

# The UK: Thinking big or small?

No member state has ever left the European Union (EU), and so the idea that the United Kingdom (UK) might leave has stirred fierce debate ever since Prime Minister David Cameron promised a referendum on membership nearly a year ago. On 23 June 2016, British citizens have a choice to make. Public opinion in the UK is split on a British exit from the EU, or a “Brexit.” A recent survey indicates that the majority of researchers favor the UK remaining in the EU.\* As a British scientist and former Chief Scientific Adviser to the President of the European Commission, I believe that it benefits the UK, the EU, and global science for the UK to remain a strong committed member of the EU.

Established in 1951 to cement nations through common trade interests, the EU reflects a unified movement toward peace, prosperity, and stability. Now a family of 28 nations, this union shares economic goals and social and cultural values, and solves problems and exerts global influence through partnerships. As a result, the EU leads some of the most successful scientific enterprises in the world.

A vote to leave the EU amounts to turning Britain’s back on a demonstrably valuable venture that supports the UK’s scientific success. The UK would face having a minor role in scientific endeavor rather than one of leadership and common vision. Science would survive, of course, and the UK could try to agree to terms with the remaining EU members (not a foregone conclusion) to secure “associated country” status for major science projects such as Horizon 2020, the largest EU Framework Programme for Research and Innovation. But the UK would say goodbye to influence, and the ability to achieve scientific ambitions would diminish as it attempted to compete globally as a small island nation.

Would this really matter? If the UK aspires to deliver a robust and sustainable economy fit for the 21st

century, that economy must be based on science, engineering, and technology. It is difficult to see how that will be achieved if the best researchers in the UK are distanced from the best in Europe and other global partners. Science is an international pursuit. It relies on the best infrastructure, which cannot easily be delivered by single nations. British scientists currently have leadership roles in, and benefit from, the European Southern Observatory, the European Space Agency, the European Molecular Biology Laboratories, ITER (European nuclear fusion project), and ELIXIR (European infrastructure for biological information), to name a few. This involvement supports the UK’s scientific aspirations, industries, and economy.

The UK currently attracts the best scientists in the world, who understand that by being there, they can influence and take part in EU research programs, move freely between EU member states, form powerful scientific networks, and access the best infrastructure. It is hard to imagine that the UK would remain attractive to the best global scientific minds if distanced from the EU. Worse yet, would the UK close its borders to European scientists? Consider how the UK would deliver its European networks if the

UK government chose not to replace funding received from Horizon 2020, an amount that substantially exceeds its proportionate contribution.

Without doubt, there are challenges for the European Commission as it struggles to support the rapid expansion of the EU. Tensions about debt crises and immigration loom large over Europe. But what would a Brexit reflect as far as the British attitude toward an alliance that represents the hope of further strengthening stability and security? Rather, the UK should be working with its European partners to make the EU the best it can be.

– Anne Glover



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***“...it benefits the UK...  
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\*D. Cressy, *Nature* 531, 559 (2016).

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*Science* **352** (6283), 273.  
DOI: 10.1126/science.aaf8180

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