Statistical Business Registers and Business Demography Statistics: Review of country practices

Abstract

Business demography provides important information to analysts and policy makers interested in entrepreneurship, business dynamics and their relationship with productivity and economic growth. There are methodological and practical benefits in compiling business demography statistics from statistical business registers. The Global Survey on Statistical Business Registers conducted by the United Nations Statistics Division revealed that 71 of the 116 countries surveyed compile business demography statistics based on their business registers. The extent to which these relevant statistics are disseminated as outputs is however not investigated by the UN Global Survey. This paper proposes a review of the different practices across countries to assess the level of international comparability of the statistics produced. The purpose is to map differences and account for the reasons behind the discrepancies with a view to encourage the production of business demography statistics from statistical business registers as well as greater harmonisation of definitions and methodology.
1. Relevance of business demography statistics

For economic analysis and policy

The promotion of entrepreneurship and the support to small enterprises have formed part of the policy response to the crisis in virtually all countries, recognising the role of entrepreneurship and business dynamics as drivers of economic growth and job creation with important consequences for productivity and innovation. Analyses conducted at the OECD to investigate new sources of economic growth recognise that "facilitating entrepreneurial activity is essential: a dynamic process of firm creation and exit will facilitate resource reallocation to new sources of growth based on knowledge-based capital".

However, whilst the role of entrepreneurship in economic development has been widely recognised for a number of decades no, sound international evidence on the entrepreneurial phenomenon, its determinants and impacts, remains relatively scarce.

Until the late 1990s, self-employment data were used as the predominant indicator of entrepreneurship but in recent years considerable efforts have been undertaken to develop more sophisticated indicators to measure entrepreneurial activity in a country.

Specifically, statistics measuring entrepreneurial performance are today mainly of two types: statistics that focus on individuals (the entrepreneurs), and statistics that focus on businesses (the enterprises). The latter consist to a large extent of business demography statistics measuring the birth, death, survival and growth of enterprises. Other measures of entrepreneurship rely on linking data on individuals and business but where progress has been slower reflecting the greater compilation challenges involved.

Business demography statistics support the analysis of a broad range of questions that are of interest from a policy perspective; for instance: What is the enterprise birth rate in a country and how does it compare internationally? How many newly-created firms are likely to survive after a few years? How many of them will grow? How much employment is generated by the creation of new enterprises? Do business demography trends differ significantly across sectors and industries? In fact, measures of entrepreneurial performance are essential to evaluate the effectiveness of different policy approaches to encourage entrepreneurship, to assess the contribution of entrepreneurship to achieving social and economic objectives, and to study the determinants of and obstacles to entrepreneurship.

For the purpose of statistical production

Information on demographic events is also important for survey statisticians, in particular as concerns the demographic events that have an impact on enumeration and recording of statistical units. Creating standardised business demography indicators therefore provide and important feedback loop that can inform the business registers themselves and thus improve the quality of all surveys that depend on a sound business register. Survey statisticians are interested in how surveyed units relate over time and what causes entrances and exits from survey populations; this is helpful not only for practical reasons of data collection and processing described above, but also for the interpretation of the data collected.
2. Benefits of computing business demography statistics from SBR

In the mid-2000s, the OECD conducted a study to investigate the comparability of statistics on start-up rates with a view of providing recommendations to improve cross-country comparability (Vale, 2006). A review examined methods and sources for calculating start-ups rates implemented in different countries or specific projects. The results of the review pointed to the use of statistical business registers (SBRs) as a most convenient source for the purpose of compiling international comparable statistics, especially if SBRs are already subject to some form of harmonisation.

The OECD study together with additional research work that led to the preparation of the Eurostat-OECD Manual on Business Demography Statistics (2007) highlighted the advantages and challenges associated to different sources of data on business demography; specifically:

- Statistical business registers usually provide comprehensive coverage of the population of interest and are a reliable source. In fact, data from a comprehensive, frequently updated statistical business register are likely to be more reliable than those from a small scale survey or study. The quality of the data in the source clearly has an impact on most of the other factors of comparability identified here, for example poor quality information on economic activity will have an impact on the comparability of coverage. An issue with SBR is that systematic biases in the population coverage may be present due to scope and threshold restrictions.

- Census data can be, in theory, at least as good as statistical business registers, and sometimes better, if they have less scope restrictions. However, the cost of running a census of businesses every year makes this approach unrealistic for most countries. Data from less frequent censuses can be used; however, comparability of statistics across countries will be difficult when the periodicity of data differs.

- Survey data have also been used by some countries and most notably in the Eurostat project Demography of Small and Medium-sized Enterprises (DOSME) conducted in twelve countries of Central and Eastern Europe as they were making their transition to the market economy. This approach is useful when registers are not sufficiently developed and allows, for instance, the collection of more information on the profile of the business creators than is available from other sources, or on the informal economy. It suffers, though, from the usual constraints of survey errors and sample size limitations when detailed data breakdowns are required.

While survey data did not emerge as the best source for business demography, an important lesson was nevertheless learned from the DOSME project. Importantly, it demonstrated that having better data on business demography can have a strong impact on the quality of statistical business registers and more generally of all economic and business statistics. The project allowed for some of the participating countries to catch up rapidly with their western European counterparts in the quality of data on small and medium-sized enterprises (UNECE, 2013).

These earlier insights were confirmed by the experience conducted by several countries in the framework of the OECD-Eurostat Entrepreneurship Indicators Programme (EIP) launched in 2007. Following the recommendation of the 2007 Manual on Business Demography Statistics to use the SBR as data source, countries participating in the EIP regularly produce business demographic statistics based
on SBR data, with only a few exceptions. One key outcome of the EIP is the establishment of a database of comparable business demographic statistics that was missing in the domain of official statistics.

To summarise, in principle business demographics can be compiled from a range of data sources, in particular business censuses, business surveys and SBR. However, survey errors, sample size limitations, the impossibility to identify business deaths through surveys, and the inadequate periodicity of censuses, make SBR a preferred source for business demographics. Moreover, international comparability is improved when SBR are the data source, especially if basic requirements of the registers are harmonised across countries.

3. Business demography and SBR: Country practices

In 2013, the United Nations Statistics Division (UNSD) presented the results of a "SBR Global Assessment Questionnaire Survey" aimed at collecting information on the status of the business register in all countries. In fact, 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 purpose the survey, also such lists were referred to as a business register.

Among the range of topics investigated, the questionnaire also enquired about business demographics (Box 1).

The survey findings revealed that 71 countries, among the 116 that replied to the questionnaire, use SBR to produce business demography or similar statistics (Table 1). As explained above, in the context of the UNSD survey "business register" had a broad connotation.

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Box 1. UNSD SBR Global Assessment Survey Questionnaire

The UNSD questionnaire comprised 30 questions, encompassing fields such as SBR coverage, statistical units, classification of economic activities, types of units and thresholds, data sources and frequencies of updates, error handling, data linking, legal framework, continuity rules and business demographics. Specifically, two questions related to business demographics:

**Question 25:** Does your country compile Business Demographics or similar statistics using the Business Register? (Yes or No)

If you compile the BDS using other source, please specify:

**Question 26:** Please provide details about the Business Demographics or similar statistics that are compiled in your country using the Business Register:

- Name of Statistics:
- Point of Contact:
- Date of first compilation:

Source: UNSD SBR Global Assessment Questionnaire Survey
Table 1. Countries using SBR for business demographics and date of first compilation

| F | Finland (2002), the Former Republic of Yugoslavia (2011), France (1979) |
| H | Hungary (2001) |
| I | Ireland (2010), Israel (2009), Italy (1998) |
| N | Netherlands (1999), New Zealand (2001), Norway (2002) |
| P | Peru (2012), Philippines (1998), Poland (2004), Portugal |
| T | Tanzania (2012), Thailand (1976), Trinidad and Tobago (1995), Tunisia (2011) |
| U | Uganda (2013) |
| V | Vietnam |

Note: A number of countries did not indicate the date of first compilation in their reply. Also, in some cases the date seems to refer to the first reference year for which data are available.

Source: UNSD Global Assessment Survey on SBR.

Questionnaire replies were yet not sufficiently detailed to conduct a thorough analysis of the characteristics of the business demography statistics, the methodology for compiling business demographics and the definitions of relevant variables. Also, in half of the concerned countries the web site of the National Statistical Office does not present information on business demography statistics, suggesting that they are possibly compiled for internal purposes and not for external dissemination.

The review of the findings allowed nevertheless to establish a number of facts:

- In most countries, the compilation of BD from business registers started in the early 2000s or even in more recent years. France, where the production dates back to the 1970s, represents an exception.

- In some developing and transition economies (for instance Tanzania, Thailand, and Trinidad and Tobago) the series mentioned by the respondents are in fact structural data about the number of enterprises (by sector, size and region), and not business demography statistics. This reveals a misunderstanding about the meaning of business demographics.

- Business demography statistics produced by countries based on SBRs may simply consist of data on registrations and deregistrations of firms with the competent authority (as in Singapore,
for example) or, on the contrary, be the result of the implementation of ad-hoc methodology and definitions of the main demographic events. This is the case in OECD countries and other developed and emerging economies, where either a national specific methodology (for instance, Australia, Costa Rica, the Russian Federation and Tunisia) or an internationally agreed methodology (in particular based on the Eurostat-OECD Manual on Business Demography Statistics) are implemented.

4. Some lessons

**Importance of disseminating information on business demographics.**

Business demography statistics provide very valuable information for analysts and policy makers to support analysis of important questions related to business productivity and employment creation, but also to social integration and impact. NSOs should be encouraged not only to develop these statistics but also to produce outputs available to the public. Importantly this strong encouragement reflects the fact that business registers provide a source of information to produce a new suite of indicators for policy makers and analysts that places no additional burden on businesses.

France, a country with a long tradition of business demographics, provides users with a wealth of statistics on business demography that meet the needs for evidence at the national, regional, local or sectoral level (see [http://www.insee.fr/fr/themes/theme.asp?theme=9&sous_theme=1](http://www.insee.fr/fr/themes/theme.asp?theme=9&sous_theme=1)).

**Importance of disseminating information on country practices.**

The dissemination of information on country practices adopted at the national or international level could highly benefit the work of NSOs that have not yet started to develop business demography statistics. With that aim, Table 2 shows useful web links that contain information on how statistics on business demography are compiled in a range of countries, including some emerging economies.

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<th>Country</th>
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<td>Costa Rica</td>
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**Note:** Statistics Singapore simply reports data on registrations and deregistrations of firms with the Accounting and Corporate Regulatory Authority (ACRA).

**Importance of harmonisation for international comparability.**

NSOs are encouraged to follow international standards for the compilation of business demography statistics in order to facilitate international comparisons, otherwise not possible. The 2007 Eurostat-
OECD Manual could guide NSOs that have little or no experience in this area. The harmonisation of basic requirements of statistical business registers on which BD statistics are based would further help the objective of comparable data.

Even in the absence of harmonised standards, the dissemination of a clear documentation on the definitions of the basic concepts and methodology used for compiling business demographics is very helpful for the purpose of cross-country comparisons, as detailed metadata assist the assessment about the comparability of data. This is the case, for example, concerning business demography statistics produced by the Australian Bureau of Statistics and Member States of the European Union, where the existence of precise documentations in the two regions respectively allows an appraisal of the real differences between, for instance, birth and death rates in Australia and the European Union.

NSOs interested in starting the production of business demography statistics are therefore invited to cooperate with the OECD, Eurostat and UNECE, as well as with countries that have experience in this statistical area.

References


