



Research and Development Survey 2016

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Methodology

Reference period

The reference period for the latest survey was the 2015/16 financial year. Businesses with balance dates falling between 1 January and 30 September supplied data for the year ending 2016. Businesses with balance dates falling between 1 October and 31 December supplied financial data for the year ending 2015.

Summary of changes to the R&D population

The sample for the R&D Survey: 2016 consisted of 3961 enterprises, plus the eight universities and their commercial arms.

The target overall response rate for the R&D Survey: 2016 was 85 percent for business, government, and Crown research institutes (CRI). The response rate was 77 percent, the target was not achieved due to the November 2016 earthquake. The target overall response rate for the higher education (universities) was 100 percent, which was achieved.

We identified some businesses as key units – if their response to a survey question was considerable in the previous survey period. The target response rate was 100 percent for businesses identified as key units.

The sampling error on the total R&D expenditure figure is 3.7 percent at the 95 percent confidence level.

There is no sampling error for the higher education sector due to the full coverage of this sector. The sampling error on the R&D expenditure figures at the 95 percent confidence level for the total business sector is 5.1 percent; for the total government sector it is 2.1 percent.

The table below provides a numerical summary of the changes in the R&D population, as well as associated changes in the sample, number of respondents, and sampling errors.

- Response rate = number of respondents divided by sample.
- 'Yes to R&D' means that a business is carrying out and/or funding R&D.
- R&D performers as percentage of respondents = 'yes to R&D' divided by number of respondents.

Note: Due to rounding some figures may not add to stated totals.

Only businesses we pre-identified as carrying out R&D are included. The sample size was relatively stable from 2012 to 2016. The response rate for R&D 2016 was lower than previous survey years due to the November 2016 earthquake.

Response rates by industry

The table below shows response rates by industry within the business sector. The overall business sector's response rate was 77 percent, ranging from 74 percent to 86 percent across the different industries.

Bioscience expenditure on R&D

Following consultation with key stakeholders we removed the questions that related to Bioscience expenditure on R&D as they were no longer relevant.

Sampling Procedure

Sampling error by industry

The table below shows the business sector sampling error on R&D expenditure by published industry. Customers need to take into account these sample errors when using data at published industry level.

The survey sample was designed to minimise sample error at sector level. At published industry level, sample errors are higher, due to the smaller numbers in each of these groups.

Variables