# International research collaboration beyond Brexit

Adrian Smith & Graeme Reid 26 February 2020

"...the UK would like the option to associate to Horizon Europe .... we are also exploring in parallel credible and ambitious alternatives .... in the event that the UK chooses not to associate."

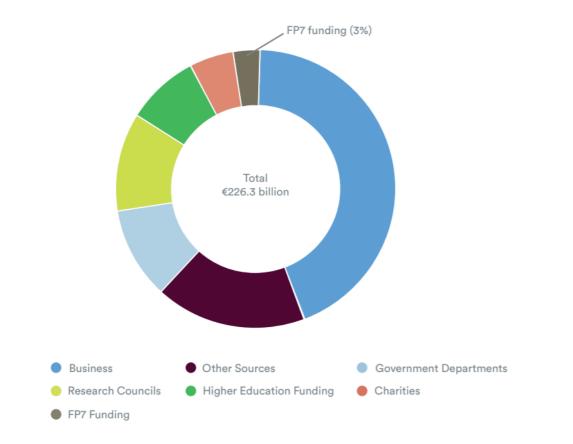
Written statement to the House of Commons Chris Skidmore MP, 26 March 2019

**After Brexit** 

"...the UK will no longer pay a 'membership subscription' to the EU. Until now, that subscription has automatically included the UK's financial contribution to EU research programmes.

In future, any financial contribution to EU research programmes may be tensioned against other options for domestic UK budgets."

#### Scale of EU R&D funding



#### c3% of UK GERD

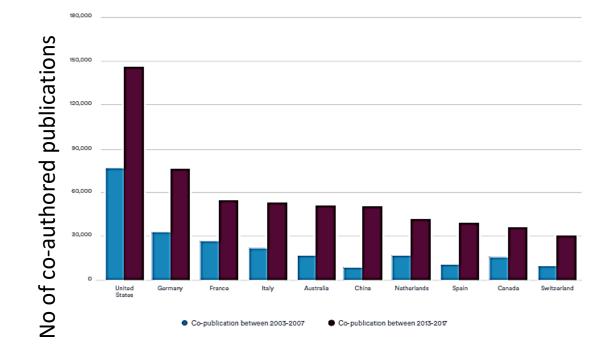
#### c3.5% of EU28 GERD

### 3% of UK GERD masks patterns of concentration

- Russell Group universities 11% (2017/18)
- Welsh R&D depends on ESIF
- archaeology, classics.... > 30% (2014/15)

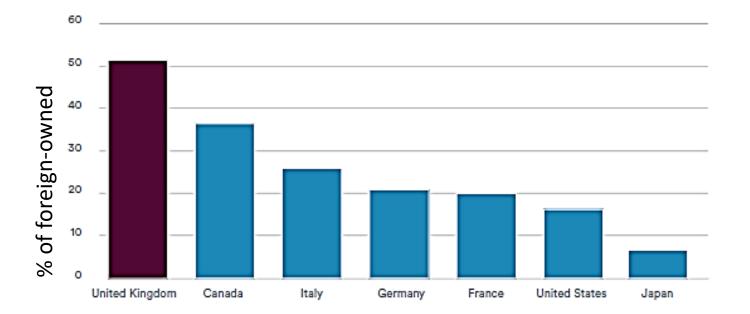
#### .... and intangible benefits

### UK's top 10 partners by volume of internationally co-authored publications



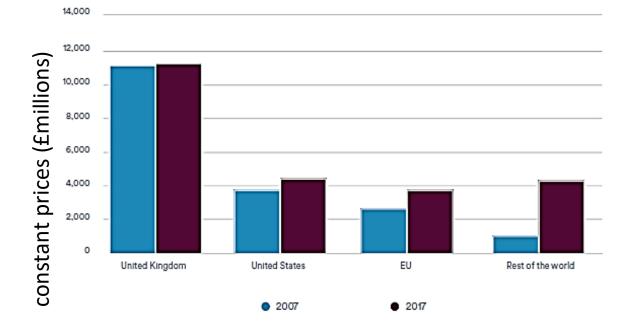
Source: Elsevier Scival Database

### 2015 R&D spend of foreign affiliates as % of business R&D



Source: OECD, MSTI Database

## Country of ownership of businesses performing R&D in the UK



Source: BERD statistics, ONS

## Replace the quantity of EU funding

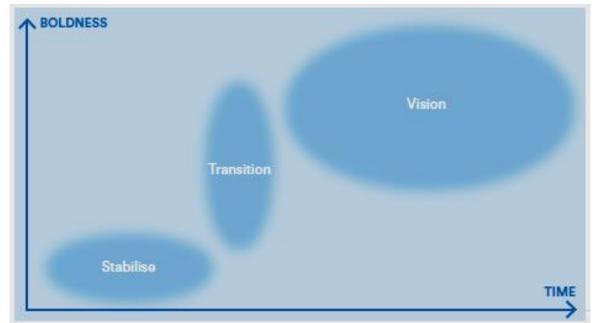
".... we see a powerful case for replacing the level of funding that the UK currently receives from EU R&D activities – around £1.5bn per annum ...."

### Recommendations

### No line-by-line replication of EU programmes

"...we are not convinced that a persuasive case can be made for sizeable levels of public spending on activities that replicate, line by line, EU research and innovation arrangements in the UK."

## Moving to a global vision for research and innovation in the UK



#### Protect and stabilise UK capabilities

"We recommend that any decision not to associate should be accompanied by an immediate programme to protect and stabilise capabilities built up in the UK through participation in EU research and innovation programmes over recent decades."

#### Framework for global vision

A global vision including:

- strides towards 2.4%;
- research and innovation addressing long-standing regional disparities; and
- increasing the agility of UK research and innovation.

**Global Talent Strategy** 

"... reforms to immigration policy ... to attract and retain many of the world's most talented researchers and research students in the the UK."

Smith &

Reid, 2019, p38

#### **Flagship research fellowships**

- Exceptional researchers.
- Two or three successive four year terms.
- Scale at least as great as from other funders.
- Funding available at all career stages.
- Overseen by prestigious international faculty of peer reviewers, recruited through national academies.

### Principles for administration of alternative funding:

- Robust governance to maintain the confidence of BEIS and HM
  Treasury.
- Independence and transparency to maintain the confidence of international collaborators.
- Expertise in international collaborations.
- Diversity of funding sources.
- Lowest extra costs of administration.

#### **Future analysis and decisions**

- Association or 'Third Country' for Horizon Europe?
- Replacing HMT's funding guarantee with 'Protect and Stabilise' support?
- Governance of agility funding and expanded international collaboration?
- Domains with large amounts of EU support?

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