Regional Course on Statistical Business Registers

Session 16 - Manual on Principal Indicators for Business and Trade Statistics Vol.1

UNITED NATIONS SIAP Statistical Institute for Asia and the Pacific

United Nations Statistics Division

Manual on Principal Indicators for Business and Trade Statistics Vol.1

The Manual represents a consolidation of the work of the Committee

It aims to provide guidance for the programmes of business and trade statistics to be agile and responsive to new and emerging user needs, integrating the strategic view on business statistics

The UNCEBTS prepared and submitted the draft first volume of the Manual on the principal indicators on business and trade statistics to the Statistical Commission in March 2022. At its 53rd session, the Statistical Commission took note of the draft first volume of the Manual and encouraged the preparation of volume 2 of the Manual to further elaborate on the international trade indicators.

Objectives of the manual

- Presents a strategic view on business and trade statistics, including identifying policy needs and data gaps

- Puts forth a list of principal indicators on business and trade statistics, designed to meet users' needs in terms of better quality and increased data granularity and in support of the 2030 Agenda for Sustainable Development

- The indicators are intended to be able to be compiled in an internationally comparable, flexible and sustainable approach

- Identifies areas for further development

Target audience

- NSOs and the statisticians that are responsible for the compilation and reporting of the principal indicators
- Compilers from different statistical domains and institutions may also be involved in the collection and compilation of the data needed to produce the indicators
- Data users outside the NSOs will also gain more information on the interpretation and use of the principal indicators presented as well as the data sources and methods of calculation

Outline of the manual

I. Introduction

- Objective
- Structure of this Manual
- Process of preparing the Manual
- Target audience

II. Strategic and Data Production Frameworks for Business and Trade Statistics

- Strategic Framework
- Data production Framework

  i. The adoption of an enterprise-centered approach ii. The role of the domestic and potentially globally interconnected SBR as the backbone in the new data infrastructure iii. Exchange of microdata
- Priority areas of the UNCEBTS

III. Principal business and trade indicators

- Delineation and selection of the principal business and trade indicators
- Availability and organization of data and integrated information systems
- Institutional coordination and governance
- Presentation of the indicators
- Specific considerations for the indicators

IV. Future agenda

Appendix: methodological sheets

Role of Statistical Business Registers (SBRs)

The SBR as the core of the new data production framework for economic statistics

- SBRs play a pivotal role in the process of data integration with different and multiple data sources by generating new information with the desirable characteristics

- Appropriate micro-data linking methodologies based upon unique identifiers could be applied to produce consistent information scalable from micro to aggregated figures

- The SBR provides the sample frame for multiple different surveys but can also serve as a direct source to produce selected business statistics

Analytical and Policy Framework

- This section aims to elaborate on the analytical and policy framework for business and trade statistics in general and within each priority areas (namely, business demography, globalization and digitalization, well-being and sustainability)

- The 2030 Agenda for Sustainable Development provided the overarching policy framework, but specific policy priority for each priority area are elaborated as well

- The analytical framework reflects the need to better understand the structure and performance of businesses in an increasingly complex environment

- This section also aims to elaborate on the importance of the integration of business and trade statistics

Section III on Principal indicators for business and trade

- This section contains a detailed description of the indicators
- It provides a further elaboration of the main concepts for business and trade statistics, covering:
  - the scope of business and trade statistics
  - statistical units
  - importance of adding granularity to existing statistics by exploring relevant breakdowns to address relevant policy questions
  - Identifies main policy questions that core indicators in these areas should be able to measure
  - Identification of integrated approaches that could address existing data gaps (e.g. Micro data linking, data sharing, profiling, etc.)
- It includes references to related indicators and work undertaken by relevant international and regional organizations

Institutional coordination and governance

- This section addresses issues of institutional coordination and governance for the compilation of the principal indicators:
  - Several institutions in the country may be responsible for the compilation and reporting of the principal indicators
  - There is the need to provide guidance on institutional coordination mechanisms and governance needed for the national reporting of the indicators

- Also, coordination at the international level among international statistical organizations is planned to be addressed in this section

Indicators on Business Dynamics, Demography and Entrepreneurship

1. Number of active enterprises
2. Number of enterprise births
3. Employment created by enterprise births
4. Number of enterprise deaths
5. Loss of employment due to enterprise deaths
6. Number of X-year-old employer enterprises
7. Number of persons employed in X-year-old employer enterprises
8. Employment in the population of active enterprises
9. Employment share of enterprise births
10. Enterprise survival rate
11. Number of high-growth enterprises
12. Employment in high-growth enterprises
13. Number of young (up to 5-year old) high-growth enterprises (gazelles)
14. Employment in young (up to 5-year old) high-growth enterprises (gazelles)
15. Labour compensation paid by active enterprises
16. Gross Value Added produced by active enterprises

Indicators on Globalization and Digitalization

17. Total exports of businesses as a percentage of businesses' gross value added

18. Number of trading businesses by number of partner countries

19. Export intensity of businesses

20. Value of trade by foreign affiliates

21. Employment abroad in foreign affiliates controlled by resident enterprises as share of enterprises' total employment

22. Entry and exit rates for the digital economy sector

23. Average post-entry employment growth for the digital economy sector

24. Percentage of businesses with internet connection

25. Capital investment of businesses on ICT as a percentage of total business capital investment

26. Capital investment of businesses on ICT as a percentage of total gross value added

27. Percentage of businesses using cloud computing services

28. ICT-related patents (registered)

29. ICT-related trademarks (as a percentage of total trademarks)

30. Patents in AI technologies

31. Percentage of businesses engaged in sales via e-commerce

32. Value of e-commerce sales by businesses

33. Labour productivity growth in the ICT sector

34. Contribution of ICT sector to labor productivity growth

35. Gross value-added of ICT-related businesses as percentage of total gross value added

36. Employment of ICT specialists as a percentage of total employment

37. Percentage of businesses providing ICT-related training

38. Percentage of enterprises reporting hard-to-fill vacancies for ICT specialists

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Indicators on Wellbeing and Sustainability

39. Proportion of women in managerial positions

40. Annual growth rate of real total gross value added per employed person

41. Average hourly earnings for employees in businesses by sex

42. Unemployment rate, by sex, age and persons with disabilities

43. Gross value added of businesses per employed person

44. Sector employment as a proportion of total employment

45. Water-use efficiency in businesses

46. Level of water stress attributable to businesses

47. Share of renewable energy consumption in businesses

48. Energy efficiency in businesses

49. Green investment by businesses

50. Greenhouse gas emissions generated by businesses per unit of value added

51. Research and development expenditure as a proportion of gross value added

52. Researchers (in full-time equivalent) per million inhabitants

53. Number of companies publishing sustainability reports

54. Job Openings (Vacancies) in businesses

55. Taxes and other payments of businesses to the Government

56. Total taxes paid by businesses as a proportion of total government tax revenues

Example

Business demography statistics

Example of SBR-derived demographics from the UK

Figure 1: Birth and death rates of businesses

UK, 2017 to 2022

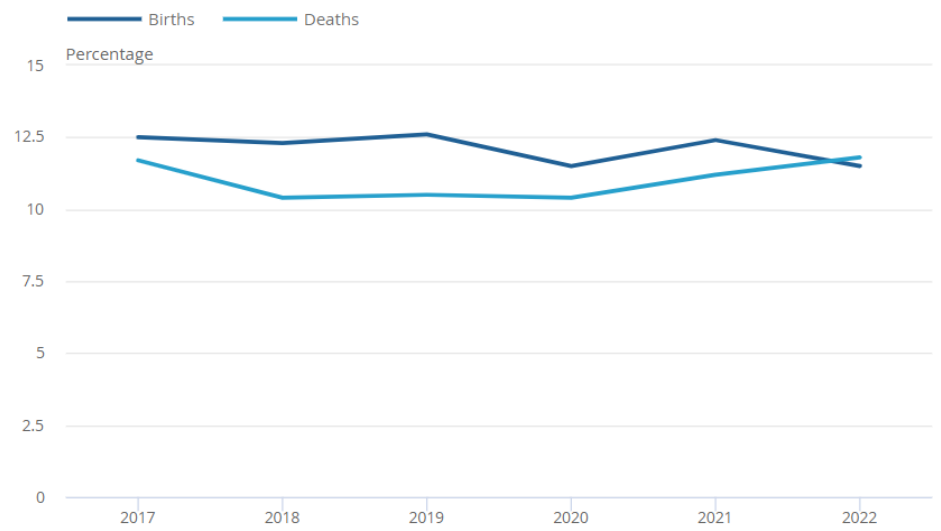

Table 3: Comparison of business births by industry and employee size bands

UK, 2022

	Business Demography	Employers Demography	2 or more employees
Production	15,325	13,060	4,420
Construction	49,390	44,295	13,355
Motor trades	7,570	7,025	2,095
Wholesale	10,765	9,800	2,160
Retail	29,420	27,700	8,410
Transport and storage (inc. postal)	36,460	20,760	6,955
Accommodation and food services	28,550	28,055	20,635
Information and communication	22,455	21,395	5,165
Finance and insurance (Excl 6420)	2,775	2,690	1,035
Property	11,825	11,350	3,270
Professional, scientific and technical	47,445	44,890	10,895
Business administration and support services	39,965	38,825	13,565
Education	5,000	4,785	1,795
Health	10,890	10,780	3,960
Arts, entertainment, recreation and other services	19,090	17,540	7,705
Total	336,925	302,950	105,420

Template used for the methodological description of the indicators

Name of indicator	Unit of measure
Definition of the indicator	Statistical unit
Objective of the indicator	Reference period
Contribution and usefulness of the indicator	Frequency (periodicity) of data collection and dissemination
Classification	Dissemination format
Industrial Coverage	Timeliness
Breakdown	Source data type
Algorithm	Availability of methodological documents
Description of the calculation of the indicator	

Field	Metadata
Name of the indicator	Employment created by enterprise births
Definition of the indicator	The employment generated by enterprise births. [1]
Objective of the indicator	To measure how newly born enterprises contribute to the creation of jobs, as well as the actua volume of work created.
Contribution and usefulness of the indicator	Employment created by enterprise births provides an indication of how enterprise births contr to overall employment in the economy. This indicator can also be used to derive the employm of enterprise births in year *t* as a share of employment in all active enterprises in year *t*. [1]
Classification	ISIC Rev. 4
Industrial Coverage	At a minimum, it is recommended to cover ISIC Rev. 4 B-N, P-R, 95-96.
Useful Breakdowns (listed in order of relevance or importance)	• by 2-digit ISIC division at a minimum • by enterprise size – the enterprise size classes are defined as follows: 0-9 employees; 10-49 employees; 50-24 employees; 250+ employees.[1] For the purpose of business demography, a further breakdo the smallest thresholds (i.e., 0[2], 1-4, 5-9, 10-19, 20-49) would be desirable. • by trading status (i.e., importer only, exporter only, or importer and exporter (two-way trad in line with trade (and services trade) by enterprise characteristics (TEC and STEC) statisti • by type of ownership (that is, foreign- or domestically-controlled enterprise (with or witho own affiliates abroad)) • by Legal Form (typical SBR breakdown) [2][3][4]
Algorithm	The number of employees, in the reference period *t* in enterprises born in *t*.
Description of the calculation of the indicator	It is recommended to compile this indicator based on the concept of "employment" (*see Gloss* Data should ideally be provided both as head counts and as full-time equivalents. Using solely head count will overestimate the volume of work produced if the enterprise starts later than 1s January of year *t* or if it has only part-time employment. However, as information on full-time equivalents is not available in all countries, it is proposed that, as a first priority, employment indicators should be measured in terms of head counts. The head count of persons employed, number of employees should be calculated as an annual average over the operating period of t enterprise. [1]
Unit of measure	Employment indicators should be measured in terms of average headcount. If information is available on full-time equivalents, they should be used to complement the information and be indicated in the metadata. [1]
Statistical unit	Enterprises (and in case of lack thereof, establishments)
Reference period	The basic reference period is the calendar year for annual data.
Frequency (periodicity) of data collection and dissemination	Recommended: Annual at a minimum.
Dissemination format	Publications, such as key figures/pocketbooks; statistical books; statistics in focus; new releas and online databases
Timeliness	For annual data, provisional data should be published within one year and final data should be published within 2 calendar years of the end of the reference year.
Source data type	The national SBRs are the main source of business demography data.
Reference documents	[1] Eurostat-OECD. (2007). [2] Eurostat (2020a). [3] Eurostat (Metadata). [4] Eurostat (2017).

[1] It is common for business demography statistics to break down the smallest thresholds of enterprises, as demog changes more likely occur among smaller firms; but a full breakdown by size class is useful if the data are available.
[2] Enterprise size class of zero ("0") refers to non-employer enterprises; i.e., enterprises with no employees, such as th employed who work on their own account and do not employ other persons. Likewise, the enterprise size class of zero be the case in which an enterprise is still active but it does not currently have any employees.

Discussion questions

- Could you share which indicators are currently compiled by your office?
  - Indicators on Business Dynamics, Demography and Entrepreneurship
  - Indicators on Globalization and Digitalizations
  - Indicators on Wellbeing and Sustainability
- Statistical business registers will serve as the main sources for what type of indicators?

Indicators on Business Dynamics, Demography and Entrepreneurship

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Thank you!