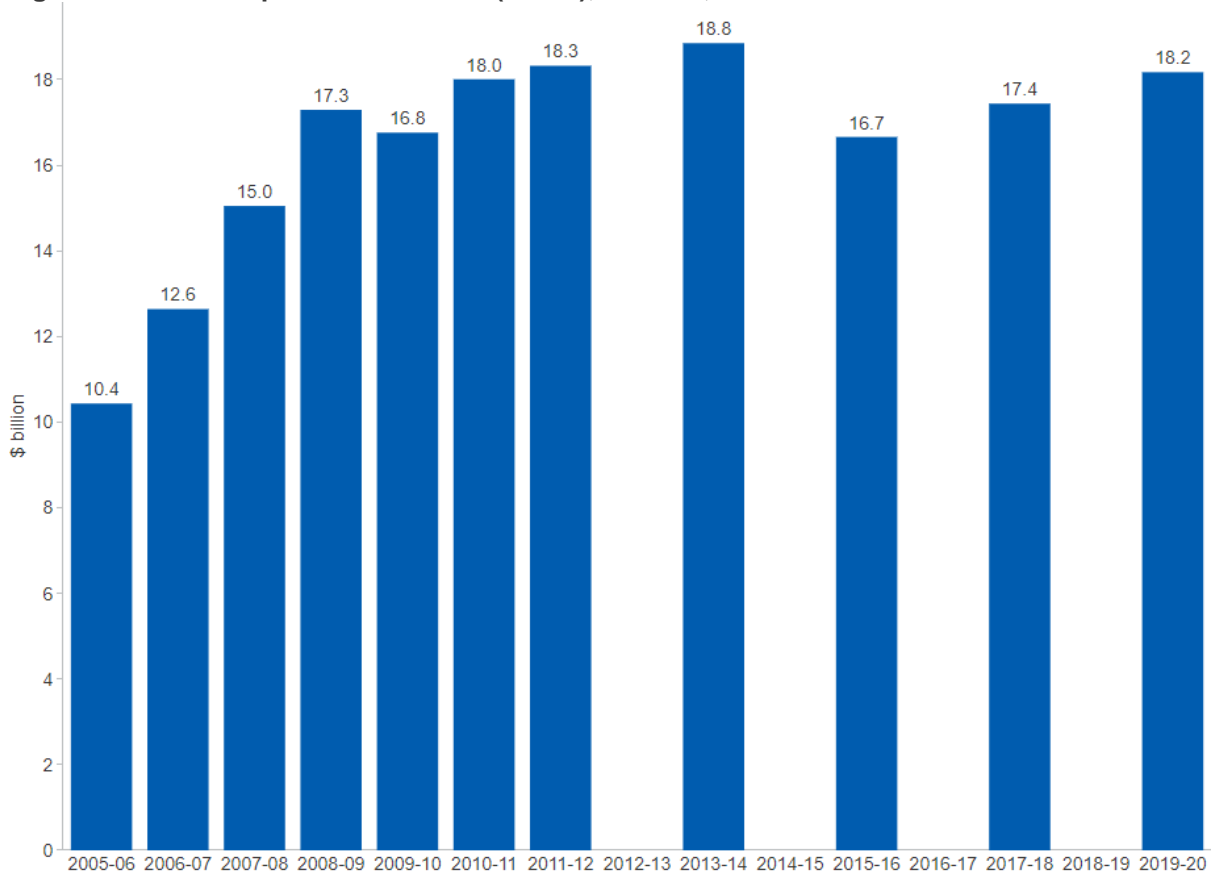


### 3.1.1 Total business expenditure on R&D (BERD)

As experimental development is dedicated to producing new materials, technologies, products or processes, it is closely related to business innovation. It has previously been estimated that R&D-active Australian businesses were three times more likely to introduce new-to-market goods and service innovations than non-R&D-active ones.<sup>1</sup> BERD currently makes up just over half (51.0 per cent) of total Gross expenditure on R&D (GERD). It is particularly relevant to businesses in technology-intensive industries such as *Manufacturing* but also increasingly in *Professional, scientific and technical services*, which now represents the largest contribution to BERD. Following a notable decline in 2015–16, total BERD lifted from \$16.7 billion in 2015–16 to \$18.2 billion in 2019–20. The largest increase in this period occurred in overseas expenditures (up \$1.2 billion), while in Western Australia expenditures continued to fall sharply (down \$677 million). In 2019–20 by field of research, the largest contribution to BERD came from *Information and computing sciences* (\$7.1 billion) and *Engineering* came in second (\$5.3 billion).<sup>2</sup>

**Figure: Business expenditure on R&D (BERD), \$ billion, latest 2019–20**



<sup>1</sup> Department of Industry, Innovation and Science (2016) *Australian Innovation System Report 2016*, Office of the Chief Economist (<https://www.industry.gov.au/data-and-publications/australian-innovation-system-report/australian-innovation-system-report-2016>)

<sup>2</sup> ABS, *Research and Experimental Development, Businesses, Australia*, Cat. No. 8104.0 (<https://www.abs.gov.au/statistics/industry/technology-and-innovation/research-and-experimental-development-businesses-australia/latest-release>)