
Overview of new insights into Scottish research impact

Three new studies affirm the benefits of Scottish university research to the economy and to wider society. Here, we provide a short context to the reports and summarise some of their main findings.

Scotland's global standing

Scotland is a leading research nation with an active and productive research community that publishes highly regarded research. A recent study by academic publisher, Elsevier, found Scottish research received 80% more citations in academic papers than the global average.

Scotland is a key international collaborator, and over half of Scottish research relating to United Nations Sustainable Development Goals is carried out with international partners.

Why countries invest in research

Research is one of the keystones of a progressive society. Nations invest in it because:

- They recognise its positive impact on people. New knowledge and new inventions benefit everyone in the long term.
- They know research creates wealth. Successful 'blue skies' research in universities spills over into benefits for businesses, industry and the whole economy.
- They understand research gives rise to the industries of the future. Technologies to support the transition to net zero, big data and artificial intelligence are all now moving out of research departments to create real investment and real jobs in the industries of tomorrow.

Impact on the Scottish economy



[New analysis](#) from the Fraser of Allander Institute shows public investment channelled into research by the Scottish Funding Council supports at least:

- 8,900 full-time equivalent jobs.

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- £590 million in sales of goods and services produced in Scotland.
 - A £410 million contribution to the Scottish economy measured as Gross Value-Added.

This level of support is typically higher than that provided by other sectors, and evidence from elsewhere at a UK level suggests universities may generate up to 20% more value at least on top of these benefits.

Impact on society



RAND, an international organisation specialising in understanding public policy, has examined how research conducted in Scottish universities improves people's lives. To do this they looked at the Scottish case studies submitted for the most recent UK wide assessment of university research. [Its report](#) found that:

- Scottish universities are able to turn their research into local benefits in areas like education, health and the arts. In around one in every three examples looked at, these benefits occurred within a 15-mile radius of the university.
- Scottish universities are playing a part in solving global problems identified by the United Nations. The positive impact of research from Scottish universities included the diagnosis of illness and disease; upholding human rights; and preserving cultures.
- Scottish universities are helping tackle the climate emergency. They are developing new technologies, finding ways to measure greenhouse gases and helping to shape policy in the UK and across the world. Importantly, they are also working closely with industry to turn research into business opportunities, jobs and future prosperity.

Built on a foundation supported by SFC's Research Excellence Grant



All the impacts described above are rooted in the public investment from the Scottish Government that goes to Scottish universities through the Scottish Funding Council's Research Excellence Grant.

The Research Excellence Grant provides universities in Scotland with a stable foundation on which to base their long-term development of excellence in research and innovation.

It is designed to work in tandem with the short-term project grants Scottish universities attract from sources such as UK Research & Innovation, the European Union, and charities like the Wellcome Trust.

A [new report](#) from the Scottish Funding Council, describes the positive impact of this foundation funding stream through a series of case studies.

A pipeline for the future

Research is a long-term endeavour. The impacts we describe above come from past investments.

A pipeline for the research benefits of the future requires stable, sustained and continuous investment in university research. Variations in levels of investment risk the loss of research talent that is easily attracted to other countries. Not having a steady structural base from which to win competitive project funding risks stalling the conversion of new knowledge into real world benefits.

Having a pipeline for the future will allow Scotland to build on its exceptional research abilities and continue to change lives, discover new knowledge and create prosperity for communities in Scotland and across the world.

“By chasing the discoveries of tomorrow, we can help people today”

Professor Sheila Rowan, Professor of Experimental Physics, University of Glasgow; Director of the Institute for Gravitational Research; former Chief Scientific Adviser (CSA) for Scotland