

Universities Wales response to the Finance Committee of the Senedd's call for information on Welsh Government Draft budget proposals for 2024/25

About Universities Wales

Universities Wales represents the interests of universities in Wales. Our membership encompasses the Vice Chancellors of all the universities in Wales and the Open University in Wales.

Our mission is to support a university education system which transforms lives through the work Welsh universities do with the people and places of Wales and the wider world.

Summary

- We are at a critical juncture where the cost pressures faced by universities, coupled with the current position of public finances, present real risks to our ability as a nation to provide higher education opportunities and deliver the research and innovation that Wales needs for future prosperity. (Q2)
- Recent analysis indicates that the maximum fee limit no longer meets the full costs of delivery in any subject area. Similarly, research typically only recovers around two thirds of its costs, relying heavily on cross subsidy from other sources. At the same time, university expenditure is increasing faster than income. Welsh universities also hold high levels of borrowing. In 2021-22, external borrowing amounted to 49% of income in Wales compared to 34% for the rest of the UK. (Q2)
- This year has seen fewer 18 year olds in Wales opt to enter higher education, increasing the existing gap in participation between Wales and the UK¹² We face the unfortunate reality that there will now likely be cohorts of young people less well qualified than their immediate predecessors, putting people in Wales at a significant disadvantage. This is against a backdrop of an increased need for higher education provision to cater for projected population growth and a major increase in demand for graduate skills (Q2).
- At the same time international recruitment, crucial to the sustainability of universities given the subsidy required to deliver teaching and research, is

¹ This primarily relates to England and Northern Ireland as figures are not directly comparable with Scotland.

² UCAS 2023: <https://www.ucas.com/data-and-analysis/undergraduate-statistics-and-reports/statistical-releases-daily-clearing-analysis-2023>

becoming more uncertain with the UK facing increased competition from other markets, and in the light of changes to immigration policy at UK level. (Q2)

- Our universities directly and indirectly support a range of public services, including through direct investment of resource (Q1). As well as leading the UK in terms of the impact of research and innovation, Welsh universities also support public services by:
 - Training public sector staff including teachers, nurses and doctors
 - Providing poverty reduction programmes
 - Providing access to free advice and services including law clinics
 - Providing facilities to communities including sporting facilities and nurseries
 - Providing arts and community centres, parks and botanic gardens.
- In this challenging financial position, Welsh universities are actively exploring ways to improve financial sustainability including reviewing business models and delivery. However, the impact of inflation and the pressures we currently face mean these efforts will not address short-term challenges. (Q2)
- In addition, more investment is needed to better support and scale up the research and development base in Wales to help prevent a cycle of low-skill, low-wage and low productivity in Wales, and ensure Wales can secure a proportionate share of UK government investment. (Q2)
- Recognising the severe financial constraints for this year's budget, we would urge the Welsh Government to consider the following key opportunities for investment in higher education for the 2024/25 budget (Q7 – key opportunities):
 - Continue to work closely with the sector to address the fundamental funding challenges facing universities, in light of a severe real-term reduction in income and the impact of significantly rising costs of provision. It is essential that changes are made as soon as possible to ensure higher education can operate on a sustainable basis and deliver the higher education that Wales needs for future prosperity.
 - Maintain core funding for higher education for 2024/25 with a view to increasing it in line with the Diamond Review recommendations in future budget rounds, seeking in particular to provide greater core funding for research and innovation and to address the impact of increasing losses made from providing fee-regulated courses. This includes consideration of the breadth of support for modes of delivery including part-time.
 - Explore options to enable universities to transform their activities where this could prevent greater costs down the line and improve sustainability, for instance, 'invest to save' funding or finance.

- Explore ways in which universities can be supported to maintain the talent and infrastructure currently being lost or at risk of being lost as a lack of replacement for EU funding sources.
- Provide support for Teachers Pension Scheme (TPS) increases in higher education, in line with support provided for FE and other organisations facing significant TPS cost increases. Explore options for bridging funding to help with the immediate impacts of energy, pensions and cost of living.
- Consider the unit of resource available for teaching, including part-time, giving the emerging difference between the cost of provision and price.

Q1: Impact of the Welsh Government's 2023-24 Budget

1. What, in your opinion, has been the impact of the Welsh Government's 2023-2024 Budget, including funding related to the recovery of the pandemic? Have Welsh Government business support policies been effective, given the economic outlook for 2024-25?

1. Investment in higher education is a highly effective and important means of supporting economic recovery and promoting well-being in Wales. In 2023-24, universities continued to provide world-class higher education that addresses skills needs in Wales, ground-breaking research and innovation with a real-world impact, and a wide range of activities undertaken as part of civic mission that help to reduce expenditure in other essential services and for the wider public benefit.
2. The total allocation that HEFCW received for higher education in its Remit Letters was £215m for FY 2023/24.³ This included an increase in funding for Degree Apprenticeships (increased by +3.9m to £8.9m) to enable to further expansion to meet some of the unmet demand and potential for growth in Wales, and an increase mental health funding (+2.0m to £4.3m). Funding was also specifically ring-fenced to provide postgraduate bursaries (£4m), and £10m capital funding to provide much needed support for estates and infrastructure.
3. The core revenue funding for higher education for FY 2023/24 was lower than the previous year (£205.4m for 2023/24 compared to £207.9m for 2022/23). Given the continued rapid rise in costs in 2023/24, this meant it was an increased challenge to provide core higher education, research and innovation.

³ 2023-24 Remit Letter, 5 July 2023, [here](#).

4. Although Welsh Government investment forms a relatively small part of universities' overall income,⁴ it has a significant impact on university surplus or deficit levels and is critical in enabling universities to secure their other streams. For example, without QR funding it would not be possible for universities to draw down the level of UKRI funds that they do as those funds are only intended to cover only 80% of the full economic cost of UKRI funded projects. Without core funding, a wide range of additional income secured through research, innovation, teaching in expensive and high cost subjects and more would not be possible.
5. Universities continue to work to tackle the profound and wide-ranging challenges currently faced in Wales, including cost of living crisis in the aftermath of the pandemic, the need for additional support for student well-being, the need to address climate change, demographic shifts and structural changes in the workplace and labour market.
6. For instance, in 2023/24 this helped universities to continue to deliver the skills that the economy needs, and boost individuals' employment prospects, equipping more than 40,000 graduates for the workforce.⁵

Delivering skills and boosting employment

By the end of 2023/24 we estimate that the investment in universities will have enabled, for instance:⁶

- More than 40,000 students to graduate from universities in Wales, around 53% with a first degree and 35% with a postgraduate degree. Around 96% of these will be expected to be in work or further study within 15 months of graduating, with a starting salary most frequently in the range from £24,000 to £27,000 per annum.
- Welsh universities to supply around 72% of the new UK graduate workforce in Wales. They will also have helped to keep the graduate skills in Wales: Welsh-domiciled graduates from Welsh universities are much more likely to be employed in Wales (87%) than if they had graduated from a provider in another UK country (43%).
- Welsh universities will have equipped the next generation of the UK's professional workforce with essential knowledge and skills they need to enter practice including, for instance: over 5,000 graduates in medicine, dentistry, nursing and other healthcare subjects; over 1000 graduates with a first degree in law and a further 700 with a postgraduate qualification; over 2,600 graduates in engineering and technology; around 375 graduates qualified in social work; around 800 graduates qualified in

⁴ For instance, in 2021/22, HEFCW's direct allocations to universities totalled £171.3m (see HEFCW W22/27HE, Table 6) which comprised 9.1% of their total income of £1.877bn (HESA Finance record, opendata, 2021/22).

⁵ Based on HESA 2020/21 graduate outcomes data, published May 2023, see [here](#).

⁶ Ibid.

architecture, building and planning; 700 accounting graduates; and around 1800 graduates will have completed teacher training.

- Welsh universities will have supplied and equipped the next generation of researchers and innovators needed to tackle the foremost challenges that Wales faces today - with over 4,300 postgraduate researchers enrolled in Welsh universities. This will include, for instance, Welsh graduates who have pursued specialisms in an increasing range of diverse fields such as ecology and environmental biology, biosciences, and artificial intelligence.
- Graduates continue to expand their skills once they have left university. Around 20% of Welsh graduates go on to undertake more study within 15 months of leaving - most frequently in or alongside employment.
- Welsh universities will have delivered more than 315,000 learner days of continuing professional development (CPD) and continuing education (CE) courses.⁷

7. Welsh universities' research and innovation continued to deliver a real-world impact, rooted in Wales but with an international importance and reach.

Research and innovation with a real impact for Wales

According to the REF2021, the quality of the research that Welsh universities deliver is not only world-class but world-leading in terms of its real-life impact.

In the most recent UK wide assessment exercise ('REF 2021'), 89% of Welsh research was considered internationally excellent or world leading in terms of 'impact'⁸, measured in terms of its 'benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia'.

Recent analysis of the research submitted for the 2021 assessment concluded that Welsh universities are actively reshaping every part of society for the better. A key finding was that 'Impact in Wales' is the predominant outcome of Welsh research: 70% of the identified impact had an impact in Wales. Rooted in Wales, the benefits of research being undertaken at Welsh universities are felt worldwide. Welsh universities benefitted in particular 25 different types of groups of people and organisations, highlighting in particular children and young people, policy-makers and local communities, the elderly, women and people with disabilities.⁹

⁷ Based on HESA, HE Business and Community Interaction data 2021/22, Open data [here](#).

⁸ REF2021, Results and submissions data, published 12 May 2022, [here](#)

⁹ The Learned Society of Wales, Making an Impact, A Celebration of Welsh Research, 9 Nov 2023 ([here](#))

Some of the characteristics of the research submitted by Welsh universities included, for instance: ¹⁰

- 94% of the Welsh university case studies involved collaboration with non-academic partners including public sector bodies, national and local government, and industrial partners in particular.
- Over half of the research reported informed policy or governance, and 42% had an economic impact.

For a wealth of specific examples which have had a real impact on Wales see the showcase REF case studies in its '[Research impact](#)' section of the Universities Wales website, including:

- How mathematical modelling saved lives during the COVID-19 pandemic. A mathematical model developed at Swansea University helped to save lives and support the NHS in Wales during the height of the Covid-19 pandemic. [here](#)
- Understanding the implications of emotional artificial intelligence. Bangor University's research on 'Emotional Artificial Intelligence' (eAI) has influenced the design and ethical application of emergent artificial intelligence technologies across the globe. [here](#)
- Boosting the Welsh food and drink industry. A partnership project between academics at Cardiff Metropolitan University and the Welsh food and drink industry has supported SMEs to develop their food science, technical and food safety skills, resulting in new jobs, new markets and a £103m increase in sales. [here](#)
- Detecting the DNA of cyberattacks. A collaboration between Professor Pete Burnap, Cardiff University, and Airbus has led to a completely novel way of detecting and preventing malicious software. [here](#)
- Towards a million Welsh speakers? Informing language policy in Wales. Research by Aberystwyth University on the revitalisation of regional or minority languages has played a key role in informing and influencing Welsh Government policy on the promotion of the Welsh language. [here](#)
- Making the Welsh language more accessible. Researchers at Bangor University have developed a range of online resources, including the software package Cysgliad with the Cysill Welsh-language grammar and spelling checker as well as the Cysgeir collection of dictionaries. which have helped to transform the use of Welsh in digital environments, promoting Welsh as a modern, forward-looking language. [here](#)
- Improving language provision for forced migrants in Wales. Research at the University of South Wales has helped to improve access to English language education for forced migrants in south Wales and informed government policy on ESOL (English for Speakers of Other Languages). [here](#)

¹⁰ The Learned Society of Wales, The Impacts of Research from Welsh Universities, 9 Nov 2023 ([here](#))

See Question 1 for examples relating to health and Question 4 for examples relating to building a greener economy and tackling climate change.

8. Investment in universities also continued to help to reduce the need for expenditure in other essential services, providing infrastructure, education and services underpinning the delivery of our public services in Wales. In addition to this, universities often invest their own resources that directly benefits the public sector and provides the public sector with savings: this includes costs associated with the delivery of medicine, dentistry and nursing places, provision of facilities, and support for the training and development of teachers.

Reducing costs and underpinning the delivery of public services in Wales

Investment in universities helps to reduce the need for expenditure in other essential services.

Our universities directly and indirectly support a range of public services, including through direct investment of resource. As well as leading the UK in terms of the impact of research and innovation, Welsh universities also support public services by:

- Training public sector staff including teachers, nurses and doctors
- Providing poverty reduction programmes
- Providing access to free advice and services including law clinics
- Providing facilities to communities including sporting facilities and nurseries
- Providing arts and community centres, parks and botanic gardens

More broadly, higher education has been linked with better general health and life expectancy, and better mental health – reducing pressures on the health budget.¹¹ University research also makes a very considerable contribution to this area, identifying better and more effective solutions and promoting earlier detection of health problems. Recent examples of world-class research led by Welsh universities, for instance, include:

- Using the arts to improve health and wellbeing. A Wrexham University project exploring the impact of art on people’s health has helped to inform social care policies, change working practices for arts and health practitioners, and positively impact people’s health and wellbeing. [here](#)
- Developing new technology to diagnose and treat rare diseases. New technology developed by researchers at Swansea University has improved

¹¹ See for instance, BIS Research Paper No. 146 ([here](#)), October 2013.

the diagnosis and treatment of rare diseases, opening up new approaches to patient management for health care professionals worldwide. [here](#)

- Improving the lives of people at risk of alcohol-related brain damage. Research by the University of South Wales into alcohol-related brain damage has helped to improve awareness, understanding and treatment of the condition. [here](#)
- Improving quality of life for people with advanced dementia. An innovative new product by design researchers at Cardiff Metropolitan University has been proven to enhance the quality of life for people living with advanced dementia. [here](#)
- Establishing new worldwide standards of care for prostate cancer patients. Cardiff University researchers played leading roles in major clinical trials, which improved the treatment of prostate cancer and influenced the way oncologists monitor their patients and use surgery, radiotherapy, and hormone therapy. [here](#)
- Improving quality of life for children with neurodevelopmental conditions. Products developed by the Cerebra Innovation Centre at the University of Wales Trinity Saint David are improving quality of life and increasing independence for children with neurodevelopmental conditions. [here](#)

Higher levels of higher education are associated with lower levels of crime, greater social cohesion, trust and tolerance, and more civic engagement.¹² Recent examples of world-class research led by Welsh universities that also help to prevent or reduce expenditure on essential community and social services, for instance, include:

- Measuring the effectiveness of drug and crime control policies. Research from Swansea University has highlighted the need to change how drug and crime control policies are measured, leading to changes in approach by governments and international organisations. [here](#)
- Building resilient families. A new assessment tool developed by researchers at the University of South Wales helps health visitors to assess family resilience and identify the support they need to give their children the best start in life. [here](#)
- Improving decision-making in the emergency services. Ground-breaking research by Cardiff University has improved how the emergency services think, behave and respond in emergency situations. [here](#)

¹² Ibid.

Higher education also brings greater social mobility, higher earnings, less exposure to unemployment and increased entrepreneurial activity.¹³ This in turn alleviates pressure on the welfare budget.

9. Universities provide extensive support for businesses, providing access to unique expertise, services and specialist facilities.

Providing support for businesses and SMEs

Universities provide extensive support for businesses, providing access to unique expertise, services and specialist facilities.

In 2023/24, based on projections from previous years, universities will be expected to provide more consultancy for over 1,500 organisations, and undertake in the region of £33m of contracted research. Over 2,000 business and external organisations will also use equipment and facilities provided by Welsh universities.¹⁴

Over the last five years on record, from 2018/19 to 2021/22, Welsh universities provided support for the creation of over 1,600 student new start-up companies.¹⁵

Welsh universities have a particularly strong track-record in this respect. In 2021/22, for instance, they were responsible for 13% of all student start-ups from UK universities, and 14% of all staff start-ups.¹⁶

10. Universities also continued to make a significant direct impact on the economy through the scale of their business operation in its own right. In 2019/20, for instance, the expenditure of universities, their staff and students, and the international visitors that they attracted accounted for 4.2% (£2.8bn) of the gross value added (GVA) to the Welsh economy, and generated 4.9% (over 61,000) of all jobs in Wales.¹⁷

¹³ Ibid. Also see, the IFS study in 2021 ([here](#)) which identified that individuals eligible for Free School Meals (FSM) in year 11 who attended university are almost four times more likely to be amongst the highest 20% of earners at age 30 than those who did not.

¹⁴ Based on data from the HESA HE Business and Community interaction survey, 2021/22, open access [here](#).

¹⁵ HESA Business and Community Interaction data 2021/22, Open data, Table4e [here](#).

¹⁶ Ibid.

¹⁷ Viewforth Consulting Ltd (2021), Economic impact of higher education in Wales, July 2021.

The economic impact of universities

Universities are among the largest employers in Wales, and largest charities in the UK. In addition to the economic impact of its education and research and innovation, the activities of the universities as businesses in their own right have a very significant impact on the economy in Wales.

Direct investment in universities ripples throughout the economy as their output, the value they add to economy and the jobs they generate are significantly multiplied through businesses and suppliers. According to the latest study by Viewforth Consulting Ltd:¹⁸

- **Output:** For every £100 million of Welsh university output an estimated further secondary output impact of £96 million is generated in Wales plus a further £33 million outside Wales, in the rest of the UK.
- **GVA:** For every £100 million of gross value added directly to the economy by Welsh universities, a further £68 million is generated in Wales through knock-on effects plus a further £24m outside of Wales in the rest of the UK.
- **Jobs:** Welsh universities generate a total of 60,000 jobs in Wales. For every 100 direct jobs created in the University itself, another 122 UK jobs were generated outside the universities in other industries, 95 of them in Wales.

In addition, the off-campus expenditure of Welsh university students and the international visitors that universities and their students bring make a very significant contribution to the economy.

In 2019/20, Welsh universities (including the expenditure of staff, students and international visitors) generated over £5bn of economic output, accounting for 4.2% of the gross value added to the Welsh economy, and 1 in every 20 jobs in Wales:

Economic impact of higher education in Wales 2019/20

Including student off-campus expenditure and international students

2019/20	Universities - direct	Rest of Wales	Rest of UK	Total	% of Welsh economy
Output (£m)	1,638	3,676	642	5,955	
GVA (£m)	1,116	1,709	337	3,162	4.20%
Jobs	20,730	40,992	6,895	68,617	4.85%



¹⁸ Viewforth Consulting Ltd (2021), Economic impact of higher education in Wales, July 2021

11. Our universities also made a significant contribution to wider civic mission. Since 2021, universities in Wales have worked together, collaborating with a range of partners, under the pioneering sector-level initiative, the Civic Mission Framework for Wales, to deliver against the goals of the Well-being of Future Generations Act.

Civic mission – a spotlight on universities’ contribution

Every year, in addition to their core teaching and research activities, Welsh universities bring wider benefits to their local communities, contributing to their culture and well-being and providing unique support and services, as part of a shared civic mission.

In 2021/22, for instance, Welsh universities provided events and exhibitions for around one million attendees, including: free art, gallery or museum exhibitions, free public lectures, and music dance and drama performances.¹⁹

Since 2021, universities in Wales have worked together, collaborating with a range of partners, under the pioneering sector-level initiative, the Civic Mission Framework for Wales, to deliver against the goals of the Well-being of Future Generations Act.

Universities Wales’s showcase event held in July 2023 spotlighted a wealth of examples of the pioneering initiatives taking place right now, in 2023/24:²⁰

- Working with socially disadvantaged families, Bangor University’s Centre for Evidence Based Early Intervention promotes positive parenting and helps to reduce harmful and abusive parenting.
- Aberystwyth university provides free legal advice to more than 300 individuals locally a year, many of whom could not afford private lawyer fees, through its Family Legal Clinic and Veterans Legal Clinic.
- Cardiff Council and Cardiff University have worked together to provide young children with a wealth of opportunities through the Passport to the City: Cardiff Children’s University scheme, with more than 100 children from Cardiff rewarded for their achievements at the most recent ‘graduation ceremony’.
- Working with local partners and community leaders, the Open University’s Wales Reach project has helped people to learn creatively about the histories that have shaped their local communities - including one of the UK’s oldest multicultural communities in Butetown, the industrial history of Port Talbot, semi-rural communities in Pembrokeshire, quarrying and slate mining in Gwynedd, and helped people with learning disabilities in living in Rhondda Cynon Taf, Cardiff and the Vale of Glamorgan.

¹⁹ HESA Business and Community Interaction data 2021/22, Open data, Table 5, [here](#)

²⁰ See Universities Wales website [here](#) for further information.

- Working with local authorities, friends groups, homeless charities and schools Swansea University's Centre for Heritage Research and Training (CHART) is helping to develop heritage-led regeneration, drawing on South Wales's unique position as a major preserve of the heritage of the Industrial Revolution.
- The Linc Cymru Strategic Partnership between the University of South Wales and Linc Cymru (Linc), a Housing Association and Care provider, enables psychology students to contextualise their learning in the real world while helping people, and provides opportunities for co-curriculum development and collaborative research that improves well-being in the community.
- Working in partnership with Blaen y Maes Drop-in Centre in Swansea, UWTSO has provided opportunities over 60 families and 200 local community members to date to engage in family and adult learning activities from literacy and numeracy to confidence building and hosted local and national events such as the Swansea Christmas Parade and Refugee week.
- The North Wales 2025 Movement, a partnership including Wrexham university, has brought over 600 people and organisations together to end avoidable health and social inequalities, helping hundreds of people across North Wales.

Q2 Preparedness for the 2024/25 financial year and Welsh Government support

2. How should/could the Welsh Government support the economy and business following the pandemic, Brexit and inflationary and other economic pressures?

– How financially prepared is your organisation for the 2024-25 financial year, how will inflation impact on your ability to deliver planned objectives, and how robust is your ability to plan for future years?

Supporting the economy and businesses

12. One of the most important and effective ways that the Welsh Government can support the economy and business will be to invest in higher education. There is a pressing need to encourage more people, of all ages and backgrounds, into higher education in line with demographic growth in Wales and to meet major increase in demand for graduate skills by 2030. It will be important to increase investment in research and innovation with a real-world impact to prevent a cycle of low-skill, low-wage, and low productivity. More investment in universities also plays an important role in reducing the need for public expenditure in other essential services and enabling universities to make a unique and important contribution to wider public benefit as part of their civic mission.

13. There are significant opportunities to support universities in 2024/25 in the delivery of objectives that are critical to the economic and social well-being of Wales.
14. Catering for the next generation of students in Wales, as Wales's population continues to grow but participation rates worsen, will require tackling profound and challenging issues that currently limit participation in higher education and hold back individuals and the economy. Some of the key priorities and challenges that we currently seek to address include:
15. **Meeting increasing demand for graduate skills in Wales.**
16. More than 400,000 extra graduates will be needed in Wales by 2035 in order to respond to skills gaps and workforce challenges of the future, according to the findings of a new report by UUK.²¹ By 2035, 95% of new jobs in Wales will be at graduate level, with 88% of UK jobs set to be at graduate level. As Welsh universities currently provide around 40,000 of graduates each year, and account for nearly three quarters of the UK graduate workforce in Wales,²² this means increasing the number of graduates from Welsh universities very significantly.
17. **Addressing the significant under-participation in higher education from Welsh students.**
18. Wales already has the lowest participation rates in higher education of any country in the UK and the position is currently getting worse. As of September 2023 (Day 28 of Confirmation and Clearing), UCAS data indicates that 29.9% of Welsh 18-year-olds were accepted to study full-time undergraduate higher education in the UK via UCAS (10,476 from an estimated population of 35,040). This was a significant fall from the 32.4% application rate in the previous year and means that the gap in application rates with the rest of the UK has increased and is once again significantly lower than the 36.4% rate for English students or the 40.2% rate for students from Northern Ireland (data for Scotland is not directly comparable).
19. Were Wales to have a similar acceptance rate to that of Northern Ireland, for instance, we would expect around 3,600 more Welsh 18-year-olds in higher education. In short, more needs to be done to ensure that Welsh students have the higher education opportunities they deserve, and the economy needs.
20. **Preparing for the population growth in Wales.**
21. Broadly, more people of all ages and backgrounds will need to enter higher education. However, there is also a key challenge to cater for the projected growth in potential students from Wales and the UK. Between mid-2020 and mid-2030, the population of Wales is projected to increase by 2.6% to 3.25 million and the average age of the population will increase.²³ The growth, however, will be much greater for the age groups which make up the majority of students with regulated

²¹ UUK, *Jobs of the future*, August 2023.

²² See above, para 6ff (Delivering skills and employment).

²³ ONS, National population projections (interim data): 2020-based, 12 Jan 2022 [here](#).

fees. Just between 2021 and 2027, the projected increase is +14% for 18 year-olds and + 15% for 19 year-olds between 2021 and 2027.

22. Scaling up research and development base in Wales.

23. Investment in research and development is considered critical to prevent “a cycle of low-skill, low-wage and low productivity”, as identified by the Senedd’s research.²⁴ Research and development delivers substantial and often transformative benefits for society, but is typically not viable for individual organisations without public investment and support.

24. Welsh universities have a particular importance for delivery of the nation’s total research and development. Welsh universities accounted for 28% of Wales’s total in R&D activity in 2021/22²⁵, which was much higher than English higher education providers accounted for (22% of England R&D). Investing in universities further stimulates private investment. According to the UK government’s research, “public investment in R&D crowds in private investment at a ratio of around two pounds on average for each pound of government funding”.²⁶

25. Compared to other UK countries, however, expenditure on Welsh university R&D is notably low, and the gap has been increasing significantly in the last few years (from 3.8% of the UK HERD expenditure in 2018 to 3.1% in 2021)²⁷.

26. This is primarily attributable to the size of the research base in higher education. Wales recorded 3.9% of the UK’s research staff submitted in the recent REF 2021 - significantly lower than an expected proportion based on Wales’s population size (4.7%)²⁸.

27. Because of this lack of investment in Wales, other UK countries – with a comparably larger research base – are better able to take advantage of the UK government’s major investments and opportunities. The keystone of UK Government’s 2017 industrial strategy was the commitment to increase R&D investment to 2.4% of GDP by 2027 (the OECD average)²⁹. The UK government has subsequently committed to increase public R&D investment from £14.8 billion in 2021/22 to £20 billion per year by 2026/27.³⁰

²⁴ Senedd Research, Research and Innovation in Wales, Research Briefing July 2021

²⁵ ONS, UK gross domestic expenditure on research and development, 2021, 17 July 2023.

²⁶ HMT, Build Back Better: our plan for growth, (3 March 2021) [here](#), citing Oxford Economics (2020), ‘The relationship between public and private R&D funding’.

²⁷ ONS, UK gross domestic expenditure on research and development 2021, Table 4a, 17 July 2023 [here](#).

²⁸ REF2021 data, 22 May 2022 [here](#) (own analysis); ONS mid-year population statistics mid-2020 [here](#) - corresponding to the REF2021 July 2020 census date.

²⁹ Industrial Strategy: building a Britain fit for the future, [here](#);

³⁰ UK Government, Autumn Budget and Spending Review 2021, 27 October 2021 [here](#). Originally the target date was 2024/25: see UK Government, Budget 2020, March 2020 [here](#).

28. Consider the unit of resource available for teaching, including part-time, giving the emerging difference between the cost of provision and price.

29. Grant funding from HEFCW has not increased to the levels envisaged by the Diamond Review as necessary for financial sustainability.³¹ As high inflation levels continue, it will be an increasing challenge for universities to address the issues identified above and wider benefits for Wales, without giving further consideration to the unit of resource available for teaching, including part-time provision.

Financial preparedness

30. The greatest challenge to delivery of these goals is the severe financial challenge that universities are facing themselves.

31. Universities in Wales are currently doing all that they can to mitigate the growing financial pressures, including fundamentally reviewing their business models and options. Universities Wales is supporting institutions in exploring sector level options. However, this is not likely to address the short-term pressures faced by institutions outlined in this document. In the meanwhile, universities are increasingly dependent on international fee income in particular, which is highly volatile and means a significant and growing financial risk.

32. Despite their proven track-record of coping with financial pressures, universities will not be able to remain on the current trajectory and continue to operate viably without making decisions that will have a significant impact on the provision of higher education for students and future capacity to provide research and innovation.

33. Addressing funding and sustainability issues in good time, with a clear plan, will ensure that universities are able to continue to deliver benefits to people and places in Wales and help addressing the big challenges that Wales faces. However, the longer that this left unaddressed the less likely universities will be able to prevent lasting damage that will take many years to recover from, and at much greater cost.

34. The latest financial statements present a clear picture of costs increasing quicker than income. For example, staff costs increased by 5%, even once the exceptional adjustments for USS pensions in 2021/22 were excluded.³² Staff costs remain by far the largest component of universities' expenditure.

35. Income increased overall, but the underlying picture was mixed:

- Tuition fee income increased by 4% in 2021/22. However, the fee income increases have not kept pace with the costs of provision: since 2015/16 by only

³¹ The funding assumptions at 2015/16 prices, were set out in Table 6 (p.51) and Table 7 (p.68) of the Diamond Review Report (2016) [here](#). This included £310m for higher education overall, including £85m to support the cost of full-time undergraduate provision, £63m to support the cost of part-time provision, and £96m for core research and knowledge exchange. It also recommended that this was updated in line with inflation (para 9.0.6). In 2023/24 prices, the total higher education funding would amount to between £387m and £437m, depending on the inflation measure used (GDP or RPIX).

³² HESA, HE Finance data 2021/22, Open data, [here](#). See also, HEFCW, Financial Position of HE Institutions in Wales 2021/22, 22 June 2023, [here](#) (para 50ff).

+3% in real-terms (RPIX) but the number of students (in FTEs) has increased by +12% in the same period.

- 'Other income' including accommodation and catering recovered in 2021/22, as the operating environment for most universities returned to near pre-pandemic levels, after two years with significant losses in 2019/20 and 2020/21. However, this was largely offset by an associated increase in 'other expenses'.
- Universities benefited from additional **funding body grants** in 2021/22 – a reduction compared to 2020/21 but still significantly higher than pre-pandemic levels, reflecting Covid related funding. The allocations for 2023/24 have already returned to lower levels.

36. Other operating expenses also increased notably, for a variety of factors – in particular increased expenditure associated with returning to a near pre-pandemic operating environment. For some this also included e.g. additional expenditure associated with increased international activity, and a significant rise in energy costs

37. **Cash flow** is an increasing problem for some universities. Net liquidity is becoming an increased difficulty.

38. **Levels of borrowing** are also a significant issue for many Welsh universities. Although there was variance between individual institutions, external borrowing overall amounted to 49% of income in Wales, compared to 34% for the rest of the UK in 2021/22. While the majority of borrowing was at fixed rates or hedged to limit exposure to variable rates and inflation, this limits the extent to which further borrowing can be relied upon.

39. Although financial accounts are not yet available for the current year, the position does not appear to have improved.

Financial preparedness – key challenges for 2024/25 and beyond

40. Universities in Wales have lost over 30% of the value of the full-time undergraduate tuition fee income since tuition fees were capped at £9,000 in 2012/13 due to inflation. Unlike the student support package, which is currently linked to the Living Wage, the value of maximum fee value has dropped and is continuing to drop rapidly due to high levels of inflation. The equivalent value of the fee when introduced was £13,365 in today's (RPIX in 2023/24 prices).

41. Based on current TRAC data, many universities across the UK – including in Wales – appear to have reached a point where full-time undergraduate provision, and publicly funded provision more generally, are not recovering their full economic cost.³³ In other words, they are delivered at a loss by the university. This adds to the long-standing problem that research typically only recovers around two-thirds of its costs, relying heavily on cross-subsidy from other sources. With current

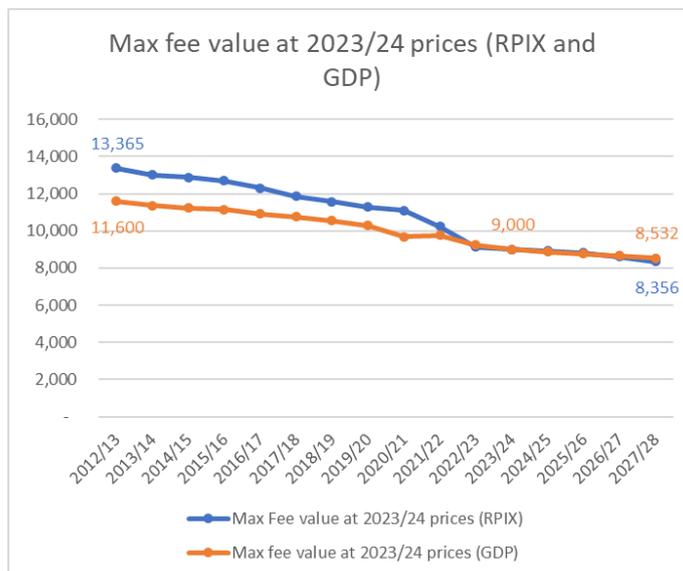
³³ OFS, Annual TRAC 2021-22, 25 May 2021 [here](#).

forecasts for inflation, this position is unsustainable and currently projected to get rapidly worse.

Impact of inflation on university finances

The maximum full-time undergraduate fee for home (and formerly EU) students has stayed at £9,000 since it was first introduced in 2012/13.

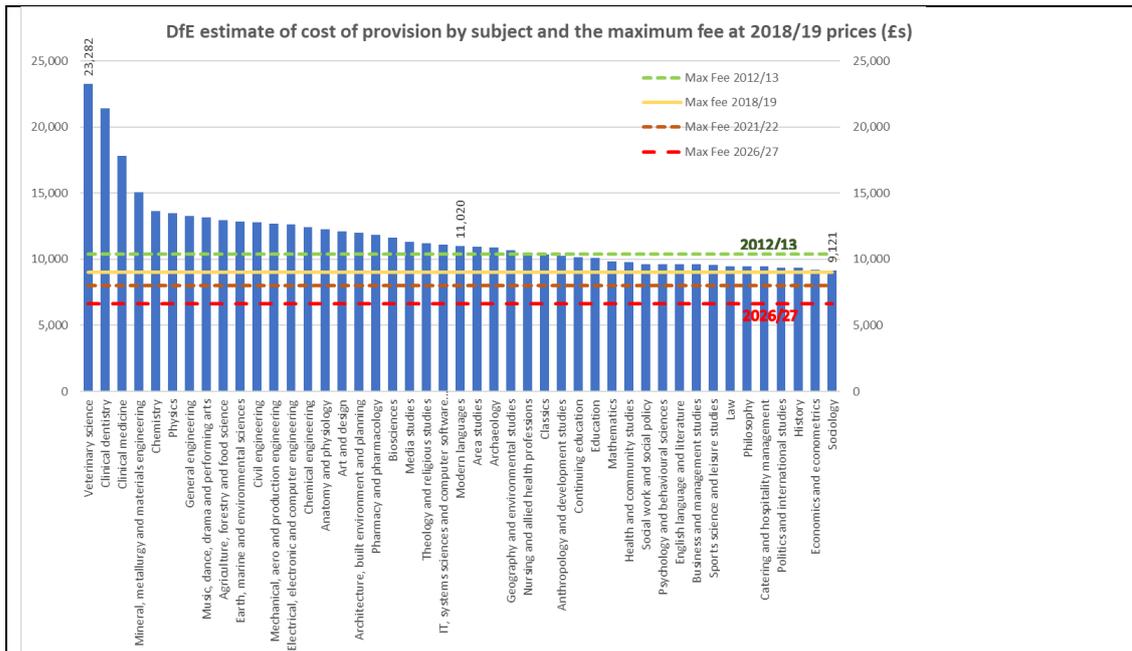
In 2023/24 prices, the value of the maximum fee has already fallen by 30% from £13,365, and will fall to £8,356 by 2027/28, based on the retail price index (RPIX) inflation forecasts.



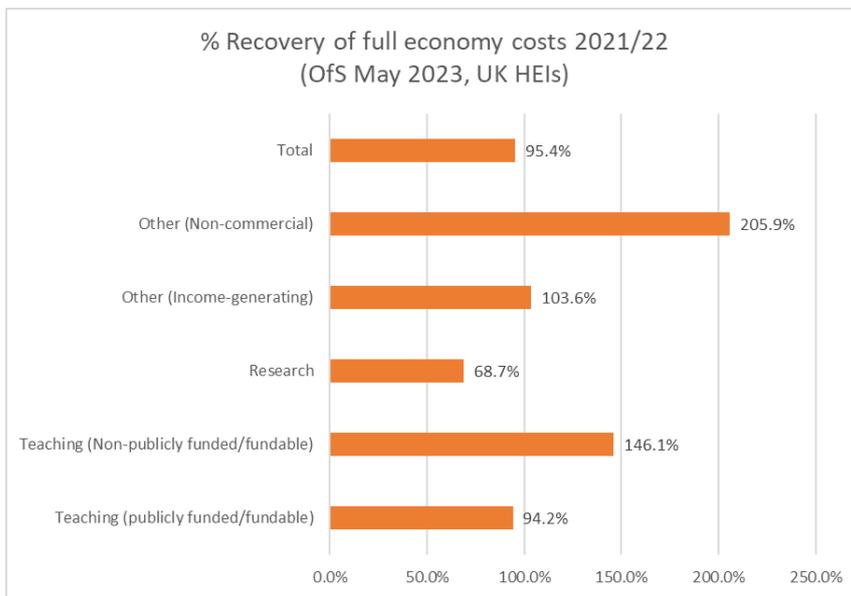
Analysis by both the DfE³⁴ and the OfS³⁵ indicates that, if measured in terms of RPIX inflation, the £9,000k full-time undergraduate **maximum fee no longer meets the full costs in any subject area**. The following chart sets out the DfE's estimate of the costs of provision by subject area in 2018/19 prices, and adds lines to show the comparative decline in value of the maximum fee (also in 2018/19 prices, based on RPIX):

³⁴ Department for Education, Measuring the cost of provision using Transparent Approach to Costing data, Annex A, May 2019 [here](#)

³⁵ Development of the OfS's approach to funding, Annex B, Figure B2, p.34 [here](#).



Analysis of university cost data by activity (TRAC data) by OfS³⁶ suggests that publicly funded teaching is typically no longer recovering full economic costs. In addition, as has long been the case, research only recovers around two-thirds of its costs. Though the published data is only available for the UK as a whole, and results specifically for Wales are not publicly available, we understand the position for Welsh universities to be broadly similar:



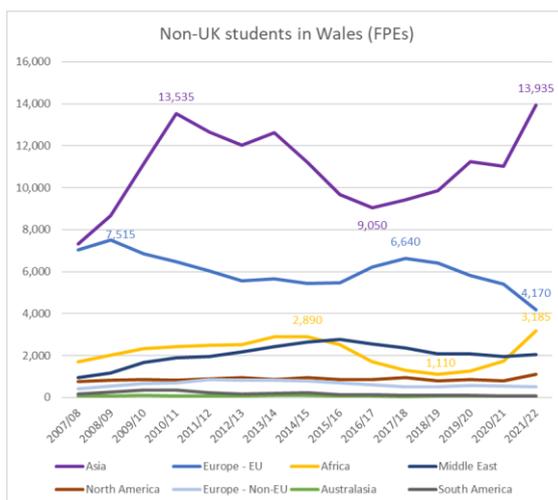
³⁶ OfS, Annual TRAC 2021-22, 25 May 2021 [here](#).

42. This means increasing reliance on fee income from **international students**. Despite recent increases, most notably for postgraduate study (+13% in 2021/22), Wales still has a comparatively low market share of international students (3.9% of the UK in 2021/22). However, for universities to recruit significantly beyond current levels, major additional investment is likely to be needed.

Students in Wales (FPEs) as % of UK

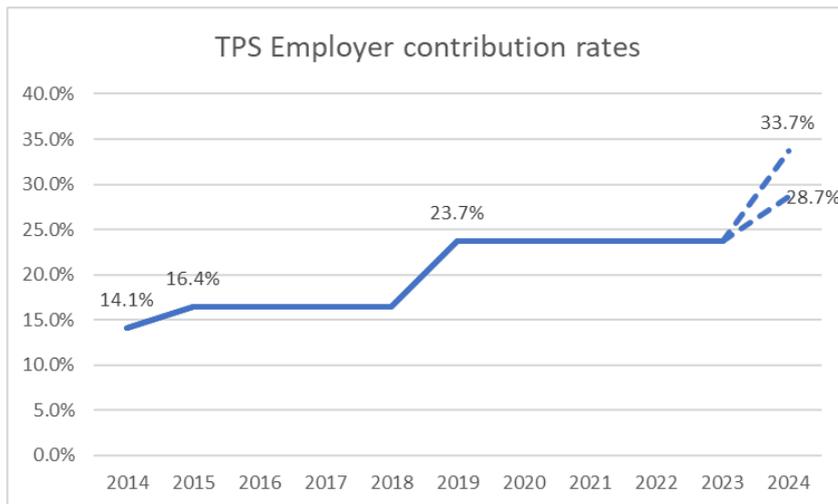
2021/22	Postgraduate			Undergraduate			Total
	Full-time	Part-time	Total	Full-time	Part-time	Total	
FPEs							
European Union	760	415	1,180	2,595	400	2,995	4,170
Non-European Union	13,435	605	14,040	6,385	495	6,880	20,920
United Kingdom	9,595	13,850	23,440	74,990	25,520	100,505	123,950
Total	23,790	14,870	38,655	83,965	26,415	110,380	149,040
As % of UK							
European Union	3.2%	5.0%	3.7%	3.2%	12.2%	3.6%	3.6%
Non-European Union	4.3%	3.3%	4.3%	3.2%	3.9%	3.3%	3.9%
United Kingdom	5.2%	5.7%	5.5%	5.4%	8.9%	6.0%	5.9%
Total	4.6%	5.5%	4.9%	5.0%	8.7%	5.6%	5.4%

43. International student markets are also notoriously volatile, as the chart below indicates, and increasingly competitive which makes it very risky as a strategy to rely on to make up for losses on core activities. Institutions across the UK are reporting a more difficult environment in converting applications to enrolments, likely driven by competition from other markets and a sub-optimal domestic migration environment (for example, the past year has seen extensive visa delays and increases to the costs charged to students by UK Government to study in the UK). Universities are also reporting significant additional costs in developing new markets which point to potentially significantly lower margins on returns than historically made.



44. Another major issue for universities to contend with in 2024/25 will be continuing pension cost increases. In the immediate future, further increases in the costs of the **Teachers Pension Scheme**, a statutory requirement for a number of Welsh universities, are of the greatest concern. TPS employer contributions have

increased dramatically since 2014 (14.1%). Employer contributions are currently expected to increase by a further 5% at least as result of the SCAPE discount rate review i.e. from 23.68% of salary to 28.68% of salary, but the increases may be even higher. A 5% increase would (on initial estimate) mean approximately £9.6m additional costs per annum from 2024, by our calculations, which would fall on just four universities, and the increase could be as high as 10% i.e. double that.



45. The TPS is an unfunded defined benefit scheme. This means that the government promises scheme members a defined stream of income in retirement, based on their salary when they were working, but does not set aside a ‘fund’ to meet these costs. Instead, the costs are made out of general taxation when they eventually become due and, in the meantime, employers are required to make employer pension contributions based on an estimate of the present-day cost of the pension benefits promised (which effectively reduce current government deficits rather than increase future member benefits). Essentially, increased contributions from Welsh universities will have the effect of reducing current UK government deficits.
46. It is a statutory requirement for maintained schools, academies, further education colleges and post-92 universities to continue to enrol eligible teachers on the scheme. The UK and Welsh governments have previously provided significant support for cost increases in the TPS in other sectors, and one of our key asks would be that the Welsh Government to explore ways in which the major impact that this will have on the four universities affected can be mitigated. In 2018 the UK government provided additional funding to cover the additional costs for the NHS and the school sector in England. The Scottish Government agreed to additional funding of £2.749M to help Scottish HEIs transition towards the costs, for the period 1 September 2019 to 30 March 2020. In relation to the 2020 valuation, HM Treasury have currently committed to providing increased funding for employers whose employment costs are centrally funded through departmental expenditure (ensuring it is fiscally neutral). However, in line with the decisions in

2018, this currently does not include universities who end up by making a disproportionate contribution of the scheme's costs.

47. Following the 2023 revaluation, we currently expect the future service costs of the Universities Superannuation Scheme (USS) to reduce with the combined employer and member contributions falling from 25.2% to 20.6%, and deficit recovery contributions falling from 6.2% to 0%, to be implemented in 2024. Final decisions on the split between employer and member contributions are yet to be confirmed, however.³⁷ The surplus identified by the 2023 revaluation will also result in significant adjustments to the accounts to reflect changes in contractual liabilities. The on-going volatility of the scheme, based on Gilts rates, may still be an issue for banking covenants, however.
48. Of the many other inflationary pressures to impact on universities finance, the rise in **energy costs** remains a key concern. Rising faster than general inflation and Welsh universities particularly exposed: 75 sites with more than 1,500 buildings (about a third of which are residential) occupying an area of 2,376 hectares. In many cases, the impact of the energy price rises is only beginning to be fully felt as contracts are renewed, and we expect future sets of accounts to reflect this.
49. Our current work with universities suggests there could still be significant opportunities efficiencies. However, there are obstacles to universities making the necessary capital investment, particularly with the current levels of borrowing that they already have.
50. On that front, the **cost of borrowing** is also expected to impact heavily on Welsh universities. Universities already have relatively **high external borrowing** overall (49% of income Wales, 34% UK in 2021/22), although this varies between individual institutions. Bank rates increased to 5.25% in August 2023, an increase 3.5 percentage points within a year (from 1.75% in August 2022) and are expected to continue to rise. We welcome the Welsh Government exploring the potential opportunity for Welsh universities to have greater access to financial transactions capital, for instance, to help with this.

Why can't universities just use their reserves?

Universities 'reserves' are not unused cash or liquid assets set aside for dealing with emergencies. In accounting terms, it simply means the total 'net assets' that a university has accumulated, i.e. its total assets less its liabilities.

Most of the universities' assets are fixed assets used by the university such as land, buildings and capital equipment, and not cash or equivalents.

The majority of the assets which make up the reserves are essential for the continued operation of the university. Reducing those assets means reducing the activities, services or income streams they support, which in turn has an impact on universities' future income generation.

³⁷ USS update, 26 October 2023 [here](#).

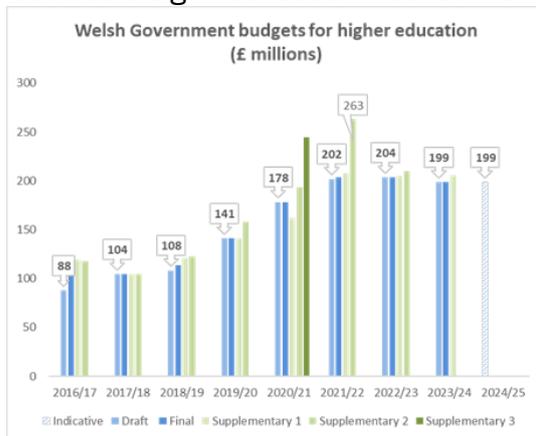
The value of the assets recorded in the accounts may often be considerably less than the assets would achieve at open market, due to the specialised nature of those assets: the assets are normally accounted for at original cost or value to the institution as opposed to disposal value.

In general, using up reserves to address recurrent problems with income/surplus levels is not a prudent financial management strategy. Unless the use of reserves results in the university having a more viable business it will simply mean that its assets continue to be eroded, and potentially very rapidly. Banks and lenders and charity rules typically require universities to keep certain levels of reserves. In addition, around 7% of reserves in universities are ‘restricted’ which means they can’t be used for any other purpose.

In Wales, universities net assets (i.e. reserves) have been recovering in absolute terms after the major fall in 2018/19 and 2019/20. The days ratio of net assets (i.e. reserves) to total expenditure, however, fell to 282 days in 2021/22, because of the significantly increased total expenditure.

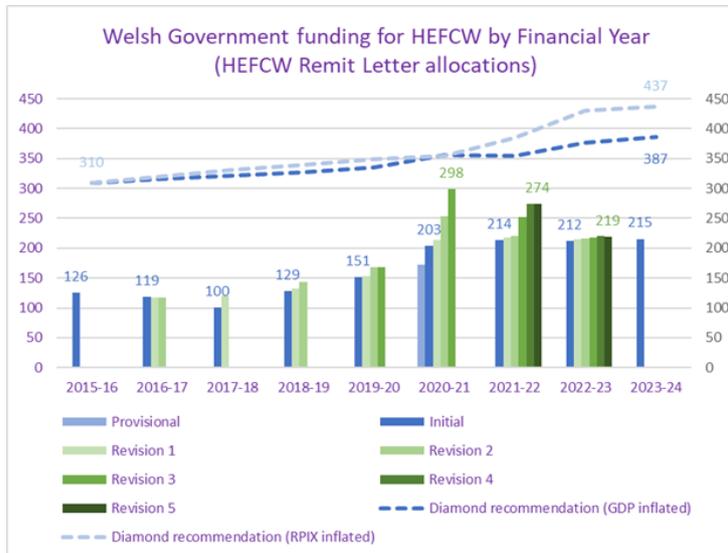
Welsh government budget for HE

51. We are concerned about the implications of any budget position for 2024-25 that leads to a significant cut in real-terms.



52. The public funding support for higher education has a critical role in enabling universities to deliver activities that would not be economically viable to deliver if left to market forces alone and to make up for universities’ inability to recover full costs where the government has imposed restrictions on the fees that universities may charge. For example, without Welsh Government investment it would not be possible for universities to secure the income that it does from other sources.
53. The core funding allocation for higher education, however, remains a long-way short of the levels envisaged as necessary to provide financial sustainability by the

Diamond Review³⁸ in addition to the lack of inflationary increase to the maximum fee chargeable for full-time undergraduate students.



54. Nearly half of HEFCW's current budget (£105m) was allocated to research and innovation including £82m for quality research funding, £6m for postgraduate provision, and £15m for the Research Wales Innovation Fund (RWIF).³⁹ Even with this critical support, however, public funding only covers around two-thirds of the costs of research.⁴⁰

55. £77m was allocated to teaching for the academic year (AY) 2023/24. £43m was allocated for full-time undergraduate provision, including £36m for higher cost and expensive subjects. £34m was allocated for part-time and post-graduate provision, primarily comprising £24m for part-time undergraduate provision and £8m for the access and retention premium.⁴¹

56. In addition, HEFCW's allocations for 2023/24 included £6m for access, well-being and employability initiatives, £9m for degree apprenticeships, £4m for postgraduate master's bursaries, £7m for other strategic investments, and £10m for capital expenditure.

57. Comparing funding in other UK countries, higher education in Wales remains comparatively disadvantaged. Welsh universities received significantly more one-off funding during COVID than their English counterparts (including £127m

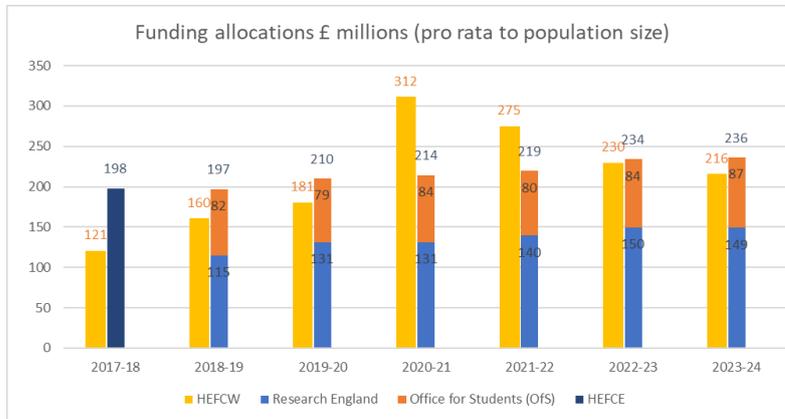
³⁸ Review of higher education funding and student finance arrangements: final report, September 2016; [here](#). The funding assumptions at 2015/16 prices, were set out in Table 6 (p.51) and Table 7 (p.68) of the Diamond Review Report (2016) here. This included £310m for higher education overall, including £85m to support the cost of full-time undergraduate provision, £63m to support the cost of part-time provision, and £96m for core research and knowledge exchange. It also recommended that this was updated in line with inflation (para 9.0.6). In 2023/24 prices, the total higher education funding would amount to between £387m and £437m, depending on the inflation measure used (GDP or RPIX).

³⁹ HEFCW, W23/19HE: HEFCW's Funding Allocations for Academic Year 2023/24, 19 July 2023, [here](#)

⁴⁰ See Box above (following para 41) on Impact of inflation on university finances – referring to TRAC data published by the Ofs, Annual TRAC 2021-22, 25 May 2021 [here](#).

⁴¹ See footnote 29 above.

additional COVID-19 related funding for financial year 2020/21, allocated across different academic years). However, the latest HEFCW allocations reflect a return to core funding and it appears that Wales is set to lag behind again – by the equivalent of around £20m on a population basis for Wales for 2023/24.



58. Core funding for research (QR and PGR) in particular continues to lag significantly behind other parts of the UK which makes it all the more difficult to compete for other funding sources. For 2023/24, this indicates that in Wales the funding allocations for research and innovation (£105m) were £44m lower than in England (£149m equivalent) and £68m lower than in Scotland (£173m equivalent). Teaching funding in Scotland is not directly comparable.

UNIVERSITY RESEARCH FUNDING ENVIRONMENT

UK universities are funded to undertake research and innovation under a dual support system. Each UK government provides **core funding for research**, distributed by its funding council (HEFCW, Research England etc). Primarily this is made up of **quality-related research funding** ('QR funding'), which is typically awarded on the basis of outcomes from the most recent national evaluation exercise – currently the Research Excellence Framework 2021 – and provides the foundations on which other projects can be built. Further funding is also allocated for postgraduate research students. There are equivalents to this in each UK country, although the methods for allocation differ.

UKRI and its constituent councils also provide **competitive funding for universities on a UK-wide basis**. QR funding is essential in enabling Welsh universities to compete for this funding. Notably, UKRI only funds 80% of the full economic cost of the projects it funds.

Innovation funding varies between country. In Wales, RWIF funding supports innovation and knowledge exchange activities. Notably, Wales did not have RWIF funding (or equivalent) between 2013 and 2019.

EU funding replacement

59. Universities in Wales have delivered significant benefit through collaborative, large-scale research, innovation and skills projects funded by European Structural and Investment Funds (ESIF).
60. £366m in EU Structural funds were awarded for projects led by Welsh universities from 2014 to 2020.⁴² This does not include projects where universities are joint sponsors or partners (including Welsh Government projects). These projects, specifically designed to help level the playing field for Wales and address regional disparity, include many projects that have delivered significant benefits for Wales and its communities. The funding has enabled universities to deliver benefits to businesses, including small and medium enterprises, the public sector and individuals.
61. The lack of an adequate replacement for EU funding is a major issue for universities. Some of the most severe impacts on jobs and projects arising from the withdrawal of the structural funds are likely to be seen in the university sector. In April 2023, we identified that, as a result of the loss of ESIF funding, over 1,000 highly-skilled jobs and 60 research, skills and innovation projects in Welsh universities were at risk.⁴³ The loss of these will significantly reduce research capacity and the ability to develop and attract talent to grow the Welsh research base within Welsh universities and deliver skills for the future.
62. While the UK Shared Prosperity Fund (UKSPF) will award £459m across 2022-25 in Wales (with £101m of this ring-fenced for Multiply) it cannot be considered replacement funding for ESIF from a university perspective. Some of the problems we have highlighted in evidence to the Senedd is that the UKSPF has a far wider remit than ESIF and the funding methodology inhibits the ability to deliver regional or national joined up activities with long-term planning horizons. Key factors in this include the timescales under which local authorities have had to develop proposals, making regional or national collaboration difficult, and the short-term funding horizons making it challenging to develop long-term interventions such as KESS.
63. Similarly, the UK government's Levelling up fund, which allows each local authority can submit one bid for the fund's investment priorities per constituency wholly or partially within their boundaries, means that universities can no longer directly access these funds.
64. In April 2023, we identified that bridging funding of approximately £71m would enable ESIF funded projects in Wales to continue for a further 12 months. We welcome the ETRA Committee's recommendation that the Welsh Government

⁴² Welsh Government, EU Structural Funds programme 2014 to 2020: approved projects, updated 18 April 2023, This figure includes a project led by HEFCW.

⁴³ Universities Wales, Post-EU regional development Funding Consultation response to the Economy, Trade and Rural Affairs Committee, 21 April 2023 [here](#).

should commit to discussing bridge funding opportunities with universities as a result of withdrawal of the EU funds.⁴⁴

Q3 Inflation and cost of living issues

3. What action should the Welsh Government take to help households cope with inflation and cost of living issues?

– How should the Budget address the needs of people living in urban, post-industrial and rural communities and in supporting economies within those communities?

65. Further investment in universities will play a significant part in diverse ways in supporting vulnerable households and communities in tackling inflation and cost of living issues. We discuss cost of living issues in relation to university students under Q7. More generally, research indicates that in the long-term higher education reduces poverty and inequality and brings life-changing opportunities for individuals and communities.

66. Continued investment in research and innovation should also play a part in tackling these challenges. For instance:

- Pinpointing fuel poverty. Cardiff University researchers have developed a new tool which identifies households most in need of support to heat their homes, [here](#). The unique mapping system can establish, for the first time, where targeted energy saving measures would deliver maximum reduction in waste energy usage. As of August 2021, the mapping system has been used to target and assist 3,000 vulnerable households.
- Strengthening uptake of the Living Wage across the UK. Research from academics at Cardiff Business School has led to improvements in the working conditions of thousands of people. [here](#)
- Reforming homelessness legislation in Wales. Dr Pete Mackie's research into Welsh homelessness legislation led to the Housing (Wales) Act 2014, and has informed policy debates in Scotland, Canada, and Australia. [here](#)

67. Many of the initiatives undertaken by universities as part of their civic mission engagement specifically help to address poverty in the community. For instance, in 2023/24:

- The North Wales 2025 Movement, a partnership including Wrexham university, has brought over 600 people and organisations together to end avoidable health and social inequalities, helping hundreds of people across North Wales.

⁴⁴ Welsh Parliament Economy, Trade and Rural Affairs Committee, Post-EU regional development funding, September 2023, [here](#). Recommendation 14.

- Working with local authorities, friends' groups, homeless charities and schools Swansea University's Centre for Heritage Research and Training (CHART) is helping to develop heritage-led regeneration, drawing on South Wales's unique position as a major preserve of the heritage of the Industrial Revolution.
- Working in partnership with Blaen y Maes Drop-in Centre in Swansea, UWTSD has provided opportunities over 60 families and 200 local community members to date to engage in family and adult learning activities from literacy and numeracy to confidence building and hosted local and national events such as the Swansea Christmas Parade and Refugee week.

Q4 Building a greener economy and tackling climate change

4. Are Welsh Government plans to build a greener economy clear and sufficiently ambitious? Do you think there is enough investment being targeted at tackling the climate change and nature emergency? Are there any potential skill gaps that need to be addressed to achieve these plans?

68. Tackling climate change and its associated impacts will be one of the foremost challenges that Wales will face in coming years. We agree that tackling climate change should be a key ambition and priority for the Welsh Government.
69. We think there is further scope to support universities in tackling climate change and the nature emergency. Wales is under-investing in research and development compared to other parts of the UK, and there is a strong argument for expanding and supporting Welsh universities in providing pioneering and world-class contributions to this area – particularly in the light of the absence of an appropriate replacement for the EU structural funds.
70. Universities have a key role as educators, in providing expertise for policy development, and in shaping future behaviours, through the range of engagement activities and in providing a research and evidence base.
71. For Welsh universities, as major organisations in their own right, there is significant scope to collectively explore further 'invest to save' opportunities that will help universities to reduce costs in the long-run and meet net-zero targets through greener projects and investments.
72. Examples of world-class research in Wales that is helping to build a greener economy and tackle climate change includes for instance:
- Changing land use to reach net zero. Research on biomass crops by a team at Aberystwyth University has influenced government policy and legislation on the use of land to reach net zero. [here](#)
 - Scaling-up the environmentally friendly production of Perspex®. Research by Cardiff University provided the global Perspex® industry with a cost-effective production process, which could be used at scale, delivering significant economic and environmental benefits. [here](#)

- Maximising the benefits of the UK's wind farms. Cardiff University research is helping to modernise energy transmission across the UK and Europe and push us towards the target of net zero carbon emissions. [here](#)
- Pioneering the use of hydrogen for transport and industry. Researchers at the University of South Wales have developed cost-effective, low-carbon methods of producing and recovering hydrogen. [here](#)
- Making livestock farming more sustainable. Two new clover varieties developed by researchers at Aberystwyth University reduce the environmental impact of livestock farming, while delivering economic benefits to farmers. [here](#)

73. 'Net zero, Energy capture and storage and Decarbonisation' is one of the key areas that Welsh universities are collectively focusing on for their research and innovation, coordinated by the Wales Innovation Network (WIN). Examples of the projects currently being undertaken in this area include:

- Exploring solutions to the generation, storage and application of hydrogen. The Hydrogen Alliance – led by Bangor University - has three main purposes: to review existing research and innovation activity within Welsh higher education institutions, focussing on the generation, storage and application of hydrogen; to examine collaborative activity between universities, and between universities and external partners in, or close to, Wales; to examine how research into hydrogen complements and integrates regionally with work into other low carbon energy sources. It will provide the basis for a future network which can develop a research and innovation based low-carbon ecosystem in Wales.
- Supporting Wales' marine energy and blue economy. The ERDF-funded [SEACAMS](#) project (1+2), led by Swansea University, has supported Wales's marine renewable energy (MRE) and blue economy for more than 12 years. SEACAMS2 offered vital research support to companies wanting to harness the sea's power and create a sustainable marine energy industry in Wales.
- Gathering and collating evidence for the effectiveness of coastal eco-engineering. The project, led by Aberystwyth University explored eco-engineering and biosecurity solutions for coastal adaptation to climate change. Ecostructure has produced a number of tools for coastal managers and researchers, such as GIS maps, modelling tools, and conservation resources. The next stage of research and development in this field will require larger-scale trials in collaboration with the public and private sectors.

Q7 Specific areas – reducing poverty and tackling the cost of living crisis

- *Is enough being done to tackle the rising costs of living and support those people living in relative income poverty?*

74. For our comments on how universities can further help tackle poverty and inflation issues in households and communities generally see under Q3 above.
75. Welsh universities have variously put in place significant additional measures to alleviate financial hardship for students in 2023/24. This has included increasing hardship funding and widening eligibility, new targeted bursaries to address cost of living – and increased staffing to help promote and process applications quickly.
76. Examples of other targeted initiatives have included: provision of free food for those who need it (e.g. through food stations, and free breakfast items), provision of information and access to training on managing finances (e.g. access to the Academy of Money Open Learn course developed by MoneySavingExpert Martin Lewis and the Open University, and ‘Manage your Cash’ workshops) and providing ‘shopping bags’ of useful items to help students negotiate the winter months and keep costs down. Student support services for health and welfare more generally are being increased. Universities have also reported that they have sought to avoid or mitigate increased catering and accommodation costs for students as far as possible.
77. In particular, supporting student mental health and well-being remains a key priority for Welsh universities. In its evidence to the Senedd's Children, Young People and Education committee on student mental health support in higher education in October 2022, Universities Wales highlighted the need for data sharing between health and education providers, and support for transitions from further to higher education, from CAMHS to adult mental health services, and for students living away from home during term-time to access GPs and NHS services – drawing on the policy recommendations developed in partnership with NUS Wales, AMOSSHE and Colleges Wales published last year.

Q7 Specific areas – addressing gender inequality

- *How could the budget further address gender inequality in areas such as healthcare, skills and employment?*

78. There is significant further scope for the budget to addressing gender (and other) inequalities by supporting universities.
79. Addressing inequalities in higher education will also help to address inequalities in employment and other areas. Specifically in relation to gender inequality, recent work by the Institute of Fiscal Studies (IFS) suggests that attending university increases women's earnings by 26% at age 29.⁴⁵ Similarly, a study of graduate earnings found that all students, no matter their subject choice or background, benefit from higher education with underrepresented groups having relatively high returns from going to university.⁴⁶

⁴⁵ See IFS, The impact of undergraduate degrees on early-career earnings, November 2018, [here](#).

⁴⁶ See e.g. IFS, The returns to undergraduate degrees by socio-economic group and ethnicity, 2021 [here](#).

80. In relation to skills, an important priority will be to address the under-representation of male students applying to higher education. Only 24% of Welsh 18-year-old men were accepted to study full-time undergraduate higher education, compared to 36% of women in 2023. This compares to 31.3% of male English 18-year-old students and 41.8% of women. Gender representation across different subjects can also vary greatly.

81. Universities undertake a range of measures specifically to address gender inequality, as identified in their fee and access plans.

82. Many of the causes of gender imbalance in subject choices and career paths are rooted at a much earlier stage of education, however. This is an area that can benefit from a collaborative approach, and CTER may provide further opportunities to support a cross-PCET approach. The sector in Wales has already undertaken efforts to address this, for example through the Physics Mentoring Project which aims to increase participation of women in physics and physics-related subjects.

Q7 Specific areas – preventative spending

- *Is the Welsh Government's approach to preventative spending represented in resource allocations (Preventative spending = spending which focuses on preventing problems and eases future demand on services by intervening early).*

83. We think there is further room to recognise the extent to which investment in higher education prevents problems in other areas and saves public expenditure on other essential services. Investment in higher education as a whole means many wider benefits for communities and individuals further down the line.

84. Higher education has been linked with better general health, better mental health, and higher life expectancy.⁴⁷ Welsh university research also plays a fundamental role in this. Recent world-class research projects that help to save the need for much greater expenditure further down the line include, for instance:

- Helping young children develop skills for a healthy life. Researchers at the University of Wales Trinity Saint David have created a programme to support the development of children's physical literacy and motor skills. [here](#)
- Improving diagnosis and treatment of disease. Researchers at Aberystwyth University have used medical image analysis to develop new diagnostic tools and improve outcomes for patients living with conditions including MS, endometriosis and retinal disease. [here](#)

85. University education also helps to prevent problems in communities. Higher education is associated with lower levels of crime, greater social cohesion, trust and tolerance, and more civic engagement.⁴⁸ Universities also directly support and engage with communities (see under Question 1 for examples of current work).

⁴⁷ See for instance, BIS Research Paper No. 146 ([here](#)), October 2013.

⁴⁸ Ibid.

86. Higher education also brings greater social mobility, higher earnings, increased entrepreneurial activity and less exposure to unemployment.⁴⁹ This in turn has a significant role in reducing costs further down the line on the welfare budget.

87. In particular, more preventative spending is needed in tackling climate change and building a greener economy. As discussed more fully under Question 4, for example, research and innovation activity exploring issues such as clean, sustainable energy capture and storage can help reduce future carbon emissions. Similarly, the opportunities offered by universities for people of all ages and backgrounds to access higher level skills will help address the potential economic and societal shocks of automation and technological change.

Q7 Specific areas – budget transparency

- *How should the Welsh Government explain its funding decisions, including how its spending contributes to addressing policy issues?*
- *How can the documentation provided by the Welsh Government alongside its Draft Budget be improved?*
- *How is evidence and data driving Welsh Government priority-setting and budget allocations, and is this approach clear?*

88. We note that one of the aims of the Welsh Government in establishing the new Commission for Tertiary Education and Research will be to increase the transparency of funding decisions and information. HEFCW already has a strong track-record in this respect and we hope will provide a good model to build on.

Q7 Specific areas – public sector investment

- *Is the Welsh Government providing adequate support to the public sector to enable it to be innovative and forward looking through things like workforce planning. Has there been adequate investment from the Welsh Government in basic public sector infrastructure.*
- *Is the support provided by the Welsh Government for third sector organisations, which face increased demand for services as a consequence of the cost of living crisis and the pandemic, sufficient?*

89. Although universities are charities and not public sector they are subject to many of the duties and rules that apply to public sector bodies. In some cases, this can mean disparities in support. In relation to the TPS scheme in particular, where universities have inherited schemes from the public sector, it means that higher education has not received support for the major increase in costs unlike FE and others in the public sector.

⁴⁹ Ibid.

90. We look forward to working with public sector partners on issues of joint interest on the new Social Partnership Council, when established in 2024.

Q7 Specific areas – infrastructure investment for young people

- Is there enough infrastructure investment targeted at young people?

91. As discussed more fully under Question 2, we are currently very concerned that the higher education infrastructure may not be sufficient to cater for the future needs of people in Wales, and further investment will be required to do so.

92. Wales has the lowest participation rates in higher education of any UK country, and all but one region within the UK (the North East).

93. As noted above, 29.9% of Welsh 18-year-olds applied to study full-time undergraduate higher education in the UK in the 2023 UCAS cycle (18,020 from an estimated population of 60,268)⁵⁰ and the gap in participation rates compared to other UK countries (and most regions in England) is growing.

Q7 Specific areas – Key opportunities for investment

– *What are the key opportunities for the Welsh Government to invest in supporting an economy and public services that better deliver against the well-being goals in the Well-being of Future Generations Act?*

94. As identified in the questions above, investment in higher education is critical for supporting economic recovery in Wales. Universities make a very substantial contribution to the delivery across the spectrum of Wales's well-being goals, and investment in higher education also supports public services more widely, often reducing the need for expenditure in other areas.

95. We recognise the challenges of the current budget round and the difficulty of adequately addressing the many priorities for budget allocations. Nevertheless, as identified under Q3, the current financial position for universities remains very challenging and the impact of inflation is rapidly making it increasingly unsustainable to deliver what Wales needs.

96. In so far as the Welsh Government is able, we would urge it to consider the following key opportunities for investment in higher education for the 2024/25 budget:

- Continue to work closely with the sector to address the fundamental funding challenges facing universities, in light of a severe real-term reduction in income and the impact of significantly rising costs of provision. It is essential that changes are made as soon as possible to ensure higher education can operate

⁵⁰ Data available here: [Statistical releases – daily Clearing analysis 2023 | Undergraduate | UCAS](#)

on a sustainable basis and deliver the higher education that Wales needs for future prosperity.

- Maintain core funding for higher education for 2024/25 with a view to increasing it in line with the Diamond Review recommendations in future budget rounds, seeking in particular to provide greater core funding for research and innovation and to address the impact of increasing losses made from providing fee-regulated courses. This includes consideration of the breadth of support for modes of delivery including part-time.
- Explore options to enable universities to transform their activities where this could prevent greater costs down the line and improve sustainability, for instance, ‘invest to save’ funding or finance.
- Explore ways in which universities can be supported to maintain the talent and infrastructure currently being lost or at risk of being lost as a lack of replacement for EU funding sources.
- Provide support for Teachers Pension Scheme (TPS) increases in higher education, in line with support provided for FE and other organisations facing significant TPS cost increases. Explore options for bridging funding to help with the immediate impacts of energy, pensions and cost of living.
- Consider the unit of resource available for teaching, including part-time, giving the emerging difference between the cost of provision and price.

Universities Wales

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