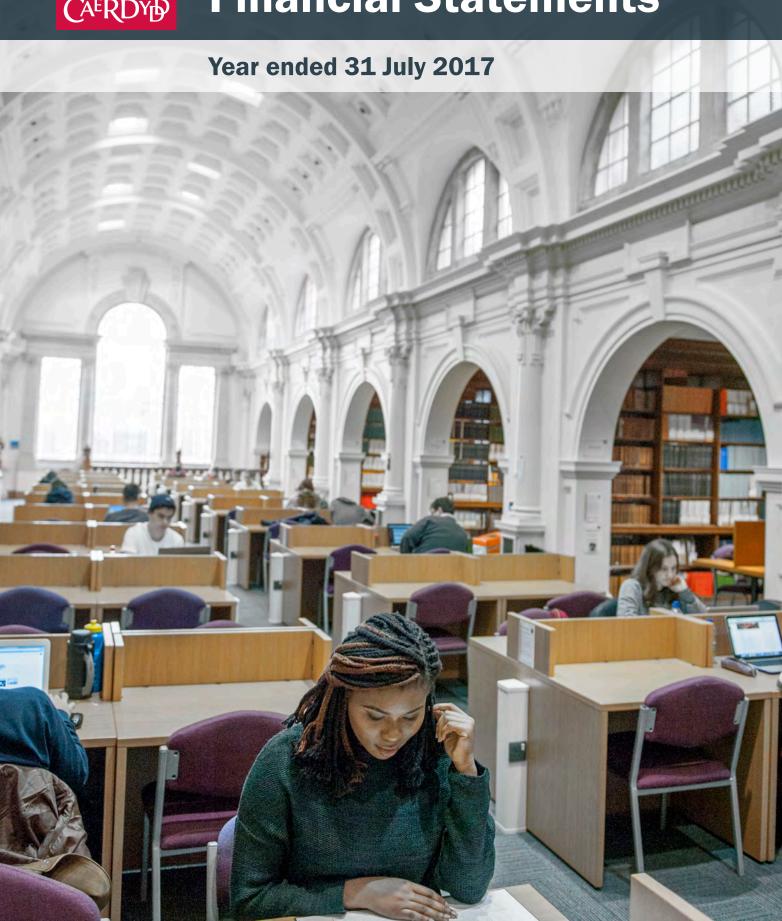


# Annual Report and Financial Statements





### Contents

3
19
23
25
26
27
31
32
33
34
35

Charity Name:

**Cardiff University** 

Charity Registration Number:

1136855

Registered Office:

Main Building Cathays Park Cardiff CF10 3AT

www.cardiff.ac.uk

#### Members of Council

Chair:

**Professor Stuart Palmer** 

Vice Chair:

Rev Canon Gareth Powell

Vice-Chancellor:

Professor C Riordan

Deputy Vice-Chancellor: Professor E Treasure

[to 31 March 2017]

Professor K Holford

[from 1 April 2017]

Mr R Aggarwal

Mrs M Battle

[to 22 May 2017]

Ms S Timbers

[to 30 June, replaced by Ms H Cooke]

Judge Ray Singh

Mr R Lewis-Watkin

Mr M Leighfield

Ms R Williams

[to 31 July 2017]

Professor G Boyne

Dr C Bell

Mr A Gibbons

Ms J Juillerat

Mr M Hanafy

[to 30 June 2017]

Ms F Al-Dhahouri

[from 1 July 2017]

Ms L Phillips

Mr R Preece

Professor P Milbourne

Mr D Simpson

Professor N De Leeuw

Dr S Luke

Mr R Leach

[to 31 July 2017]

Professor A Coffey

Ms N Richards

Dr J Wademan

[from 28 December 2016]

All of those persons listed above served as Charity Trustees throughout the year covered by this Report. Unless otherwise indicated they also occupied these positions on the date on which the Report was approved.



# **Annual Strategic Review**

### Introduction

by the Vice-Chancellor

The academic year 2016-17 was among the most turbulent I can remember in my professional life. The Brexit vote in June 2016 created a set of uncertainties for all UK universities, encompassing the position of our staff who are EU citizens, the recruitment of EU students, EU research funding and networks as well as the future of the EU Structural Funds, which account for approximately 25% of university funding in Wales.

The Brexit negotiations came on top of reforms to the student support and university funding system in Wales arising from the review led by Sir Ian Diamond. Those reforms, which included changes to tuition fees, were intended to create a fair system of support for Welsh students as well as addressing the financial squeeze that had been affecting Welsh universities. However, the General Election of June 2017 changed the terms of the debate: the structure of the tuition fees system was called into question and a further dimension of uncertainty was added to the way universities will operate in future. At the time of writing, none of these matters has yet been fully resolved, though it is clear that we will be navigating choppy financial waters for some time to come.

That said, Cardiff University is a successful, resilient organisation and will remain so. I am delighted to report that in August 2017 Cardiff University became Wales's only world top 100 university according to the Academic World Ranking of Universities, one of the oldest and most highly respected of international league tables. Our ranking of 99th in this table is a significant achievement, representing as it does the fulfilment of an ambition for Cardiff University

that I set out when I became vice-chancellor in 2012. Moreover, despite the unpredictable external environment, during 2016-17 we have been able to celebrate a series of successes in teaching, research and in our community outreach activities. More detail about these successes is included in the annual review section of this document.

Looking to the future, we have now begun to implement our new strategy, The Way Forward 2018-23. Education and research occupy a central position of course, but we are also prioritising innovation and international reach. In addition, we take seriously our responsibilities to our wider communities. For this reason, civic mission will be a prominent theme: we will work with organisations and communities to promote social cohesion and help to improve the health, wealth and well-being of the people of Wales.

In order to put our new strategy into action, and to continue being successful, we need to build upon our traditional prudent approach to our financial strategy. Our track record of careful financial management paid dividends in 2016-17, allowing us to embark on an ambitious programme of investment that will fit us for a competitive future whilst

retaining our strong financial position. We have known for some time that 2017-18 would be fiscally constrained, given the resources available to the Higher Education Funding Council for Wales. We have planned for that and for subsequent years so that we can invest prudently to provide our students and staff with the high-quality teaching, research and living environment they deserve. Our strong cash generation and careful deployment of the £300m proceeds from the 2016 bond issue mean that we are well placed to continue the trajectory of success that has taken us into the world top 100, and fulfil our vision to be a 'worldleading, research-excellent, educationally outstanding university, driven by creativity and curiosity, which fulfils its social, cultural and economic obligations to Cardiff, Wales, the UK and the world'.

**Professor Colin Riordan** 

Vice-Chancellor









#### **Images**

- 1. Go ahead for £50m Centre for Student Life
- 2. National Software Academy expansion
- 3. Rising stars of microstructural MRI
- 4. Cardiff University opens £2m dental simulation suite
- 5. New home for School of Journalism, Media & Cultural Studies



### Education

#### Go ahead for £50m Centre for Student Life

During the year planning permission was granted for the University to begin construction on a £50m landmark building at the heart of the Cathays Campus.

The Centre for Student Life is part of a major investment in the student experience and part of the biggest campus upgrade in a generation.

It is a partnership project with our Students' Union and is a response to requests from students for enhanced services and improved spaces for learning and studying.

The new building will create a central hub for our student support services as well as offering modern, flexible social learning spaces and a technology-rich 550-seat lecture theatre.

#### National Software Academy expansion

The University's National Software Academy is expanding into new offices in Newport in preparation for the 2018/19 academic year.

The move will help to accommodate the ever-growing cohort of students choosing to study for a degree at the Academy, which offers a unique and innovative programme that is heavily focused on engagement with industry.

The Academy, which is currently based at The Platform building in Newport, will take up residence in Newport City Council's Information Station in the city's old railway station building.

The new facilities will also enable the Academy to expand its teaching facilities and help to achieve one of its key goals, which is to provide students with a study space that mimics a workplace environment and integrates industry working practices.

### Rising stars of microstructural MRI

Three talented rising stars of microstructural MRI have each secured highly prestigious fellowships to study at the Cardiff University Brain Research Imaging Centre (CUBRIC).

Maxime Chamberland (Sherbrooke University, Quebec), Erika Raven (Georgetown University, Washington DC), and Chantal Tax (Utrecht Medical Centre, Utrecht) will start their fellowships this year in the newly built, state-of-the-art centre.

Dr Chamberland secured a Fellowship from the Natural Sciences Engineering and Research Science Council (NSERC) of Canada to develop fast, interactive tools for exploring brain fibres and brain connectivity, and was ranked first out of his application round.

Dr Tax secured a Rubicon Fellowship from The Netherlands Organisation for Scientific Research (NWO), again ranking first in her round, for her proposal to exploit ultra-strong gradients in multimodal MRI for assessment of white matter microstructure.

Dr Raven won the only Marshall Sherfield Fellowship from the US to look at the iron content of brain tissue, and how this relates to cognition.

# Cardiff University opens £2m dental simulation suite

Students studying at the University's School of Dentistry will now have access to a brandnew simulation suite, providing them with the latest equipment for practising all aspects of dentistry.

The state-of-the-art training facility, opened by Vaughan Gething AM, Cabinet Secretary for Health, Well-being and Sport in December 2016, will allow trainee dentists, dental therapists and dental hygienists to perform procedures on simulation manikins before entering patient clinics.

The refurbished suite will enable the School to continue to meet General Dental Council regulations to ensure patient protection and will vastly improve student experience.

# New home for School of Journalism, Media and Cultural Studies

The University's School of Journalism, Media and Cultural Studies is to move to a stateof-the-art building in Cardiff's Central Square Development, situated alongside national broadcaster BBC Wales.

The move to No. 2 Central Square, due for 2018/19, will create an industry-academic interface, putting the School at the heart of a vibrant media environment in Cardiff city centre.

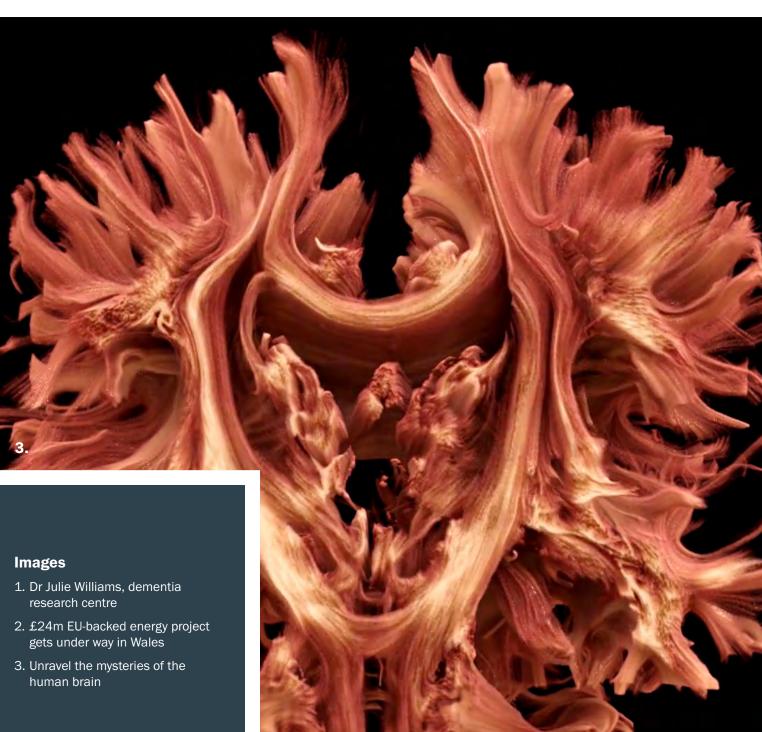
Already recognised globally for its excellence in education and research, the School's relocation will build stronger industry links, boosting students' employability by providing direct access to major media organisations within journalism as well as the creative and cultural industries.

The relocation is part of a wider £260m investment by the University to transform its student experience. In total, the University is investing £600m to provide world class facilities as part of its largest campus upgrade in a generation.

... part of the biggest campus upgrade in a generation.







### Research

### £13m dementia research centre

The University will be playing a major role in the UK's biggest dementia research initiative with the launch of a £13m dementia research centre in April 2017.

With the potential to be awarded a further £17m in research funding over the next five years, the UK Dementia Research Institute (DRI) at Cardiff University is set to become the biggest investment Wales has ever received for scientific study into dementia.

The new research centre in Wales is one of six across the UK and will be a significant section of the newly launched UK DRI - a £250m initiative, funded by the Medical Research Council, Alzheimer's Society and Alzheimer's Research UK, to find new ways to diagnose, treat, prevent and care for people with dementia.

The selection of the new centres marks a significant investment for the UK DRI, with total funding for the foundation programmes and resources awarded to the centres reaching £55m.

## £6m centre to help tackle major policy challenges

The University announced in June 2017 it will host a new £6m research centre which will help to ensure that governments and public services have access to the best available evidence to help them tackle the major policy challenges of our day.

The Wales Centre for Public Policy has been funded for five years by Welsh Government and the Economic and Social Research Council (ESRC) and will play a key role in encouraging evidence-based policymaking and professional practice.

Working with experts from universities across the UK and internationally, the Centre will undertake two distinct but linked programmes of work for Welsh Ministers and public services to address key policy issues including Brexit, supporting growth and prosperity, closing the education attainment gap, and the

future funding of the health service and social care.

### Supercomputing across Wales and the West

The GW4 Alliance unveiled the world's first ARM-based production supercomputer at the Engineering and Physical Sciences Research Centre launch in March 2017 at the Thinktank science museum in Birmingham.

The Engineering and Physical Sciences Research Council awarded the GW4 Alliance, together with Cray Inc and the Met Office, £3m to deliver a new Tier 2 high performance computing service that will benefit scientists across the UK.

The supercomputer, named 'Isambard' after the renowned Victorian engineer Isambard Kingdom Brunel, will enable researchers to choose the best hardware system for their specific scientific problem, saving time and money.

GW4 Alliance comprises the universities of Bath, Bristol, Cardiff and Exeter.

### Unravel the mysteries of the human brain

The most detailed scans of the wiring of the human brain are being produced at Cardiff University's Brain Research Imaging Centre (CUBRIC).

CUBRIC brings together expertise that has established Cardiff University as one of the UK's top three universities in the UK for Psychology, Psychiatry and Neuroscience, alongside Oxford and Cambridge universities.

The £44 million Centre, designed by global architecture and technology practice IBI Group, and built by construction firm BAM, is four times larger than the University's previous brain research imaging facilities. It houses some of the best neuroimaging equipment in the world to help unravel the mysteries of the human brain.

The new facility has been part-funded by the Engineering and Physical Sciences Research Council, the European Regional Development Fund through the Welsh Government, the Medical Research Council, the Wellcome Trust, the Welsh Government and the Wolfson Foundation.

Together, these investments are supporting innovation in world-class brain imaging research, including the creation of highly-skilled research jobs in Wales.

# £24m EU-backed energy project gets under way in Wales

A multi-million pound project set to transform the UK energy sector and tackle some of the biggest challenges currently facing society is under way in Wales.

The £24m FLEXIS project, led by Cardiff University, is bringing together expertise from across Welsh universities to facilitate an affordable, sustainable, and socially acceptable transition to a low carbon future.

The five-year EU-backed project will look to solve a diverse, complex and interdependent set of challenges, ranging from energy storage, to decarbonisation and fuel poverty.

The project will specifically look at how new, low-carbon energy sources can be integrated into the energy grid, and how the grid itself can cope with extreme flows of energy into the system in numerous places and at random times.

By 2020, over £20m of additional competitive research income is expected to be secured in Wales as a result of FLEXIS.











#### **Images**

- 1. Bid to cut Namibian roads death toll
- 2. Half marathon support extended
- 3. University internships break new ground
- 4. Mapping Cardiff's Creative Economy
- 5. Major presence at Eisteddfod
- 6. Pavilion project's Lottery boost



## Engagement

# Mapping Cardiff's Creative Economy

The University has produced a detailed map of Cardiff's creative economy workforce. The research, carried out by the Creative Economy team, identified 2,788 creative companies, organisations and freelancers in Cardiff and surrounding wards.

Mapping Cardiff's Creative Economy sits alongside the formation of the Creative Cardiff Network, which has an 800-strong membership of people working in creative organisations, businesses and jobs in Cardiff and the city region.

Following the publication of this work, Creative Cardiff intends to work with its network and founder members BBC Wales, Wales Millennium Centre and Cardiff City Council to enable and amplify the capital's creative economy.

## University internships break new ground

Eleven young people with learning disabilities and/or autism have graduated from internships at Cardiff University as part of Project SEARCH.

This renowned international programme provides internships and learning opportunities for young people with disabilities.

Cardiff's involvement is a first for Wales and is an example of the University's partnerships across the education and charity sectors, with Cardiff and Vale College, ELITE SEA Ltd and Learning Disability Wales collaborating to make the project a success.

Project SEARCH in Cardiff is part of the wider Engage to Change project, funded by the Big Lottery Fund in partnership with Welsh Government.

Through participation in the scheme, four of the interns have secured employment opportunities across the University where they will put the skills and work experience they have developed into action.

### Bid to cut Namibian roads death toll

The University's Phoenix Project is leading essential life-saving training for police officers in Namibia to help tackle extremely high death rates on the country's roads.

Doctors from the Welsh NHS have been carrying out the training, with each police officer receiving training ahead of a trial in the Namibian capital Windhoek.

The packs – developed by Professor Judith Hall with partners at Cardiff Metropolitan University, the Welsh National Health Service and BCB International - have been field tested in Zambia through Professor Hall's Mothers of Africa charity, with support from the Welsh Ambulance Service and first responders in Wales.

International Red Cross and the UK's Royal Centre for Defence Medicine have also assisted with testing and development.

### Half marathon support extended

Cardiff University has pledged its continued support as title sponsor of the Cardiff Half Marathon.

After the success of the unforgettable Cardiff University/World Half Marathon, where Geoffrey Kamworor held off the challenge of Sir Mo Farah, and more than 16,000 people ran "in the footsteps of champions", the University will continue its title sponsorship of the race until at least 2020.

The 2017 event saw a record entry of 25,000 including hundreds of University staff, students and alumni who ran to raise funds for University research.

The University has used its relationship with the UK's second largest half marathon to encourage runners to support its ongoing research into cancer and neuroscience & mental health.

## Pavilion project's Lottery boost

One of Cardiff University's five Flagship Engagement Projects, Community Gateway, has been successful in its bid for a £50,000 grant from the Big Lottery Fund to develop ideas to renovate and extend the Grange Pavilion, an old bowls pavilion and green in the heart of Grangetown, Cardiff.

Cardiff University's Community Gateway has secured one of nine initial grants of up to £50,000 each to help projects develop their ideas, before being invited to submit developed applications to the second stage of funding with the aim of securing grants of between £300,000 and £1.150.000.

Over the past three years, Community
Gateway, which supports the development
of research, teaching and volunteering
opportunities in Grangetown, has worked
with Grangetown residents' groups
Grange Pavilion Project and Grangetown
Community Action to rejuvenate the
old Grange Gardens Bowls Pavilion and
transform it into a thriving venue for the
whole community.

#### Major presence at Eisteddfod

The University's significant presence at the National Eisteddfod in both 2016 and 2017 saw experts examining the impact of an explosive political period upon Wales.

The consequences of Brexit were discussed at politically-focused events that complemented the University's activities looking at Welsh language, culture and heritage.

Professor Colin Riordan, Vice-Chancellor, said: "We are extremely proud to be a Welsh university that contributes an enormous amount to our country economically, socially and culturally.

"The National Eisteddfod is one of the jewels in the Welsh crown and it is a pleasure for us to play a major role each year."



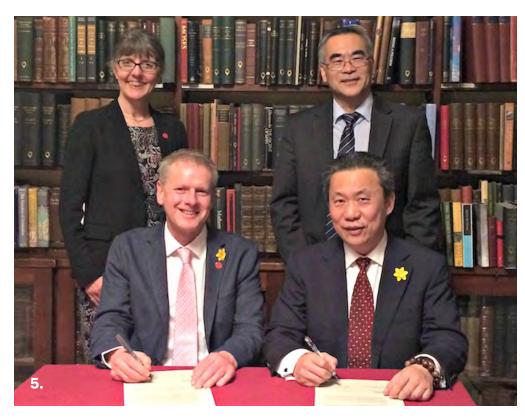






#### **Images**

- 1. Bringing Wales to the world
- 2. Borneo jungle diaries
- 3. Prestigious Fulbright Award for student
- 4. Work gets under way on Welsh-designed Indian Temple
- 5. Chinese investment in biomedical research



### International

#### Bringing Wales to the world

The University signed a partnership agreement with Xiamen University in China in November 2016 to increase collaborative research, share education best practice and create more opportunities for student and staff exchange.

Benefits under the new agreement include the development of collaborative training of researchers through cosupervision of doctoral students, as well as a joint fund to provide £1.2m worth of seed corn funding for collaborative research projects that can attract external funding and create new trade links for Wales.

The agreement was signed by President Zhu of Xiamen University and Vice-Chancellor Professor Colin Riordan with the First Minister of Wales in attendance.

### Prestigious Fulbright Award for student

Jac Larner, a PhD student at the Wales Governance Centre, has received an All-Disciplines Fulbright Award which will enable him to undertake research at the University of Michigan.

Fulbright provides the only bi-lateral, transatlantic scholarship programme, offering Awards for study or research in any field, at any accredited US or UK university.

Typical grants include a maintenance allowance and/or a contribution towards tuition fees. Fulbright scholars receive administrative support and a cultural education programme including: visa processing, a comprehensive predeparture orientation, enrichment opportunities in the USA, a re-entry session and access to a global alumni network.

#### Work gets under way on Welsh-designed Indian Temple

After almost eight years of designing and planning, construction started in June 2017 on an ancient Indian temple designed by Professor Adam Hardy from the Welsh School of Architecture.

The temple, commissioned by Sri Kalyana Venkateshwara Hoysala Art Foundation through the University's Research and Commercial Development division, is located in Ventakapura in the Indian state of Karnataka. It is a new manifestation of the ancient Hoysala style which came to prominence between the 11th and 14th centuries in the south western Indian state of Karnataka. When built, the temple will revitalise regional cultural traditions, becoming a religious centre and providing a setting for music and dance performances, as well as hosting thousands of worshippers and tourists every year.

#### Borneo jungle diaries

The work of scientists trying to safeguard Malaysian wildlife at the University's Danau Girang Field Centre in Borneo has been showcased in a new online series.

The collaborative research and training facility, managed in partnership with the Sabah Wildlife Department, is home to a dedicated team of international research scientists, and students who embark on the University's unique Biodiversity Field Course.

As well as providing outreach and awareness programmes for local communities on eco-tourism and palm oil plantations, the centre uses world class facilities and cutting-edge technological tools for the applied conservation of tropical ecosystems across a fragmented landscape.

The 10-part series is available to watch on the Danau Girang Facebook page and at Scubazoo.tv.

## Chinese investment in biomedical research

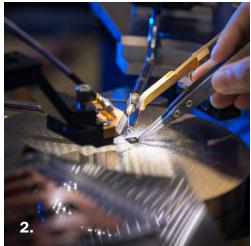
The University has joined forces with Realcan, a major Chinese biomedical service provider, to explore research opportunities in cancer, integrative biosystems, neuroscience, immunology, infection and inflammation, and population health.

Realcan, which operates primarily in China, will provide funding of £1m over a three-year period for PhD students to partner with the University's leading clinicians, biomedical scientists, and research fellows.

The partnership is one of around 40 the University has fostered across China, including major collaborations with Peking University and Beijing Friendship Hospital (Capital Medical University) as part of the Cardiff China Medical Research Collaborative (CCMRC), which focuses on oncology research.

... When built, the temple will revitalise regional cultural traditions...







#### **Images**

- 1. Go ahead for Innovation Campus
- 2. £13m EU funding boost for compound semiconductors
- 3. New innovation fund launched



### Innovation

## Go ahead for Innovation Campus

The latest phase of the University's Innovation Campus was approved by the City of Cardiff Council in November 2016.

Two new buildings will bring together researchers and the private, public and third sectors to create new products, policies and services.

The Translational Research Facility will accommodate the Institute for Compound Semiconductors and the Cardiff Catalysis Institute, both of which work with industry on major tech and sustainability challenges.

Innovation Central will house office and lab space, dedicated business support and a Social Science Research Park, creating a hub for new commercial ventures and creative solutions to societal problems.

## £13m EU funding boost for compound semiconductors

In January 2017, the Welsh Government announced £13m EU funding to help put the Institute for Compound Semiconductors at the forefront of 21st Century technologies.

The funding will help the Institute build, equip and run a state-of-the-art cleanroom to service the region's compound semiconductor industry with cutting-edge fabrication facilities.

The Institute will turn its laboratory research into products and services by working with commercial partners to develop one of the world's key enabling technologies.

### New innovation fund launched

A new £5m fund to help the delivery of better services and generate savings in the Welsh public sector was launched in February 2017.

The Innovate to Save fund is a unique partnership between Welsh Government and Y Lab – itself a partnership between the University and innovation charity Nesta – and will work closely with the Wales Council for Voluntary Action.

The new fund will provide repayable and non-repayable funding, as well as non-financial support, to Welsh public services and the third sector. Non-repayable funding will support organisations to prototype, test and develop complex and innovative changes to the way services are delivered.

#### Cardiff University joins top 40 innovative universities in Europe

Cardiff University has moved up nine places to 36th in Europe's Top 100 Most Innovative Universities.

The University maintained its spot as eighth in the UK, according to Reuters' second annual list published in May 2017

The Reuters rankings identify the educational institutions doing the most to advance science, invent new technologies, and help drive the global economy.

The league table is based on data including academic papers, patent filings, industry citations and industry collaborations.

## University's £3bn boost to UK economy

The University contributes nearly £3bn to the UK economy, while the UK's research-focused universities overall inject nearly £87bn into the economy, research has found.

Cardiff's total UK economic impact reached £2.918bn in the most recent figures (2014-15), an increase of 9.3% - or £248m - when compared to £2.670bn generated in 2012-13, according to an independent report by London Economics.

The University's contribution to the Welsh economy has grown in line with the UK figure - from £2.037bn in 2012-13 to approximately £2.205bn in 2014-15.

In a separate study by London Economics, research-intensive Russell Group universities were found to have contributed £86.8bn in 2015/16 and supported a total of 261,000 full-time equivalent jobs.

The report on Cardiff University said that the University supported more than 11,000 jobs: 5,516 full-time equivalent employees plus a further 5,795 jobs.

Research activity alone added £664.1m to the University's contribution to the UK economy (equivalent to 23% of the University's total economic impact).

The study also showed that Cardiff now generated £6.36 for every £1 it spent – compared to £6.26 in 2012-13.



# Philanthropy

Philanthropy plays a crucial role in Cardiff University's success, and in our mission to create and share knowledge, and to educate for the benefit of all.

Donors from all walks of life have, through their gifts and fundraising on behalf of Cardiff, enabled transformational change at the University. Donors are supporting vital Cardiff University research which will help to solve society's biggest challenges; and building a student culture of excellence, employability and well-being so that Cardiff students believe anything is possible.

In 2016-17 alone, a record year for Cardiff University's philanthropic activities, over 775 Cardiff alumni, staff, friends, trusts and foundations pledged £4.5m in new gifts to support a range of projects.

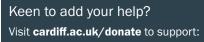
An exceptional gift from the Hodge Foundation is bringing together leading experts in both neuroscience and immunology, and helping Cardiff researchers gain a better understanding of why disabling conditions such as Alzheimer's disease and schizophrenia develop, including which factors cause them to progress. A £1m gift pledge has established The Hodge Centre for Neuropsychiatric Immunology, and over the coming four years will provide funding for a Senior Fellowship, six Hodge Foundation PhDs, five pilot research studies, seed funding for innovative new ideas, and a series of public lectures.

2016-17 was also the second year for Cylch Caerdydd, Cardiff's donor circle which recognises gifts of £1,000 or more in an academic year. In 2016-17, 53 Cylch Caerdydd donors collectively raised over £1.7m; these generous individuals inspire others through the impact of their gifts.

We continued to welcome new members to #TeamCardiff, the University's community fundraising programme which invites staff, students, alumni and friends to fundraise for the University's research into cancer, and neuroscience and mental health. 160 #TeamCardiff runners at the October 2016 Cardiff University/ Cardiff Half Marathon raised nearly £32,000; and from November 2016 through July 2017, another 350 runners joined #TeamCardiff as they prepared

for the October 2017 half marathon. The team is fast gaining recognition across the city and beyond, for their enthusiasm and success

Cardiff University is hugely grateful to all donors. Your continued support is helping to save, change and enrich lives in Wales and beyond.



- Cardiff student experience, attainment and employability
- PhD students making breakthroughs in research
- Neuroscience and mental health research
- · Cancer research
- Cardiff's School of Journalism,
   Media and Cultural Studies
- Innovation: building new products, processes and policies via partnerships
- Immunity and inflammation research



Keen to support Cardiff in other ways?

Visit cardiff.ac.uk/alumni/get-involved to volunteer:

- Become an ambassador for the University
- Attend Open Days to share your post-University experiences with prospective Cardiff students
- Employ talented Cardiff students on placements and internships

Alumni are Cardiff's best champions and ambassadors: your help is warmly welcomed!





#### **Images**

- 1. Changes to Environmental Sustainability
- 2. Biodiversity and Community



# **Environmental Sustainability**

## Changes to environmental sustainability

The University has acknowledged the strategic importance of environmental sustainability. Over the summer a number of focus groups have been held to develop the themes of the strategy.

Sustainability has also been recognised in the University's overall Way Forward strategy, putting it at the heart of what we do. One of the key themes will be how the University can reduce single use plastics.

The ISO 14001 international environmental standard is being updated, and to continue to comply we need to undertake a number of activities including reviewing our stakeholder groups inside and outside the institution, and analysing the environmental context of the University. These more challenging standards will ensure that environmental sustainability is embedded into all working practices, with greater opportunities to consider life cycle analysis and how we conduct our business. Continual improvement overall in environmental management is now firmly embedded in the culture of the University.

#### Engagement

The National Union of Students (NUS) runs a number of staff and student engagement tools for sustainable development including Green Impact.

Twenty-five students and 10 staff took part in Blackout, auditing four buildings to check where staff had left equipment on unnecessarily on a Friday night. This forms part of the behavioural change programme to get staff and students to think about their actions.

The University has run Green Impact for four years; 38 teams participated in Green Impact in 2016/17 with 32 teams reaching bronze accreditation or higher. These teams were made up of 194 staff members, reaching 1,673 people in their wider departments. 1,203 actions were completed. Analysis of just five of the criteria revealed estimated savings of £55,277 and 177,979 kgCO2e.

Our campus facilities team went on to win the NUS National Award for Environmental Improvement for their work 'Leading the way in Biodiversity for Cardiff University'.

Sustainability Week in March focused on renewable energy with talks on tidal lagoons and the Rampion Wind Energy Project. Bike breakfast and Dr Bike continued to be extremely popular. We also ran a local consultation on the Cardiff Council integrated network map which was extremely well attended. The drop-in day focused on sustainable laboratories providing the latest information on low carbon equipment. We have also developed a sustainability induction which is available for all staff and students.

#### Fairtrade

The University celebrated 10 years as a Fairtrade university in which we have committed to supporting, promoting and using Fairtrade goods.

This includes making Fairtrade foods available for sale in all campus shops and in all cafés, restaurants and bars on campus.

#### Carbon

Invest to save project (partly funded by Welsh Government) spent £1.4m between January and October 2016.

Since completion it is saving £259k annually, reducing CO2e emissions of 1,009 tonnes per year. Work consisted of boiler replacement, chiller upgrades, LED replacement lighting and photovoltaic solar panels. The new solar panels are producing over 108,000kWh annually.

Electricity consumption has increased in 2016-17 despite carbon reduction works (49,700,000kWh, up from 47,300,000kWh). This increase is partially attributed to the new CUBRIC building and new research projects in Engineering. Despite an increase in consumption, CO2e continues to fall below 2005/6 base year (falling from 19,500,000 kg CO2e to 17,500,000 kg CO2e).

#### Reducing our impact

We are always seeking ways to reduce our environmental impact.

In 2014, we changed our standard paper supply for printing and photocopying from Forest Stewardship Council (FSC) paper to 100% recycled. We also worked hard with our supplier to make this change cost neutral to the University. This year, we've been able to estimate the reduction in environmental impact due to this change, which is a saving of around 184 tonnes of waste, 27 tonnes less carbon dioxide and other greenhouse gases, and over half a million kilowatt-hours per year.

#### Biodiversity and community

A bee-friendly campus initiative, run by the School of Pharmacy and Pharmaceutical Sciences, has won the Sustainability category at the Guardian University Awards 2017.

http://www.cardiff.ac.uk/news/view/cardiff-success-at-guardian-university-awards

The Chris McGuigan Memorial Garden at the School of Pharmacy and Pharmaceutical Sciences achieved a coveted Green Flag Community Award in 2016/17.

http://www.cardiff.ac.uk/news/ view/824349-chris-mcguiganmemorial-garden-receives-green-flagcommunity-award

A lot of positive work has been done in relation to sustainability at the University but there is much more to do. The University's new strategy for 2018-23, which is due to be launched in January, promises to promote sustainability education and enable students and staff to make positive changes to our environmental impact.



# Financial Review 2016-2017

The past year has been financially challenging for the University as Funding Council grants have been cut in year whilst costs have continued to rise and the home/EU fee of £9,000 remained static. However, tuition fee income increased in line with a growth in student numbers.

Despite these challenges, the University has continued to prosper. It entered the world top 100 in the respected Academic Ranking of World Universities in August 2017. The University has again secured significant research income and continued to invest in its estate by refurbishing existing facilities and pushing ahead with plans for new state-of-the-art buildings.

The University is investing in its future to enable it to meet its stated goals as outlined in The Way Forward strategy. This approach will also be vital to attaining the goals in the University's new strategy, which will be implemented early in 2018. The investment will support the University's goals of providing excellent research and teaching in facilities that are comparable to the best in the country.

While the University is enacting its plans before an external backdrop of public spending cuts and the fall-out from the result of the EU referendum, it is doing so from a position of financial strength. The Financial Statements suggest that it is well placed to respond to the current challenges in the sector, including those posed by Brexit. The strength of its income from research grants and students gives the University cause to be optimistic about the future.

### Scope of the Financial Statements

The Financial Statements for the year ended 31 July 2017 consolidate the results of the University, its subsidiary company University College Cardiff Consultants Limited and the joint ventures Compound Semiconductors Limited and Cardiff Medicentre Limited.

#### Results for the year

The surplus for the year was broadly in line with expectations.

The introduction of the 2015 Statement of Recommended Practice (SORP) for Further and Higher Education Institutions in 2015/16 led to more volatile results for universities.

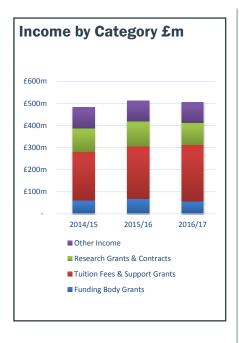
This was particularly evident in research where capital grants are recognised on completion of buildings or purchase of equipment rather than being spread across their useful lives.

The University's share of USS pension scheme liabilities must be included within expenditure, which had a negative impact on the surplus before other gains and losses for the year.

The value of the University's own investments is also unpredictable because it is dependent on market rates, and large investment gains and losses can be made as a result. For 2016/17 the University made an unrealised gain of £12m.

#### Summary of group results

	2016/17 £m	2015/16 £m
Income	505	512
Expenditure	514	485
(Deficit)/ surplus before other gains		
and losses	(9)	27
Gain on investment	s 12	6
Share of deficit in joint ventures	(3)	(1)
Actuarial gains/ (losses) on pension	ı	
schemes	11	(21)
Total Comprehensi	ve	
Income	11	11



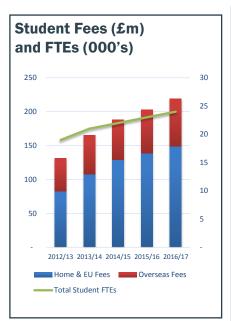


Income dipped slightly in the year to £505m from £512m in 2015/16 as fewer capital grants were recognised.

A £2m in-year reduction in recurrent funding from the Higher Education Funding Council for Wales (HEFCW) was compounded by capital grants of only £3m compared to £10m being recognised in the previous year.

Research income fell compared to 2015/16 which included the recognition of £16m of capital grants, as significant capital projects including the new Cardiff University Brain Research Imaging Centre (CUBRIC) building were completed. Although work commenced on the new Translational Research Facility, its grant income will not be recognised until it is completed.

All other income in aggregate remained static around the £91m mark as increased income received from investment of the bond money and higher income from student residences was offset by a reduction in other services income.



## Student tuition fees increase 7%

As HEFCW grants were reduced, income from additional student recruitment filled the gap.

Home and EU student FTEs increased by 5% to 19,706 during the year and the associated fees have increased by £9m (7%).

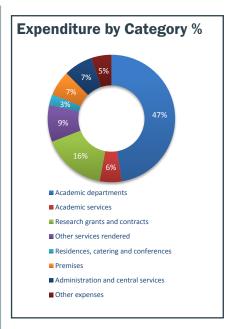
Overseas student FTEs also increased by 5% to 4,517 with fees increasing by £6m (9%). The overseas students represented 19% of the total FTEs of the University and 32% of the student fee income.

The University had a total head count in excess of 30,000 students, putting it in the top 10 of UK universities for student numbers.

It has a diverse student population with students coming from more than 100 countries and from a range of backgrounds.

The University works in partnership with its students to create a stimulating and supportive environment in which all students can thrive.

Studying and learning in a research-rich environment means the University's students are taught by scholars working at the frontiers of knowledge in their disciplines.



#### Expenditure increase 6%

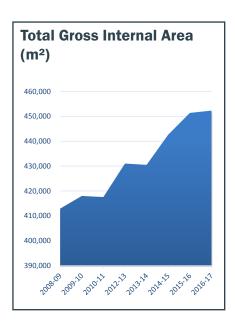
The majority of the University's spending of £514m was focused on teaching and research which together make up 63% of total expenditure and 74% of the £290m staff costs.

Almost half of expenditure was accounted for by spending in the University's Schools while a further 6% was spent on academic services including IT and libraries.

Research revenue expenditure increased by £10m in 2016/17.

However the research capital spending for 2016/17 was lower, with proportionately more of the research income being spent on revenue items. This was mainly due to the completion of a number of large projects in 2015/16 including CUBRIC and the Musculoskeletal Research Centre.

The depreciation charge increased by £6m in the year which reflects the increase in capital investment.



#### Capital investment £57m

During the year £57m was spent on investment in infrastructure and equipment. This was funded from the cash surplus generated in the year, £3m of capital grants plus the use of existing reserves within the University. Of this total, £37m was invested in building projects.

Work has started on the latest developments on the Innovation Campus on Maindy Road. Planning permission was given for Innovation Central and the Translational Research Facility in November 2016. The £50m Centre for Student Life was given the go ahead by planners the following month. Construction work started on a new state-of-the-art home for the School of Journalism, Media and Cultural Studies alongside national broadcaster BBC Wales in Cardiff city centre. This major upgrade will transform the campus for the 21st Century.

Many existing buildings were refurbished in line with the Estates Masterplan, which aims to provide state-of-the-art research, teaching and student facilities. A further £4m was invested in the refurbishment of student residences and £5m on purchasing land adjacent to the Talybont site to build a new students' residence.



#### Cashflow surplus 8%

The Way Forward strategy aims for a minimum cashflow surplus of 5% of income to be retained each year to fund its ambitious investment programme. The net cash inflow from operating activities for 2016/17 of £42m represented 8% of income.

The University is in a strong position with cash and short term investments of £419m at 31 July 2017 which will be used to invest in the enhancement of the University's facilities and to weather any future financial storms.

# Key financial performance indicators in line with Russell Group

The University monitors its key financial performance indicators and compares these against the Russell Group of research-led universities in the UK.

The latest available information relating to Russell Group universities indicates that Cardiff's ratios are broadly in line with its comparators as outlined in the table.

The operating surplus is sensitive to the increased volatility in the recognition of grant income following the introduction of the 2015 SORP and in 2016/17 has reduced in line with the reduction in this income as discussed above.

#### Compound Semiconductor Centre Limited

A further £900,000 was invested in this new joint venture with IQE Plc during the year bringing the total invested to £21.8m. The investment is integral to the establishment of the Institute for Compound Semiconductors which will be based in the Translational Research Facility on the Innovation Campus. The Institute will provide facilities to help researchers and industry work together, positioning Cardiff as the UK and European leader in compound semiconductors

#### Principal risks

The University is in a sound financial position to face the challenges that will affect the higher education sector over the next few years. All UK universities are exposed to changes in their relationship with the EU and it remains to be seen what impact the Brexit outcomes will have on EU student numbers and research income.

In addition to the EU challenge, the University, alongside all other UK universities, is exposed to any adverse or positive changes to student recruitment from overseas countries. The University manages these risks and continually monitors the market to ensure it is well placed to respond to any eventuality.

KPIs	Cardiff Russell G		<b>Russell Group Median</b>
	2016/17 £m	2015/16 £m	2015/16 £m
Total Income	505	512	579
Operating (Deficit) / Surplus	(9)	27	28
Research Income	101	114	126
% Income	20%	22%	22%

In 2016/17 The University's Executive Board reviewed its key risks. In addition to the afore-mentioned BREXIT risk, the principal risks and how they have been mitigated are shown in the table below:

Risk area	Dick decement on	Disk managament
Funding	Risk description  Any further changes in the funding of universities from public sources, including the impact of changes in student fees, the funding of research and the implementation of the Diamond review.	Risk management  The University plans prudently with regard to income assumptions, and is embarking on a programme of transforming services which will deliver more effective and efficient services.
Recruitment	The University fails to recruit and retain a strategically desirable number, quality and diversity of students, particular high quality and international students.	The University plans conservatively for student demand, focuses on key recruitment areas, develops overseas networks as well as networks with local schools, is investing in a First Choice transformation programme and in the Centre for Student Life which will improve the student experience.
Pensions	Further changes to the pension schemes which increase cash outflows from the University, or make the University a less attractive employer.	The USS pension scheme valuation at 31 March 2017 is underway. Options around contribution rates and future pension benefits will be considered by employers, Unions and the Trustees in agreeing a recovery plan which will be scrutinised by the Pensions Regulator.
Reputation	The ability to maintain an internationally competitive position in respect of the quality and recognition of both teaching and research.	The University is investing in supporting staff to excel in research and teaching.
People	The recruitment and retention of internationally recognised scholars in a highly competitive market.	The University is putting the staff experience at the centre of the next strategy and undertakes regular, frequent review of recognition and reward mechanisms and leadership and development training programmes.

#### Outlook

The next few years will see a major capital programme come to life with construction work starting on the developments on Maindy Road and the Centre for Student Life on Park Place. These developments will significantly enhance the research capability of the University and provide a state-of-the-art facility for our students to support key elements of student life.

Financial forecasts for the next few years show a tight budgetary landscape while still allowing for reasonable cash

surpluses to be created each year to contribute to our capital ambitions.

The publication of the Diamond Review on university funding in Wales is a very welcome development that should bring financial stability and sustainability to the Welsh HE sector.

Cardiff University continues to be a very successful university built on a prudent financial approach.

#### **Professor Stuart Palmer**

Chair of Council 4 December 2017

### Corporate Governance Statement

The University's legal status derives from a Royal Charter originally granted in 1884. Its objects, powers and framework of governance are set out in its Charter and its supporting Statutes, the latest amendments to which were approved by the Privy Council in 2015. The University registered as a charity in 2010 (1136855).

The Charter and Statutes require the University to have three separate bodies, each with clearly defined functions and responsibilities, to oversee and manage its activities:

#### Council

The Council is the governing body, responsible for administration and management of the affairs of the University and for agreeing the general strategic direction of the institution.

The Council is committed to conduct its business in accordance with Nolan principles identified by the Committee on Standards in Public Life (selflessness, integrity, objectivity, accountability, openness, honesty and leadership) and with the guidance to universities from the Committee of University Chairs in its Higher Education Code of Governance published in December 2014.

In respect of the year ended 31 July 2017, the Council can report:

- that there was no element of the Governance Code of Practice with which the University's practice was not consistent; and
- (ii) that it was fully aligned with the changes effected by the Higher Education (Wales) Act.

The University undertakes regular Council effectiveness reviews and underwent an external review in 2017, conducted by the Good Governance Institute. This External Review concluded that that the University is fully compliant with the CUC Code of Higher Education Governance in respect of its governance framework.

To ensure a continued fit-for-purpose Council which meets the test of being business-like and responsive to key stakeholders, whilst preserving the long-term traditions and values of the institution a number of recommendations were made, which will be actioned in 2017/18.

The University is committed to the highest standards of openness, probity and accountability, and seeks to conduct its affairs in a responsible manner and has in place a Public Interest Disclosure policy to enable staff, students and other members of the University to raise concerns which are in the public interest.

The Council has a majority of members from outside the University (described as lay members), from whom its Chair must be drawn. The membership also includes staff and students. None of the lay members receive any payment, apart from the reimbursement of expenses, for the work they do for the University. On joining Council, members are required to complete Register of Interests entry.

The current register of interests is publicly available on our website:

http://www.cardiff.ac.uk/\_\_data/ assets/pdf\_file/0011/78644/Council-Register-of-Interests-2016-17.pdf

#### Senate

The Senate is the academic authority of the University and draws its membership from the academic staff and students of the institution. Its role is to direct and regulate the teaching and research work of the University.

#### Court

The Court is a large, mainly formal body. It offers a means whereby the wider interests served by the University can be associated with the institution, and provides a public forum where members of Court can raise any matters about the University.

The Court normally meets once a year to receive the annual report and audited financial statements of the University. The Court is chaired by the Chancellor. In March 2017 the University Chancellor stepped down and members of the Council and of the Court will seek to appoint a successor for the role of Chancellor following an interregnum. Most members of the Court will be from outside the University, representing the local community and other designated bodies with an interest in the work of the University. The membership also includes representatives of the staff of the University (both academic and nonacademic) and the student body.

#### **Accounting Officer**

The chief executive and principal academic and administrative officer of the University is the Vice-Chancellor, who has a general responsibility to the Council for maintaining and promoting the efficiency and good order of the University.

Under the terms of the formal financial memorandum between the University and the Higher Education Funding Council for Wales, the Vice-Chancellor is the accounting officer of the University and in that capacity can be summoned to appear before the Audit Committee of the Welsh Government.

#### Committees

Although the Council meets at least five times each academic year, much of its detailed work is initially handled by committees, in particular the Policy and Resources Committee, the Governance Committee, the Remuneration Committee and the Audit Committee.

The role of each of these committees is set out below:

### Policy and Resources Committee

The Policy and Resources Committee manages, monitors and regulates the finances, accounts and investments of the University within the overall policy laid down by the Council.

#### **Governance Committee**

The Governance Committee met four times in 16/17 and considered in detail the University's compliance with Welsh Language Standards, PREVENT, CMA, Bribery Act, Human Tissue Act, Animal Research regulations, Equality Act and regulation of fundraising activity following publication of the Etherington report. The Committee considered the University's governance arrangements following and external governance effectiveness review conducted by the Good Governance Institute and discussed the maturity of the University's risk management.

#### **Remuneration Committee**

The Remuneration Committee determines the remuneration of the most senior staff, including the Vice-Chancellor.



#### **Audit Committee**

The Audit Committee met five times in 2016-17, including a special meeting of the Committee in May 2017 to receive an update on information security and to discuss a maturity assessment of the University's risk management processes.

The University's internal auditors attended all meetings. The external auditors were present for consideration of the annual Financial Statements and management letter as well as the annual audit plan.

The Committee considers detailed reports together with recommendations for the improvement of the University's systems of internal control as well as management responses and implementation plans. It also receives and considers reports from HEFCW, the Wales Audit Office and Research Councils UK as they affect the University's business and monitors adherence to the regulatory requirements.

The Vice-Chancellor and other senior executives are not members of the Committee and may attend meetings by invitation.

In the preparation of this statement the Council of the University has had regard for the guidance issued by the Charity Commission.

All of these committees are formally constituted with terms of reference and a membership which includes lay members of Council. The committees are chaired by a lay member of Council. In the case of the Audit Committee, all the members are independent of the University's management, although senior executives attend meetings as necessary.

#### Management

As chief executive of the University, the Vice-Chancellor exercises considerable influence over the development of institutional strategy, the identification and planning of new developments, and the shaping of the institutional ethos. The Pro-Vice-Chancellors and the senior professional officers all contribute in various ways to these aspects of the work, but ultimate authority rests with the Council.

## Principal risk and system of internal control

Council has responsibility for maintaining a sound system of internal control that supports the achievement of the University's policies, aims and objectives, while safeguarding public and other funds and assets for which it is responsible.

The system of internal control is designed to manage rather than eliminate the risk of non-achievement of policies, aims and objectives; it can therefore only provide reasonable and not absolute assurance of effectiveness. The system of internal control is based on an ongoing process designed to identify the principal risks to the achievement of the University's policies, aims and objectives, to evaluate the nature and extent of those risks and to manage them effectively.

This process has been in place for the year ended 31 July 2017 and up to the date of approval of the financial statements, and accords with HEFCW guidance.

As the governing body, Council has responsibility for reviewing the effectiveness of the system of internal control. It meets at regular intervals to consider the plans and strategic direction

of the institution and receives the minutes of Audit Committee and periodic reports from the Chair of Audit Committee concerning internal control.

The Audit Committee receives regular reports from Internal Audit. An independent opinion is provided on each report relating to the adequacy and effectiveness of the University's system of internal control, together with recommendations for improvement.

The University Executive Board has responsibility for risk management, receiving updated risk registers from Colleges and Services, updating the University Executive Board risk register and reporting on risk to the Governance Committee and Council throughout the year.

These reports are used to inform the University, Colleges and Professional Services risk registers considered by University Executive Board, Council, Governance and Audit Committee.

This ensures that the risk information provided via the registers to the University Executive Board and Council includes governance, management, quality, reputational and financial risk from all areas of the University.

Responsibility for the operational management of individual University, College and Professional Services risks rests with risk owners in these areas. Risks are evaluated on their likelihood and the impact of risks becoming a reality. Key risks are escalated to the University Executive Board and Council as part of their quarterly reporting and cover business, operational, compliance and financial risk.

### Public Benefit Statement

Cardiff University is a registered charity (no 1136855). Its Royal Charter, first granted in 1884, sets out its constitutional arrangements and its objects. Embodied within the objects are such fundamental principles as the advancement of education, including the University's power to conduct research, to teach, examine, and award degrees. They also contain obligations to develop the character of the students, to promote health and welfare, especially in Wales and generally to contribute to social, cultural and economic development.

The University is a member of the group of research intensive universities, the Russell Group, and exists to create and share knowledge and to educate for the benefit of all. Cardiff University sees fundamental research both as an essential to human aspiration and as critical to the development of cultural artefacts, technologies and services to improve the quality of life for all. Its research reputation is one of the principal factors in staff and student recruitment.

In setting and reviewing the University's objectives and activities, the University's Council has had due regard to the Charity Commission's guidance on the reporting of public benefit and particularly to its supplementary public benefit guidance on the advancement of education.

The University's strategic aims are set out in 'The Way Forward 2012 – 2017' and are summarised below. The University is currently preparing a new strategy for the period 2018 – 2023.

#### Education

The University provides an education that seeks to excite, motivate, challenge, and support students. In order to achieve this, we ensure that our programmes enable students to engage actively in their learning and benefit from our research culture. We provide opportunities for students to develop qualities that equip them to succeed in a global employment arena and to make a real difference in the world. We support and encourage our students to explore work experience and access a range of global opportunities to study, work and volunteer abroad. We welcome and support students from a wide range of backgrounds and from all around the world. Our students form a dynamic global community. In 2016/17 we invested £8m in scholarships and hursaries

#### Research and innovation

Through its research, which is enhanced by a number of dedicated institutes, the University is tackling critical global issues that require cross disciplinary co-operation. The University's researchers are tackling major challenges facing society, the economy and the environment. Our researchers have access to a wide range of development programmes, cutting-edge facilities, extensive library resources and expert advice. The University is also establishing itself as the Home of Innovation - acting as a magnet for private, public and third sector partners - to ensure it fulfils its civic mission. It is equipping graduates with entrepreneurial capacity so that they can contribute to the growth of the knowledge economy. It is also investing in bespoke facilities for innovative collaborations with industry, government and wider society.

#### International

The University is a global institution with almost 6,000 international students (non-UK EU included) from more than 100 countries and formal links across more than 35 countries. We collaborate with business and education partners all over the world, including formal strategic partnerships with Xiamen University in China and KU Leuven in Belgium. The University's strong links with institutions worldwide mean that many of our students study, work or volunteer abroad. Our researchers collaborate with partners worldwide to tackle global issues such as reliable water access in Africa and improving energy efficiency in European industry.

#### Engagement

The University is committed to improving the health, wealth and well-being of communities in Cardiff, Wales and beyond through its engagement programme. This includes the University's five flagship engagement projects - known as the Transforming Communities programme - which uses University expertise, knowledge and resources to support selfhelp community projects across Wales and further afield. One example is the Community Gateway project which works with residents and local organisations to make Cardiff's Grangetown district an even better place to live and work by developing research, teaching and volunteering opportunities which respond to residents' needs. The University also benefits local communities in other ways such as through the approximately 1,000 students who volunteer on community projects each year, or by its continuing commitment to paying the Living Wage. In addition, the University works closely with schools and colleges to support young people's learning so that they can achieve their potential.

### Responsibilities of the Council of Cardiff University

In accordance with the University's Charter of Incorporation, the Council is responsible for the administration and management of the affairs of the University, including ensuring an effective system of internal control, and is required to present audited Financial Statements for each financial year. The Council is responsible for preparing the Annual Report and Financial Statements in accordance with applicable law and regulations and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

The law applicable to the University requires the Council to prepare financial statements for each financial year which give a true and fair view of the state of affairs of the University and the consolidated group and of the incoming resources and expenditure of the University and the consolidated group for that period.

### In preparing these Financial Statements, the Council is required to:

- select suitable accounting policies and then apply them consistently;
- observe the methods and principles in the Statement of Recommended Practice: Accounting for Further and Higher Education;
- make judgements and estimates that are reasonable and prudent;
- state whether applicable UK
   Accounting Standards have been followed, subject to any material departures disclosed and explained in the financial statements; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the University will continue in business.

The Council is responsible for keeping proper accounting records which disclose with reasonable accuracy at any time the consolidated and University financial position and to enable it to ensure that the Financial Statements are prepared in accordance with the University's Charter of Incorporation, the Accounts Direction issued by HEFCW, the Statement of Recommended Practice: Accounting for Further and Higher Education Institutions and other relevant accounting standards. In addition, within the terms and conditions of a Financial Memorandum agreed between HEFCW and the Council of the University, the Council, through its designated office holder, is required to prepare Financial Statements for each financial year which give a true and fair view of the state of affairs of the University and its subsidiaries and of the surplus or deficit, statement of movements on reserves and cash flows for that year.

### The Council has taken reasonable steps to:

- ensure that funds from HEFCW,
   Welsh Government and other Funding
   Bodies are used only for the purposes
   for which they have been given and
   in accordance with the Financial
   Memorandum with HEFCW and any
   other conditions which HEFCW or
   Funding Body may from time to time
   prescribe;
- ensure that there are appropriate financial and management controls in place to safeguard public funds and funds from other sources;
- safeguard the assets of the University and its subsidiaries and prevent and detect fraud;
- secure the economical, efficient and effective management of the resources and expenditure of the University and its subsidiaries.

The key elements of the University's system of internal financial control, which is designed to discharge the responsibilities set out above, include the following:

- clear definitions of the responsibilities of, and the authority delegated to, heads of academic schools and administrative departments;
- planning process, supplemented by detailed annual income, expenditure, capital and cash flow budgets, the overall budget being approved by the Council;
- regular reviews of financial results involving variance reporting and updates of forecast outturns;
- clearly defined and formalised requirements for approval and control of expenditure;
- comprehensive Financial Regulations, detailing financial controls and procedures, approved by the Audit Committee and the Council;
- an Internal Audit team whose annual programme is approved by the Audit Committee and endorsed by the Council.

Any system of internal financial control can, however, provide only reasonable, but not absolute, assurance against material misstatement or loss.

On behalf of the Council **Professor Colin Riordan**Accounting Officer

4 December 2017

# Independent Auditors' Report to the Council of Cardiff University

### Report on the audit of the financial statements

#### **Opinion**

In our opinion Cardiff University's consolidated financial statements and University financial statements (the "financial statements"):

- give a true and fair view of the state of the Group's and of the University's affairs as at 31 July 2017 and of the Group's and the University's income and expenditure and changes in reserves and the Group's cash flows for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards, comprising FRS 102 "The Financial Reporting Standard applicable in the UK and Republic of Ireland", and applicable law);
- have been properly prepared in accordance with the requirements of the Statement of Recommended Practice – Accounting for Further and Higher Education; and
- have been prepared in accordance with the requirements of the Charities Act 2011.

We have audited the financial statements, included within the Annual Report and Financial Statements (the "Annual Report"), which comprise: the Consolidated and University Balance Sheets as at 31 July 2017; the Consolidated and University Statements of Comprehensive Income, the Consolidated Statement of Cash Flows, and the Consolidated and University Statements of Changes in Reserves for the year then ended; and the notes to the financial statements, which include a description of the significant accounting policies.

#### **Basis for opinion**

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities under ISAs (UK) are further described in the Auditors' responsibilities for the audit of the financial statements section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### Independence

We remained independent of the Group in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, which includes the FRC's Ethical Standard, as applicable to listed public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

#### Our audit approach Overview



- Overall group materiality: £5.1m (2016: £5.1m), based on 1% of income.
- Overall University materiality: £5.0m (2016: £5.1m), based on 1% of income.
- The entities where we performed audit work accounted for 99% of the consolidated income and expenditure and net assets.
- Risk of fraud in income and expenditure recognition (Group and University).
- Pension liabilities (Group and University).
- Valuation of investment in Compound Semiconductor Centre Limited (University).

#### The scope of our audit

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the financial statements. In particular, we looked at where the Council made subjective judgements, for example in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. As in all of our audits we also addressed the risk of management override of internal controls, including evaluating whether there was evidence of bias by the Council that represented a risk of material misstatement due to fraud.

#### **Key audit matters**

Key audit matters are those matters that, in the auditors' professional judgement, were of most significance in the audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) identified by the auditors, including those which had the greatest effect on the overall audit strategy; the allocation of resources in the audit; and directing the efforts of the engagement team. These matters, and any comments we make on the results of our procedures thereon, were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. This is not a complete list of all risks identified by our audit.

#### How our audit addressed the key audit matter

#### Risk of fraud in income and in expenditure recognition

We identified that the risk of fraud in relation to income and expenditure were significant audit risks, in particular whether the University and Group were entitled to recognise income and whether expenditure was complete.

The majority of income recognised in the Group and University is not complex, with clear recognition points.

Research grant and contract income (note 4) of £101.2m (2016: £113.6m) is included in the financial statements and was considered to be more susceptible to manipulation because performance related recognition conditions are specific to individual grants. Consequently there is a risk that management could manipulate income by overstating accruals or understating deferrals of income.

Our work on expenditure was focussed on the area most susceptible to manipulation to increase the Group's and University's surplus. This was unrecorded liabilities.

#### Income

To ensure that income was recognised in accordance with performance related conditions we obtained the project funding agreements for a sample of projects to determine the conditions under which revenue could be recognised. By reference to the performance conditions identified, we determined whether the income had been recognised in accordance with these conditions and performed tests to check whether that performance had taken place, for example by checking whether underlying expenditure had been incurred and whether that expenditure was eligible by reference to the funding agreements.

Our work did not identify any instances where performance criteria had not been achieved.

#### **Expenditure**

We performed testing over post year end payments to identify whether there were any liabilities that should be recorded in the financial statements but that had been omitted.

No such items were identified.

#### **Pension liabilities**

Refer to note 22 (Pension schemes)

The Group and the University participate in two defined benefit pension plans with aggregate net liabilities of £51.9m (2016: £60.5m). There is also a further provision of £51.4m (2016: £50.0m) for future deficit repayments in relation to a further multi-employer defined benefits scheme, the Universities Superannuation Scheme (USS). This scheme is treated as a defined contribution scheme because it is not possible to separately identify the assets and liabilities of each member organisation of the scheme. However a liability is required to be recognised in respect of the future deficit repayments that the Group and University have agreed to make. The liability is determined by discounting the future cash flows under the deficit repayment plan at an appropriate discount rate.

Each of these liabilities is significant in the context of the Group's and the University's balance sheets.

The valuation of the pension liability requires significant levels of judgement and technical expertise in choosing appropriate assumptions. Unfavourable changes in a number of key assumptions (including salary increases, inflation, discount rates, and mortality rates) can have a material impact on the calculation of the liability.

#### **Defined benefit schemes**

We obtained the pension valuation reports for each of the two defined benefit schemes from the external actuary. With the assistance of our internal actuarial specialists we compared the principal assumptions used in the valuation of the pension liability by the external actuary to our internally developed benchmarks.

The assumptions used were consistent with our benchmarks.

#### **USS liability**

We obtained the model used by the Group and University to determine the USS liability. We used our internal actuarial specialists to establish that the discount rate used to quantify the liability fell within an acceptable range.

We agreed that other principal assumptions used in the model were consistent with the Group's and University's internal planning and forecasting models.

#### How our audit addressed the key audit matter

### Valuation of investment in Compound Semiconductor Centre Limited ("CSC")

Refer to note 13 Non-Current Investments

Included in non-current investments in the University's balance sheet is an investment of £21.8m (2016: (£20.9m) in a joint venture, CSC.

CSC is a start-up entity which was forecast to be loss making in the first years of its life reflecting its initial three year investment and development plan. The venture has been trading for more than two years at 31 July 2017.

The recoverability of the University's investment is dependent on the ability of CSC to generate future levels of business that are consistent with those set out in its business plan.

As the investment approaches the end of its investment and development phase, judgement is required to assess its future prospects and therefore the recoverability of the investment. The key judgements include the discount rate and growth rates assumed by the Council.

We focussed on this area because of the size of the investment and the degree of the Council's judgement involved in assessing the recoverability of the investment.

The Council has assessed that there were no triggers which necessitated a formal impairment review.

We obtained the Council's assessment of whether there were any factors which would trigger a detailed review of the joint venture for an impairment. We evaluated this assessment including whether the economic performance of CSC was in line with the original expectations.

We obtained the Council's cash flow forecasts supporting its assessment and evaluated the appropriateness of key assumptions, including the discount rate and growth rates used. We compared the discount rate to the University's cost of capital and the growth rate to economic forecasts. We also performed a range of sensitivity analyses to determine the extent to which certain key assumptions would need to change before the Council's cash flow model indicated that the investment was impaired. We noted that no reasonably probable changes would result in the investment being impaired.

#### How we tailored the audit scope

We tailored the scope of our audit to ensure that we performed enough work to be able to give an opinion on the financial statements as a whole, taking into account the structure of the Group and the University, the accounting processes and controls, and the sector in which they operate.

The University generates 99.7% of the Group's income and accounts for 99.7% of the Group's expenditure before other gains and losses. Its activities centre around education and research from its base in Cardiff. In the prior year the University entered into a joint venture with IQE plc to form the CSC. The accounting and financial reporting functions for the Group, other than for the CSC are based at the University, in Cardiff. The subsidiary of the University included in the Group accounts is immaterial. All of our audit procedures were therefore carried out at the University in Cardiff, including in respect of CSC.

#### Materiality

The scope of our audit was influenced by our application of materiality. We set certain quantitative thresholds for materiality. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures on the individual financial statement line items and disclosures and in evaluating the effect of misstatements, both individually and in aggregate on the financial statements as a whole.

Based on our professional judgement, we determined materiality for the financial statements as a whole as follows:

#### **Overall materiality**

Consolidated: £5.1m (2016: £5.1m), University: £5.0m (2016: £5.1m).

#### How we determined it

1% of income.

#### Rationale for benchmark applied

We consider that income is an appropriate benchmark, recognising that the University is a not-for-profit organisation, and because income is an important driver in funding relevant expenditures.

We agreed with the Audit Committee that we would report to them misstatements identified during our audit of each of the Group and the University above £0.25m (2016: £0.25m) as well as misstatements below those amounts that, in our view, warranted reporting for qualitative reasons.

# Conclusions relating to going concern

We have nothing to report in respect of the following matters in relation to which ISAs (UK) require us to report to you when:

- the Council's use of the going concern basis of accounting in the preparation of the financial statements is not appropriate; or
- the Council has not disclosed in the financial statements any identified material uncertainties that may cast significant doubt about the Group's and University's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the financial statements are authorised for issue.

However, because not all future events or conditions can be predicted, this statement is not a guarantee as to the Group's and University's ability to continue as a going concern.

### Reporting on other information

The other information comprises all of the information in the Annual Report other than the financial statements and our auditors' report thereon. The Council is responsible for the other information. Our opinion on the financial statements does not cover the other information and, accordingly, we do not express an audit opinion or, except to the extent otherwise explicitly stated in this report, any form of assurance thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If we identify an apparent material inconsistency or material misstatement, we are required to perform procedures to conclude whether there is a material misstatement of the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report based on these responsibilities.

#### **Annual Report**

Under the Charities Act 2011 we are required to report to you if, in our opinion, the other information given in the Annual Report is inconsistent in any material respect with the financial statements. We have nothing to report based on this responsibility.

# Responsibilities for the financial statements and the audit

### Responsibilities of the Council for the financial statements

As explained more fully in the Responsibilities of the Council of Cardiff University set out on page 26, the Council is responsible for the preparation of the financial statements in accordance with the applicable framework and for being satisfied that they give a true and fair view. The Council is also responsible for such internal control as it determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Council is responsible for assessing the Group's and the University's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless the Council either intends to liquidate the Group or the University or to cease operations, or has no realistic alternative but to do so.

### Auditors' responsibilities for the audit of the financial statements

We are eligible to act, and have been appointed, as auditors under section 144(2) of the Charities Act 2011.

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the FRC's website at:

#### www.frc.org.uk/auditorsresponsibilities

This description forms part of our auditors' report.

#### Use of this report

This report, including the opinions, has been prepared for and only for the Council as a body in accordance with the charters and statutes of the University and section 124B of the Education Reform Act 1988 as amended by section 71 of the Further and Higher Education Act 1992 and section 144 of the Charities Act 2011 and regulations made under section 154 of that Act (Regulation 30 of The Charities (Accounts and Reports) Regulations 2008) and for no other purpose. We do not, in giving these opinions, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

#### Other required reporting

Opinions on other matters prescribed in the HEFCW Audit Code of Practice issued under the Further and Higher Education Act 1992

In our opinion, in all material respects:

- the requirements of HEFCW's accounts direction have been met;
- funds from whatever source administered by the University for specific purposes have been properly applied to those purposes and managed in accordance with relevant legislation and any other terms and conditions attached to them;
- income has been applied in accordance with the University's statutes; and
- funds provided by HEFCW have been applied in accordance with the Memorandum of Assurance and Accountability and any other terms and conditions attached to them.

# Sufficiency of accounting records and information and explanations received

Under the Charities Act 2011 we are required to report to you if, in our opinion:

- sufficient accounting records have not been kept by the University; or
- the University financial statements are not in agreement with the accounting records and returns; or
- we have not received all the information and explanations we require for our audit.

We have no exceptions to report arising from this responsibility.

#### **Internal control**

Under the HEFCW Audit Code of Practice issued under the Further and Higher Education Act 1992 we are required to report to you if, in our opinion, the statement of internal control, included as part of the Corporate Governance Statement, is inconsistent with our knowledge of the University and Group. We have no exceptions to report arising from this responsibility.

Lynn Pamment (Senior Statutory Auditor) for and on behalf of PricewaterhouseCoopers LLP Chartered Accountants and Statutory Auditors Cardiff 5 December 2017

# Consolidated and University Statements of Comprehensive Income

Year ended 31 July 2017

		Consolidated			University	
	Note	2017 £'000	2016 £'000	2017 £'000	2016 £'000	
Income		2 000	2 000	2 000	2 000	
Funding Body Grants	2	58,351	68,016	58,351	68,016	
Tuition fees and support grants	3	254,048	237,724	254,048	237,724	
Research grants and contracts	4	101,232	112,494	101,232	112,494	
Research grants and contracts - RDEC	4	-	1,129	-	1,129	
Other income	5	82,094	85,666	80,820	84,573	
Investment income	6	7,445	5,128	7,445	5,128	
Donations and Endowments	7	1,953	1,596	1,953	1,596	
Total Income		505,123	511,753	503,849	510,660	
Expenditure						
Staff costs	8	290,348	277,671	290,348	277,671	
Staff costs – Increase in USS pension scheme provision	10,20	4,144	5,650	4,144	5,650	
Other operating expenses	10	174,982	167,454	173,716	166,370	
Depreciation	12	32,060	26,276	32,060	26,276	
Interest and other finance costs	9	12,305	7,624	12,297	7,615	
Total Expenditure	10	513,839	484,675	512,565	483,582	
(Deficit)/ surplus before other gains and losses		(8,716)	27,078	(8,716)	27,078	
Gain on investments	13,16	11,765	5,977	11,765	5,977	
Share of operating deficit in joint ventures	13	(2,904)	(941)	-	-	
Surplus before tax		145	32,114	3,049	33,055	
Corporation Tax	11	-	(233)	-	(233)	
Surplus for the year		145	31,881	3,049	32,822	
Actuarial gain/ (loss) in respect of pension schemes	22	10,780	(21,300)	10,780	(21,300)	
Total comprehensive income for the year		10,925	10,581	13,829	11,522	
Represented by:						
Endowment comprehensive income for the year		2,869	1,601	2,869	1,601	
Restricted comprehensive income for the year		(237)	-	(237)	-	
Unrestricted comprehensive income for the year		8,293	8,980	11,197	9,921	
		10,925	10,581	13,829	11,522	

All items of income and expenditure relate to continuing activities.

### Statements of Changes in Reserves

### Year ended 31 July 2017

Consolidated	Income and expenditure account Revaluatio reserve		Revaluation reserve	Total	
	Endowment £'000	Restricted £'000	Unrestricted £'000	£'000	£'000
Balance at 1 August 2015 Surplus/(deficit) from the income and expenditure	28,668	722	309,318	358,179	696,887
statement	1,601	-	30,280	-	31,881
Other comprehensive income	-	-	(21,300)	-	(21,300)
Transfers between revaluation and income and expenditure reserve			6,297	(6,297)	
Balance at 1 August 2016 Surplus/(deficit) from the income and expenditure	30,269	722	324,595	351,882	707,468
statement	2,869	(237)	(2,487)	-	145
Other comprehensive income	-	-	10,780	-	10,780
Transfers between revaluation and income and expenditure				(0.000)	
reserve Balance at 31 July 2017	33,138	485	6,296 339,184	(6,296) 345,586	718,393
Bulance at 613aly 2017		100		0.10,000	
University	Income ar	Income and expenditure account Revaluation reserve			Total
	Endowment	Restricted	I have a state at a st		
		Hoodhotou	Unrestricted		
	£'000	£'000	£'000	£'000	£'000
Balance at 1 August 2015 Surplus/(deficit) from the income and expenditure	£'000 28,668			£'000 358,179	£'000 697,563
Surplus/(deficit) from the		£'000	£'000		
Surplus/(deficit) from the income and expenditure statement Other comprehensive income Transfers between revaluation	28,668	£'000	£'000 309,994		697,563
Surplus/(deficit) from the income and expenditure statement Other comprehensive income Transfers between revaluation and income and expenditure reserve	28,668	£'000	£'000 309,994 31,221		697,563 32,822
Surplus/(deficit) from the income and expenditure statement Other comprehensive income Transfers between revaluation and income and expenditure	28,668	£'000	£'000 309,994 31,221 (21,300)	358,179 - -	697,563 32,822
Surplus/(deficit) from the income and expenditure statement Other comprehensive income Transfers between revaluation and income and expenditure reserve  Balance at 1 August 2016 Surplus/(deficit) from the income and expenditure statement	28,668 1,601 -	£'000 722 - -	£'000 309,994 31,221 (21,300) 6,297 326,212 417	358,179 - - (6,297)	697,563 32,822 (21,300) - 709,085
Surplus/(deficit) from the income and expenditure statement Other comprehensive income Transfers between revaluation and income and expenditure reserve  Balance at 1 August 2016 Surplus/(deficit) from the income and expenditure statement Other comprehensive income	28,668 1,601 - - 30,269	£'000 722 - - - 722	£'000 309,994 31,221 (21,300) 6,297 326,212	358,179 - - (6,297)	697,563 32,822 (21,300) 709,085
Surplus/(deficit) from the income and expenditure statement Other comprehensive income Transfers between revaluation and income and expenditure reserve Balance at 1 August 2016 Surplus/(deficit) from the income and expenditure statement Other comprehensive income Transfers between revaluation and income and expenditure	28,668 1,601 - - 30,269	£'000 722 - - - 722	£'000 309,994 31,221 (21,300) 6,297 326,212 417 10,780	358,179 - - (6,297) 351,882 - -	697,563 32,822 (21,300) - 709,085
Surplus/(deficit) from the income and expenditure statement Other comprehensive income Transfers between revaluation and income and expenditure reserve  Balance at 1 August 2016 Surplus/(deficit) from the income and expenditure statement Other comprehensive income Transfers between revaluation	28,668 1,601 - - 30,269	£'000 722 - - - 722	£'000 309,994 31,221 (21,300) 6,297 326,212 417	358,179 - - (6,297)	697,563 32,822 (21,300) - 709,085

### **Balance Sheets**

### As at 31 July 2017

Note   2017   2016   2017   2016   2017   2016   2000				University		
Non-current assets   12		Note	2017	2016	2017	2016
Tangible fixed assets Investments         12 mode of the properties of			£'000	£'000	£'000	£'000
Investments	Non-current assets					
Current assets         765,432         757,600         769,271         758,535           Current assets         314         235         239         235         239           Debtors         15         58,374         65,674         58,664         66,039           Investments         16         328,875         293,937         328,875         293,937           Cash and cash equivalents         90,212         118,516         89,750         118,510           477,696         478,366         477,524         478,725           Creditors: amounts falling due within one year         17         (112,899)         (107,811)         (112,045)         (107,488)           Net current assets         364,797         370,555         365,479         371,237           Total assets less current liabilities         1,130,229         1,128,155         1,134,750         1,129,772           Creditors: amounts falling due after more than one year         18         (308,551)         (310,220)         (308,551)         (310,220)           Pension provisions         20         (103,285)         (110,467)         (103,285)         (110,467)           Total net assets         718,393         707,468         72	Tangible fixed assets					
Current assets         14         235         239         235         239           Debtors         15         58,374         65,674         58,664         66,039           Investments         16         328,875         293,937         328,875         293,937           Cash and cash equivalents         90,212         118,516         89,750         118,510           477,696         478,366         477,524         478,725           Creditors: amounts falling due within one year         17         (112,899)         (107,811)         (112,045)         (107,488)           Net current assets         364,797         370,555         365,479         371,237           Total assets less current liabilities         1,130,229         1,128,155         1,134,750         1,129,772           Creditors: amounts falling due after more than one year         18         (308,551)         (310,220)         (308,551)         (310,220)           Pension provisions         20         (103,285)         (110,467)         (103,285)         (110,467)           Total net assets         718,393         707,468         722,914         709,085           Restricted Reserves           Incom	Investments	13	35,040	52,104	38,879	53,039
Stocks         14         235         239         235         239           Debtors         15         58,374         65,674         58,664         66,039           Investments         16         328,875         293,937         328,875         293,937           Cash and cash equivalents         477,696         478,366         477,524         478,725           Creditors: amounts falling due within one year         17         (112,899)         (107,811)         (112,045)         (107,488)           Net current assets         364,797         370,555         365,479         371,237           Total assets less current liabilities         1,130,229         1,128,155         1,134,750         1,129,772           Creditors: amounts falling due after more than one year         18         (308,551)         (310,220)         (308,551)         (310,220)           Pension provisions         20         (103,285)         (110,467)         (103,285)         (110,467)           Total net assets         718,393         707,468         722,914         709,085           Restricted Reserves         1ncome and expenditure reserve – restricted         485         722         485         722           Unrestricted Reserves         1ncome and expenditure reserve – unrestric			765,432	757,600	769,271	758,535
Debtors         15         58,374         65,674         58,664         66,039           Investments         16         328,875         293,937         328,875         293,937           Cash and cash equivalents         477,696         478,366         477,524         478,725           Creditors: amounts falling due within one year         17         (112,899)         (107,811)         (112,045)         (107,488)           Net current assets         364,797         370,555         365,479         371,237           Total assets less current liabilities         1,130,229         1,128,155         1,134,750         1,129,772           Creditors: amounts falling due after more than one year         18         (308,551)         (310,220)         (308,551)         (310,220)           Pension provisions         20         (103,285)         (110,467)         (103,285)         (110,467)           Total net assets         718,393         707,468         722,914         709,085           Restricted Reserves         1ncome and expenditure reserve – restricted reserve         485         722         485         722           Unrestricted Reserves         1ncome and expenditure reserve – unrestricted Reserves         339,184         324,595         343,705         326,212	Current assets					
Investments	Stocks	14				
Cash and cash equivalents         90,212         118,516         89,750         118,510           Creditors: amounts falling due within one year         17         (112,899)         (107,811)         (112,045)         (107,488)           Net current assets         364,797         370,555         365,479         371,237           Total assets less current liabilities         1,130,229         1,128,155         1,134,750         1,129,772           Creditors: amounts falling due after more than one year         18         (308,551)         (310,220)         (308,551)         (310,220)           Pension provisions         20         (103,285)         (110,467)         (103,285)         (110,467)           Total net assets         718,393         707,468         722,914         709,085           Restricted Reserves         1ncome and expenditure reserve – endowment reserve         21         33,138         30,269         33,138         30,269           Income and expenditure reserve – restricted reserve         485         722         485         722           Income and expenditure reserve – unrestricted Reserves         339,184         324,595         343,705         326,212           Income and expenditure reserve – unrestricted Reserves         345,586         351,882         345,586         351,882 </td <td>Debtors</td> <td>15</td> <td>,</td> <td>,</td> <td>,</td> <td></td>	Debtors	15	,	,	,	
Creditors: amounts falling due within one year       477,696       478,366       477,524       478,725         Creditors: amounts falling due within one year       17       (112,899)       (107,811)       (112,045)       (107,488)         Net current assets       364,797       370,555       365,479       371,237         Total assets less current liabilities       1,130,229       1,128,155       1,134,750       1,129,772         Creditors: amounts falling due after more than one year       18       (308,551)       (310,220)       (308,551)       (310,220)         Pension provisions       20       (103,285)       (110,467)       (103,285)       (110,467)         Total net assets       718,393       707,468       722,914       709,085         Restricted Reserves       1       33,138       30,269       33,138       30,269         Income and expenditure reserve – restricted reserve       485       722       485       722         Unrestricted Reserves       339,184       324,595       343,705       326,212         Income and expenditure reserve – unrestricted Revaluation reserve       345,586       351,882       345,586       351,882		16		,	,	,
Creditors: amounts falling due within one year         17         (112,899)         (107,811)         (112,045)         (107,488)           Net current assets         364,797         370,555         365,479         371,237           Total assets less current liabilities         1,130,229         1,128,155         1,134,750         1,129,772           Creditors: amounts falling due after more than one year         18         (308,551)         (310,220)         (308,551)         (310,220)           Pension provisions         20         (103,285)         (110,467)         (103,285)         (110,467)           Total net assets         718,393         707,468         722,914         709,085           Restricted Reserves Income and expenditure reserve – endowment reserve         21         33,138         30,269         33,138         30,269           Income and expenditure reserve – restricted reserve         485         722         485         722           Unrestricted Reserves Income and expenditure reserve – unrestricted Revaluation reserve         339,184         324,595         343,705         326,212           Revaluation reserve         345,586         351,882         345,586         351,882	Cash and cash equivalents		90,212	118,516	89,750	118,510
Net current assets         364,797         370,555         365,479         371,237           Total assets less current liabilities         1,130,229         1,128,155         1,134,750         1,129,772           Creditors: amounts falling due after more than one year         18         (308,551)         (310,220)         (308,551)         (310,220)           Pension provisions         20         (103,285)         (110,467)         (103,285)         (110,467)           Total net assets         718,393         707,468         722,914         709,085           Restricted Reserves Income and expenditure reserve – endowment reserve         21         33,138         30,269         33,138         30,269           Income and expenditure reserve – restricted reserve         485         722         485         722           Unrestricted Reserves Income and expenditure reserve – unrestricted Revaluation reserve         339,184         324,595         343,705         326,212           Revaluation reserve         345,586         351,882         345,586         351,882			477,696	478,366	477,524	478,725
Total assets less current liabilities         1,130,229         1,128,155         1,134,750         1,129,772           Creditors: amounts falling due after more than one year         18         (308,551)         (310,220)         (308,551)         (310,220)           Pension provisions         20         (103,285)         (110,467)         (103,285)         (110,467)           Total net assets         718,393         707,468         722,914         709,085           Restricted Reserves Income and expenditure reserve – endowment reserve         21         33,138         30,269         33,138         30,269           Income and expenditure reserve – restricted reserve         485         722         485         722           Unrestricted Reserves Income and expenditure reserve – unrestricted Revaluation reserve         339,184         324,595         343,705         326,212           Revaluation reserve         345,586         351,882         345,586         351,882	Creditors: amounts falling due within one year	17	(112,899)	(107,811)	(112,045)	(107,488)
Creditors: amounts falling due after more than one year       18       (308,551)       (310,220)       (308,551)       (310,220)         Pension provisions       20       (103,285)       (110,467)       (103,285)       (110,467)         Total net assets       718,393       707,468       722,914       709,085         Restricted Reserves         Income and expenditure reserve – endowment reserve       21       33,138       30,269       33,138       30,269         Income and expenditure reserve – restricted reserve       485       722       485       722         Unrestricted Reserves       1ncome and expenditure reserve - unrestricted Revaluation reserve       339,184       324,595       343,705       326,212         Revaluation reserve       345,586       351,882       345,586       351,882	Net current assets		364,797	370,555	365,479	371,237
one year       18 (308,551) (310,220) (308,551) (310,220)         Pension provisions       20 (103,285) (110,467) (103,285) (110,467)         Total net assets       718,393 707,468 722,914 709,085         Restricted Reserves       Income and expenditure reserve – endowment reserve       21 33,138 30,269 33,138 30,269         Income and expenditure reserve – restricted reserve       485 722 485 722         Unrestricted Reserves       339,184 324,595 343,705 326,212         Revaluation reserve       345,586 351,882 345,586 351,882	Total assets less current liabilities		1,130,229	1,128,155	1,134,750	1,129,772
one year       18 (308,551) (310,220) (308,551) (310,220)         Pension provisions       20 (103,285) (110,467) (103,285) (110,467)         Total net assets       718,393 707,468 722,914 709,085         Restricted Reserves       Income and expenditure reserve – endowment reserve       21 33,138 30,269 33,138 30,269         Income and expenditure reserve – restricted reserve       485 722 485 722         Unrestricted Reserves       339,184 324,595 343,705 326,212         Revaluation reserve       345,586 351,882 345,586 351,882						
Restricted Reserves         718,393         707,468         722,914         709,085           Restricted Reserves         Income and expenditure reserve – endowment reserve         21         33,138         30,269         33,138         30,269           Income and expenditure reserve – restricted reserve         485         722         485         722           Unrestricted Reserves         100         339,184         324,595         343,705         326,212           Revaluation reserve         345,586         351,882         345,586         351,882		18	(308,551)	(310,220)	(308,551)	(310,220)
Restricted Reserves         Income and expenditure reserve – endowment reserve         21         33,138         30,269         33,138         30,269           Income and expenditure reserve – restricted reserve         485         722         485         722           Unrestricted Reserves         Value of the company of the	Pension provisions	20	(103,285)	(110,467)	(103,285)	(110,467)
Income and expenditure reserve – endowment reserve         21         33,138         30,269         33,138         30,269           Income and expenditure reserve – restricted reserve         485         722         485         722           Unrestricted Reserves         Value of the company of the compan	Total net assets		718,393	707,468	722,914	709,085
Income and expenditure reserve – endowment reserve         21         33,138         30,269         33,138         30,269           Income and expenditure reserve – restricted reserve         485         722         485         722           Unrestricted Reserves         Value of the company of the compan	Restricted Reserves					
Income and expenditure reserve – restricted reserve         485         722         485         722           Unrestricted Reserves         Unrestricted Reserves         339,184         324,595         343,705         326,212           Revaluation reserve         345,586         351,882         345,586         351,882		21	33,138	30,269	33,138	30,269
reserve Unrestricted Reserves Income and expenditure reserve - unrestricted 339,184 324,595 343,705 326,212 Revaluation reserve 345,586 351,882 345,586 351,882	reserve					
Income and expenditure reserve - unrestricted         339,184         324,595         343,705         326,212           Revaluation reserve         345,586         351,882         345,586         351,882	·		485	722	485	722
Revaluation reserve 345,586 351,882 345,586 351,882						
	·					
Total Reserves 718,393 707,468 722,914 709,085	Revaluation reserve		345,586	351,882	345,586	351,882
	Total Reserves		718,393	707,468	722,914	709,085

The financial statements on pages 31 to 58 were approved by Council on 4 December 2017 and were signed on its behalf on that date by:

**Professor Stuart Palmer** Chair of Council Professor Colin Riordan Vice Chancellor Robert Williams Chief Financial Officer

### Consolidated Statement of Cash Flows

Year ended 31 July 2017

		Year ended	Year ended
	Note	31 July	31 July
	Note	2017 £'000	2016 £'000
Cash flow from operating activities			
Surplus for the year		145	31,881
Adjustment for non-cash items			- ,
Depreciation	12	32,060	26,276
Gain on investments	16	(11,765)	(5,977)
Decrease/ (increase) in stock		4	(8)
Decrease/ (increase) in debtors		7,300	(4,733)
Increase/ (decrease) in creditors		5,210	(4,664)
Increase in pension provision		3,598	4,776
Share of operating deficit in joint ventures	13	2,904	941
Adjustment for investing or financing activities			
Profit on sale of tangible fixed assets		-	(602)
Other disposal of tangible fixed assets		-	44
Investment income	6	(7,445)	(5,128)
Interest payable	9	10,151	5,448
Endowment income	21	(582)	(596)
Net cash inflow generated from operating activities		41,580	47,658
Cash flows from investing activities			
New deposits		(23,280)	(159,697)
Investment income	6	7,445	5,128
Payments made to acquire fixed assets	12	(56,956)	(69,422)
New non-current asset investments	13	(15,932)	(47,310)
Proceeds from sale of fixed assets		-	1,743
Proceeds from sale of non-current investments		30,092	11,556
Net cash outflow used in investing activities		(58,631)	(258,002)
Cash flows from financing activities			
Interest paid	9	(10,151)	(5,439)
Endowment cash received	21	582	596
Net proceeds of bond issue	18	-	291,870
New loans	18	-	1,034
Repayments of amounts borrowed		(1,684)	(1,571)
Net cash (out)/inflow (used in)/ generated from financing activities		(11,253)	286,490
			<u> </u>
(Decrease)/ increase in cash and cash equivalents in the year		(28,304)	76,146
Cash and cash equivalents at beginning of the year		118,516	42,370
Cash and cash equivalents at end of the year		90,212	118,516

# Notes to the Financial Statements

# Year ended 31 July 2017

# 1. Statement of Principal Accounting Policies

## Basis of preparation

This consolidated financial information has been prepared in accordance with the Statement of Recommended Practice (SORP): Accounting for Further and Higher Education 2015 and in accordance with Financial Reporting Standard (FRS 102). The University is a public benefit entity and therefore has applied the relevant public benefit requirement of FRS 102. The financial information is prepared in accordance with the historical cost convention (modified by the revaluation of land and buildings and the measurement of certain financial instruments at fair value).

The financial statements have been prepared on a going concern basis. The Council considers that the University has adequate financial resources and its current forecasts and projections show it to be well placed to manage its activities successfully for the foreseeable future.

### Basis of consolidation

The consolidated financial information consolidates the financial statements of the University and its subsidiary undertaking University College Cardiff Consultants Limited for the financial year to 31 July but does not include those of the University Union, WWII Limited or the Cardiff Partnership Fund Limited as the Council does not exercise control over their financial and operating activities. Uniform accounting policies are adopted throughout the Group. Joint ventures are accounted for using the equity method.

## Recognition of income

Fee income is stated gross of any expenditure which is not a discount or overseas agent payment and credited to the Consolidated Statement of Comprehensive Income and Expenditure. Where the amount of the tuition fee is reduced, by a discount for prompt payment, income receivable is shown net of the discount. Bursaries and scholarships are accounted for gross as expenditure and not deducted from income.

Income from the sale of goods or services is credited to the Consolidated Statement of Comprehensive Income and Expenditure when the goods or services are supplied to the external customer or the terms of the contract have been satisfied.

Investment income is credited to the consolidated statement of comprehensive income and expenditure on a receivable basis.

Funds the University receives and disburses as paying agent on behalf of a funding body are excluded from the income and expenditure of the University where the University is exposed to minimal risk or enjoys minimal economic benefit related to the transaction.

### Grant funding

Grant funding including funding council block grants, research grants from government sources and grants (including research grants) from non-government sources are recognised as income when the performance related conditions have been met and the University has become entitled to the income. Income received in advance of performance related conditions being met is recognised as deferred income within creditors on the balance sheet and released to income as the conditions are met.

## Donations and endowments

Non exchange transactions without performance related conditions are donations and endowments. Donations and endowments with donor imposed restrictions are recognised in income when the University is entitled to the funds. Income is retained within the restricted reserve until such time that it is utilised in line with such restrictions at which point the income is released to general reserves through a reserve transfer.

Donations with no restrictions are recognised in income when the University is entitled to the funds.

Investment income and movements in fair value of endowments are recorded in income in the year in which they arise and as either restricted or unrestricted income according to the terms of the restrictions applied to the individual endowment funds.

There are four main types of donations and endowments identified within reserves:

- Restricted donations the donor has specified that the donation must be used for a particular objective.
- Unrestricted permanent endowments

   the donor has specified that the fund is to be permanently invested to generate an income stream for the general benefit of the University.
- 3. Restricted expendable endowments
   the donor has specified a particular
  objective other than the purchase or
  construction of tangible fixed assets,
  and the University has the power to
  use the capital
- 4. Restricted permanent endowments - the donor has specified that the fund is to be permanently invested to generate an income stream to be applied to a particular objective.

### Capital grants

Capital grants are recognised in income when the University is entitled to the funds subject to any performance related conditions being met.

# Research and Development Expenditure Credits (RDEC)

Income is recognised under the RDEC legislation at the point at which the claim methodology in relation to expenditure incurred has been approved by HM Revenue and Customs.

### Provision for doubtful debts

Provision is made for individual debts where recovery is thought to be in doubt based on historic experience.

### Pension schemes

The three principal defined benefit pension schemes for the University's staff are the Universities Superannuation Scheme (USS), the Cardiff University Pension Fund (CUPF), and the Local Government Pension Scheme (LGPS). The schemes are funded defined benefit schemes. The funds are actuarially valued every three years by a professionally qualified actuary using either the aggregate method or the attained age method with the rates of contribution payable being determined by the scheme's trustees on the advice of the actuary.

The USS is a multi-employer scheme for which it is not possible to identify the assets and liabilities to University members due to the mutual nature of the scheme and therefore this scheme is accounted for as a defined contribution retirement benefit scheme.

A liability is recorded within provisions for any contractual commitment to fund past deficits within the USS scheme.

### Defined contribution plan:

A defined contribution plan is a postemployment benefit plan under which the University pays fixed contributions into a separate entity and will have no legal or constructive obligation to pay further amounts. Obligations for contributions to defined contribution pension plans are recognised as an expense in the consolidated statement of comprehensive income and expenditure in the periods during which services are rendered by employees.

### Defined benefit plan:

Defined benefit plans are postemployment benefit plans other than defined contribution plans. Under defined benefit plans, the University's obligation is to provide the agreed benefits to current and former employees, and actuarial risk (that benefits will cost more or less than expected) and investment risk (that returns on assets set aside to fund the benefits will differ from expectations) are borne, in substance, by the University. The Group should recognise a liability for its obligations under defined benefit plans net of plan assets. This net defined benefit liability is measured as the estimated amount of benefit that employees have earned in return for their service in the current and prior periods, discounted to determine its present value, less the fair value (at bid price) of plan assets. The calculation is performed by a qualified actuary using the projected unit credit method. Where the calculation results in a net asset, recognition of the asset is limited to the extent to which the University is able to recover the surplus either through reduced contributions in the future or through refunds from the plan.

In addition, the National Health Service (NHS) Superannuation Scheme is in operation for certain staff. The NHS scheme is an unfunded defined benefit scheme, with pension benefits being paid out of contributions received in the year and contribution rates determined by HM Treasury. This is accounted for

as a defined contribution scheme. To comply with The Pensions Act 2008, the University also uses the NEST defined contributions pension scheme for eligible non-contractual workers.

### **Employment benefits**

Short term employment benefits such as salaries and compensated absences are recognised as an expense in the year in which the employees render service to the University. Any unused benefits are accrued and measured as the additional amount the University expects to pay as a result of the unused entitlement.

# Foreign currencies

Transactions denominated in foreign currencies are recorded at the rate of exchange ruling at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are translated into sterling at year-end rates and the resulting exchange differences are included in the determination of the deficit or surplus for the year.

### Operating leases

Costs in respect of operating leases are charged on a straight-line basis over the lease term. Any lease premiums or incentives are spread over the minimum lease term.

### Fixed assets

Fixed assets are stated at cost / deemed cost less accumulated depreciation and accumulated impairment losses. Certain items of fixed assets that had been revalued to fair value on the date of transition to the 2015 FE HE SORP, are measured on the basis of deemed cost, being the revalued amount at the date of that revaluation.

The difference between the revalued amount and historical cost is credited to a revaluation reserve. An amount equal to the depreciation in excess of that on the historical cost basis is transferred from the revaluation reserve to retained earnings.

# Land and buildings

Costs incurred in relation to land and buildings after initial purchase or construction are capitalised to the extent that they increase the expected future benefits to the University. Land is not depreciated as it is considered to have an indefinite useful life. Freehold buildings are depreciated on a straight line basis over their expected useful lives as follows:

Academic buildings	
and listed buildings	50 years
Pre 1990 residence sites	25 years
Post 1990 and Talybont	
North residence sites	50 years
Residential Houses	50 years
Semi-permanent and	
Maths/ Education buildings	25 years
New UHW site buildings	50 years
Old UHW site buildings	25 years
Refurbishments	15 years

Leasehold buildings are depreciated over the shorter of the lease term or the expected useful lives shown above.

No depreciation is charged on assets in the course of construction.

### Equipment

Equipment costing less than £10,000 per individual item or group of related items is written off in the year of acquisition. All other equipment is capitalised with the exception of equipment funded from Research Grants which costs under £50,000 which is also written off in the year of acquisition.

Capitalised equipment is stated at cost and depreciated over its expected useful life of four or ten years. Assets under construction are not depreciated until brought into use.

#### Investments

Non-current asset investments are held on the Balance Sheet at cost less impairment, as the shares are unlisted and the fair value cannot be determined reliably. Joint ventures are carried at cost less impairment in the University's accounts.

Current asset investments are held at fair value with movements recognised in the total comprehensive income for the year.

### Stocks

The stocks are building materials and trading consumables of the Works Unit and Catering. They are valued at the lower of cost or net realisable value.

### Cash and cash equivalents

Cash includes cash in hand, deposits repayable on demand and overdrafts.

Deposits are repayable on demand if they

are in practice available within 24 hours without penalty.

Cash equivalents are short term, highly liquid investments that are readily convertible to known amounts of cash with insignificant risk of change in value.

### Maintenance of premises

The University has a rolling maintenance plan which is reviewed on an annual basis. The cost of routine corrective maintenance is charged to the income and expenditure account as incurred.

#### **Taxation status**

The University is a registered charity within the meaning of Chapter 1 Section 3 of the Charities Act 2011 and as such is a charity within the meaning of Section 6 to the Finance Act 2010. Accordingly, the University is potentially exempt from taxation in respect of income or capital gains received within categories covered by Section 478-488 of the Corporation Tax Act 2010 or Section 256 of the Taxation of Chargeable Gains Act 1992 to the extent that such income or gains are applied to exclusively charitable purposes for public benefit.

The only Corporation Tax charge reflected in the consolidated financial information is the tax deducted at source by HMRC in respect of Research and Development Expenditure Credits (RDEC) recognised in the consolidated statement of comprehensive income and expenditure during the year.

All subsidiary companies are liable to Corporation Tax and Value Added Tax (VAT). The University's principal activities are exempt from VAT but certain ancillary supplies and services are liable to VAT at various rates. Expenditure includes irrecoverable VAT charged by suppliers to the University. The University does not have to pay Stamp Duty Land Tax when buying and leasing a property.

### **Provisions**

Provisions are recognised when the institution has a present legal or constructive obligation as a result of a past event, it is probable that a transfer of economic benefit will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation.

#### Financial instruments

The University has chosen to adopt Sections 11 and 12 of FRS102 in respect of financial instruments for its consolidated and University accounts.

### (i) Financial Assets

Basic financial assets, including trade and other receivables, cash and bank balances and investments in commercial paper, are initially recognised at transaction price, unless the arrangement constitutes a financing transaction, where the transaction is measured at present value of the future receipts discounted at a market rate of interest.

Such assets are subsequently carried at amortised cost using the effective interest method.

At the end of each reporting period financial assets measured at amortised cost are assessed for objective evidence of impairment. If an asset is impaired the impairment loss is the difference between the carrying amount and the present value of the estimated cash flows discounted at the asset's original effective interest rate. The impairment loss is recognised in the total comprehensive income for the year.

If there is a decrease in the impairment loss arising from an event occurring after the impairment was recognised, the impairment is reversed. The reversal is such that the current carrying amount does not exceed what the carrying amount would have been had the impairment not previously been recognised. The impairment reversal is recognised in the total comprehensive income for the year.

Other financial assets, including investments in equity instruments which are not subsidiaries, associates or joint ventures, are initially measured at fair value which is normally transaction price.

Such assets are subsequently carried at fair value and the changes in fair value are recognised in the surplus or deficit, except that investments in equity instruments that are not publicly traded and whose fair values cannot be measured reliably are measured at cost less impairment.

Financial assets are derecognised when (a) the contractual rights to the cash flows from the asset expire or are settled, or (b) substantially all the risks and rewards of the ownership of the assets are transferred to another party or (c) despite having retained some significant risks and rewards of ownership, control of

the asset has been transferred to another party who has the practical ability to unilaterally sell the asset to an unrelated third party without imposing additional restrictions.

#### (ii) Financial liabilities

Basic financial liabilities, including trade and other payables, bank loans, loans from fellow group companies and preference shares that are classified as debt, are initially recognised at transaction price, unless the arrangement constitutes a financing transaction, where the debt instrument is measured at the present value of the future receipts discounted at a market rate of interest.

Debt instruments are subsequently carried at amortised cost, using the effective interest rate method.

Fees paid on the establishment of loan facilities are recognised as transaction costs of the loan to the extent that it is probable that some or all of the facility will be drawn down. In this case, the fee is deferred until the draw-down occurs. To the extent there is no evidence that it is probable that some or all of the facility will be drawn down, the fee is capitalised as a pre-payment for liquidity services and amortised over the period of the facility to which it relates.

Trade payables are obligations to pay for goods or services that have been acquired in the ordinary course of business from suppliers. Accounts payable are classified as current liabilities if payment is due within one year or less. If not, they are presented as non-current liabilities. Trade payables are recognised initially at transaction price and subsequently measured at amortised cost using the effective interest method.

Financial liabilities are derecognised when the liability is extinguished, that is when the contractual obligation is discharged, cancelled or expires.

### Reserves

Reserves are classified as restricted or unrestricted. Restricted endowment reserves include balances which, through endowment to the University, are held as a permanently restricted fund which the University must hold in perpetuity.

Other restricted reserves include balances where the donor has designated a specific purpose and therefore the University is restricted in the use of these funds.

# Significant estimates and judgements

Significant estimates and judgements used in the preparation of this financial information were as follows:

# (i) Carrying value of Compound Semiconductor Centre Limited

The investment made in July 2015 with further payments made during 2015/16 and 2016/17 relating to the new joint venture in Compound Semiconductor Centre is considered to be recoverable based upon a business model that shows sufficient returns to support the recovery of the investments.

#### (ii) Recoverability of debtors

The policy for provision for bad and doubtful debts is specific for each debt based upon known circumstances and post year end recovery of debts. Any un-provided debts are deemed as recoverable.

### (iii) Retirement benefit obligations

The University operates its own scheme, Cardiff University Pension Fund (CUPF) and participates in a Local Government Pension Scheme (LGPS); both are defined benefit schemes. Actuarial valuations of the schemes are carried out as determined by the trustees at intervals of not more than three years.

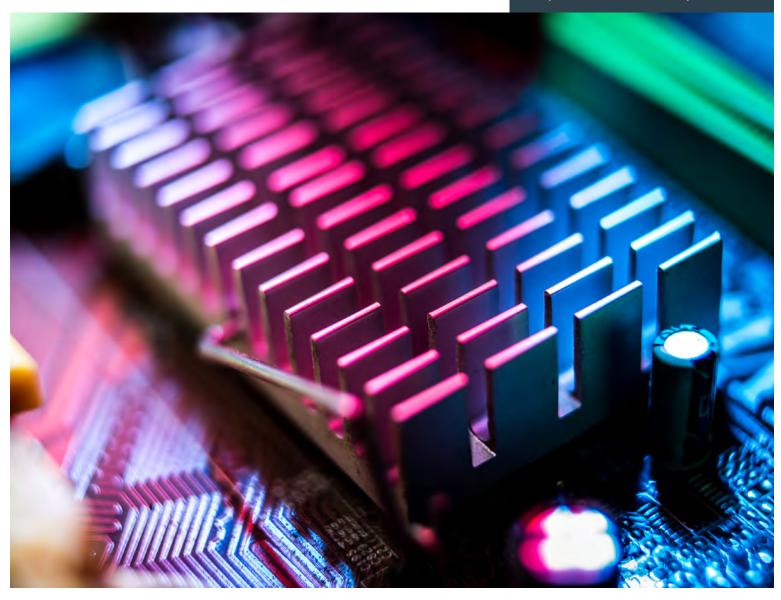
Pension costs under FRS 102 are assessed in accordance with the advice of independent actuaries based upon latest actuarial valuations and assumptions determined by the actuaries. The assumptions are based upon information supplied to the actuaries by the University, supplemented by discussions between the actuary and management. The assumptions are documented in note 22.

The Universities Superannuation Scheme (USS) is accounted for as a defined contribution scheme as insufficient

information is available to use defined benefit accounting. However, as the University is contractually obliged to pay contributions into the USS to fund past deficits, this obligation is provided for on the balance sheet.

The deficit recovery plan put in place by the USS sets out the proportion of annual contributions that relate to past deficit recovery, and the period for which these are committed. These committed deficit contributions are re-assessed with each triennial valuation of the scheme, and form the basis of the provision, together with assumptions on appropriate inflation and discount factors

Cardiff University is playing a leading role in the regional cluster of compound semiconductor expertise



# 2. Funding Body Grants

Consolidated and University

	2017	2016
	£000	£000
Recurrent grant	52,846	56,978
Specific grants	1,834	1,248
Capital grants	3,671	9,790
	58,351	68,016

# 3. Tuition Fees and Support Grants

Consolidated and University

	2017	2016
	£000	£000
UK and European Union Undergraduate	130,573	122,644
UK and European Union Postgraduate	12,580	11,440
Overseas (including part-time)	69,549	63,949
Part Time (UK and European Union)	5,395	5,401
	218,097	203,434
Education contracts	18,059	16,805
Research training support grants	7,401	6,202
Non-credit bearing fees	10,491	11,283
	254,048	237,724

# 4. Research Grants and Contracts

Consolidated and University

	2017	2016
	£000	£000
Research Councils	27,137	37,119
UK-based charities	21,152	20,662
UK Government bodies	30,924	33,613
UK Industry	4,790	4,603
European Commission	11,380	11,474
Overseas	5,150	4,569
Other grants and contracts	699	1,583
	101,232	113,623

Included within other grants and contracts in 2016 is £1,129k in relation to Research and Development Expenditure Credits (RDEC) receivable for the financial year ending 31 July 2016. This is a one-off source of income and will not occur in future years. The table below shows a breakdown:

	2017	2016
	£000	£000
Income receivable under RDEC	-	1,129
Tax payable (note 11)	-	(233)
Net receipt due included in debtors	-	896

# 5. Other Income

	Consolidated		University	
	2017 £000	2016 £000	2017 £000	2016 £000
Other services rendered:				
UK Central Government	31,682	34,848	31,682	34,848
UK Health Authorities	9,061	8,754	9,061	8,754
UK Industry	1,325	1,377	1,325	1,377
European Union	1,508	1,383	1,508	1,383
Overseas	433	261	433	261
UK Universities	664	569	664	569
Other Sources	4,978	5,405	4,978	5,405
Total other services rendered	49,651	52,597	49,651	52,597
Residences, catering and conferences	27,233	26,172	27,233	26,172
Profit on disposal of fixed assets	-	601	-	601
Rents Receivable	231	164	231	164
Exempt VAT recoverable	722	458	722	458
Other income	4,257	4,074	2,983	2,981
IP Group plc Investment Release	-	1,600	-	1,600
	82,094	85,666	80,820	84,573

# 6. Investment Income

Consolidated and University

	2017	2016
	£000	£000
Income from investments	6,571	4,413
Income from endowment investments	874	715
	7,445	5,128

# 7. Donations and Endowments

Consolidated and University

	Note	2017 £000	2016 £000
New endowments	21	582	596
Donations with restrictions		231	-
Unrestricted donations		1,140	1,000
		1,953	1,596

## 8. Staff Costs

# Consolidated and University

	Note	2017 £000	2016 £000
Staff costs:			
Wages and salaries		227,890	223,086
Social security costs		22,817	18,962
Other pension costs	22	39,641	35,623
		290,348	277,671

The above figures exclude payments made to staff on behalf of the National Health Service.

Emoluments of the Vice Chancellor - Salary	247	244
- Bonus	9	8
- Pension	45	41
- Benefits in kind	1	1
	302	294

In addition to the emoluments above, there is a 5 year deferred bonus arrangement in place. A maximum of £49k will be payable in December 2017 if performance targets are met.

	2017 £000	2016 £000
Remuneration paid to Trustees in total for expenses	7	8

No Trustee receives payment for serving as a trustee.

	2017 Number FTE	2016 Number FTE
Average staff numbers by major category:		
Clinical and non-clinical academic and academic related	4,113	4,013
Technical services	229	226
Administrative support	979	993
Operational services	277	278
	5,598	5,510
	2017	2016
	£000	£000
Key management personnel	1,955	1,910

Key management personnel are the 12 University Executive Board members (2016 - 12) having authority and responsibility for planning, directing and controlling the activities of the University. Staff costs includes compensation paid to key management personnel.

# 8. Staff Costs (continued)

## Consolidated and University

Remuneration of higher paid staff (excluding the Vice Chancellor) excludes employer's pension contributions and payments made on behalf of the National Health Service in respect of its contractual obligations to University staff under separate National Health Service contracts of employment (for example distinction awards) which are also excluded from the University's income and expenditure account.

	2017 Number	2016 Number
Salary band:	Number	- IVallibel
£100,000-£109,999	48	47
£110,000-£119,999	24	37
£120,000-£129,999	20	15
£130,000-£139,999	5	10
£140,000-£149,999	6	5
£150,000-£159,999	4	5
£160,000-£169,999	5	5
£170,000-£179,999	2	-
£180,000-£189,999	1	2
£190,000 - £199,999	-	2
£220,000 - £229,999	1	-
	116	128
	2017	2016
	£'000	£'000
Compensation for loss of office payable to 2 higher paid		
employees (2016 - 5 employees)	24	379

The compensation payments were approved by the University's Remuneration Committee.

# 9. Interest and Other Finance Costs

		University		
	2017	2016	2017	2016
	£000	£000	£000	£000
Bond interest Bank loan interest Net charge on pension schemes Unwind of discount on USS pension provision	9,153	4,345	9,153	4,345
	998	1,103	990	1,094
	1,280	1,380	1,280	1,380
	874	796	874	796
	12,305	7,624	12,297	7,615

# 10. Analysis of Expenditure by Activity Consolidated

		Other			
	Staff	operating	Interest	Total	Total
	costs	expenses	Payable	2017	2016
	£000	£000	£000	£000	£000
Academic departments	173,915	53,123	_	227,038	219,660
Academic services	16,085	10,750	-	26,835	25,701
Research grants and contracts	41,155	35,332	-	76,487	66,427
Other services rendered	21,107	23,403	-	44,510	46,190
Residences, catering and conferences	5,642	6,619	990	13,251	13,536
Premises	7,386	23,148	-	30,534	29,978
Administration and central services	20,293	5,632	9,161	35,086	30,184
Other expenses	7,465	16,975	-	24,440	21,947
Pension fund adjustments	(2,700)	-	2,154	(546)	(874)
	290,348	174,982	12,305	477,635	452,749
Depreciation (note 12)				32,060	26,276
Staff costs - Increase in USS pension scho	eme provision	(note 20)		4,144	5,650
· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	(11010 20)		•	
Total per Income and Expenditure Accoun				513,839	484,675
University					
		Other			
	Staff	operating	Interest	Total	Total
	costs	expenses	Payable	2017	2016
	£000	£000	£000	£000	£000
Academic departments	173,915	53,123	-	227,038	219,660
Academic services	16,085	10,750	-	26,835	25,701
Research grants and contracts	41,155	35,332	-	76,487	66,427
Other services rendered	21,107	23,403	-	44,510	46,190
Residences, catering and conferences	5,642	6,619	990	13,251	13,536
Premises	7,386	23,148	-	30,534	29,978
Administration and central services	20,293	5,632	9,153	35,078	30,175
Other expenses	7,465	15,709	-	23,174	20,863
Pension fund adjustments	(2,700)	-	2,154	(546)	(874)
	290,348	173,716	12,297	476,361	451,656
Depreciation (note 12)				32,060	26,276
Staff costs - Increase in USS pension scho	eme provision	(note 20)		4,144	5,650
Total per Income and Expenditure Accoun				· · · · · · · · · · · · · · · · · · ·	
	Ť			512,565	483,582

The impact of accounting for pension liabilities under FRS102 is not allocated by activity.

# 10. Analysis of Expenditure by Activity (continued)

# Consolidated and University

	2017	2016
	£000	£000
Other expenses include (inclusive of VAT):		
Auditors' remuneration – external audit University	61	61
<ul> <li>external audit subsidiaries</li> </ul>	2	2
<ul> <li>services in relation to bond issue</li> </ul>	-	150
<ul> <li>audit-related services</li> </ul>	19	15

# 11. Corporation Tax

# Consolidated and University

The 2016 tax charge for the year arises from the claim for Research and Development Expenditure Credits (RDEC).

	2017 £000	2016 £000
Current Tax		
UK Corporation tax of 20.67% on income receivable under RDEC for the year (note 4)	-	233



## 12. Tangible Fixed Assets

Consolidated and University

		Land	and Buildings	Equipment	Total
	Freehold £000	Long leasehold £000	Assets in the Course of Construction £000	£000	Including Equipment £000
Cost or valuation					
At 1 August 2016	427,291	241,508	20,917	126,337	816,053
Additions at cost	10,865	7,251	18,955	19,885	56,956
Disposals (i)	-	-	-	(2,202)	(2,202)
Projects completed	11,505	2,058	(13,563)	-	-
At 31 July 2017	449,661	250,817	26,309	144,020	870,807
Valuation (ii)	379,584	229,472	-	-	609,056
Cost	70,077	21,345	26,309	144,020	261,751
At 31 July 2017	449,661	250,817	26,309	144,020	870,807
Accumulated depreciation					
At 1 August 2016	15,474	10,467	-	84,616	110,557
Charge for year	9,386	6,509	-	16,165	32,060
Eliminated on disposal	-	-	-	(2,202)	(2,202)
At 31 July 2017	24,860	16,976	-	98,579	140,415
Net book value					
At 31 July 2017	424,801	233,841	26,309	45,441	730,392
At 31 July 2016	411,817	231,041	20,917	41,721	705,496

- (i) Disposal of equipment is assumed after 10 years.
- (ii) A full valuation of the University's Estate was carried out on 31 July 2014 by Cooke and Arkwright Chartered Surveyors in accordance with the RICS Valuation Professional Standards January 2014 (the Red Book) to establish deemed cost. Of the total valuation of £609m, £557m was at fair value by depreciated replacement cost and £52m was at fair value.
- (iii) Certain buildings have been funded from Treasury sources at a cost of £132m. Should these particular buildings be sold, the University would use the proceeds in accordance with the Financial Memorandum with HEFCW.
- (iv) Land and buildings includes non-depreciated land of £118m.
- (v) The carrying amount of land and buildings under historical cost basis as at 31 July 2017 was £221m Freehold and £92m Long Leasehold.

#### 13. Non-Current Investments

			Consolidate	d	University	
	Other Investments	Investment in joint ventures	Total	Other Investments	Equity investment in joint ventures	Total
	£000	£000	£000	£000	£000	£000
Balance at 1 August 2016	39,042	13,062	52,104	39,037	14,002	53,039
Additions	15,932	-	15,932	15,932	-	15,932
Share of operating deficit in joint ventures	-	(2,904)	(2,904)	-	-	-
Disposals	(30,092)	-	(30,092)	(30,092)	-	(30,092)
Balance at 31 July 2017	24,882	10,158	35,040	24,877	14,002	38,879

The University has investments in the following:

#### Compound Semiconductor Centre (CSC) Limited

During the year additional investment of £932k was made in this joint venture with IQE plc relating to preference shares. This brings the group's total investment after its share of operating deficits to £9,800k of preference shares and £7,197k of equity shares (University: £9,800k preference shares and £12,000k equity shares). The preference shares are debt instruments and are included in 'other investments'.

### University College Cardiff Consultants Limited (UC3)

The results of UC3, a company limited by guarantee and registered in the UK, have been included by consolidation in the financial information. The company's principal activity is the commercialisation of the intellectual property and other outputs of research generated by the academic schools of the University. The company is also responsible for the University's interests through shareholdings in a number of spin-out companies arising from the University's research and other operations.

### Cardiff Partnership Fund Limited

The University owns a 100% interest in the Cardiff Partnership Fund Limited, the holding company of the unincorporated Cardiff Partnership Fund Limited Partnership. This company is not consolidated on the basis that the University does not exercise control over the activities that rest with an independent board. The company has no trading activities and net assets of £105,847 at 31 July 2017 (£29,779 at 31 July 2016).

#### **WWII Limited**

The University is a member of WWII Limited, a company limited by guarantee and registered in England and Wales, whose vision is to improve wound prevention and treatment. The other members are Swansea University, Cwm Taf University Health Board and Cardiff and Vale University Health Board. This company is not consolidated on the basis that the University does not exercise control over the activities that rest with an independent board.

## **Cardiff Medicentre**

The University holds an 89% interest in Cardiff Medicentre with Cardiff and Vale UHB holding the remaining 11%. This group's total investment after its share of operating surpluses is £2,961k (2016 £2,795). This interest is treated as a joint venture as the University has joint control with Cardiff and Vale UHB.

#### Deposits

The £15m investment additions relate to 370 day notice period deposit accounts and, as at 31 July 2017 notice had not yet been issued, these investments have been classed as non-current investments.

The £30m disposal relates to an 18 month short term deposit expiring on 13 November 2017. At 31 July 2016 this was due after one year and categorised as a non-current investment but at 31 July 2017 it was due within one year and categorised as a current investment.

## 14. Stocks

# Consolidated and University

	2017	2016
	£000	£000
Residences and Catering	114	116
Maintenance	68	81
Academic Departments	53	42
	235	239

Concolidated

University

## 15. Debtors

	Consolidated Univers			
	2017 £000	2016 £000	2017 £000	2016 £000
Amounts falling due within one year:				
Debtors:				
Fees	1,487	3,213	1,487	3,213
Research	31,316	33,320	31,316	33,320
NHS Distinction Awards	233	159	233	159
Accommodation	41	25	41	25
Trade Debtors	12,283	13,631	12,283	13,631
RDEC	-	3,812	-	3,812
Other	10,854	11,189	10,544	10,954
Amount due from subsidiary undertaking	-	-	600	600
Compound Semiconductor Centre Limited (i)	650	-	650	-
Less: provision for impairment	(1,351)	(1,217)	(1,351)	(1,217)
	55,513	64,132	55,803	64,497
Prepayments	861	542	861	542
	56,374	64,674	56,664	65,039
Amounts falling due after more than one year:				
Compound Semiconductor Centre Limited (ii)	2,000	1,000	2,000	1,000
Total Debtors	58,374	65,674	58,664	66,039

- (i) The debtor due < 1 year from Compound Semiconductor Centre Limited (the CSC) relates to an interest free short term loan of  $\pounds 0.65$ m which was drawn down on 26 June 2017 and was repaid on 16 August 2017
- (ii) The debtor due after 1 year from the CSC relates to an interest bearing loan agreement for a £2.0 million facility which had been fully drawn down by the year end. The interest is accrued daily at the European State Aid Reference Rate and is payable on repayment of the loan. The repayment is subject to the CSC generating sufficient profits to do so.

# 15. Debtors (continued)

## Consolidated and University

	2017	2016
	£'000	£'000
As at 31 July 2017, the provision for impairment of debtors was aged as follows:		
3 to 6 months past due	-	12
Over 6 months past due	1,351	1,205
	1,351	1,217
	2017	2016
	£'000	£'000
Movement on the provision for impairment of debtors is as follows:	2 000	2 000
At 1 August	1,217	621
Debtors written off during the year	(457)	-
Provision adjustments	591	596
At 31 July	1,351	1,217
As at 31 July 2017, debtors past their due date but not impaired were aged as follows:		
	2017	2016
	£'000	£'000
Less than 3 months past due	2,188	2,328
Over 3 months past due	5,557	3,278
	7,745	5,606

### 16. Investments

### Consolidated and University

2017 £000	2016 £000
123,822	110,570
62,536	19,305
22,517	18,864
120,000	145,198
328,875	293,937
	123,822 62,536 22,517 120,000

The increase in fair value of short term investments in the year was £11,765k (2016 £4,255k).

Deposits are held with banks and building societies operating in the London market and licensed by the Financial Services Authority with more than three months maturity at the balance sheet date. The interest rates for these deposits are fixed for the duration of the deposit at the time of placement.

At 31 July 2017 the weighted average interest rate of these fixed rate deposits was 1.00% (2016 1.15%) per annum and the remaining weighted average period for which the interest rate is fixed on these deposits was 200 days. The fair value of these deposits was not materially different from the book value.

# 17. Creditors: amounts falling due within one year

Co	onsolidated		University
2017	2016	2017	2016
£000	£000	£000	£000
8,513	10,787	8,467	10,060
6.582	8.588	5.785	8.588
8,655	8,449	8,655	8,449
6,642	6,268	6,622	6,268
21,288	22,295	21,260	22,293
7,672	1,835	7,672	1,835
310	313	310	313
31,082	27,257	31,082	27,257
20,093	20,049	20,093	20,049
1,104	984	1,104	984
700	700	700	700
258	286	258	286
112,899	107,811	37 112,045	406 107,488
	2017 £000 8,513 6,582 8,655 6,642 21,288 7,672 310 31,082 20,093 1,104 700 258	£000 £000  8,513 10,787 6,582 8,588 8,655 8,449 6,642 6,268 21,288 22,295 7,672 1,835 310 313 31,082 27,257 20,093 20,049 1,104 984 700 700 258 286	2017         2016         2017           £000         £000         £000           8,513         10,787         8,467           6,582         8,588         5,785           8,655         8,449         8,655           6,642         6,268         6,622           21,288         22,295         21,260           7,672         1,835         7,672           310         313         310           31,082         27,257         31,082           20,093         20,049         20,093           1,104         984         1,104           700         700         700           258         286         258           -         37

# 18. Creditors: amounts falling due after more than one year

## Consolidated and University

	2017	2016
	£000	£000
Lloyds Bank Loan (i)	9,330	10,434
Royal Bank of Scotland Loan (ii)	5.075	5.775
Public Bond (iii)	293,370	293,263
Invest-to-Save Loan (iv)	776	748
	308,551	310,220

(i) Lloyds Bank originally advanced £17 million to the University to finance the cost of student residences. The loan is secured on Talybont South and is repayable by 28 February 2024 on a reducing balance method as follows:

Within one year £1,104k Between two and five years £5,694k Over five years £3,636k

Interest is payable on the loan at 8.868% and is charged to Interest Payable (Note 9)

# 18. Creditors: amounts falling due after more than one year (continued)

(ii) Royal Bank of Scotland originally advanced £14 million to the University to finance the cost of Talybont Court. The loan is secured on Talybont Court and is repayable by 1 October 2025 by equal instalments of £0.7 million as follows:

Within one year £700k
Between two and five years £2,800k
Over five years £2,275k

Interest is payable on the loan at 0.225% above Base Rate and is charged to Interest Payable (Note 9).

- (iii) The 39 year public bond of £300 million was issued in February 2016 and is repayable in full in February 2055. Interest is payable at a coupon rate of 3.1%.
- (iv) The interest free Welsh Government Invest-to-Save energy saving loan was taken out during the year and is repayable in instalments by 31 March 2020 as follows:

Within one year £258k Between two and five years £776k

## 19. Financial Instruments

### Consolidated

The University has the following financial instruments which are all denominated in sterling:

	Note	2017 £000	2016 £000
Financial assets at fair value through surplus or deficit			
Investments in equity instruments and listed bonds	16	208,875	148,739
		208,875	148,739
Financial assets that are debt instruments measured at amortised cost			
Trade receivables	15	12,363	15,627
Other receivables	15	44,840	45,693
Investments in short term deposits	16	120,000	175,290
		177,203	236,610
Financial liabilities measured at amortised cost			
Public bond	18	293,370	293,263
Loans	17/18	17,243	18,927
Trade creditors	17	8,513	10,787
Accruals	17	88,531	80,198
Other creditors	17	7,151	8,588
		414,808	411,763

# 20. Pension Provision

## Consolidated and University

	Obligation to fund deficit on USS Pension	Defined benefit obligations (Note 22)	2017 Total Pension Provision	2016 Total Pension Provision
	£'000	£'000	£'000	£'000
At 1 August	49,957	60,510	110,467	84,391
Utilised in year	(3,580)	-	(3,580)	(1,910)
Additions/ (reductions)	4,144	(8,620)	(4,476)	27,190
Unwind of discount	874	-	874	796
At 31 July	51,395	51,890	103,285	110,467

### **USS** deficit

The obligation to fund the past deficit on the University's Superannuation Scheme (USS) arises from the contractual obligation with the pension scheme for total payments relating to benefits arising from past performance. Management have assessed future employees within the USS scheme and salary payment over the period of the contracted obligation in assessing the value of this provision.

# 21. Endowment reserves

## Consolidated and University

	Unrestricted Permanent £000	Restricted Permanent £000	Total Permanent £000	Restricted Expendable £000	2017 Total £000	2016 Total £000
Opening Balance						
Capital	1,909	16,628	18,537	1,157	19,694	18,568
Accumulated Income	1,157	7,733	8,890	1,685	10,575	10,100
	3,066	24,361	27,427	2,842	30,269	28,668
New endowments	-	75	75	507	582	596
Income for year	89	710	799	75	874	715
Expenditure	(84)	(540)	(624)	(311)	(935)	(711)
	5	170	175	(236)	(61)	4
Increase in market value	261	1,904	2,165	183	2,348	1,001
Closing Balance	3,332	26,510	29,842	3,296	33,138	30,269
Represented by:						
Capital	2,131	18,282	20,413	1,161	21,574	19,694
Accumulated Income	1,201	8,228	9,429	2,135	11,564	10,575
	3,332	26,510	29,842	3,296	33,138	30,269

## 21. Endowment Reserves (continued)

	Unrestricted Permanent £000	Restricted Permanent £000	Total Permanent £000	Restricted Expendable £000	2017 Total £000	2016 Total £000
Analysis by type of purpose:						
Appeal Fund	-	66	66	-	66	60
Chairs	-	10,079	10,079	-	10,079	9,370
Lectures	-	775	775	-	775	650
Hardship Funds	9	1,479	1,488	431	1,919	1,446
Scholarships	-	6,981	6,981	298	7,279	6,596
Prizes	-	2,317	2,317	30	2,347	2,151
Research	-	1,120	1,120	1,671	2,791	2,794
General	3,323	3,693	7,016	866	7,882	7,202
	3,332	26,510	29,842	3,296	33,138	30,269
Analysis by asset:						
Current asset investments						
- shares					20,809	19,397
- bonds					3,508	2,844
- other					3,570	3,093
Cash & cash equivalents					5,251	4,935
					33,138	30,269

## 22. Pension Schemes

Different categories of staff were eligible to join one of five different schemes:

- (i) Universities' Superannuation Scheme (USS)
- (ii) Cardiff University Pension Scheme (CUPF)
- (iii) Local Government Pension Scheme (LGPS)
- (iv) National Health Service Pension Scheme (NHSPS).
- (v) NEST.

The first three of these schemes are defined-benefit schemes contracted out of the State Second Pension (S2P) the assets of which are held in separate trustee administered funds.

In addition, the National Health Service (NHS) Superannuation Scheme is in operation for certain staff. The NHS scheme is an unfunded defined contribution scheme, with pension benefits being paid out of contributions received in the year and contribution rates determined by HM Treasury. To comply with The Pensions Act 2008, the University also uses the NEST defined contributions pension scheme for eligible noncontractual workers.

The total pension cost for the University was:

	2017	2016
	£'000	£'000
USS	26,162	24,484
NHS	2,047	2,139
CUPF	11,055	8,587
LGPS	372	410
NEST	5	3
	39,641	35,623
USS minimum funding guarantee	4,144	5,650
	43,785	41,273

### (i) The Universities Superannuation Scheme

The Universities' Superannuation Scheme (USS) is the main scheme covering most academic and academic-related staff, which provides benefits based on final pensionable salary for Final Salary members (now closed to new entrants) and Career Revalued Benefits (CRB) for new entrants since 2011. The assets of the scheme are held in a separate fund administered by the trustee, Universities Superannuation Limited.

Because of the mutual nature of the scheme, the scheme's assets are not hypothecated to individual Universities and a scheme-wide contribution rate is set. The University is therefore exposed to actuarial risks associated with other Universities' employees and is unable to identify its share of the underlying assets and liabilities of the scheme on a consistent and reasonable basis and therefore, as required by FRS 102(28), accounts for the scheme as if it were a defined contribution scheme.

As a result, the amount charged to the income and expenditure account represents the contributions payable to the scheme in respect of the accounting period. A liability is also recorded within provisions for any contractual commitment to fund past deficits within the USS. Movements in this provision can also give rise to charges to the income and expenditure account as shown in note 20 above.

The appointment of directors to the board of the trustee is determined by the Company's Articles of Association. Four of the directors are appointed by Universities UK; three are appointed by the University and College Union, of whom at least one must be a USS pensioner member; and a minimum of three and a maximum of five are independent directors appointed by the board. Under the scheme trust deed and rules, the employer contribution rate is determined by the trustee, acting on actuarial advice.

The latest triennial actuarial valuation of the scheme was at 31 March 2014. This was the third valuation for USS under the scheme-specific funding regime introduced by the Pensions Act 2004, which requires schemes to adopt a statutory funding objective, which is to have sufficient and appropriate assets to cover their technical provisions. The actuary also carries out regular reviews of the funding levels. In particular, he carries out a review of the funding level each year between triennial valuations.

The triennial valuation was carried out using the projected unit method. The assumptions which have the most significant effect on the result of the valuation are those relating to the rate of return on investments (i.e. the valuation rate of interest), the rates of increase in salary and pensions and the assumed rates of mortality. The financial assumptions were derived from market yields prevailing at the valuation date.

An "inflation risk premium" adjustment was also included by deducting 0.2% from the market-implied inflation on account of the historically high level of inflation implied by government bonds

To calculate the technical provisions, it was assumed that the valuation rate of interest would be 5.2% per annum, salary growth would be 2.6% per annum (CPI) in year1, CPI+1% in year 2 and RPI+1% thereafter and pensions would increase by CPI.

Standard mortality tables were used as follows:

Male members' mortality 98% SAPS S1NA "light" YOB

Female members' mortality 99% SAPS S1NA "light" YOB with a -1 year adjustment

Use of these mortality tables reasonably reflects the actual USS experience but also provides an element of conservatism to allow for further improvements in mortality rates. The assume life expectations on retirement at age 65 are:

Male (females) currently aged 65 24.2 (26.3) years Males (females) currently aged 45 26.2 (28.6) years

At the valuation date the value of the assets of the scheme was £41,604m and the value of the scheme's technical provisions was £46,900m indicating a deficit of £5,300m. The assets therefore were sufficient to cover 89% of the benefits which had accrued to members after allowing for expected future increases in earnings.

Under the Pension Protection Fund regulations introduced by the Pensions Act 2004 the scheme was 54% funded on a buy-out basis (i.e. assuming the Scheme had discontinued on the valuation date) the assets would have been approximately 54% of the amount necessary to secure all the USS benefits with an insurance company.

The technical provisions relate essentially to the past service liabilities and funding levels, but it is also necessary to assess the ongoing cost of newly accruing benefits. The cost of future accrual was calculated using the same assumptions as those used to calculate the technical provisions but the allowance for promotional salary increases was not as high.

Analysis has shown very variable levels of growth over and above general pay increases in recent years, and the salary growth assumption built into the cost of future accrual is based on more stable, historic, salary experience. However, when calculating the past service liabilities of the scheme, a cautionary reserve has been included, in addition, on account of the variability mentioned above.

As at the valuation date the scheme provided Career Revalued Benefits (CRB) for new entrants since 2011 and final salary benefits for members who joined prior to that date. The employer's contribution rate was 16% of Salaries, CRB members contributed 6.5% and Final Salary members 7.5% of pensionable pay.

From 1 April 2016 the Final Salary section was closed and all members' future service is on a Career Revalued Benefits basis on pensionable salary up to £55k p.a. plus other benefits on a Defined Contribution basis. Employee contributions were increased to 8.5% of salary and to 18% for the employer

Following UK government legislation, from 2011 statutory pension increases or revaluations are based on the Consumer Prices Index measure of price inflation. In addition, a pension increase cap is provided to recognise that if official pensions increases by more than 5% then USS will match the first 5% of the increase but then only half of any higher increase up to a maximum of 10% in total.

Surpluses or deficits which arise at future valuations may impact on the University's future contribution commitment. A deficit may require additional funding in the form of higher contribution requirements, where a surplus could, perhaps, be used to similarly reduce contribution requirements.

The sensitivities regarding the principal assumptions used to measure the scheme liabilities on a technical provisions basis as at the date of the last triennial valuation are set out below:

Change in total

Assumption	Change in Assumption	Impact on scheme	contribution rate % salaries over 17 year recovery period
Investment return			
(discount rate)	Decrease by 0.25%	Increase by £0.8 billion	Increase by 0.5%
Discount rate in 20			
years' time	decrease by 0.25%	increase by £1.1 billion	Increase by 2.1%
RPI inflation rate	Increased by 0.25%	Increase by £0.8 billion	Increase by 1.9%
Members live longer			
than assumed	1 year longer	Increase by £0.5 billion	Increase by 0.8%
	<u> </u>		

USS is a "last man standing" scheme so that in the event of the insolvency of any of the participating employers in USS, the amount of any pension funding shortfall (which cannot otherwise be recovered) in respect of that employer will be spread across the remaining participant employers and reflected in the next actuarial valuation of the scheme.

The trustee believes that, over the long-term, equity investment and investment in selected alternative asset classes will provide superior returns to other investment classes. The management structure and targets set are designed to give the fund a major exposure to equities through portfolios that are diversified both geographically and by sector. The trustee recognises that it would be possible to select investments producing income flows broadly similar to the estimated liability cash flows.

However, in order to meet the long-term funding objective within a level of contributions that it considers the employers would be willing to make, the trustee has agreed to take on a degree of investment risk relative to the liabilities.

This taking of investment risk seeks to target a greater return that the matching assets would provide whilst maintaining a prudent approach to meeting the funds' liabilities.

Before deciding to take investment risk relative to the liabilities, the trustee receives advice from its internal investment team, its investment consultant and the scheme actuary, and considers the views of the employers.

At 31 March 2017, USS had over 190,000 active members and the University had 3,952 active members participating in the scheme.

The positive cash flow of the scheme means that it is not necessary to realise investments to meet liabilities. The trustee believes that this, together with the ongoing flow of new entrants into the scheme and the strength of covenant of the employers, enables it to take a long-term view of its investments. Short-term volatility of returns can be tolerated and need not feed through directly to the contribution rate. However, the trustee is mindful of the difficult economic climate that exists for defined benefits pension schemes currently, and the need to be clear about the responses that are available should the deficits persist and a revised recovery plan become necessary following the next valuation to compile a formal financial management plan, which will bring together the various funding strands of covenant strength, investment strategy and funding assumptions, in line with the latest guidance from the Pensions Regulator.

### (ii) Cardiff University Pension Fund and the Local Government Pension Scheme

Both of these defined benefit schemes are externally funded and are contracted out of the State Second Pension (S2P) pension provision.

The last formal triennial actuarial valuation of the schemes were performed by professionally qualified actuaries as at 31 July 2016 for the Cardiff University Pension Fund (CUPF) and 31 March 2016 for the Local Government Pension Scheme (LGPS).

During the accounting period, the University paid contributions to the CUPF of 20% of pensionable salaries (LGPS - 27.3% plus a cash lump sum of £1.3m). The University has also contributed the salary sacrifice amount of 7.5% (final salary members) or 6.5% for Career Average Revalued Earnings members for each Non-Contributory member (i.e. those participating in the Salary Sacrifice arrangement) in the CUPF. Salary sacrifice of pension contributions is not permitted in the LGPS scheme.

An updated estimated valuation of each of the two defined benefit schemes was performed at 31 July 2017 by qualified actuaries. The FRS 102 disclosures set out below are based upon this updated valuation.

## **Assumptions**

The financial assumptions used to calculate scheme liabilities under FRS102 are:

Price Inflation (RPI)	
Price Inflation (CPI)	
Rate of increase in salaries	
Rate of increase of pensions in payment	
Increases to deferred pensions before retirement	
Discount rate	

CUPF	LGPS	CUPF	LGPS
At 31 July	At 31 July	At 31 July	At 31 July
2017	2017	2016	2016
%pa	%pa	%pa	%pa
3.1	3.1	2.6	2.6
2.0	2.0	1.5	1.5
2.5	3.0	2.5	2.5
2.0	2.0	1.5	1.5
2.0	2.0	1.5	1.5
2.5	2.6	2.4	2.3

The most significant non-financial assumption is the assumed level of longevity. The table below shows the life expectancy assumptions used in the accounting assessments based on the life expectancy of male and female members at age 65.

	CUPF	LGPS	CUPF	LGPS
	At 31 July	At 31 July	At 31 July	At 31 July
	2017	2017	2016	2016
Pensioner – male	21.3	23.0	22.0	23.8
Pensioner – female	23.9	25.7	25.1	26.8
Non-pensioner (currently aged 45) - male	22.4	24.0	24.0	25.9
Non-pensioner (currently aged 45) - female	24.7	27.1	26.7	29.1

## Scheme assets and expected rate of return

The expected return on assets has been derived as the weighted average of the expected returns from each of the main asset classes (i.e. equities and bonds). The expected return for each asset class reflects a combination of historical performance analysis, the forward looking views of the financial markets (as suggested by the yields available) and the views of investment organisations.

	Fair value as at 31 July		Fair value a July	s at 31
	2017	2017	2016	2016
	CUPF	LGPS	CUPF	LGPS
	£m	£m	£m	£m
The assets in the scheme were:				
Equities	129.5	22.4	122.5	20.3
Bonds	63.9	4.0	62.1	4.3
Other	1.7	2.4	0.7	1.9
Total assets	195.1	28.8	185.3	26.5
Scheme liabilities	(239.8)	(36.0)	(233.0)	(39.3)
Deficit in the scheme – net pension liability recorded within pension provisions (Note 20)	(44.7)	(7.2)	(47.7)	(12.8)
Current service cost	10.5	0.4	8.1	0.4
Administrative expenses	0.6	-	0.5	-
Total operating charge:	11.1	0.4	8.6	0.4
Analysis of the amount charged to interest payable/credited to other finance income:				
Interest cost	1.0	0.3	1.0	0.4
Total profit and loss charge before deduction for tax Analysis of other comprehensive income:	12.1	0.7	9.6	0.8
Loss on liabilities	(6.1)	(4.6)	18.9	2.4
Total charge to other comprehensive income before deduction for tax	6.0	(3.9)	28.5	3.2

	At 31 July		At 31 July	
	2017	2017	2016	2016
	CUPF	LGPS	CUPF	LGPS
	£m	£m	£m	£m
Analysis of movement in deficit:				
Deficit at beginning of year	47.7	12.8	27.7	11.3
Contributions or benefits paid by the University	(9.0)	(1.7)	(8.5)	(1.7)
Current service cost	11.1	0.4	8.6	0.4
Other finance charge	1.0	0.3	1.0	0.4
(Gain)/ loss recognised in other comprehensive income	(6.1)	(4.6)	18.9	2.4
Deficit at end of year	44.7	7.2	47.7	12.8
Analysis of movement in the present value of liabilities:  Present value of liabilities at the start of the year Current service cost (net of member contributions)	233.0 10.5	39.3 0.4	196.0 8.1	34.9 0.4
Actual member contributions (including notional contributions) Interest cost Actuarial (gain)/ loss Actual benefit payments	0.2 5.5 (2.4) (7.0)	0.1 0.9 (3.2) (1.5)	0.2 7.1 28.0 (6.4)	0.1 1.2 4.0 (1.3)
Present value of liabilities at the end of the year	239.8	36.0	233.0	39.3
Analysis of movement in the fair value of scheme assets:				
Fair value of assets at the start of the year	185.3	26.5	168.3	23.7
Interest income on assets	4.5	0.6	6.1	0.9
Actuarial gain on assets	3.7	1.4	9.1	1.5
Actual contributions paid by University Actual member contributions (including notional	9.0	1.7	8.5	1.6
contributions)	0.2	0.1	0.2	0.1
Actual benefit payments	(7.0)	(1.5)	(6.4)	(1.3)
Expenses	(0.6)	-	(0.5)	-
Fair value of scheme assets at the end of the year	195.1	28.8	185.3	26.5

CUPF and LGPS assets do not include any of the University's own financial instruments, or any property occupied by the University.

	Year end	Year ended 31 July		Year ended 31 July	
	2017	2017	2016	2016	
	CUPF	LGPS	CUPF	LGPS	
	£m	£m	£m	£m	
Actual return on scheme assets:					
Interest income on scheme assets	4.5	0.6	6.1	0.8	
Asset gain	3.7	1.4	9.1	1.6	
	8.2	2.0	15.2	2.4	

# 23. Capital Commitments

Consolidated and University

	2017 £000	2016 £000
Commitments contracted at 31 July	11,398	15,446

# 24. Related Party Transactions

During the year, Cardiff University made a block grant payment of £2.9 million to the Cardiff University Students' Union. There are no other material related party transactions.

All transactions involving organisations in which a member of the Council may have an interest are conducted at arm's length and in accordance with the University's financial regulations and normal procurement procedures. The University maintains a Register of Interests of members of Council and senior officers.

No council member has received any remuneration/ waived payments from the Group during the year.



