United Nations ECE/CES/2018/5



Economic and Social Council

Distr.: General 3 April 2018 Original: English

Economic Commission for Europe

Conference of European Statisticians Sixty-sixth plenary session Geneva, 18–20 June 2018 Item 4(f) of the provisional agenda Entrepreneurship statistics

Guidelines on the use of statistical business registers for business demography and entrepreneurship statistics

Note by the Task Force on entrepreneurship statistics

Summary

The document provides an extract of the *Guidelines on the use of statistical business registers for business demography and entrepreneurship statistics*. The purpose of the Guidelines is to provide practical guidance on how to develop and maintain the statistical business register to support the production of business demography and entrepreneurship statistics.

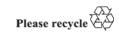
The Guidelines were developed by the Task Force on entrepreneurship statistics, composed of representatives of the Netherlands (Chair), Austria, Canada, Estonia, Germany, Ireland, Israel, Italy, New Zealand, Norway, Poland, Portugal, Republic of Korea, Slovenia, United Kingdom, United States, Eurostat, United Nations Food and Agriculture Organization, United Nations Population Fund and United Nations Economic Commission for Europe.

The current extract of the Guidelines is prepared for translation purposes. It includes selected parts of the Guidelines: (i) introduction; (ii) background and acknowledgements; (iii) importance of measuring entrepreneurship; (iv) statistics for measuring entrepreneurship; (v) business demography and international comparability; (vi) aims of the Guidelines; and (vii) overview of the Guidelines.

The full text of the Guidelines has been sent to all members of the Conference for electronic consultation. It is available at: http://www.unece.org/index.php?id=47411. Subject to positive outcome of the consultation, the Guidelines will be submitted to the 2018 plenary session of the Conference of European Statisticians for endorsement.

GE.18-05155(E)







I. Introduction

- 1. Business demography and entrepreneurship statistics provide information about the creation, survival and dissolution of businesses and about the characteristics and activities of entrepreneurs. Over the previous decades, interest in these types of statistics has increased as they are sources of information about innovation, competitiveness, economic growth and job creation. Such information is used to inform business policies, for economic planning, and for analytical and research purposes.
- 2. The production of business demography and entrepreneurship statistics of suitable quality requires good data sources. The statistical business register (SBR), which plays a central role in the production of economic statistics, can provide the statistical infrastructure required to produce business demography and entrepreneurship statistics in the form of structured data on business units and their characteristics and activities. The SBR can be the sole source of data, or may be combined with data from other existing sources. Use of the SBR in addition to, or instead of, other sources, provides an opportunity to reduce costs, increase efficiency and improve the quality of the resulting statistics.
- 3. The Guidelines provide practical guidance on how to develop and maintain SBRs to support the production of business demography and entrepreneurship statistics. The Guidelines contain definitions and compilation guidance for key demographic events, and they propose business demography indicators that can be produced directly from the SBR. They also describe the requirements for the SBR to produce business demography indicators and they provide guidance on linking the SBR with other data sources.
- 4. The Guidelines were developed by a UNECE Task Force established by the Bureau of the Conference of European Statisticians.

II. Background and acknowledgements

- 5. In 2015 the Conference of European Statisticians (CES) endorsed the UNECE Guidelines on Statistical Business Registers (SBRs), which provides practical guidance and recommendations on the establishment and maintenance of SBRs.
- 6. The CES recognized the central role of SBRs in the production of economic statistics and the potential for using SBRs to produce business demography and entrepreneurship statistics. The CES also recognized a growing interest in entrepreneurship statistics as an area where new statistics could be developed based on the SBR and other datasets that national statistics offices have already assembled.
- 7. The growing importance of entrepreneurship statistics was already noted by the Bureau of the CES in 2013 when the future work on entrepreneurship statistics was discussed, based on an in-depth review prepared by OECD and Eurostat. The review highlighted areas where further work was needed to improve the production of business demography and entrepreneurship statistics, for example, by developing linkages between datasets, and longitudinal data sets.
- 8. With this background, in July 2016 the Bureau of the CES established a Task Force to develop guidelines for producing business demography and entrepreneurship statistics. Following on from the terms of reference for the Task Force, the guidelines describe the statistical infrastructure required to support the production of business demography and entrepreneurship statistics. More specifically, they provide:
- (a) Guidance on how to develop SBRs to support the production of business demography and entrepreneurships statistics, including:

- Definitions and compilation guidelines for key demographic events.
- Suggestions of demographic statistics that could be produced directly from SBR.
- Recommendations on the requirements for the SBR to produce business demography information, longitudinally, annually and sub-annually, and by region within country.
- (b) Guidance on linking the SBR with information from other data sources to produce business demography and entrepreneurship statistics.
- 9. The Guidelines take into account existing relevant material, in particular the Guidelines on Statistical Business Registers (UNECE, 2015), the Manual on Business Demography Statistics (Eurostat and OECD, 2007) and the Business Registers Recommendations Manual (Eurostat, 2010) and make use of the definitions contained in these documents.
- 10. The target audiences for the Guidelines are SBR statisticians in national statistics offices, experts in the production of business demography and entrepreneurship statistics as well as users of the statistics.
- 11. In the course of drafting the Guidelines over the period 2016 to 2018, the Task Force mainly worked through the exchange of e-mails and audio conferences. The Task Force had also two face-to-face meetings. Drafts of chapters and relevant materials were shared on a common designated UNECE wiki page.
- 12. During the first half-year, the Task Force agreed on the time plan of activities and worked on a detailed outline for each chapter of the Guidelines. The structure and content of the draft chapters was discussed in detail during the first face-to-face meeting that took place in Geneva over the period 13-14 June 2017. During the meeting the Task Force members noted the importance of incorporating country examples and suggested including a glossary that would be in line with the 2015 UNECE SBR Guidelines.
- 13. An outline of the draft Guidelines was presented to a broader audience in September 2017 during the joint UNECE, Eurostat and OECD biennial meeting of the Group of Experts on Business Registers. Meeting participants were given an opportunity to submit written comments and suggestions on the draft chapters. The comments received were taken into account in subsequent versions of the Guidelines.
- 14. The second face-to-face meeting of the Task Force took place on 27 September 2017 in Paris, back-to-back with the meeting of the Group of Experts on Business Registers. The draft chapters and the time plan for remaining work were discussed during this meeting.
- 15. From September 2017 to January 2018 the Task Force continued to work on the draft chapters and to clarify outstanding issues. With the help of an editor, a draft version of the guidelines was finalised in March 2018 and circulated to all members of the CES for written consultation.

III. Importance of measuring entrepreneurship

16. The role of entrepreneurs in stimulating economic growth has received renewed attention in the past two decades, when the extraordinary development of information and communication technologies and other advanced technologies fostered new breeds of startups, as well as a new attitude toward entrepreneurial activity. Here by *entrepreneurs* we mean business owners who seek to generate value through the creation of economic activity by identifying and exploiting new products, processes or markets, and by *entrepreneurship* we mean the phenomena associated with entrepreneurial activity.

- 17. The interest in entrepreneurship was further stimulated by the economic recession that followed the global financial crisis in 2007/2008. The notion that entrepreneurship is a crucial driver of economic growth has become part of the policy narrative on how to ensure growth and prosperity across the world, though the theoretical foundations for such an assumption are, to some extent, still under development. While the work of Schumpeter at the beginning of the 20th century had already identified entrepreneurship as a driving force for innovation and an engine for economic development, it was only in the past two decades that scholars formally proposed considering entrepreneurship as an additional factor in explaining economic growth. The assumption is that entrepreneurship is distinct from human capital and R&D, the two drivers of growth already put forward by endogenous growth theories, and that it constitutes the missing link between investment in new knowledge and economic growth. Entrepreneurs, via business creation, exploit opportunities provided by new knowledge and ideas that have not yet been discovered or commercialised by incumbent firms.
- 18. A second mechanism is also at work. The Schumpeterian process of "creative destruction" itself is a driver of economic growth. New firms entering the market displace obsolete firms, and the business dynamics of entry and exit contribute to productivity dynamics and eventually to economic growth.
- 19. Against this positive backdrop, the literature on entrepreneurship also acknowledges that entrepreneurs are a heterogeneous group, encompassing very different types. Innovative "Schumpeterian" entrepreneurs, who exploit market opportunities or innovative ideas coexist with "necessity" entrepreneurs, who start a business out of necessity as they do not have another means of generating income. While necessity entrepreneurs (also called "survival" entrepreneurs) may eventually become successful, not all entrepreneurial activities have the same, positive impact on productivity and growth. Entrepreneurship is more or less conducive to knowledge creation and diffusion, and economic growth, depending on how and where it occurs, for example in which sectors and/or locations.
- 20. The impact of entrepreneurship has also been associated with poverty reduction and social inclusion. Stimulating entrepreneurial activities among individuals who belong to disadvantaged or marginalised groups (because of their age, gender, ethnic characteristics, or lack of education and skills, or the geographical area where they live) can be an important vehicle for social inclusion, and it can contribute to poverty reduction by bringing into a country's active labour force segments of the population previously excluded.
- 21. To advance understanding of the role of entrepreneurship in economic growth and social inclusion, sound evidence on the entrepreneurial phenomenon, and its determinants and impacts, is critical. However, empirical research on entrepreneurship continues to rely to a large extent on private data sources and much less on official statistics¹.
- 22. Indeed, suitable and comprehensive data for the analysis of entrepreneurship are not always are found in national statistical offices (NSOs). The main challenge is that entrepreneurship data span a multitude of domains. They cross the traditional boundary between economic and social statistics, by encompassing topics such as the demography and performance of businesses, the profiles of individuals who create enterprises, the attitudes toward entrepreneurship, and the regulatory environment for setting up new businesses.

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¹ At the international level, three collections of entrepreneurship data developed outside NSOs have gained popularity among analysts: the *Global Entrepreneurship Monitor (GEM)*, the *Eurobarometer on Entrepreneurship*, of the European Commission, and the World Bank's *Entrepreneurship Databases*. The first two collections rely on ad-hoc surveys of individuals, while the third mainly consists of administrative data on business registrations.

- 23. The Guidelines focus on economic statistics and describe concepts and methods for the production of business demography statistics to complement the wealth of business data already produced by NSOs, in particular structural business statistics. The latter have existed for many years and describe the structural characteristics of the business population, for example, business counts, employment, value added, and turnover. However, they cannot adequately account for the entrepreneurial dynamism as reflected by the creation of new businesses, their survival, growth or death. Business demography statistics, on the other hand, capture these fundamental aspects of the phenomenon of entrepreneurship.
- 24. The Guidelines are meant to assist NSOs and other statistical institutions in developing the production infrastructure, in particular the SBR, for compiling statistics on business demography and entrepreneurship by linking business demography data with other business and social statistics data.
- 25. While the primary purpose of the Guidelines is to provide advice on how to develop the SBR to facilitate the production of business demography statistics and related statistics, the Guidelines acknowledge that there are other approaches. Not having a fully developed SBR should not be considered an insuperable obstacle to production of business demography statistics.

IV. Statistics for measuring entrepreneurship

- The topic of entrepreneurship was included as a statistical area in the Classification of Statistical Activities (CSA) only recently, in 2010.² Specifically, entrepreneurship is categorised under Domain 3: Environment and multi-domain statistics. Entrepreneurship statistics, now statistical area 3.3.7, cover "the measurement of the determinants, performance and impact of entrepreneurial activities of people and organizations". This classification acknowledges that entrepreneurship statistics are a multi-domain statistical area. For example, data on self-employment and business demography on the one hand, and data on access to finance for new and young businesses on the other, are both key elements in statistical analysis supporting the study of entrepreneurial phenomena. The classification has been inspired by the conceptual framework developed by the OECD-Eurostat Entrepreneurship Indicators Programme³, which characterises as separate categories the indicators of entrepreneurial determinants, performance and impact. As illustrated in Figure 1, entrepreneurial performance refers to the manifestation of entrepreneurial activity, e.g., the creation of new businesses, their growth and survival, or the innovation ability of start-up and young firms. The Guidelines are concerned with, and provide guidance for, the production of indicators of entrepreneurial performance.
- 27. The Guidelines deal with measures of *entrepreneurial performance* based on business data, notably the two types described below.

² The Classification of Statistical Activities is an international standard for describing and categorising official statistical work by domain. See https://unstats.un.org/unsd/iiss/Classification-of-International-Statistical-Activities.ashx

³ The OECD-Eurostat Entrepreneurship Indicators Programme (EIP), launched in 2006, develops policy-relevant and internationally-comparable indicators. The Programme produced methodological tools to structure the development and collection of indicators of entrepreneurship: "Eurostat-OECD Manual on Business Demography Statistics" (Eurostat & OECD, 2007), and the Working Papers "Defining Entrepreneurial Activity: Definitions Supporting Frameworks for Data Collection" (Ahmad & Seymour, 2008) and "A Framework for Addressing and Measuring Entrepreneurship" (Ahmad & Hoffmann, 2008).

Figure 1 Conceptual framework of the OECD-Eurostat Entrepreneurship Indicators Programme

Determinants							Entrepreneurial performance	Impact
Regulatory framework	Market conditions	Access to finance	Knowledge creation and diffusion	Entrepreneuria l capabilities		Culture	Firm based	Job creation
Administrative burdens for entry	Anti-trust laws	Access to debt financing	R&D investment	Training and experience of entrepreneurs		Risk attitude in society	Employment based	Economic growth
Administrative burdens for growth	Competition	Business angels	University/ industry interface	Business and entrepreneurship education (skills)		Attitudes towards entrepreneurs	Wealth	Poverty reduction
Bankruptcy regulation	Access to the domestic market	Venture Capital	Technological co-operation between firms	Entrepreneurs hip infrastructure		Desire for business ownership		Formalising the informal sector
Safety, health and environmental regulations	Access to foreign markets	Access to other types of equity	Technology diffusion	Immig	Entrepreneur hip education (mindset)			
Product regulation	Degree of public involvement	Stock markets	Broadband access					
Labour market regulation	Public procurement							
Court and legal framework							V	
Social and health security								
Income taxes:			Firms		Employment		Wealth	
wealth/bequest taxes			Enterprise birth rates			of high growth by employment)	Share of high growth firms (by turnover)	
Business and	Patent system		Enterprise death rates		Share of gazelles (by employment)		Share of gazelles (by turnover)	
capital taxes	s standards Business chui		urn	Ownership rate start-ups		Value added, young or small firms		
			Net business population growth		Ownership rates business population		Productivity contribution, young or small firms	
			Survival rat	tes	Employment in young firms		Innovation performance, young or small firms	
			Proportion of young firms		Average firm size after x years of survival		Export performance, young or small firms	

Source: (OECD, 2017)

- 28. Statistics that focus on businesses. These primarily consist of business demography statistics measuring the births, deaths, survival and growth of businesses as well as the employment changes associated with these events. Also, by linking business demography data with other business statistics, important indicators can be generated to describe the performance of new or young enterprises versus that of mature enterprises in domains such as trade or innovation. Examples of linked business data are statistics on exports and innovation activities of young businesses.
- 29. Statistics profiling businesses jointly with the business owners. These measures of entrepreneurship rely on statistics linking data on the individuals who are business owners with data on the businesses they own. Such statistics provide the profile of an entrepreneur together with the performance of his/her business. Progress in this area has been slower reflecting the greater compilation challenges involved. Two examples are (1) statistics on

business births and deaths by gender of the business owner, and (2) innovation activity of young firms by educational attainment and employment history of the business owner.

30. The Guidelines do not cover a third category of measures of entrepreneurial performance that is characterised by having the *individual* (actual or potential entrepreneur) and not the *enterprise*, as the statistical unit. Entrepreneurship indicators on individuals include statistics on self-employment from labour force surveys and population censuses, and statistics from ad-hoc surveys of individuals on attitudes toward entrepreneurship and involvement in entrepreneurial activities. Examples are: statistics on self-employed, disaggregated by the gender and age of the self-employed; individuals' preference for self-employment over wage employment; attitudes toward the risk of business failure: and perceptions on the social and economic role of entrepreneurs. The extract in Box 1 below describes the limitations of these data as measures of entrepreneurial performance.

Box 1

Entrepreneurship and self-employment

- 31. The approach to measuring entrepreneurial activity has evolved significantly in the past two decades. Until the late 1990s, self-employment was the indicator most frequently used to proxy entrepreneurship. This seems a reasonable choice as self-employed persons are defined as persons who are the sole owners, or joint owners, of the unincorporated enterprises in which they work, and, therefore, they appear to represent the entrepreneur well. Also, in virtually all countries, information on self-employment is collected on a regular basis by labour force surveys and population censuses, making the use of self-employment data an easy solution for analysts in search of quantitative evidence on entrepreneurship. However, while self-employment data do contribute to the understanding of the entrepreneurial phenomenon, there are limits to their ability to represent entrepreneurship in a comprehensive and accurate way.
- 32. Firstly, self-employment can, at best, provide information on the population of entrepreneurs, for example, their number, their characteristics in terms of gender, age, education or work experience. It cannot offer any insight into the performance of the businesses being created, for example, their survival or growth.
- 33. Secondly, not all the self-employed are in fact entrepreneurs, e.g. some might have a self-employment status for reasons of convenience or a rising phenomenon might be "gig workers". This term describes workers engaged in flexible employment arrangements, or "gigs". While certain professions, notably in the entertainment industry, have always relied on gigs as an important source of income, the rapid popularisation of gigs has been fueled by technology and is largely associated with the rise of online platforms such as Uber and TaskRabbit that connect buyers and sellers for one-time transactions. Many gig workers use online platforms to find small jobs, sometimes completed immediately after request (essentially, on-demand), in the context of a contractual relation where any notion of entrepreneurial risk for the gig worker is absent.
- 34. In light of these limitations, in recent years the international statistical community has made considerable efforts to conceptualise and develop additional indicators for measuring entrepreneurial activity, in particular indicators that concentrate on businesses as the observation unit rather than individuals.

Source: (OECD, 2017)

V. Business demography and international comparability

- 35. Business demography statistics refer to statistics on "events like births and other creations of units, deaths and other cessations of units, and their ratios to the business population. This includes following units over time, thus gaining information on their survival or discontinuity. It also covers development over time of certain characteristics, like size, thus gaining information on the growth of individual units, or a cohort of units, by type of activity" (Eurostat & OECD, 2007). In the economic literature the term "business dynamics" is used to refer to the analysis of the demography of businesses and their impact on employment and productivity. In these Guidelines the term business demography is used.
- 36. Business demography statistics can be compiled from a range of data sources, in particular SBRs, business censuses and business surveys. Research conducted in the mid-2000s on how to improve cross-country comparability of data on the creation of new businesses identified the following advantages and challenges associated with these different sources of data on business demography:
 - SBRs usually provide comprehensive coverage of the population of interest and
 are a reliable source. In fact, data from a comprehensive, frequently updated SBR
 are likely to be more reliable than those from small scale surveys or studies on
 enterprise creation. However, the scope of the SBR, and specific threshold
 restrictions, can involve exclusions from the population coverage that is desired
 from a business demography perspective;
 - Census data can be as good as SBR data, and sometimes better if they have less scope restrictions. However, the cost of running a census of businesses every year makes this approach unrealistic in any country. Data from less frequent censuses can be used, but the statistics become out of date, and their comparability of statistics across countries is difficult when their periodicity differs;
 - Survey data have also been used by some countries, most notably in the Eurostat project "Demography of Small and Medium-sized Enterprises (DOSME)" conducted in twelve countries of Central and Eastern Europe at the time of their transition to the market economy. This approach is useful when SBRs are not sufficiently developed. It allows collection of more information on the profiles of entrepreneurs than is available from other sources. It allows collection of information on the informal economy. However, it suffers from the usual constraints set by sample size when detailed data breakdowns are required. Also, it is not possible to identify business deaths through surveys.
- 37. The advantages and challenges listed above also point to the use of SBRs as a most convenient source for compiling internationally comparable business demography statistics, especially if the SBRs are already subject to some form of harmonisation, i.e., if basic requirements of the registers are harmonised across countries.
- 38. Today, an increasing number of countries compile business demography statistics on a regular basis, although with important differences in the scope of the data collection, and mostly based on country specific approaches. The extract in Box 2 provides an overview of country practices that highlights this.

⁴ Business scholars use the same term to indicate modelling methods to test the effectiveness of different policies on business outcomes and for the analysis of business strategy; for example, see (Sterman, 2000)

Box 2

Overview of country practices

- 39. In 2013, the United Nations Statistics Division (UNSD) conducted an "SBR Global Assessment Questionnaire Survey" aimed at collecting information on the status of the business register in all countries. The Global Survey Questionnaire was applicable not only to National Statistical Offices (NSOs) that operate a comprehensive single business register but also to those that maintain and update one or more lists of enterprises, economic census frames, or annual enterprise surveys. The list(s) of enterprises could be compiled based on multiple surveys or could be built by combining survey data with administrative data. For the purposes of the survey, all such lists were referred to as a "business register".
- 40. The analysis of the questionnaire findings highlighted a number of facts:
- (i) In most countries, compilation of business demography statistics from SBRs started in the early 2000s or more recently. France, where the production dates to the 1970s, is an exception;
- (ii) Business demography statistics produced by countries may consist simply of data on registrations and de-registrations of firms with the competent authority (as in Singapore, for example);
- (iii) On the other hand, business demography statistics may be the result of implementing a methodology for identifying and handling demographic events. This is the case in OECD countries, EU member states and other developed and emerging economies where:
- a *country specific* methodology is implemented, for instance, in Australia, Costa Rica, the Russian Federation and Tunisia;
- an *internationally harmonized* methodology is implemented, typically based on the *Eurostat-OECD Manual on Business Demography Statistics* (Eurostat & OECD, 2007), as in EU member states, Brazil, Canada, Israel, New Zealand, Norway and Switzerland.
- 41. In contrast to a country specific approach is the coordinated effort conducted by the countries within the framework of the OECD-Eurostat Entrepreneurship Indicators Programme (EIP), launched in 2007. Countries that are Member States of the European Union are required to comply with mandatory regulations and to produce business demography statistics following the methodology and definitions recommended by the *Eurostat-OECD Manual on Business Demography Statistics* (Eurostat & OECD, 2007). As a result, Eurostat and the OECD have created databases of internationally comparable business demography statistics that were previously missing in the domain of official statistics.

VI. Aims of the Guidelines

- 42. The Guidelines aim, primarily, to support the development of the SBR as statistical production infrastructure for the compilation of business demography statistics and related indicators of entrepreneurship. Notably they address the requirements for the SBR to support the production of business demography statistics.
- 43. The Guidelines build on the (UNECE, 2015) Guidelines on Statistical Business Registers, and take these forward to provide guidance on developing a longitudinal SBR. They also expand the methodological explanations and provide illustrative examples of country practices for compilation of business demography statistics from SBRs.

- 44. The Guidelines also build on the (Eurostat & OECD, 2007) Eurostat-OECD Manual on Business Demography Statistics, which provides definitions of business demographic events (to serve as recommended international standards) and proposes a methodology to operationalise the definitions and compile business demography statistics. The Manual is supplemented but not superseded by this document, and the definitions and concepts of business demography statistics in the Guidelines are fully consistent with those in the Manual. The SBR concepts used in the Manual are based on the Eurostat Business Register Recommendations Manual and are thus consistent with the concepts and definitions in the Business Demography Manual.
- 45. The Guidelines complement and extend the Manual by further developing methodological aspects in relation to the compilation of statistics by linking SBR data with other data sources. The Guidelines also provide an initial discussion of issues concerning business demography at the sub-national level and concerning business demography using statistical units other than the enterprises (establishment, local units) and the need to adapt concepts accordingly. Finally, the Guidelines emphasise the effects of the compilation of business demography statistics in supporting improvements in the quality of business statistics and economic statistics.
- 46. In summary, the Guidelines:
- (a) Deliver guidance on how to develop SBRs to support the production of business demography and entrepreneurships statistics, including:
 - Definitions of key demographic events, including births and deaths;
 - Suggestions for basic demographic statistics that can be produced directly from the SBR;
 - Guidance regarding methods to produce business demography statistics;
 - Guidance on methods for linking SBRs to other data sources (administrative/social registers and other statistical registers) to support analysis of enterprises and entrepreneurs, including gender entrepreneurship;
 - Guidance on methods for linking SBRs with statistics on international activities of enterprises, such as statistics on trade, foreign-owned enterprises, and foreign affiliates.
- (b) Provide examples of other approaches, not based on the SBR, to produce business demography statistics.
- (c) Provide an overview of entrepreneurship indicators that can be produced and disseminated by NSOs.

VII. Overview of the Guidelines

47. The Guidelines are structured into seven chapters, three annexes and a Glossary. The following paragraphs provide short descriptions of the topics and contents of each chapter.

Chapter 2: Definitions and key concepts of business demography statistics

48. Chapter 2 presents the definitions of the key business demography concepts and related variables, based on the (Eurostat & OECD, 2007) Eurostat-OECD Manual on Business Demography Statistics and the (UNECE, 2015) Guidelines on Statistical Business Registers. The chapter provides definitions and explanations of continuity rules, and

identification of entrepreneurs, including the treatment of self-employed persons. It also discusses definitions of high-growth enterprises, including gazelles. The chapter also includes explanations on regional and sub-annual business demography, as well as the use of establishments and local units as statistical units, which is not dealt in the Eurostat-OECD Manual.

Chapter 3: SBR functionality to support production of business demography statistics

49. Chapter 3 focuses on how to develop the SBR to facilitate production of business demography statistics. The chapter aims at building the bridge between the concepts of business demography statistics and the SBR infrastructure required to support the production of business demography statistics. There are no guidelines on this topic elsewhere. Development and maintenance of longitudinal business data play a key role in the chapter, including methods to identify the demographic events and to determine whether a business has been born, survived or died. Other forms of SBR requirements are also dealt with, such as coverage of the SBR, updating frequency and the variables needed to describe demographic events.

Chapter 4: Linking SBR and business demography units with data from other sources

50. Linking business demography data with other existing data sources is an efficient way of producing statistics and increases the analytical power of the demography dataset. However, SBRs cover only a limited set of variables on the businesses and usually no information on the entrepreneur as a (natural) person. The chapter provides methods for, and guidance on, linking SBR information with other data sources. Other sources may include, for example, data on the success of enterprises (e.g., growth of employment, turnover, profit), foreign trade data, and data about the entrepreneur (e. g., sex, age, nationality, (former) employment status and education) that may be obtained from surveys, administrative registers or other statistical registers.

Chapter 5: Non-SBR based approaches to the production of business demography statistics

51. While the guidelines focus on the production of business demography statistics based on the SBR, it is recognised that, in the short run, countries might not be able to do so and production of their business demography statistics has to be based on other information. Thus, the chapter provides examples of production using data from surveys, censuses or administrative sources or based on a combination of sources.

Chapter 6: Examples of business demography and related entrepreneurship indicators

52. The chapter outlines the minimum set of business demography indicators recommended to support analysis of entrepreneurship. Examples are presented to illustrate country practices in production and dissemination of statistics on business demography.

Chapter 7: Topics for further work and research

- 53. The chapter includes topics for possible further work and research, based on the discussions of the Task Force. The research agenda includes: development of longitudinal databases for producing business demography statistics; linking and integrating the SBR with information from other data sources, including administrative sources; development of a statistical framework for business demography statistics; the use of different statistical units in business demography; international comparability of business demography statistics; and sub-annual (quarterly) and regional indicators.
- 54. The guidelines also include a Glossary with definitions and explanations of key terms and concepts; an annex presenting the development and use of Longitudinal Businesses Data in Statistics Canada; and an annex illustrating the linking of business and social statistics in Denmark to profile the entrepreneurs.

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