

Annual Business Survey QMI

Quality and Methodology Information for the Annual Business Survey, detailing the strengths and limitations of the data, methods used and data uses and users.

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1. Output information

National Statistic: yes

Survey name: Annual Business Survey

Data collection: sample of around 73,000 businesses

· Frequency: annual

· How compiled: business survey

• Geographic coverage: UK

 Related publications: <u>Non-financial business economy</u>, <u>UK and regional (Annual Business Survey)</u>; <u>Importers and exporters</u>

2. About this Quality and Methodology Information report

This quality and methodology report contains information on the quality characteristics of the data (including the five European Statistical System dimensions of quality) as well as the methods used to create it.

The information in this report will help you to:

- · understand the strengths and limitations of the data
- learn about existing uses and users of the data
- help you to decide suitable uses for the data
- understand the methods used to create the data
- reduce the risk of misusing data

3. Important points

- The Annual Business Survey (ABS), formerly known as the Annual Business Inquiry part 2 (ABI/2), is an annual survey of businesses covering the production, construction, distribution and services industries, which represent about two-thirds of the UK economy in terms of gross value added (GVA).
- The ABS provides a number of high-level indicators of economic activity such as total turnover, the value
 of purchases of goods, materials and services, and total employment costs; the ABS output is an important
 contributor to the UK National and Regional Accounts to inform, for example, the estimation of gross
 domestic product (GDP).
- Data for the ABS can be broken down by characteristics such as industry type, geographic region and company employment size.
- This report should be read in conjunction with the ABS technical report.

4. Quality summary

Overview

Every year, Annual Business Survey (ABS) questionnaires are sent by the Office for National Statistics (ONS) to around 62,000 businesses in Great Britain, and by the Northern Ireland Statistics and Research Agency (NISRA) to (currently) around 11,000 businesses in Northern Ireland.

The ABS is the largest business survey conducted by the ONS in terms of the combined number of respondents and variables it covers (62,000 questionnaires despatched in Great Britain, with around 600 different questions asked). It is the main resource for understanding the detailed structure and performance of businesses across the UK and is a large contributor of business information to the UK National Accounts.

The ABS estimates cover the UK non-financial business economy. The inclusions and exclusions from the business population are detailed in Section 3.1 of the <u>technical report</u>.

Uses and users

Users include those from government, both internal within the ONS and external in other government departments, such as the Department for Energy Security and Net Zero (DESNZ), Department for Science, Innovation and Technology (DSIT), Department for Business and Trade (DBT), the Department for Work and Pensions (DWP) and the Department for Environment, Food and Rural Affairs (Defra). Devolved administrations such as the Scottish and Welsh Governments, as well as local authorities, also constitute main users of the ABS outputs. For government users, the ABS data are commonly used to inform policy and legislation.

The ABS output is an important contributor to the UK National and Regional Accounts to inform, for example, the estimation of gross domestic product (GDP).

The ABS also has a large number of non-government users, such as researchers, academics, think tanks, businesses, industry experts and the media.

More detail is provided in the technical report (Section 10).

Strengths and limitations

The main strengths of the ABS include:

- the ABS response rate is consistently above 70%
- the ABS questionnaires are tailored to each industry, minimising respondent burden
- the high level of detail in ABS data allows the user a thorough insight into the activities of businesses within the UK

The main limitation of the survey is the length of time between the end of the survey reference period and the publication of results; for example, data for 2021 was published in May 2023.

Quality characteristics of the Annual Business Survey data

Relevance

The ABS meets its requirements as a statutory annual survey conducted under the Statistics of Trade Act 1947, for the production of the UK National Accounts (for the compilation of supply and use tables, which provide a framework for understanding and analysing the interdependence of industries in the UK) and to give weights for index aggregation and turnover deflation for the indices of services and production.

Section 2 of the ABS technical report provides more detail on the variables collected.

Accuracy and reliability

The ABS meets its legal requirements for statistical accuracy. However, as in all surveys, the estimates from the ABS are subject to various sources of error. The total error in a survey estimate is the difference between the estimate derived from the data collected and the true (unknown) value for the population. The total error consists of two main elements: the sampling error and the non-sampling error. The ABS was designed to minimise both these errors.

Sampling error

The sampling error is the error that arises because the estimate is based on a survey rather than a census of the population. The results obtained for any single sample may, by chance, vary from the true values for the population but the variation would be expected to be zero on average over a number of repeats of the survey.

The <u>standard error</u> gives an indication of the magnitude of the sampling error. We expect 95% of our estimates for a variable to be within two standard errors of the true unknown value for the population. The closer the standard error to zero, the more precise the estimate.

The <u>coefficient of variation</u> is the standard error of a variable divided by the survey estimate and it is used to compare the relative precision across surveys or variables. The closer the coefficient of variation is to zero, the more precise the estimate in percentage terms.

<u>Sampling error</u>s for the ABS are available down to four-digit Standard Industrial Classification 2007 class level for the following variables:

- total turnover
- approximate gross value added at basic prices
- · total purchases of goods and services
- total net capital expenditure

Non-sampling error

Non-sampling errors are not easy to quantify but can be caused by coverage issues, measurement, processing and non-response.

The main non-sampling error quality issues for the ABS are listed in this section.

Response accuracy

It is difficult to accurately quantify the effect of response inaccuracy. Questionnaires are tailored to industrial sector, so that businesses are only asked to respond to questions relevant to their industry. As detailed in Section 5 of the <u>technical report</u>, the data are put through an editing and validation process that also helps to reduce inaccuracy.

ABS calendar year results

ABS results are published for calendar years. However, in order to reduce the burden on respondents, businesses have, and some use, the option to return data for their business year-end, covering any 12-month period up to and including the end of the financial year that follows the end of the calendar year. It is possible that, particularly if the economy is undergoing a period of rapid change such as during an economic downturn, the different reporting periods could introduce some bias.

Regional apportionment

Data are collected by ABS at the reporting unit level. These data are then divided among the businesses' local sub-units ("apportioned") to produce the regional results. This means that the regional results are less accurate than if the data were collected at the sub-unit level, but the burden on businesses and resource costs of carrying out the ABS at the local unit level are prohibitive. The process of regional apportionment is explained in Section 5.8 of the <u>technical report</u>.

Revisions

National and regional figures for the current reference year will usually be revised in the following year's final release.

Coherence and comparability

Section 8 of the <u>technical report</u> covers the differences between ABS and other sources while information on the data collection over time is provided in Sections 1.4 and 12.

Accessibility and clarity

Our recommended format for accessible content is a combination of HTML web pages for narrative, charts and graphs, with data being provided in usable formats such as CSV and Excel file types. We also offer users the option to download the narrative in PDF format. In some instances, other software may be used or may be available on request.

For information regarding conditions of access to data, please refer to the following:

- terms and conditions (for data on the website)
- freedom of information
- accessibility

Timeliness and punctuality

Publication of the ABS results, collected for reference year "t", is in the April or May of year t plus 2. This includes regional estimates and revisions to data for reference year t minus 1.

Publications are pre-announced on the release calendar.

Concepts and definitions

The classifications used for the ABS are harmonised with other government surveys. They include:

- UK Standard Industrial Classification
- Classification of individual consumption by purpose (COICOP)

Why you can trust our data

The ONS is the UK's largest independent producer of statistics and its national statistical institute. We treat the data that we hold with respect, keeping it secure and confidential, and we use statistical methods that are professional, ethical and transparent.

5. Methods used to produce the Annual Business Survey data

How we collect the data

Sections 3 and 4 of the <u>technical report</u> provide more information on how we carry out sampling and collect the data.

How we process, analyse and validate the data

The <u>ABS technical report</u> includes a lot of detail on the processes carried out. Rather than duplicating the information, the relevant sections of the technical report are:

editing and validation: Section 5.1

imputation: Section 5.2

• estimation: Section 5.4

outliering: Section 5.5

The ABS has two questionnaire types: long and short. The short questionnaires are mainly sent to small businesses and only ask for totals such as total turnover or total purchases. The long questionnaires are mainly sent to large businesses and a sample of smaller ones and ask for components of those totals, such as any other income and sales of goods of own production, in addition to overall totals. This method is used to reduce the response burden on smaller businesses. The values of the components therefore need to be estimated for the businesses that received short questionnaires. These "expansion" methods are detailed in Section 5.3 of the technical report.

How we disseminate and review the data

Section 5.9 of the technical report provides more information on how we keep respondents' data confidential.

6. Other information

For further information, please contact the Annual Business Survey Team: abaps@ons.gov.uk

7. Cite this methodology

Office for National Statistics (ONS), released 9 January 2024, ONS website, methodology, <u>Annual Business Survey Quality and Methodology Information</u>