## The economic and social impact of Cardiff University

**Summary Report** 







#### A world-class university

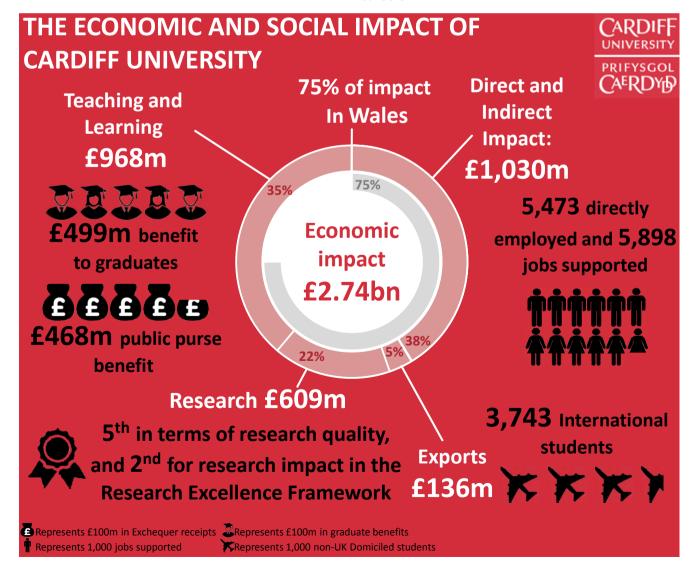
Higher education has a transformative effect on people's lives, careers, and families. Universities play a key role in enabling this long-term change, but also are a crucial source of economic and social impact. These impacts occur in the locality in which the institution is situated, through students, staff and alumni, but also nationally and internationally.

Cardiff University is a world-class institution. In addition to Cardiff University's physical footprint in south Wales, from the provision of high calibre teaching and scholarship to 14,000 new students annually, to the consistent delivery of original, significant and rigorous research, Cardiff University generates an economic impact substantially in excess of the resources it receives.

We assessed that the total economic impact associated with Cardiff University stood at approximately £2,740 million in 2012-13 across the United Kingdom.

The total economic impact associated with Cardiff University was estimated to be approximately £2,740 million in 2012-13.

The impact of Cardiff University is not limited to the purely economic. Reflecting its sense of social justice, the university undertakes extensive widening participation activities, whilst through established links across both the public and private sectors, Cardiff University students engage in a range of volunteering activities, work placements and internships throughout and beyond their academic careers.



#### Strong public engagement

Cardiff University staff engage with the general public through a wide array of high-profile events across Wales; taking an active role in disseminating academic research through the University's successful Open Access publishing; and training the professions through its Continuing Professional Development activities.

From the development of cultural capital and environmental protection (CAER Heritage Project) to transforming learning experiences in schools (Step UP and SuperStars), innovations in social care (Llamau Ltd) to life changing medical advances (Ultravision surgical advances and innovations in cancer treatment), many of these wider impacts are a direct result of Cardiff University's ongoing commitment to world-class high impact research. Through a range of significant research collaborations (e.g. MEDOW and KU Leuven), Cardiff University applies and disseminates its research expertise both nationally and internationally.

#### Medaphor Group Plc: ScanTrainer Ultrasound Training Solutions

Medaphor was established as a result of Cardiff University's School of Medicine Professor Nazar Amso identifying the need to



train highly skilled individuals to perform ultrasound procedures using **simulation technology** with **educational excellence** at its core.

Without the need of a clinical setting, ScanTrainer is a hand-held device that produces ultrasound images, enabling trainees to undertake tasks that closely resemble those carried out during live ultrasound sessions. The first ScanTrainer was launched in 2010 and is recognised in the UK as one of the gold standard simulators for teaching ultrasound.

Supported by the University's seed investment fund (Cardiff Partnership Fund), the company has increased employment ten-fold, with more than 120 hospitals now using the system in 11 countries.

Photo credit: Shutterstock

#### **CAER Heritage Project**

Funded by the Arts and Humanities Research Council, the Caerau and Ely Rediscovering (CAER) Heritage Project is a collaborative project between Cardiff University, Action in Caerau and Ely (ACE), local schools and local residents. The project is based Cardiff's around one of most important archaeological sites, Caerau Iron Age Hillfort, and seeks to engage local people and school children in shared history and help challenge marginalisation.



Picture credit: © Crown, Royal Commission on the Ancient and Historical Monuments of Wales

310,000 members of the general public attended CU events in 2012-13, while 2,800 engaged in Continuing Professional Development.

## The impact of Cardiff University's teaching and learning activity

One of the most significant elements of Cardiff University's economic impact results from the improved labour market outcomes achieved by many of its graduates. Having assessed the enhanced employment, earnings and taxation associated with higher education qualification attainment, as well as the costs of attending university, the analysis indicated that there are very substantial labour market benefits achieved by Cardiff University graduates.

# 94.4% of graduates secure employment or further study within six months after graduation.

2012-13 Destinations of Leavers from Higher Education

Incorporating all the costs and benefits, the analysis suggests that in today's money terms, the net graduate premium associated with a full-time undergraduate degree for a Welsh domiciled student stood at £103,000.

For the public purse, in today's money terms, the net benefit to the Exchequer associated with the funding of a full-time undergraduate degree for a Welsh domiciled student stood at approximately £83,000.

#### Step Up

The **Step-Up Scheme** aims to raise aspirations, attainment and provide support for secondary school students. Step-Up develops a three-year relationship with pupils in schools from which there have traditionally been



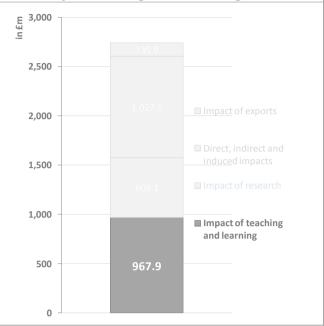
low rates of progression to university.

The Scheme brings together pupils, student mentors and academic staff at a variety of events. Current undergraduate students share their experiences at University and information is available on routes into higher education, the costs of being a student, university accommodation and much more.

Picture credit: Cardiff University

Combining the information on completion rates with the number of students starting qualifications at Cardiff University in 2012-13, the analysis indicates that the aggregate economic benefit of **teaching and learning** by Cardiff University stood at approximately £967.9 million.

## Economic impact associated with Cardiff University's teaching and Learning activities



£499 million of benefit accrues to CU students and graduates

£469 million accrues to the public purse

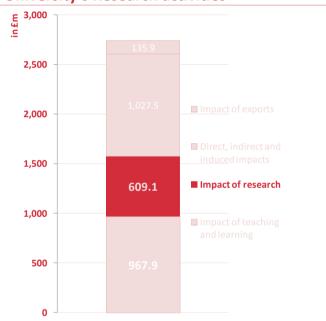
In 2012-13, CU students contributed 50,000 hours of volunteering activity.

At the end of 2012-13, there were more than 190,900 CU alumni living and working across the world.

## The impact of Cardiff University's research and innovation activity

One of Cardiff University's primary objectives is to deliver world class research. Reflecting the outstanding performance in the 2014 Research Excellence Framework, the analysis estimated that the direct benefit associated with Cardiff University research was £67 million, while research spillovers generated an additional £542 million in economic benefits. The total economic benefit associated with Cardiff's research activity was £609 million.

## **Economic impact associated with Cardiff University's Research activities**



Cardiff University was ranked 5th for research and 2nd nationally for research impact.

More than 66,000 articles are downloaded through CU's Open Access repository per month.

#### **Healthcare and Social Innovation**

Llamau has been providing housing, education, training and support services to homeless young people and vulnerable women in Wales for more than 20 years.

A Knowledge Transfer Partnership between Llamau Limited and Cardiff University has led to the improvement of the charity's service provision for vulnerable and homeless young people in Wales.

The project has also received the highest possible rating by the UK's innovation agency, the Technology Strategy Board. Awarded to only a small percentage of KTP projects nationwide, the 'outstanding' rating signifies the highest quality of collaboration between Llamau Limited and Cardiff University.





Picture credit: Cardiff University

#### Life saving research: Treating locally advanced prostate cancer



Locally advanced prostate cancer affects around 4,000 men per year in the United Kingdom.

Prior to essential research conducted by Cardiff University researchers, there was no consensus regarding the best way to treat locally advanced prostate cancer.

An international randomised clinical trial was implemented to investigate the optimal approach to improve outcomes for sufferers. The results of the trial indicated that treating locally advanced disease with a combination of therapies **reduced the risk of dying by 54%**.

The implementation of the study's results is expected to prevent up to around **1,000** deaths from prostate cancer per year in the UK and in the order of **50,000** deaths per year worldwide.

Picture credit: Piotr\_Pabijan/Shutterstock

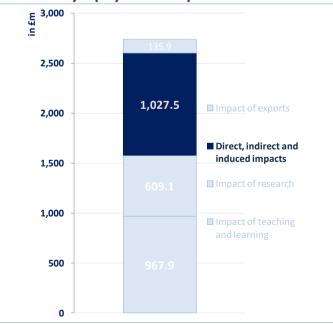
## The economic impact of Cardiff University's physical footprint

Cardiff University physical footprint supports jobs and promotes economic growth throughout the south Wales region. Employing more than **5,500** individuals directly, Cardiff University paid a total of **£249.1** million in staff costs within the United Kingdom. In addition, through a far reaching supply chain, Cardiff University spent approximately **£161.5** million on the procurement of goods and services across the United Kingdom, and its activities supported a further **5,900** jobs throughout the UK.

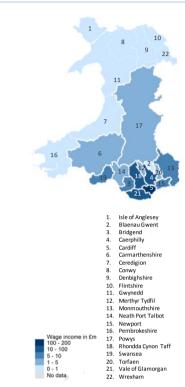
The total direct, indirect and induced impact associated with Cardiff University expenditure and student expenditure stood at £1,027.5 million across the UK, of which £885.8 million is estimated to accrue within Wales. Of this amount, the economic impact of off-campus expenditures of students undertaking their studies at Cardiff University amounted to £184.6 million.

Cardiff University's activities support 11,400 jobs across the UK, of which 10,100 are in Wales.

### Economic impact associated with Cardiff University's physical footprint



## Distribution of Cardiff University expenditure on staff salaries across Wales



Contains National Statistics data © Crown copyright and database right 2013; NISRA data © Crown copyright and database right 2013; NRS data © Crown copyright and database right 2013; Ordnance Survey data © Crown copyright and database right 2013

#### **Graduate start-up SuperStars**

After studying for a degree in child psychology at Cardiff University and spending a summer coaching different sports in America and Africa, James Taylor returned to the UK and founded SuperStars.

Over the last nine years he has grown and led the business to where it is today – an award-winning child development organisation, employing 240 staff, working with 80,000 children a week. The business is a commercial success but, as importantly, it is a success socially, helping to raise the standards of learning in over 400 schools and developing bright futures for children by giving them outstanding experiences and opportunities.

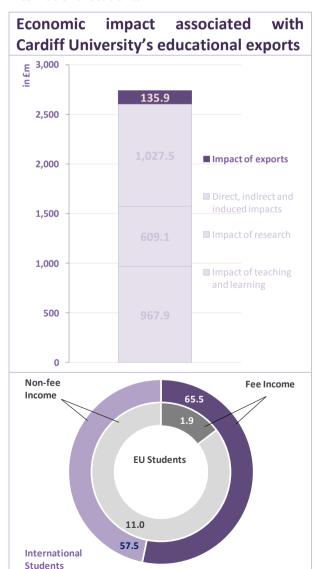


Picture credit: Cardiff University

## Internationalisation: The impact of Cardiff University on exports

Overseas trade is the sale of goods and services across international borders. With Cardiff University being a destination for **3,743** overseas students wishing to undertake their advanced studies, Cardiff University contributes significantly to the United Kingdom's export earnings.

Combining information on tuition fee income and personal expenditure, the aggregate export income associated with Cardiff University's 2012-13 cohort of overseas students stands at £135.9 million. Of this, approximately £12.9 million is generated by EU domiciled students, while the remaining £123.0 million of impact is associated with non-EU international students



#### **International Research Collaboration**

In September 2014, Cardiff University signed an agreement with the **University of Leuven** designed to boost research activity, and offer more opportunities for students and staff to study and teach abroad.

The new international agreement builds on existing academic collaborations between the two universities, and is part of Cardiff University's wider plans



to form collaborations with other universities to promote research and teaching.

Picture credit: Cardiff University

# The impact of Cardiff University on UK exports was £136 million.

## MEDOW (Multi-terminal DC Grid for Offshore Wind)

MEDOW is a partnership of five universities and six industrial organisations across the globe, funded by the European Commission and coordinated by Cardiff University's School of Engineering.

Based on a **newly emerging technology** that is particularly suitable for transporting power from offshore wind farms, the project will help inform the way in which offshore wind power is integrated into onshore AC



grids in European countries, ultimately supporting the creation of the European Super Grid.

By extending the traditional academic research training to a truly international and inter-sectoral setting, MEDOW is leading the way in creating a new generation of creative, entrepreneurial and innovative researchers and shaping the way in which researchers are trained across Europe.

Picture credit: Aleksey Stemmer/ Shutterstock

#### **About London Economics**

London Economics is one of Europe's leading specialist economics and policy consultancies and has its head office in London. We also have offices in Brussels, Dublin, Cardiff and Budapest, and associated offices in Paris and Valletta.

We advise clients in both the public and private sectors on economic and financial analysis, policy development and evaluation, business strategy, and regulatory and competition policy. Our consultants are highly-qualified economists with experience in applying a wide variety of analytical techniques to assist our work, including costbenefit analysis, multi-criteria analysis, policy simulation, scenario building, statistical analysis and mathematical modelling. We are also experienced in using a wide range of data collection techniques including literature reviews, survey questionnaires, interviews and focus groups.

**Head Office:** Somerset House, New Wing, Strand, London, WC2R 1LA, United Kingdom.

www.londoneconomics.co.uk info@londoneconomics.co.uk @LondonEconomics t: +44 (0)20 3701 7700

#### **Authors**

Ms Maike Halterbeck, Economic Consultant +44 (0) 20 3701 7724; mhalterbeck@londoneconomics.co.uk

Dr Gavan Conlon, Partner +44 (0) 20 3701 7703; gconlon@londoneconomics.co.uk

Cover picture: (Naeblys, Jiri Flogel, Jane Rix, Gail Johnson, Pressmaster)/Shutterstock and Cardiff University

