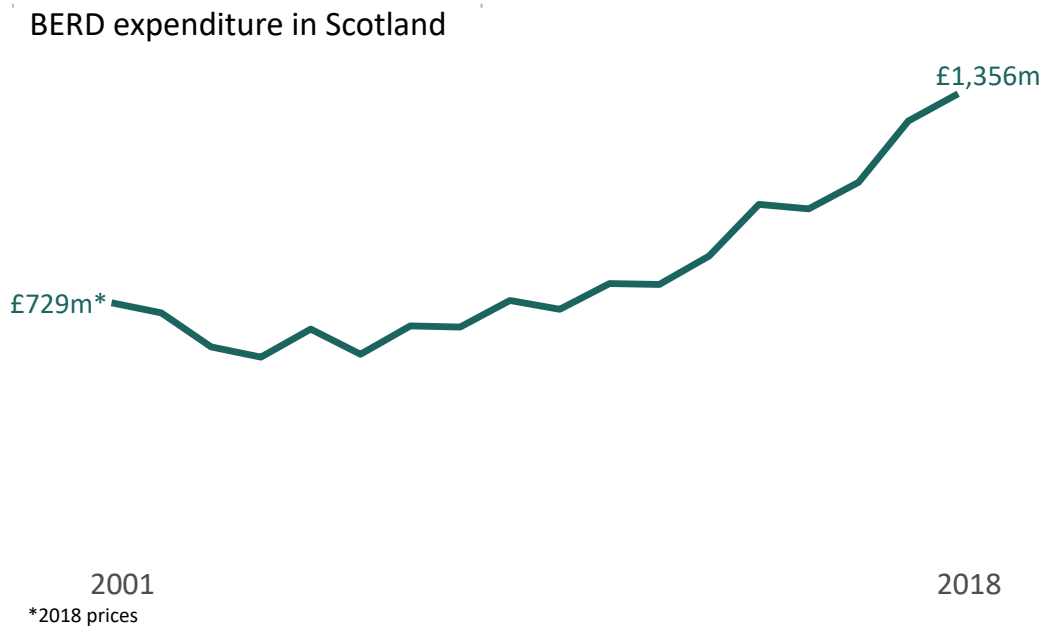


Increase in Business Enterprise Research and Development (BERD) spend in Scotland

In 2018, BERD spend in Scotland reached £1.356 billion - the highest level in the series.

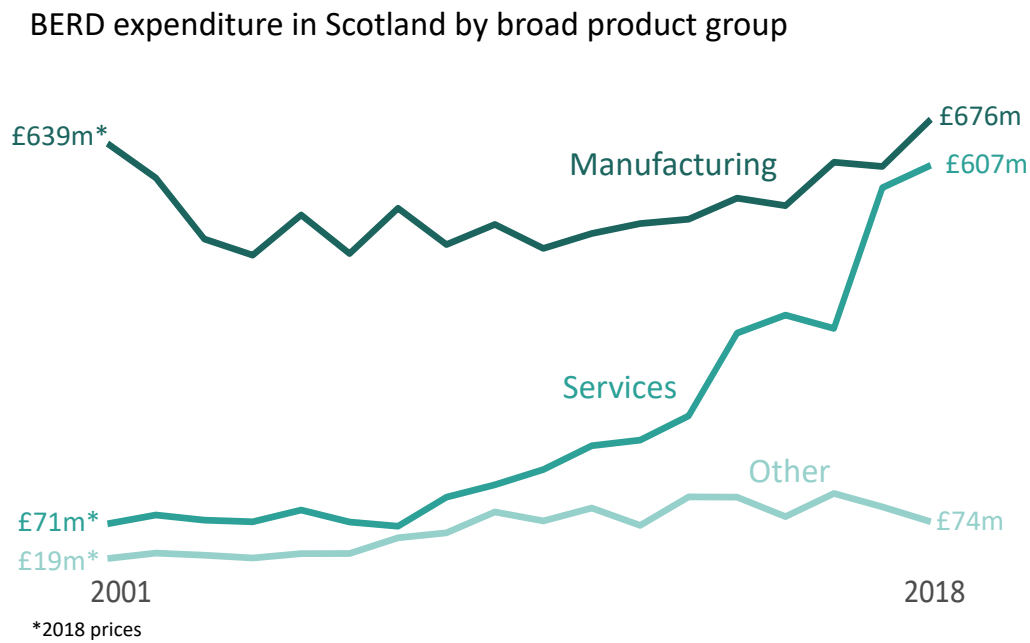
Scotland's real terms increase in BERD spend between 2017 and 2018 exceeded the growth in the UK (6.4% for Scotland v 3.9% for the UK)



Increase in Business Enterprise Research and Development (BERD) spend on Manufacturing and Services products in Scotland

In 2018, BERD spend in Scotland was mainly split between Manufacturing products (49.8%) and Services products (44.8%).

Between 2017 and 2018, BERD spend on Manufacturing and Services products increased by 11.7% and 5.8% respectively; BERD expenditure on 'Other' products decreased by 23.2%

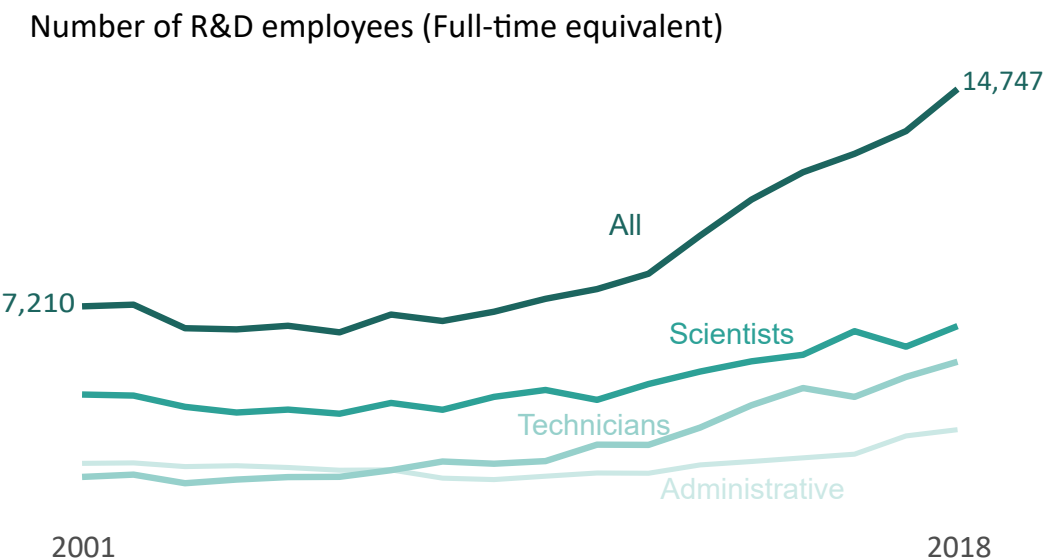


Increase in BERD employment in Scotland

Businesses in Scotland employed 14,747 R&D staff in 2018, an increase of 11.0% from 13,290 in 2017.

BERD employment is now at the highest level since the series began in 2001.

There were more than twice as many BERD employees in 2018 as there were in 2001 in Scotland.



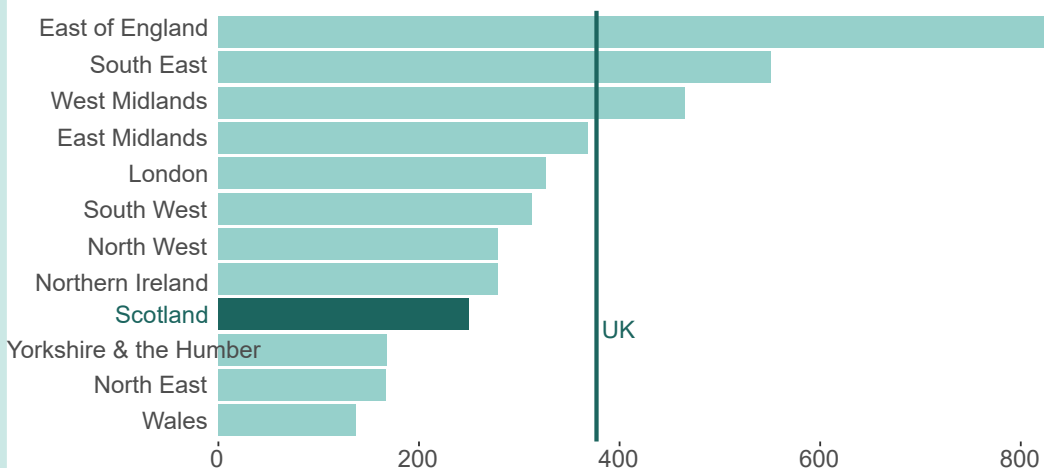
Business Enterprise Research and Development (BERD) expenditure per head of population in Scotland was £249 in 2018

In 2018, average BERD spend per head in the UK was £377, considerably higher than in Scotland.

Only three UK regions spent less per head than Scotland in 2018.

R&D spend per head was over three times higher in the East of England than in Scotland (£829 vs £249).

BERD expenditure per head of population (£)



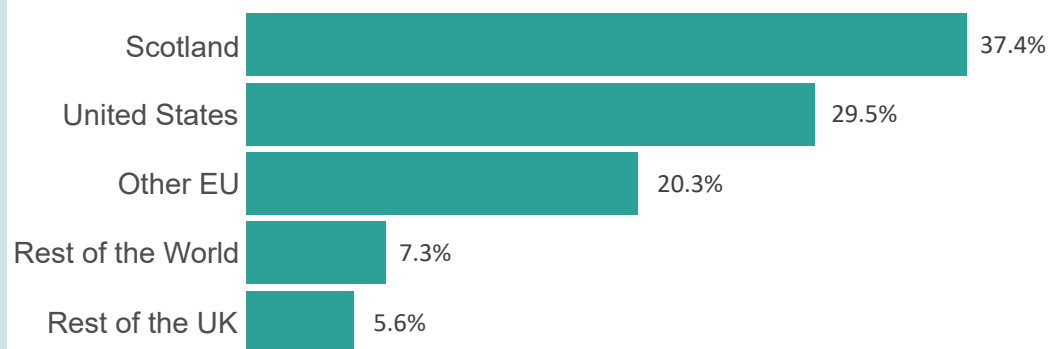
Scottish-owned businesses accounted for just over a third of BERD expenditure in Scotland

Over half of R&D expenditure in Scotland was by foreign-owned businesses.

US-owned businesses accounted for nearly a third of BERD spend in Scotland.

Spending by businesses with ownership in other EU countries decreased between 2017 and 2018.

Proportion of BERD expenditure by country of ownership of business



The largest businesses accounted for the majority of total BERD expenditure in Scotland

Large businesses (400 or more employees) accounted for almost two thirds (£854m) of BERD spend in Scotland in 2018.

Large businesses had a much higher average expenditure on R&D (£7.5m) than smaller businesses: £61k and £901k in businesses with less than 100 and 100 to 399 employees respectively.

Proportion of BERD expenditure by size of business

