference of European Statisticians in June 2021 (ECE/CES/2021/16 and ECE/CES/2021/16/Add.1) and the recommendation of the previous meeting of the Group of Experts on Business Registers in September 2019 (ECE/CES/GE.42/2019/2).

I.   Introduction

1.   The seventeenth meeting of the Group of Experts on Business Registers was held online on 26 – 29 September 2022.

2.   The meeting was attended by representatives from Argentina, Armenia, Australia, Austria, Azerbaijan, Belarus, Brazil, Canada, Chile, Cyprus, Denmark, Ecuador, Egypt, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, India, Indonesia, Ireland, Israel, Italy, Japan, Kazakhstan, Latvia, Lithuania, Luxembourg, Malta, Mexico, Moldova, Monaco, Morocco, Myanmar, Netherlands, New Zealand, Panama, Philippines, Poland, Portugal, Romania, Russia, Serbia, Singapore, Slovakia, Slovenia, South Africa, Spain, State of Palestine, Sweden, Switzerland, Tajikistan, Türkiye, Ukraine, United Kingdom and United States of America.

3.   The meeting was also attended by representatives from the European Central Bank (ECB), Eurostat, Interstate Statistical Committee of the Commonwealth of Independent States (CIS-STAT), International Monetary Fund (IMF), Organisation for Economic Co-operation and Development (OECD), United Nations Statistics Division (UNSD) and World Bank (WB).

4.   The meeting was chaired by David Talan (United States). Shujaat Ansari (Canada), Ramon Bravo (Mexico), Andrew Allen (United Kingdom), Kevin Cooksey (United States), Enrica Morganti (Eurostat) and Annabelle Mourougane (OECD) acted as session chairs.

II.   Organization of the Meeting

5.   The meeting was divided into the following sessions:

(a) Session 1: Classifications and identifiers in the statistical business register

(b) Session 2: The use of administrative data, big data and other data sources

(c) Session 3: Using the statistical business register to produce business statistics

(d) Session 4: Modernization of the statistical business register

(e) Session 5: Country Progress Reports

(f) Session 6: Measuring new forms of employment

(g) Session 7: The statistical business register and the Covid-19 pandemic

(h) Session 8: Globalisation and multinational enterprise groups

(i) Session 9: The digital economy and the statistical business register

(j) Recommended future work

III.   Summary of discussion and the main conclusions reached at the meeting

6.   Recommendations for future work are provided below. The main outcome and summary of the discussions are presented in the annex. The proceedings of the meeting are available on the UNECE website https://unece.org/info/Statistics/events/364567

IV.   Recommended future work

7.   The following topics were proposed for discussion at the joint meeting of the Group of Experts on Business Registers in 2024, subject to the decision of the Bureau of the Conference of European Statisticians:

(a) *The use of administrative data, big data and other data sources.*
New data sources and data collection methods, including web scraping; access to administrative registers; linking/matching data from different sources; data quality assurance.

(b) *Modernization of the statistical business register.*
Use of machine learning and other data science tools for profiling and classification of statistical units and maintaining and validating information in the business register; use of cloud computing and associated risk factors; reengineering of the business register to integrate multiple sources and collection methods.

(c) *Statistical units in the business registers.*
The treatment of complex cases such as, e.g., multinational enterprises, 'virtual' units, factoryless goods producers and special purpose entities and institutional coding.

(d) *Producing statistics based on the business register.*
Linking the business register with other statistical or administrative registers or survey data to produce statistics, e.g., on trade or employment.

(e) *The statistical business register and the digital and the green economy.*
Updating or extending the business register to cover the digital and the green economy; producing statistics on sustainability (including SDGs).

(f) *The maturity model for statistical business register*
Experiences with using the maturity model for business registers and exploring how it may help to sharing experiences among countries.

(g) *Publication and confidentiality.*
Given the costs to produce and maintain the business register, its use should be maximized. How to publish (more) data from the business register to meet user demands for better and more granular business statistics while ensuring confidentiality.

8.   The results of the 2021 Country Progress Reports that were presented during the meeting should be considered when organising the 2024 Expert Group meeting.

9.   Countries that would like to organise sessions or submit contributions for the expert group meeting on business registers in 2024 are encouraged to contact UNECE.

Annex

Summary of the discussion

A. Session 1: Classifications and identifiers in the statistical business register

Session Chair: Andrew Allen, United Kingdom

1.   The session included a joint presentation by UNSD and Eurostat and presentations by the World Bank and OECD.

Information on the update of ISIC and NACE. Ilaria Di Matteo, UNSD, and Claude Macchi, Eurostat

2.   In 2021, the United Nations Statistical Commission (UNSC) endorsed the revision of the International Standard Industrial Classification of All Economic Activities (ISIC Rev. 4) following the recommendations of the UN Committee of Experts on International Statistical Classifications. A main driver of the revision is to better reflect the impact of globalization and digitalisation on economic activities.

3.   In March 2022, UNSC endorsed the revised structure of ISIC for Sections (alphabetic letter), Divisions (2-digit code) and Groups (3-digit code). The update on the most detailed level, the Classes (4-digit code), is ongoing.

4.   The main changes include the following:

a) Section G - Wholesale and retail trade; repair of motor vehicles and motorcycles. Eliminating the distinction between in-store sale and non-store retail sale trade (Division 47).

b) Section G - Wholesale and retail trade; repair of motor vehicles and motorcycles. New recording of wholesale, retail sail and repair of motor vehicles and motorcycles for a more consistent structure in ISIC (Divisions 45, 46, 47).

c) Section J – Information and communication. Major restructuring to reflect development in information and communication technologies.

d) Section P – Education. Updated structure to better align with ISCED 2011.

e) Section R – Arts, entertainment and recreation. Updated to include new activities

f) Cross-cutting: Inclusion of separate groups (or classes) in Divisions where non-financial intermediate goods and services are produced

g) Section K – Financial and insurance activities. Update to reflect innovations in financial services

h) Factoryless goods producers (FGPs). Classifying FGPs in Section C in the same class where they would be classified if they carried out the manufacturing themselves.

i) Update of the explanatory notes of relevant categories to elaborate on activities relevant to climate change mitigation, conservation, management and restoration of ecosystems and biodiversity will be updated.

5.   After global consultation, the full ISIC structure, including for the Classes level, will be finalized and submitted together with explanatory notes and correspondence tables to the 2023 UNSC for endorsement.

6.   NACE (Nomenclature statistique des activités économiques dans la Communauté européenne) is a regional variant of ISIC used for classification of economic activities in the European Union. NACE follows the structure of ISIC and is being updated to reflect the changes in ISIC. The explanatory notes are expected to be ready in March 2023. The legal NACE act is expected to be adopted in 4th quarter of 2023.

7. The new NACE (NACE Rev. 2.1) and the associated updated Classification of Statistical Activities (CPA) will be implemented stepwise beginning with the SBR, which should be ready by end 2025 and most business statics it should be implemented from the reference year 2026. It should be implemented in the national accounts from the reference year 2029. Eurostat will release manuals and guiding materials to support the implementation of NACE Rev. 2.1

Best practices and automated tooling for Industry Classification: Experience from the World Bank. Arthur Giesberts, World Bank

8. The World Bank has developed best practices and automated tooling for industry classification to support its technical assistance program to develop capacity in business statistics in client countries. The tool has a fully developed interface for the coding (in ten languages). It can be used for full automated coding or as a support for manual coding or data validation.

9. Automated classification helps to ensure transparency, objective and coherent rules are applied, reproducible coding and documentation. Challenges in developing and using the tool are related to data quality (when full information is not available), language and national or regional typology. The tool for automated coding is used by 50 countries around the world. The tool facilitates improvements in data quality and cost-efficiency. The World Bank can be contacted for more information.

Profiling MNEs: A collaborative approach from OECD and UNSD. Graham PILGRIM, OECD

10. To obtain better understanding of multinational enterprises (MNEs), OECD and UNSD have developed the Analytical Database on Individual Multinationals and their Affiliates (ADIMA) and the Global Groups Register (GGR) respectively. Both initiatives have their strengths and weaknesses. ADIMA, for example, covers a larger number of MNEs (500) and extends the concept of an MNE to include websites. GGR focusses on providing a more detailed picture of the structure and hierarchy of the MNE.

11. However, users have often been confused by the existence of two views of the same MNE provided by ADIMA and GGR. UNSD and OECD, therefore, have joined forces to build a joint MNE profiling tool to be released by end 2022, combining the strengths of ADIMA and GGR. The tool will focus on the 500 largest publicly listed companies in the world with information of various characteristics (e.g., names, addresses, identifiers). Data sources have been identified through a quite manual and time consuming process. From 2023 and beyond it is the plan to investigate adding more data sources, expanding MNE coverage, broadening partnerships and possible linking to national SBRs.

Session summary

12. ISIC is fundamental for classifying statistical units in the SBR and facilitating international comparisons. The implementation of the updated version of ISIC and regional variants such as NACE, will be a major priority for statistical offices.

13. Automated tools and processes linked to machine learning and text analysis are being developed in countries and by organisations. The implementation of such tools will play a growing and important role in future classification of statistical units.

B. Session 2: Use of administrative data, big data and other data sources

Session Chair: Annabelle Mourougane, OECD

14. The session included presentations by Germany, Singapore and Eurostat.

Integrating trade register data in the Statistical Business Register – recent developments in Germany. Lorna Syme, Robin Lorenz, Germany

15. From 2023, Destatis plans to utilize data from the German trade register to maintain the SBR. The trade register includes information about the name, address and legal form and

status (current/closed) for the registered firms. Through a unique identifier these variables can be used to update and validate information in the SBR. The trade register is updated daily so using it can help to improve the timeliness and quality of the SBR. When the linkage is established, the SBR can be updated automatically.

16. The challenge of using the trade registers include a) Extracting relevant events, e.g., change or address or change in legal status etc. from unstructured text and different formats; b) Treatment of simultaneous changes, e.g., of names and addresses, and; c) The register number in the trade register is a unique identifier of current registrations in the register, not of the legal unit. However, the register numbers of closed firms may be reused for new ones, which is not in line with the continuity rules for legal units in the SBR. In future, information about business activities from the trade register can be used to determine a firm's NACE classification. There may also be a possibility to update the SBR based on web scraping since German firms are obliged to publish their trade registration number on their website.

Experimental Use of Machine Learning and New Data Sources in the Updating of the Statistical Business Register. Chee Rong Can, Peh Li Lin, Singapore

17. To meet user demand, Singapore Department of Statistics (DOS) has launched two pilot projects to explore and utilise new data sources. The first project investigates the use of web data to profile firms with internet presence. Through web scraping and machine learning (ML) and text mining it is possible to identify firms with internet presence and use the information to profiling and classifying firms. New insights can be generated by integrating information on the firms' internet presence with firm characteristics in the SBR. Almost half of all firms in Singapore had a website in 2021.

18. The second project looks into extraction of data from firms' financial statements. There is a rich amount of financial information available but often in unstructured format. DOS is testing whether/to what extent Artificial intelligence (AI) using text analysis and algorithms can be used to automatically identify and extract information from financial statements. To this end, an AI model is developed based on training datasets (i.e., a small set of financial statements) and deployed for data extraction from a large volume of financial statements. AI helps to improve operational processes in data collection and data processing and ensure that more detailed data are available for analysis. A DOS data science team assists with the development and testing of tools and software for web scraping and ML/AI.

Web Intelligence on MNEs. Alexandre Depire and Antonio Laureti Palma, Eurostat

19. *Web Intelligence* for statistical production aims to develop statistics based on information from the Internet using innovative data collection methods. Eurostat has conducted a study to retrieve information from the web for 200 selected MNEs operating in EU and EFTA using web scraping and other data science tools that can be used for extracting and exploring information on MNEs' structure that is available on the internet.

20. In the 'discovering' phase most relevant data sources were identified for quantitative and qualitative data, including annual reports, the Global Legal Entity Identifier Foundation (GLEIF), wikidata etc. In the 'implementation' phase, coverage and data quality of the web scraped information is assessed by comparison with variables in the EGR (e.g. persons employed, turnover, number of LEUs).

21. It was found that public sources appear to be useful to fill in missing values and assess and consolidate information of the MNEs in the EGR. Information on employment and legal unit needs further analysis to understand the discrepancies found. Public sources can also be used as early detection of changes to trigger necessary actions to maintain the EGR.

Session summary

22. A wide variety of data sources and collection methods are available and can replace or supplement conventional data sources and methods in the production of official statistics.

With evolving technologies, it is possible to tap on the vast and potentially valuable resource of information and gain access to a much bigger pool of data to derive new indicators or replace/supplement existing data collection/compilation.

23.   New data sources and collection methods comes with both opportunities and challenges. The quality and cost efficiency of new data sources must be evaluated and weighted against alternatives. New data sources may be suitable for some variables but not for others. Access to new data sources, availability of appropriate IT infrastructure and skills, cooperation with data owners and integration of new data sources into the SBR production process are also key challenges.

C. Session 3: Using the statistical business register to produce business statistics

Session Chair: Shujaat Ansari, Canada

24.   The session included presentations by Australia, United States, Austria and Mexico.

Development of ABS Business Demography Statistics. Michael Biddington and Natasha Miller, Australia

25.   The Australian Bureau of Statistics (ABS) presented its work to update the annual Counts of Australian Businesses, Entries and Exits (CABEE) publication, which contains data by industry, sector, type of legal organisation, size range (turnover and employment) by geographies. To this end, an extensive consultation with users was carried out regarding quarterly experimental data and annual CABEE data. Among other things, the consultation showed demand for more timely data (both quarterly and annually), more granularity, breakdown on geographical area and longer time series for analysis.

26.   To meet user needs ABS has launched an online 'Table Builder' that allows external users to easily define their own tables without breaking confidentiality. For instance, users can customise employment and turnover data and combine with different levels of geography or other business demographics. The tool is also expected to free resources in ABS. On the measurement side, ABS reported on challenges with deciding on whether smaller firms are alive or dead and modelling surviving rates.

Marine Economy Statistics: an SBR Collaboration Case Study. Kevin Cooksey, United States

27.   The presentation gave an overview of the SBR produced by the U.S. Bureau of Labor Statistics (BLS), its scope and structure and sources. BLS together with the U.S. National Oceanic and Atmospheric Administration (NOAA) since 2010 have leveraged a data sharing agreement to deliver high-quality economic data on the marine economy – that is, the portion of the economy that is dependent upon the oceans, seaports, and Great Lakes.

28.   This multi-agency collaboration has resulted in extremely valuable statistics. The statistical products that have been generated provide critical information surrounding the employment, wages, and establishments subject to impacts of sea level rise or flooding. Areas within the marine economy include many disadvantaged communities that are especially threatened. The collaboration has confirmed that valuable statistics can be produced based on the SB and that remote access to the BLS SBR can be very valuable.

Challenges in the production of Business Demography statistics in the indication of the EBS regulation. Thomas Stockinger-Glatz, Austria

29.   Since 2004 Statistics Austria has produced business demography (BD) statistics utilizing additional administrative data sources to ensure coverage and monitoring of enterprise life cycles from birth to death. From the reference year 2021, Statistics Austria plans to produce BD statistics based only on the SBR.

30.   Challenges included the following: a) Ensuring the number of active enterprises are consistent between SBR, BD and structural business statistics; b) Since BD statistics require longitudinal data consistency, it is necessary to deal with both past incomplete coverage of enterprises in the BD and subsequent structural changes caused by manual or automatic enterprise profiling. c) Impact of classical predecessor-successor mapping as well as longitudinal n:m mapping between enterprises (which are built in a transversal, time slice sense) and enterprise births and deaths; d) Dealing with time lags in administrative data, especially turnover and income tax data, where BD purposes may differ from the purpose of the SBR and other business statistics.

The experience of Mexico for producing subnational figures on exports based on linking trade and business statistics. Gerardo Durand, Mexico

31.   INEGI has developed subnational statistics on export by linking the SBR with information from other data sources, including trade statistics, structural business statistics and geospatial information. The linking is made at enterprise level through a unique enterprise identifier. This way, INEGI has been able to publish so-called 'Exports by States' statistics, which provides quarterly information on the export value of goods and the contribution of each of the Mexican 32 states to total foreign trade. This has met an increased demand for granular information about the participation of enterprises in international trade and how they are engaged in global production.

32.   Through micro data linking it has also been possible to produce other statistics, such as the profile of manufacturing enterprises of Mexico and the early monthly estimates of Mexico's level of manufacturing production using electric energy consumption data. The SBR plays a central role in linking data from different sources. Micro data linking is a powerful tool to produce new and more granular statistics to meet user needs. It also helps to reduce response burden and costs.

Session summary

33.   The SBR is in the centre of producing business statistics and can play the role as the backbone for producing new and more granular statistics through linking with data from other sources, i.e., other statistical registers, administrative registers or survey data. Linking and integration of existing data sources also helps to reduce response burden and is a cost-efficient way of producing statistics. The existence of a unique identifier is crucial for linking information from different data sources.

D. Session 4: Modernisation of the statistical business register

Session Chair: Ramon Bravo, Mexico

34.   The session included presentations by Germany, Eurostat, Netherlands and Switzerland.

Handling complex entities in the Business Register - supported by adequate IT-tools. Roland Sturm, Simon Rommelspacher, Germany

35.   The presentation gave an overview of the treatment of complex statistical units in the German SBR focusing on enterprises and enterprise groups. For both enterprises and enterprise groups elaborated procedures and tools to handle the creation and maintenance of the units have to be implemented. A combination of automated, semi-automated and manual procedures is being implemented. There is a limit for the use of automated algorithms for the more complex units in the SBR. Complex units need a top-down view. The most important units in the Business Register have to be quality-checked and worked on manually by experienced staff like profilers and analysts of enterprise group structures.

36.   Destatis has developed a tailor-made IT tool, iProfAnT (integrated Profiling Analysis Tool). iProfAnt assists staff in handling information on units and relations between units, including enterprise group structure, quality control and documentation. The results are loaded semi-automatically into the SBR. Continuous changes require annual reviews and

updates of enterprise groups. Some groups are more dynamic than others. The largest/most dynamic needs careful check every year.

Eurostat Strategy and solutions for the future EGR. Merja Jalava, Enrica Morganti, Ioannis Sopranidis, Eurostat

37. The EuroGroups Register (EGR) provides the statistical infrastructure to the European Statistical System (ESS) to support the production of globalisation statistics. It consolidates input data received from the national statistical offices of the European Member States and EFTA countries and a commercial data provider and creates a consolidated view on the structures of the multinational enterprise (MNE) operating in the Union.

38. Eurostat is preparing further improvements of the EGR to meet growing user needs. As part of this, priority will be given to the largest set of MNE groups with a sizable effect on European economy to achieve better timeliness and higher accuracy for this group of MNEs. Priority will also be given to implement new sources and technologies and user friendly online interfaces.

Towards an enterprise centred approach to data collection and processing. Gert Buiten and Anita Vaassen-Otten, Netherlands

39. Statistics Netherlands is working on a new integrated uniform production system for business statistics. The main goals of this renewal program are more flexible outputs, a more agile and efficient production process, and facilitating more possibilities for innovations and further developments against limited sources.

40. A key aspect is to implement an enterprise centred approach to data collection and processing for large enterprise (already in place) and smaller companies in a more automated way. It is also the plan to develop an 'early warning system' (EWS) using web scraping and language processing techniques to detect possible important enterprise events from online sources. Information from the EWS and other sources can also be used to generate and update files for enterprises and as (rule based) triggers for actions of profilers and statisticians, while documentation resulting from these actions are automatically added to the file.

The Data Innovation Project NOGAuto. Cindia Duc Sfez and Lorenz Helbling, Switzerland

41. The Swiss Federal Statistical Office (FSO) presented its data innovation project NOGAuto, which aims to augment and complement the existing statistical production at the FSO. This project is realised to standardise and automate the coding of the economic activity of enterprises using supervised machine learning methods applied to already available data (e.g., data from surveys, descriptions in the commercial register, explanatory notes for classifications). It is envisaged this will save time and increase cost efficiency.

42. The success of the ML based coding is evaluated by the prediction power of the classification of units at different levels of breakdown. The use of ML and language analysis has been tested on more than 1 mio. observations, in general with very good results in terms of predictive accuracy. Next step will be to deploy web applications and retrain ML language algorithms before putting the system into production. It is planned to use ML, which has been developed with a nice user interface for, implementing the new ISIC/NACE.

Session summary

43. The modernisation of the SBR covers a wide range of areas and initiatives, including, e.g., the implementation of more streamlined and automated production processes where possible. This can help to increase the quality of the SBR and statistics that draw on the SBR, reduce risk of human errors, improve cost efficiency and documentation. At the same time, it is important to maintain and, if possible, extent the flexibility of the production system.

The modernization also includes data integration with other statistical domains and data sources. Implementation of new data science tools such as machine learning and automated text analysis will be important for continuous modernisation.

E. Session 5: Country progress reports

44.   Arturo Blancas (Mexico) presented a summary of the outcome of the 2021 country progress reports (CPRs). 55 countries/organisations submitted a CPR for 2021, three of which from Africa, 12 from the Americas, 13 from Asia and the Pacific and 27 from Europe.

Current situation of SBRs in countries

45.   The presentation of the current situation of SBRs in countries highlighted the coverage of the SBRs in terms of the number of employees in the units of the SBR, the number of units (enterprises or legal units) in the SBR and the use of geographical coordinates; 53% of the replies indicated that the SBR includes geocoding. Progress and developments in the past year, future plans and challenges where most work was reported are listed below, together with the results of the two previous CPRs:

Progress and developments in the SBR

	2021 CPR	**2020 CPR**	**2018 CPR**
1	Data sources	Maintenance	Units
2	Maintenance	Units	Maintenance
3	Units	Data sources	Roles of the SBR
4	Quality	Roles of the SBR	Quality
5	Coverage	Dissemination	Data sources

Future plans for the SBR

	2021 CPR	**2020 CPR**	**2018 CPR**
1	Data sources	Data sources	Maintenance
2	Units	Coverage	Quality
3	Quality	Quality	Data sources
4	IT considerations	Units	Units
5	Coverage	IT considerations	Roles of the SBR

Challenges for the SBR

	2021 CPR	**2020 CPR**	**2018 CPR**
1	Data sources	maintenance	Roles of the SBR
2	IT considerations	Units	Units
3	Maintenance	Planning and governance	IT considerations
4	Quality	Data sources	Data sources
5	Roles of SBR	Roles of SBR	Planning and governance

46.   In summary, the CPRs are considered useful for providing overview of current developments, plans and challenges in SBRs and giving direction for future work and priorities. There was a big thank you to all countries that replied to the survey.

47.   Suggestions were made if it would be possible to link future CPRs to the maturity model. Given the potentials of big data and the increased use of data science tools (web scraping, ML, automated algorithms) it could be considered if more details on these should

be included in the CPR. It could also be considered if the coverage of the digital economy and the green economy should be covered.

48.   INEGI/Mexico was thanked for carrying out the CPR survey and summarising the results.

F. Session 6: Measuring new forms of employment

Handbook on forms of employment. Vincent Hardy, Canada

49.   The recently released *Handbook on forms of employment* was adopted by the CES plenary session in June 2022. The Handbook presents a conceptual framework to classify and analyse forms of employment. The framework is centred around two main dimensions: *work relationships* (as defined in the International Classification of Status in Employment 2018, ICSE-18) and *work modalities* (the way in which work is coordinated, performed, and compensated). It provides definitions of key concepts, general principles and guidelines as well as a list of recommended indicators to facilitate national statistical efforts to classify, measure and track diverse forms of employment. The Handbook acknowledges and refers to existing international recommendations, such as those prepared by Eurostat, OECD and ILO. The framework is also aligned with the International Classification of Status in Employment 2018 (ICSE-18) and the UNECE statistical framework on measuring quality of employment.

50.   In ICSE-18, the breakdown in employed and self-employed persons in the previous version of status in employment, ICSE-93, is replaced by a more detailed breakdown in two hierarchies according to authority and Economic risk. Given the costs of conducting surveys using the SBR to produce employment statistics through linking to employment statistics registers or administrative data will be helpful. This can help to produce employment statistics for specific sectors of the economy, e.g., gig employment or digital platform work or other forms of employment. Implementation of ICSE-18 in NSOs will also impact the production of entrepreneurship statistics.

G. Session 7: The statistical business register and the Covid-19 pandemic

New business statistics data series: SBR and Covid-19 pandemic. Venu Nair, New Zealand

51.   During the COVID-19 pandemic, Statistics New Zealand experienced a big demand for business statistics from various government agencies, economic research institutes, business organisations and journalists. Traditionally, Stats NZ Business demography statistics have been an annual series which was not helpful in measuring the immediate effect of the pandemic. To meet user needs Statistics New Zealand enhanced the SBR maintenance processes to support the production of additional business statistics during the pandemic.

52.   In addition to the regularly administrative data sources used for the ongoing SBR maintenance, new data sources were introduced to identify the lifecycle status of businesses more rapidly. These included more frequent value-added tax and employment data, lists of businesses receiving wage subsidies from the Government, and electronic card transaction data. The indicator series were derived from monthly snapshots of the SBRD on, e.g., the number of enterprises at national level and by industry, number of enterprise entries and exits, and a monthly employment indicator for an early indication of changes in the labour market. Additional indicators and breakdowns are planned for publication in coming months. The presentation offered a good example of how to produce more timely indicators to serve user needs.

H. Session 8: Globalisation and multinational enterprise groups

Session Chair: Enrica Morganti, Eurostat

53.   The session included presentations by Michael Connolly, IMF, Israel and Eurostat.

Update of the SNA and requirements for the SBR. Michael Conolly, Central Statistical Office, Ireland

54.　Economic globalisation is one of the key priorities in the update of the 2008 SNA. Michael Connolly, who is co-chairing the SNA Task Team on globalisation presented the work so far and the implications and requirements the SNA update may have for the SBR. The Task Team has focused its work on valuation of imports and exports, multinational corporations, transfer pricing, special purpose entities (SPEs), economic ownership of intellectual property, factoryless goods produces (FGPs), global value chains, typology of global production and marketing assets.

55.　The presentation gave more details on the proposed treatments of MNEs (with focus on control), SPEs (and their residency), global value chains, and the measurement of flows of goods and transactions in FGPs and merchanting arrangements based on exchange of economic ownership. FGPs are recommended to be recorded as manufactures and deemed to produce goods rather than services, consistently with the proposed update for ISIC.

56.　It was noted that (international) data sharing is not mature enough to allow recoding on a national basis, and that a resident approach will be followed. It may not be possible to include all variables needed in the SBR, in which cases links to where these can be found would be helpful.

Update of statistical standards and implications on calibration of the business register. Andrew Baer, IMF

57.　The presentation gave an overview of key recommendations for the update of the Balance of Payments Manual and the SNA Manual for which the inclusion of additional or changed information collected by the SBR would help with their compilation.

58.　Proposed recommendations concerns, among other things, supplementary data on current account items broken down by ownership/nationality, the treatment of MNEs and SPEs, classification of FGPs. Inclusion of information on the ownership/nationality of businesses and identifying FGPs and SPEs in the SBR would help countries in implementing the new statistical standards. The presentation outlined in more details the implications for the SBR in relation to digitalisation and globalisation. SBR experts may need to identify specific characteristics of units affected by these updates to aid data compilation and undertake correct classification in macroeconomic statistics.

Better assessing the impact of globalization on business statistics: toward an implementation of Groups and Enterprises in the Business Register. Agnès Topiol, Israel

59.　To better measure the impacts of economic globalisation, statistics Israel has initiated a pilot project to test the feasibility of introducing enterprises and enterprise groups in the SBR, which until recently was based only on legal units. The introduction of enterprises and enterprise groups aims to provide a better and more up to date picture of the economic development, improve international comparability and contribute to more detailed national accounts. Different data sources, including tax registers, commercial databases and OECD-ADIMA, are used to delineate domestic and foreign enterprise groups. The largest/more complex groups are identified through manual profiling. This new approach is supposed to drastically change current working process to collect and produce business statistics.

60.　Remaining challenges includes developing an algorithm to identify the main economic activity of enterprise groups; selection of enterprise groups that will have to be manually profiled based on size and complexity of the groups and available resources; introducing new variables for enterprise groups when possible; and preparing work processes to implement and update the SBR on a yearly basis.

Disseminating statistics on MNE groups in EGR. Agnes Bikauskaite and Isabelle Collet, Eurostat

61.   The EuroGroups Register (EGR) is the statistical business register of MNE groups operating in European countries. It compiles and collects information on MNE groups from national statistical offices in EU member states, EFTA countries and commercial data sources. Based on a yearly cycle, after consolidation and validation, the EGR is updated with information on MNE' characteristics, global structures, demographic events, control and ownership and their associated enterprises and legal units.

62.   The development of the EGR was trigger by the need to better describe globalisation phenomena and activities of MNEs and the need for harmonised SBR populations to derive consistent cross-border statistics. The presentation gave an overview of the main findings of the 2020 reference year. Access to EGR microdata is restricted to European national statistical authorities. Eurostat disseminates EGR metadata and some statistical article on the structure of multinational enterprise groups.

Session Summary

63.   The economic globalisation is a main challenge for SBRs and for economic statistics in general. The measurement of the economic activity and data collection are becoming more complex and difficult, and in part extend beyond the borders of countries. The development of complex global production systems and the activities of MNEs requires the development and implementation of new concepts, data sources and methods and practices to understand them. The challenge of the SBR is to collect and provide coherent and relevant information in a continuously changing world.

64.   The update of the international standards on balance of payments and national accounts will include implications and requirements for the SBR to ensure relevant information to compile macro-economic statistics according to the new standards, which will be a major challenge in most countries. Inclusion of enterprises and enterprise groups in the SBR seems still more important as globalisation and MNEs plays an increasing role in many countries

I.   Session 9: The digital economy and the statistical business register

65.   The session was based on a presentation by Mexico.

Linking the SBR with registers of companies in the web to measure the Internet Economy of Mexico. Hugo Hernandez, Mexico

66.   Activities on the Internet plays a still bigger role. In Mexico in 2019, companies received 5% of their income from websites. From 2013 to 2020, E-commerce grew from 3% to 6% of GDP. On this background, together with other countries in Latin America, Mexico participated in a project aiming at measuring the Internet economy in the countries.

67.   A private company provided information of companies (names and addresses etc.) with presence on the Internet. Through use of a text algorithm the companies were grouped into categories A-E depending on their use of the Internet: A) no website; B1) with web page, but without carrying out commercial transactions; B2) with an active presence, carrying out commercial transactions but its main activity is carried out in person; C) electronic commerce; D) online services; E) online services related to information and communication technologies.

68.   In the next step, this information was linked to the SBR, which made it possible to identify the characteristics of the companies in each of the categories. The characteristics included the type of company (enterprise with more than one establishment or only one), age of enterprise, economic activity, number of employees, revenue and gross value added. The results will be published as experimental statistics. Because the data set was obtained by web scraping it was not complete, which made the linking with the SBR difficult. It is the plan to measure the Internet economy on annual basis. INEGE will reach out to private companies

that can provide relevant information about companies with activities on Internet and consider the classification of companies according to their use of the Internet.

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