Senedd Cymru Pwyllgor yr Economi, Masnach a Materion Gwledig Ymchwil a Datblygu RD04

Ymateb gan: Prifysgol Metropolitan Caerdydd

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Welsh Parliament Economy, Trade, and Rural Affairs Committee Research and Development RD04

Evidence from: Cardiff Metropolitan University





Cardiff Metropolitan University submission to the Senedd Economy, Trade and Rural Affairs Committee's inquiry into research and development

Overview

- i. Research, development and innovation (RD&I) are vital for a productive and resilient economy, but Wales is consistently near the bottom for RD&I spending in the UK.¹ Low levels of public-funded RD&I are a particular problem, not least as every £1 of public spending on RD&I eventually stimulates around £2 of private investment.²
- ii. Welsh universities face challenges for RD&I: the loss of EU structural funds, a low share of UK sources, a real-terms-decline in devolved research streams and a decreasing ability to subsidise research from other income. Cardiff Metropolitan University recommendations:

Government	Action
Welsh	Increase higher education budget for innovation.
	Give HEFCW the consequential from England's Regional Innovation Fund,
	as well as consequentials from any further increases in England.
	Outline position on Nurse review recommendations.
UK	Replace funding for RD&I projects lost post-EU structural funds.
	Update committee on discussions for replacement funds.
Both	Routinely monitor applications from Wales to UK RD&I sources.

1. Post-EU funding

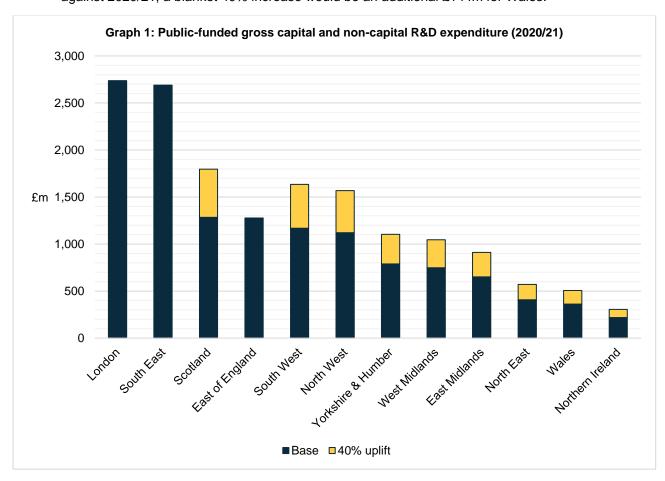
- 1.1 EU structural funds deployed Welsh universities' strengths, improving RD&I income from UK sources, job creation, private investment and products brought to market.³ Figures from the Welsh European Funding Office show universities as lead beneficiaries of projects worth c. £310m via the 2014–20 structural funds.⁴ Cardiff Met's income from the funds from 2017 and 2024 will be £20.5m, with a range of activity supported.
- 1.2 For example, Cardiff Met received £10.7m to lead Project HELIX. It is a pan-Wales initiative to support food and drink companies to grow with innovative products from concept to design, development, manufacture and sale. With an economic impact over £355m, it has helped create 683 jobs, develop 2,082 new products and producers to access 1,110 new markets.⁵
- 1.3 Universities Wales states the loss of structural funds will cost Welsh universities 1,000 jobs across 60 projects. Welsh Government has stepped into the fold for some projects, like HELIX, and ensured replacement funding. Cardiff Met has had positive engagement with local authorities on the Shared Prosperity Fund—UK Government's replacement for EU regional development funding—but expects funding to be far lower.
- 1.4 Replacing EU funds is beyond the Welsh Government budget. Speaking to a House of Commons select committee, the UK levelling up secretary said cabinet colleagues were discussing "what [they] can do to ensure, wherever possible, continuity or even enhanced funding". ** The committee could seek an update from UK Government on such talks.
- 1.5 More positively, UK Government has secured Horizon Europe association, the predecessors to which were worth a combined €219m to Welsh universities. 9 10 Moreover, UK Government has not ruled out implementing some of Pioneer, its 'plan B' for Horizon association. 11 Pioneer included extra funding for English universities, meaning a Barnett consequential. 12 Any consequentials from partial implementation of plan B should be passed to HEFCW.

2. UK Government funding and Welsh strategy

2.1 Post-EU, the aim is to win a greater share of UK-wide funding sources. UKRI figures show Wales received 3.1% of Research Council and 2.6% of Innovate UK funding in 2020/21.¹³ ONS data show England's Greater Southeast had 50% of public-funded RD&I in the UK.¹⁴



2.2 There is an opportunity to address the gap, with UK Government wanting to increase public RD&I spending by 40% outside the Greater Southeast. This will still be a challenge; the levelling up secretary found Whitehall resistance to the idea and the first data for the target showed Wales second from bottom in both absolute and per capita terms. Measured against 2020/21, a blanket 40% increase would be an additional £144m for Wales.

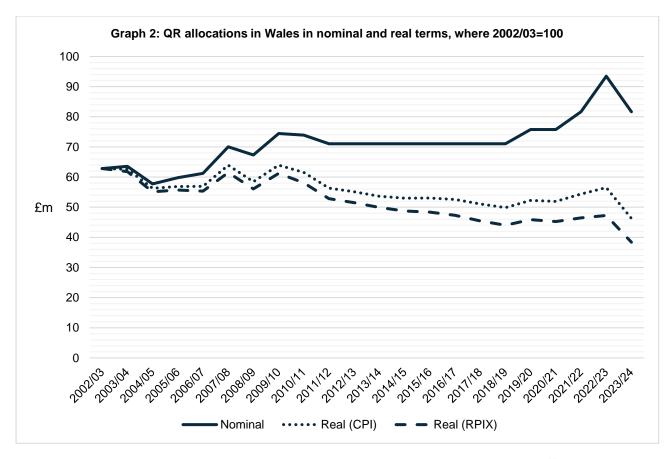


- 2.3 The ONS figures are 2020/21, so precede the 40% target. If UK Government wants to increase spending beyond the 'Golden Triangle', and Welsh Government aims to boost UKRI grant capture, then retrospective data releases are too late to monitor policy.
- 2.4 UK Government told this committee there are biennial meetings between UK science ministers and a monthly UK Funders Forum with devolved governments.¹⁸ The committee could seek information on how such meetings scrutinise funding data.
- 2.5 The Welsh Government innovation strategy recognises the loss of EU funding and prioritises the pivot to UK funds.¹⁹ Its delivery plan has appropriate measures that allow progress to be tracked and, significantly, ringfences £47m per annum for health and care research.²⁰
- 2.6 A memorandum of understanding and action plan is agreed with Innovate UK, with further memoranda and plans to be explored with UKRI's Research Councils. This is a pragmatic and creative way of approaching UK-wide RD&I within a devolved setting and the proposals deserve praise. There are, however, problems with funding (outlined in sections 3.4 to 3.7).

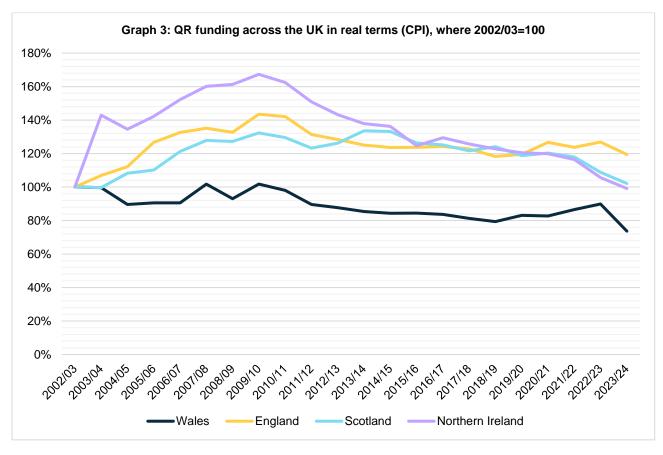
3. Devolved funding

3.1 Welsh Government also funds RD&I, primarily via HEFCW. The core funding is for quality-related research (QR), the bedrock upon which capacity, expertise and breakthroughs are built. This unhypothecated funding stream has been declining in real terms.



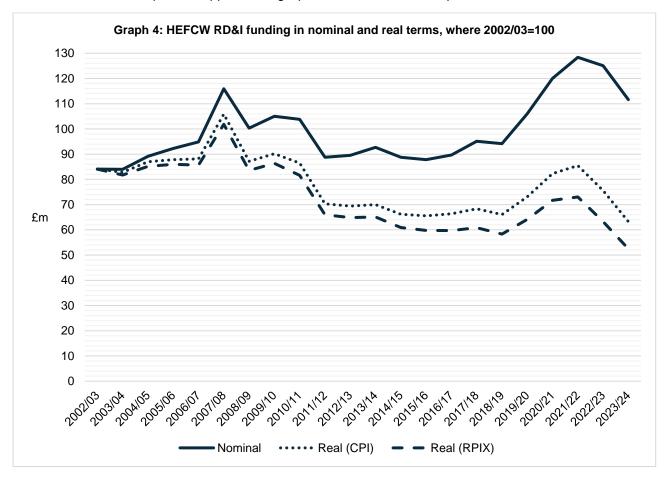


3.2 British Heart Foundation Cymru argues QR needs to be closer to £100m per year.²¹ Available data also show QR in other UK nations is higher than 20 years ago in real terms. While all had real terms losses in the 2010s, the fall in Wales follows weaker investment in the 2000s.





3.3 Additional hypothecated funding for RD&I has been available via HEFCW, with a mix of revenue and capital to support strategic priorities. The real-terms picture resembles QR.



- Wales has not fully implemented the recommendations of its review of government-funded RD&I, led by Professor Graeme Reid.²² Per annum, Reid recommended:
 - £71m for QR.
 - £3.75m for postgraduate research.
 - £25m for innovation, which is now the Research Wales Innovation Fund (RWIF).
 - £1m for the Learned Society of Wales.
 - £6m for the Sêr Cymru programme.
 - £30m for a Future of Wales Fund, to be split between universities in proportion to their share of the Welsh sector's income from UK-wide sources.
 - £35m for a St David's Fund to bring together:
 - o £10m for Welsh Government innovation.
 - £10m for innovation hubs.
 - £15m for innovation competitions.
- 3.5 Reid issued two sets of spending recommendations: one if Welsh Government had control of structural funding replacements, and one if it did not. The figures above are those for the latter, which is the situation in which Wales finds itself (see section 1). In all, the difference in 2023/24 between these funding streams and Reid recommendations was £58m.
- 3.6 The following tables uses HEFCW figures for QR, postgraduate research, RWIF and the Learned Society of Wales. The figure for Welsh Government innovation is the sum of the revenue and capital lines for "innovation" in the 2023/24 budget.²³ ²⁴ The Sêr Cymru figure is from a Welsh Government statement (it is not a distinct line in the budget).²⁵



Table 1: Difference between 2023/24 allocations and Reid review recommendations

Funding stream	2023/24 (£)	Reid (£)	Difference (£)
Quality-related research	81,677,343	71,000,000	10,677,343
Postgraduate research	6,236,883	3,750,000	2,486,883
Research Wales Innovation Fund	15,000,000	25,000,000	-10,000,000
Learned Society of Wales	275,000	1,000,000	-725,000
Sêr Cymru	5,000,000	6,000,000	-1,000,000
Future of Wales Fund	0	30,000,000	-30,000,000
Welsh Government innovation	5,519,000	10,000,000	-4,481,000
Innovation hubs	0	10,000,000	-10,000,000
Innovation competitions	0	15,000,000	-15,000,000
Total	113,708,226	171,750,000	-£58,041,774

- 3.7 The shortfall on RWIF is a particular problem. RWIF is the fund that facilitates collaboration between universities and industry, of which Wales needs more. It is also the devolved stream closest in purpose to the structural funds, in that it is specifically focused on innovation and economic development.
- 3.8 It is a concern that the innovation strategy delivery plan names £15m for RWIF as a successful milestone; this is £10m short of the level recommended and, moreover, the plan indicates the fund will be opened to non-higher education institutions.
- 3.9 Supporting innovation in other sectors is welcome, but RD&I funding streams need to be increased if more organisations are to be eligible. An innovation fund, which is already £10m too small, will be spread far too thinly with more recipients. *RWIF should be increased to £25m before any further expansion.*
- 3.10 In October 2023, UK Government announced a Regional Innovation Fund pilot, with £48.8m for English universities. ²⁶ The announcement included £3.4m for Wales as a consequential. UKRI has now confirmed allocations for English universities, but there is no news on additional Welsh funding. ²⁷ Any £3.4m consequential should be added to RWIF, taking it past £18m in 2023/24.

4. Costs

4.1 Research grants are not funded at full economic cost, with the median university in the UK recovering just 57.5% of the cost.²⁸ The median cost recovery varies by 'peer group', with 39.4% the recovery of the median institution in Cardiff Met's peer group:²⁹

Table 2: Median cost recovery for research, UK peer groups

Peer group	Includes	Median cost recovery (%)
Α	Cardiff, Swansea	72.3
В	Aberystwyth, Bangor	63.1
С	-	48.5
D	USW	39.5
E	Cardiff Met, UWTSD	39.4
F	-	69.1

4.2 It is increasingly difficult to subsidise research activity from domestic student income, with the fee for UK students having remained £9,000 in Wales for a decade. Based on ONS data for RPIX, the fee was less than £6,000 in real terms at the start of this academic year.³⁰ From OBR projections for RPIX, it will fall below £5,500 by the start of 2027/28.³¹



- 4.3 Research can be subsidised via other income. Primarily, this has come from the uncapped fees of postgraduate and international students, both of which generate a surplus. In 2021/22, international students were 17% of the total cohort in Wales but 27% of the fee income.^{32 33}
- 4.4 However, UK Government policies are destabilising international activity. From 1 January 2024, dependants of taught postgraduates will no longer be eligible for visas.³⁴ This is most likely to affect Nigeria and India which, in 2021/22, were 43% of international taught postgraduates in Wales.³⁵
- 4.5 UK Government has also increased visa costs and will be raising the Immigration Healthcare Surcharge to part-fund a public sector pay-rise. The health surcharge will go from £470 to £776 a year for students, an increase of £306 (65%).³⁶ Applying for a study visa from outside the UK has risen from £363 to £490, an increase of £127 (35%).³⁷
- 4.6 For international staff, the health surcharge will rise from £624 to at least £1,305 per annum, a substantial increase of £681 (109%). A range of their visa costs have also risen this month, including for dependants they may wish to bring as part of their move to the UK. Universities have typically paid these costs, and this increase will have a considerable effect. International researchers are prevalent in STEM in Wales, which is vital for future economic prospects.³⁸
- 4.7 With regards to short-term visas, the Royal Society found the UK system has a far higher rejection rate than other leading science nations, affecting research collaborations, conferences, guest speaker invitations and soft power.³⁹ This hampers the global south disproportionately, and the Society wants a short-term equivalent of the Global Talent visa.
- 4.8 Sir Paul Nurse's official review of the RD&I landscape recommended that UK Government should review QR, competitive funding and full economic costing to address the sustainability of research. Any changes arising from such a review would require action by Welsh Government and CTER (the body that is currently replacing HEFCW).
- 4.9 The Minister for Education and Welsh Language referenced the Nurse review in the HEFCW annual remit letter for 2023/24, also asking HEFCW to "keep under review the effectiveness of its QR, PGR and Innovation funding allocation processes to monitor their effectiveness in encouraging successful competitive behaviour relative to the rest of the UK". 40
- 4.10 Welsh Government could outline to the committee its view on the extra review proposed by Nurse, the sustainability of research and the split between hypothecated and unhypothecated funding.

¹ ONS. 2021. Gross domestic expenditure on research and development, by region, UK. Newport: ONS.

² Oxford Economics. 2020. The relationship between public and private R&D funding. London: UK Government.

³ Welsh Government. 2021. <u>2014—2020 EU Structural Funds Programme in Wales: Impact and benefits to the people, communities and businesses of Wales</u>. Cardiff: Welsh Government.

⁴ Welsh European Funding Office. 2023. <u>Written evidence from Welsh European Funding Office regarding EU Structural Funds, March 2023</u>. London: UK Parliament.

⁵ Food Innovation Wales. 2023. <u>Project HELIX delivers over £355 million impact to Welsh food and drink industry</u>. Llandysul, Llangefni and Cardiff: Food Innovation Wales.

⁶ Universities Wales. 2023. <u>Universities sound the alarm for research, innovation and skills in Wales</u>. Cardiff: Universities Wales.

⁷ Hanton, S. 2023. <u>Letter from the Professor Sheldon Hanton and Pro Vice Chancellor of Cardiff Metropolitan</u> University to the Chair regarding EU Structural Funds dated 21 February 2023. <u>London: UK Parliament.</u>

⁸ House of Commons Levelling Up, Housing and Communities Committee. 2023. <u>Oral evidence:</u> Intergovernmental Relations, HC 1247. London: UK Parliament.

⁹ UK Government. 2023. <u>UK joins Horizon Europe under a new bespoke deal</u>. London: UK Government.

¹⁰ Data from European Commission. See: European Commission. 2023. <u>Horizon Dashboard</u>. Brussels: European Commission.

¹¹ Inge, S. 2023. <u>UK 'plan B' alternative to Horizon still on the cards, says Freeman</u>. London: Research Professional.

¹² UK Government. 2023. *Pioneer: global science for global good*. London: UK Government.

¹³ UKRI. <u>UKRI Written Evidence (URF0002)</u>. London: UK Parliament.



- ¹⁴ ONS. 2023. UK public-funded gross regional capital and non-capital expenditure on research and development: financial year ending 2021. Newport: ONS.
- ¹⁵ UK Government. 2022. Levelling Up the United Kingdom. London: UK Government.
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- ¹⁷ ONS. 2023. UK public-funded gross regional capital and non-capital expenditure on research and development: financial year ending 2021. Newport: ONS.
- ¹⁸ UK Government. Response to the report by the Economy, Trade and Rural Affairs Committee into post-EU regional development funding in Wales. Cardiff: Senedd Cymru.
- ¹⁹ Welsh Government. 2023. Wales innovates: creating a stronger, fairer, greener Wales. Cardiff: Welsh Government
- ²⁰ Welsh Government. 2023. *Innovation strategy for Wales: delivery plan*. Cardiff: Welsh Government.
- ²¹ British Heart Foundation Cymru. 2022. Funding Wales' Future: Investing in universities to drive economic growth. Cardiff: British Heart Foundation Cymru.
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- ²³ HEFCW. 2023. HEFCW's Funding Allocations for Academic Year 2023/24. Caerphilly: HEFCW.
- ²⁴ Welsh Government. <u>1st Supplementary Budget 2023 to 2024</u>. Cardiff: Welsh Government.
- ²⁵ Welsh Government. 2023. <u>Sêr Cymru IV: Economy Minister announces £10 million to support scientific</u> research in Wales. Cardiff: Welsh Government.
- ²⁶ UK Government. 2023. New £60 million Regional Innovation Fund among measures to boost research and development. London: UK Government.
- UKRI. 2023. Regional Innovation Fund 2023 to 2024. Swindon: UKRI.
 Office for Students. 2023. Annual TRAC 2021-22 Sector summary and analysis by TRAC peer group. London: Office for Students.
- ²⁹ Kernohan, D. 2023. When it comes to the cost of delivery, we may not be on the right TRAC. London: Wonkhe.
- ³⁰ ONS. 2023. <u>Inflation and price indices</u>. Newport: ONS.
- ³¹ OBR. 2023. *Inflation*. London: OBR.
- 32 Higher Education Statistics Agency. 2023. Who's studying in HE?. Cheltenham: Higher Education Statistics Agency.
- ³³ Higher Education Statistics Agency. 2023. What is the income of HE providers?. Cheltenham: Higher Education Statistics Agency.
- 34 UK Government. 2023. Changes to student visa route will reduce net migration. London: UK Government.
- ³⁵ Higher Education Statistics Agency. 2023. Where do HE students come from?. Cheltenham: Higher Education Statistics Agency.
- ³⁶ UK Government. 2023. NHS staff receive pay rise. London: UK Government.
- ³⁷ UK Government. 2023. <u>Visa fees transparency data</u>. London: UK Government.
- ³⁸ Higher Education Statistics Agency. 2023. Where do they work, come from and go to?. Cheltenham: Higher Education Statistics Agency.
- ³⁹ Royal Society. 2023. <u>The borders of science: Making UK visas work for short-term researcher mobility.</u> London: Royal Society.
- ⁴⁰ Miles, J. 2023. HEFCW Remit Letter 2023-24. Caerphilly: HEFCW.