

# UNIVERSITY-DRIVEN INTERNATIONAL R&I GENERATING ECONOMIC VALUE TO THE UK

Muthu Desilva<sup>1</sup>, Dize Dinckol<sup>1</sup> and Andrew Watkins<sup>2</sup>

Birkbeck, University of London<sup>1</sup> and Oxford Brookes University<sup>2</sup>

August 2026

## EXECUTIVE SUMMARY

International Research and Innovation (R&I) give access to complementary international expertise, methods, networks, infrastructure, and datasets unavailable domestically, enabling globally distinctive economic value that national R&I alone cannot achieve. This globally distinctive economic value arises specifically because R&I spans national boundaries, creating outcomes that are qualitatively different through cross-border combinations of knowledge, talent, markets, networks and resources.

Commissioned by the Department for Science, Innovation and Technology (DSIT) and UK Research and Innovation (UKRI), this report examines how UK university-driven international R&I generate distinct economic value for the UK.

This report follows the [Phase 1 report](#), which mapped the literature and identified evidence gaps on UK-exclusive benefits, value-generation pathways, enablers and challenges for UK value capture, and the policy interventions most likely to maximise UK returns from international R&I. In response to these gaps, this report synthesises lessons from 20 successful cases that have generated economic value spanning low-to-high TRLs, disciplines, funders and partner types (university-university and university-business collaborations), with thematic analysis used to extract pathways, enablers and challenges.

### » Pathways to UK economic value from university-driven international R&I

Our analysis of evidence from 20 international R&I case studies identifies five distinct pathways through which economic value is created for the UK:

- **Producing globally distinctive, economically valuable knowledge:** International R&I brings together diverse insights, datasets, infrastructures and problem framings to produce original, generalisable knowledge and adoption-ready artefacts (methods, toolkits, standards), generating distinctive, economically valuable outcomes for the UK that domestic-only R&I cannot produce.
- **Developing world-class talent through global exposure:** International R&I equip UK researchers, businesses and students with frontier methods, regulatory literacy and intercultural leadership, which return to UK labs, firms and classrooms, raising employability and innovation readiness.

- **Creating jobs in globally demanding, future-facing sectors:** International R&I align UK capabilities with worldwide demand, catalysing jobs in spin-outs, UK roles in Multinational Corporations (MNC)' UK sites, and project-linked employment that often seeds longer-term growth.
- **Improving UK industry and policy operations:** Comparative datasets and co-developed solutions deliver sharper analytics, leaner processes and better operations in UK organisations, especially when underpinned by credible international benchmarks.
- **Accelerating commercialisation using global resources:** Access to international customers, resources, supply chains, testbeds and regulators shortens the path to product–market fit, increases licensing options and supports UK-anchored spin-outs and sales.

## » What not to assume about university-driven international R&I

Drawing on our analysis of evidence from 20 cases, we identify several common misconceptions about university-driven international R&I that should be avoided:

- **“University–university” international R&I collaborations are rarely universities-only.** Even where partnerships are formally framed as university–university, collaborations that generate economic value typically engage non-academic actors—such as businesses, policymakers, and end users—who shape problem definitions, provide data and testbeds, and enable diffusion.
- **University-driven international R&I pathways are iterative, not linear.** Rather than progressing through a stage-gated sequence, teams move back and forth across Technology Readiness Levels (TRLs). Insights from users, markets, and regulation frequently prompt refinements to the underlying science or design, increasing the likelihood of achieving fit-for-purpose economic impacts in the UK.
- **International R&I cannot be replicated through UK-only activity.** It provides access to complementary overseas expertise, facilities, datasets, and real-world contexts, which together unlock forms of economic value that would not otherwise be attainable.
- **International collaboration does not slow adoption.** Multi-country datasets and trials enhance robustness and external validity, build confidence for scaling across markets, and can accelerate diffusion through earlier piloting, improved market access, and regulatory alignment—thereby strengthening export readiness and uptake.
- **Cross-border collaboration does not simply add risk or cost.** While international R&I can involve higher direct and transaction costs and risks—driven by travel, multi-jurisdictional coordination, and legal or contracting complexities—in practice, consortia share costs and risks, reduce delivery expenses through digital collaboration, and unlock access to overseas or multilateral funding sources that would otherwise remain unavailable. When well-designed, these factors enable the returns to outweigh the additional costs and risks.

## » Enablers (positive moderators) of university-driven International R&I generating economic value to the UK

Our analysis of evidence from the 20 cases highlights the key enablers for creating economic impacts in the UK:

- **Anchor international R&I in UK needs and value-capture pathways:** Projects generated stronger UK economic value when they were framed around UK industry, policy or operational problems, involved UK practitioners, businesses and UK-based sites of

multinationals, and were supported to adapt, demonstrate and embed internationally generated innovations in UK organisations.

- **Fund the full pathway from discovery to scale-up:** Continuity of funding across TRLs, including translation grants, venture/spin-out finance, first-production support and sequential multi-year rounds, helps prevent drop-offs between discovery, validation, commercialisation and UK job formation. This enables the UK entities to move from proof of concept developed internationally to commercialisation and sales benefiting the UK.
- **Strengthen leadership and institutional support:** Economic value was enabled when experienced researchers and Principal Investigators could secure funding, align incentives and manage international partnerships, while drawing on strong Technology Transfer Offices (TTO) and enterprise support (IP, licensing, spin out formation, contracts) to convert internationally generated outputs into UK revenue and jobs.
- **Configure partnerships around purpose, mission and stage of development:** Successful collaborations aligned partners around shared long-term missions [e.g. to addressing global challenges], used broad open networks at lower TRLs and more focused trusted partnerships nearer commercialisation/high TRLs, and combined interdisciplinary perspectives to produce solutions that were both distinctive and adoptable in UK contexts.
- **Support open diffusion and globally exposed UK talent pipelines:** Open and accessible outputs generated through international R&I — including publications, data, code, toolkits and protocols — helped accelerate uptake and recombination of ideas, while international exposure for early-career researchers, co-supervised PhDs and targeted training enabled globally benchmarked skills to return to and circulate within the UK system.
- **Design international R&I to be cost-effective while maintaining quality:** Successful projects used secure digital platforms, electronic lab notebooks, version control, remote access to infrastructure and travel-lite working to reduce delivery costs, while retaining targeted face-to-face engagement where needed for trust, quality or problem-solving.

## » Challenges (Negative Moderators) of university-driven International R&I generating economic value to the UK

Drawing on 20 cases, our analysis reveals the following key challenges in achieving economic impact in the UK from university-led international R&I.

- **Cross-border partner asymmetries:** Differences in culture, pace, incentives and scientific literacy that slow joint work and complicate translation into UK-ready outputs.
- **Multi-jurisdictional regulation and standards hurdle:** Stacked ethics, data, biosafety and regulatory requirements across countries that delay comparative, adoption-ready evidence.
- **Transnational impact pathways that diffuse UK value capture:** Benefits spread internationally unless UK-anchoring mechanisms (IP and licensing arrangements, trials, UK business, adopter, MNE and subsidiary involvement, UK demonstrations) are built in from the start.
- **Gaps in capacity, incentives and support for translation:** Limited specialist support, weak incentives, and insufficient capabilities in cross-border IP, data sharing, standards, commercialisation, and business development can leave international R&I of value to the UK underexploited.
- **Funding restrictions for international talent partnerships:** Policy and funding barriers to co-funding/co-supervising with overseas partners that weaken high-value training routes for UK talent.

- **Discontinuous “bridge” finance:** Funding gaps between discovery, development and scale-up (from both government and industry) that prevent promising international results from becoming UK products and services at pace, stall job formation and slow the path to domestic revenues.
- **Slow, complex contracting for non-academic partners:** Difficult and complex onboarding agreements and payment delays for UK SMEs/creatives/individual specialists that erode time-critical windows and deter their participation in translating value to the UK.
- **Adoption frictions inside UK organisations:** “Not-invented-here” attitudes, path dependency, complex partnership mechanics, and limited implementation capacity in UK organisations impeding the uptake of international R&I outputs and diminishing the benefits to UK businesses.
- **Risk-averse entrepreneurial environment:** Conservative attitudes and thin local entrepreneurialism in some regions that slow spin-outs and early scaling of internationally produced output.

## » Key Recommendations: UK government funding strategy

- **Funding international R&I where it adds unique UK value:** The findings demonstrate that international R&I generates globally distinctive economic value for the UK when the case for additionality is clear. This underlines the importance of funding international R&I, where it demonstrably unlocks capabilities, opportunities, resources, infrastructure, datasets, testbeds, standards pathways, or market access that are unavailable domestically. Grant applications could therefore include a short case for “International Additionality”, alongside strategies to minimise costs, such as using remote collaboration where appropriate while retaining essential international travel.
- **Securing UK value capture by design:** The evidence showed that teams with pathways for translating the value of international R&I into UK benefits have generated globally distinctive economic value for the UK. This highlights the need for applicants to demonstrate how international R&I outputs will be translated into UK value. To support this, applications could be required to include a scored “UK Value Capture Plan”; grant agreements embedding obligations relating to UK value capture and diffusion; and post-award requirements incorporating a UK diffusion plan and UK-based demonstrations following international pilots [Box 1 provides further detail on the mechanisms through which UK value can be captured from university-driven international R&I].
- **Funding the UK scaling and value capture of international R&I outputs:** Fund the UK scaling and value capture of international R&I outputs by (a) launching new funding calls that support adopting in the UK after international pilots; (b) offering support and funding that provide equipment, validation batches, certifications, and go-to-market support; and (c) using pre-commercial/pathfinder procurement—time-limited public contracts that pay UK organisations to trial first deployments, generate independent performance evidence, and serve as early reference customers—to shorten time-to-market and anchor revenues, jobs, and exports in the UK.
- **Funding the whole (iterative) pipeline:** Fund the full, iterative pipeline by sequencing awards from discovery→translation→demonstration/validation→scale-up, using milestone-based tranches with payments tied to specified deliverables, and allowing back-loops so teams can return to earlier phases to resolve issues or incorporate new findings without penalty. Support multi-jurisdictional testbeds and approvals by providing access to test environments and coordinating regulatory submissions in the UK and relevant overseas markets to generate credible, mutually recognised evidence.

- **Building UK talent through global exposure.** Enable co-funding and co-supervision with international partners, scale Early Career Researcher (ECR) placements and industry-linked studentships, and support knowledge-mobilisation fellowships so globally benchmarked skills and methods return to and diffuse across UK labs, firms and public bodies.
- **Build UK capability to capture value from international R&I:** UK value creation depends on a broader bundle of organisational, relational, and implementation capabilities. Therefore, policy should go beyond funding international collaboration itself and invest in the resources, capacity, and capabilities that enable UK organisations to translate international R&I into domestic economic impact [Box 2 outlines the capabilities and capacities required to generate value for the UK from university-driven international R&I].

## Box 1: UK Value Capture Pathways from University-driven International R&I Collaborations

Our case studies show that successful international R&I projects do not generate value for the UK automatically. UK value capture needs to be deliberately designed into collaborations from the outset, so that international activity translates into clear economic, industrial, policy, and societal benefits for the UK:

- **UK problem ownership** - Projects were more likely to generate UK value when they were framed around a clearly defined UK industry, policy, or societal need. This ensured that the collaboration addressed a problem that mattered to the UK and that the resulting knowledge, technologies, or solutions had a clear domestic destination from the outset.
- **UK practitioner translation** - Successful projects kept UK practitioners visibly involved throughout the collaboration to help interpret findings for UK conditions. Their role was not simply to receive outputs at the end, but to ensure that international learning was translated into UK-relevant insights, tools, processes, standards, practices, or policy options.
- **UK adopter, beneficiary, and business pathways** - Projects generated stronger UK value when UK adopters, users, beneficiaries, and firms were built into the collaboration from the start. This created clearer routes for domestic uptake, enabled outputs to be tested and refined with potential users, and allowed UK businesses to shape, commercialise, scale, or supply resulting innovations.
- **UK-based multinationals and subsidiaries as bridging actors** - UK-based multinational enterprises and their subsidiaries played an important bridging role between international R&I activity and the UK commercial environment. They helped connect global knowledge networks with UK-based capabilities, supply chains, markets, investment opportunities, and routes to scale.
- **Clear IP and licensing arrangements** - Value capture was strengthened when intellectual property, licensing, ownership, and exploitation rights were addressed early. This helped prevent commercial value from defaulting to overseas partners and ensured that UK organisations retained credible routes to benefit from project outcomes.
- **UK trials, demonstrations, and diffusion activity** - International pilots created important learning, but UK value was amplified when projects included UK-based trials, demonstrations, or diffusion activity. These activities helped test what had worked overseas in a UK context, build confidence among domestic stakeholders, and showcase the relevance of the innovation to UK markets, institutions, users, and policy environments.
- **Contractual and post-award mechanisms for UK value capture** - The strongest projects did not leave UK value capture to goodwill or informal expectations. They used grant agreements, collaboration agreements, and post-award requirements to keep UK value pathways open. This included obligations relating to UK diffusion, UK-based demonstrations following international pilots, UK business engagement, domestic adoption, IP and licensing arrangements, and clear plans for translating project outcomes into UK economic, industrial, policy, or societal value.

## Box 2: Capabilities UK actors need to generate economic value to the UK from international R&I

Our case studies show that in order to enable more UK organisations to benefit from university-driven international R&I, policy should support the development of the following capabilities and capacities:

- **Absorptive capacity** - The ability to identify, understand, and use knowledge generated through international R&I collaborations.
- **Co-creation capability** - The ability to work actively and continuously with international partners by integrating resources, networks, knowledge and skills to define problems, shape research agendas, and develop solutions, rather than simply receiving outputs at the end.
- **Interdisciplinary capability** - The ability to combine technical, social, creative, commercial, and policy expertise so that international R&I outputs are both original and implementable in a UK context.
- **Implementation capacity** - The organisational bandwidth, resources, operational systems, and practical know-how needed to adopt and embed internationally generated outputs into UK products, services, systems, processes, or policies.
- **Institutional translation capability**- The presence of capable people, teams, and support structures, such as technology transfer offices, innovation intermediaries, commercialisation units, or policy translation teams, that can interpret, package, broker, and convert international R&I outcomes into UK economic, commercial, or policy value.
- **Practitioner and academic visibility and networking** - The networks, reputation, and connectivity that allow UK actors to understand real-world UK problems and make relevant organisations aware of university-driven international R&I outputs and their potential value.
- **Value capture readiness** - The ability and openness of UK organisations to adopt externally generated solutions, rather than defaulting to a “not invented here” mindset. This requires the capacity and capability of UK organisations to recognise, plan for, and act on opportunities to generate UK economic value from university-driven international R&I, including through adoption, diffusion, commercialisation, licensing, scaling, and policy uptake.

## Authors

- » Professor Muthu DeSilva – Birkbeck, University of London
- » Dr Dize Dinckol 0 Birkbeck, University of London
- » Dr Andrew Watkins – Oxford Brookes University

## Acknowledgements

This work was supported by ESRC grant ES/X010759/1 to the Innovation and Research Caucus and was commissioned by UK Research and Innovation (UKRI). Support was also provided by the Department for Science Innovation and Technology (DSIT) and the Department for Business, Innovation, Science and Trade (BIST) on the scope of research and review of outputs. We are very grateful to the project sponsors for their input into this research. The interpretations and opinions within this report are those of the authors and may not reflect the policy positions of UKRI or DSIT.

We would also like to acknowledge and appreciate the efforts of the IRC Project Administration Team involved in proofreading and formatting, for their meticulous attention to detail and support.

## 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.

## Find out more

**Contact:** [info@ircaucus.ac.uk](mailto:info@ircaucus.ac.uk)

**Website:** <https://ircaucus.ac.uk/>