REPUTATIONAL IMPACTS OF INTERNATIONAL RESEARCH AND INNOVATION

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5.4. UK's unilateral support for international collaboration

The UK builds a strong reputation through unilateral grants that support both UK and international individual researchers and research groups to engage in international R&I that are not necessarily be part of bilateral, multilateral, or international development grant programmes discussed in the previous three sections of Chapter 5. These grants allow for overseas collaborators to be included as co-investigators and enable international academics to visit the UK for a limited timespan to develop collaborative projects with UK researchers. Depending on the nature of the grants, they are designed to cover part or all of the full economic costs (FEC) of cutting-edge research projects and international travel expenses. These initiatives demonstrate the UK's commitment to boost its reputation as a global leader and collaborator in supporting research and innovation. This section will discuss the activities that bolster the UK's reputation in international R&I, the nature of the reputation generated from these activities and the impacts of the UK's reputation as a global leader in R&I, and how the impacts further reinforce the UK's reputation [Figure 5.4].

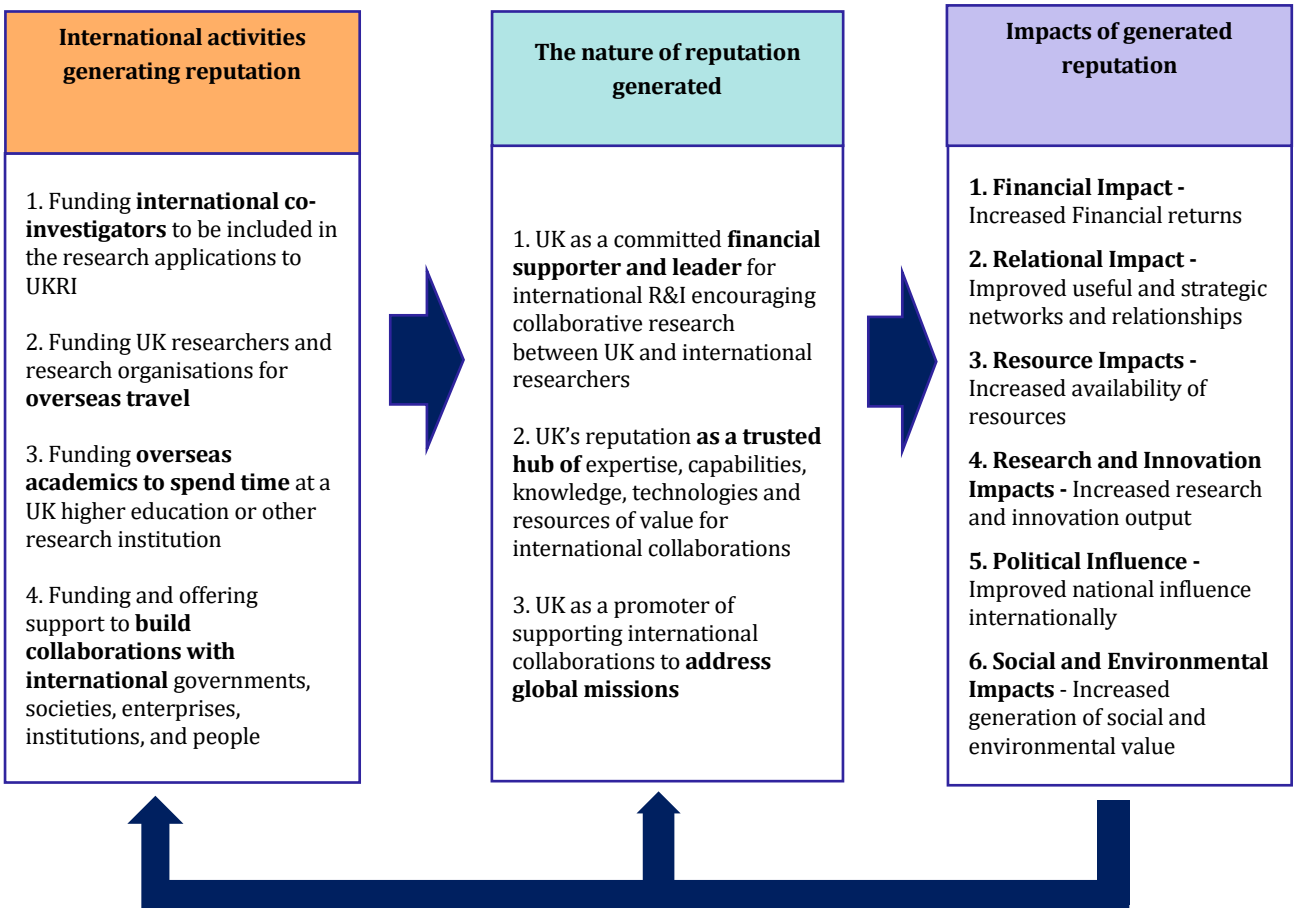

Figure 5.4: UK's unilateral support for international collaboration generating reputational impacts

5.4.1 International Activities

Funding international co-investigators to be included in the research applications to UKRI

The international co-investigator policy allows overseas collaborators to be included as co-investigators on applications to UK Research and Innovation (UKRI) research funding opportunities. The international Co-I funding covers the Co-I costs depending on the specific international project. The Co-I funding policy emphasises that international collaboration is inherently critical for UKRI and its research councils such as Arts and Humanities Research Council (AHRC), Economic and Social Research Council (ESRC), and Medical Research Council (MRC) as it serves as a fundamental underpinning of a broader international initiative. It facilitates UK-based researchers to collaborate with their peers worldwide enhancing the quality and impact of their research, particularly in the fields that are new to UK-based researchers. For instance, the International Co-I supports' research in areas such as social science focusing on populations not based in the UK, or in health space, where global collaboration is needed to understand global health, diseases not present in the UK, or rare

conditions with few patients in any one country (Review of the International Co-Investigator Policy, 2023).

For example, UKIR's Metascience Research grants support collaborative research with international organisations. This includes project co-leads based in non-UK research organisation that can be included in research grants available for international activities and international partner organisations, committed to achieving equality of opportunity for all funding applicants. This also enhances opportunities for both UK and international researchers to address challenges or seize opportunities that are not possible within a single country.

Funding UK researchers and research organizations for overseas travel

Funding UK researchers and research organizations for overseas travel facilitates international collaborations, accessing unique resources and expertise, and building a competitive edge.

International travel awards provided by the Biotechnology and Biological Sciences Research Council (BBSRC) support researchers with their visits abroad to establish initial contacts with international partners or prepare proposals for international programs, for up to one month, or attend European consortia-building events. It also aims to support researchers' stays of up to one month at facilities not available in the UK to conduct specific work or access techniques and materials beneficial to BBSRC research projects or research teams. Similarly, the Engineering and Physical Sciences Research Council (EPSRC) offers overseas travel grants, up to 80% of the full economic cost (FEC) of the project in any area within the remit of EPSRC to UK-based researchers to acquire new techniques or establish and develop international collaborations.

Funding overseas academics to spend time at a UK higher education or other research organisations

UK offers funding for overseas academics to spend time at UK higher education or research institutions through funding programmes such as the British Academy's Visiting Fellowship. This programme attracts global talents by inviting academics from around the world to visit the UK for up to six months and develop collaborative projects regardless of their career stage or discipline within the humanities and social sciences. It helps build new links and foster future partnerships between international scholars and UK researchers to strengthen global collaboration. This collaborative effort highlights the UK's role in fostering international research networks and partnerships. By enabling overseas academics to engage in research and professional development at UK institutions, the programme contributes to the development of high-quality research outputs in the humanities and social sciences and further exchange of knowledge showcasing the UK's capacity to produce impactful and innovative research

outcomes. The Visiting Fellowship programmes underscores the British Academy's dedication to international engagement and creating a welcoming research environment for global academics.

Funding and offering support to build collaborations with international governments, societies, enterprises, institutions, and people

In addition to academically focused unilateral funding programmes, the UK also offers funding and support to build collaborations with international governments, societies, enterprises, institutions, and people. For example, the Global Expert Missions (GEM), funded by Innovate UK fund and foster international collaboration with governments, societies, enterprises, institutions, and individuals worldwide. Aimed at addressing global challenges from international perspectives, the GEM programme supports the UK government's ambitions to become the international partner of choice and a global hub for innovation. It highlights the best of the british technology, research, and expertise, and enhances the UK's innovation partnership with global economies. The GEM programme's global collaboration with multiple stakeholders has been well-evidenced in examples such as Innovate UK's collaboration with industry leaders and sector experts, and leading public and private sector organisations in Australia to explore developments in Critical Materials for Electrification. Also, Innovate UKs GEM programme in partnership with UKRI India, WRAP collaborated with industry leaders and sector experts to explore development in Sustainable Plastic Packaging (Sustainable Plastic Packaging in India 2023). A 5-day GEM mission, comprising of seven UK delegates active in the UK Advanced Manufacturing industry was conducted in three separate locations in Türkiye. This mission was carried out in collaboration with key stakeholders from both private and public sector organisations, focusing on the ways materials and manufacturing organisations can be more sustainable and resource-efficient, leading to increased resilience and/or technological advancement (Advanced Manufacturing and Materials in Turkey 2022). All these activities showcase the UK's commitment to supporting international R&I collaborations and addressing global challenges, benefiting the affected stakeholder groups.

Other impactful examples are Innovate UK's Global Business Innovation Programme, Global Incubator Programme, and Business Growth Programmes, which further enable UK businesses to grow by engaging in impactful international collaborations and driving innovation across borders. These programs support UK companies in expanding globally and fostering partnerships with international researchers, SMEs, and academic institutions. Another example is the UKRI's Engineering and Physical Sciences Research Council (EPSRC) international Centre-to-Centre research collaboration call, which funded twelve partnerships in various fields

including quantum computing and electric vehicles, enabling leading UK research groups to collaborate with top international researchers on their projects.

5.4.2 The nature of the generated reputation

UK as a committed financial supporter and leader for international R&I encouraging collaborative research between UK and international researchers

The international co-investigator policy for overseas collaborators, UKIR's Metascience Research grants, and the Global Expert Missions (GEM) programme exemplify the UK's commitment and contribution to global R&I, including nurturing both UK and international researchers and their collaborations.

The UK's reputation as a considerate, supportive, and inclusive research environment is reflected in several key practices including, encouraging funding applications from a diverse range of researchers, supporting flexible working arrangements tailored to individual researchers' personal circumstances, providing support for career breaks, offering assistance for people with caring responsibilities, and promoting alternative working patterns. The British Academy's Visiting Fellowship programme particularly encourages applications from historically and/or structurally disadvantaged groups, low-income countries, and female researchers. The UK has built a reputation for offering international researchers transparent and merit-based career progression, outperforming other European countries in terms of the career opportunities available to academics (MORE4 study), underscoring the UK's dedication to creating and accommodating equitable research environment for international researchers

UK's reputation as a hub of expertise, capabilities, knowledge, technologies, and resources of value for international collaborations

UK has built reputation as the go-to research partner of choice and enhanced its domestic research by attracting increased foreign investment and talent (The UK's role in global research: how the UK can live up to its place in the world). Global Expert Missions (GEM) advance the UK's vision of becoming a global hub for UK innovation, by showcasing the best of British technology, research, technology and expertise and establishing the UK as the trusted partner of choice for innovation collaborations. To align with the UK's R&D ambitions, the UK has to maintain and enhance its status and reputation as a preferred collaborator and destination (R&D People and Culture strategy). These reputational ambitions have been fulfilled by UK's international mobility for both countries and research organisations. The UK has established a prestigious reputation as a hub of expertise, knowledge, and technologies with its research organisations playing a significant role in attracting international researchers

(Highly skilled migration and the negotiation of immigration policy: non-EEA postgraduate students and academic staff at English universities), along with the highly skilled technician workforce that provides essential support to research (Impact of Brexit on the technical workforce at Russell Group universities).

UK as a promoter of supporting international collaborations to address global missions

The UK's reputation as a promoter of supporting international collaborations to address global missions is reinforced through its commitment as a financial supporter and innovative partner. Programs like the Global Expert Missions (GEM), illustrate this commitment by fostering international collaboration with governments, societies, enterprises, institutions, and individuals worldwide, by addressing global challenges from an international perspective.

5.4.3 The impacts of the generated reputation

Table 5.4: Impacts of reputation generated through UK's unilateral support for international collaboration

Types of Impact	Specific Impacts
1. **Financial Impact** - Increased Financial returns	Increased foreign investment in UK R&I.
2. **Relational Impact** - Improved useful and strategic networks and relationships	Enhanced opportunities to develop strategic and successful partnerships among institutions and individuals.
3. **Resource Impacts** - Increased availability of resources	Enhanced access to, and/or develop new national and international resources, funding, capabilities, infrastructure, knowledge and networks
4. **Research and Innovation Impacts** - Increased research and innovation output	Increased opportunities to collaboratively develop new products, services, technologies and processes for local, national and global markets. Long-term commitments from international stakeholders on UK R&I
5. **Political Influence** - Improved national influence internationally	Increased "Soft" influence of the UK globally
6. **Social and Environmental Impacts** - Increased generation of social and environmental value	Enhanced opportunities to simultaneously generate business, academic, social, and/or environmental value

Case Study: Global Expert Mission (GEM) programme on XR and Mental Health Technologies in the US

The Global Expert Mission (GEM) programme on XR and Mental Health Technologies in the US 2023 was funded by Innovate UK. This programme supports the UK's Industrial Strategy by building strategic international partnerships and providing deep insights into opportunities for UK innovation.

International R&I activities:

The Global Expert Mission to the US in March 2023 aimed to gain a deeper understanding of the XR and mental health technologies ecosystem and identify opportunities for collaboration based on findings from the Northeast Coast of the United States. The challenges were specific to the US healthcare system, such as waiting times for diagnosis, costs of in-hospital care, mental health awareness, and the need for at-home care solutions, education and empathy training for healthcare professionals, remote collaboration between healthcare professionals and patient diagnosis. Despite the nascent stage of XR technology in both the UK and the US, the mission provided valuable insights into overcoming regulatory barriers, market access issues, and ethical and accessibility challenges.

The mission included various activities such as site visits to leading XR technology companies, workshops with healthcare providers, and meetings with regulatory bodies. These activities helped participants gain a comprehensive view of the current landscape and the potential for future innovations. Additionally, the mission facilitated networking opportunities, enabling UK and US experts to establish connections that could lead to future collaborative projects.

The nature of reputational impacts generated:

This understanding not only fosters collaboration but also offers reputational advantages by positioning the UK as a key player in advancing mental health technologies and influencing global healthcare practices. By addressing these challenges and engaging in these activities, the mission not only enhanced the UK's reputation in the field of mental health technologies but also demonstrated its commitment to leveraging cutting-edge technology to improve healthcare outcomes globally. This strategic positioning is crucial for influencing global healthcare practices and ensuring that the UK remains at the forefront of technological advancements in mental health care.

Source: https://iuk.ktn-uk.org/projects/global-expert-missions/xr-and-mental-health-technologies-in-the-us-2023/; Follow Global Alliance on the latest Global Expert Mission in AI in Construction to Switzerland - Innovate UK Business Connect

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About the Innovation and Research Caucus

The IRC supports the use of robust evidence and insights in UKRI's strategies and investments, as well as undertaking a co-produced programme of research. Our members are leading academics from across the social sciences, other disciplines and sectors, who are engaged in different aspects of innovation and research system. We connect academic experts, UKRI, IUK and the ESRC, by providing research insights to inform policy and practice. Professor Tim Vorley and Professor Stephen Roper are Co-Directors. The IRC is funded by UKRI via the ESRC and IUK, grant number ES/X010759/1. The support of the funders is acknowledged. The views expressed in this piece are those of the authors and do not necessarily represent those of the funders.

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